

## **Environmental and Sustainability (ESB) Board Meeting**

**Wednesday, May 9, 2018**

**Bellaire City Hall Council Chamber**

### **Meeting Minutes**

#### **A. Call to Order and Announcement of a Quorum**

The regular meeting of Environmental and Sustainability Board (ESB) was called to order at 6:37PM on Wednesday, May 9, 2018, by Jon Palmer, Chairman. There was a quorum of members present.

#### **Members Present**

Jon Palmer  
Ayobamidele (Ayo) Bello  
Joe Burris  
Michelle (Micki) Mastin  
Brian Witt

#### **Members Absent**

Ritwick Agrawal  
George Williams

#### **Non-Voting Members Present**

Michael Leech, Bellaire Solid Waste & Streets Superintendent (Public Works Representative)

- B. Approval of Minutes:** The draft April meeting minutes were previously circulated for review. Ayo indicated that the date and location of the meeting needed to be revised and without any further comments motioned for the approval of the minutes with the modifications. Micki seconded the approval and the minutes as amended were subsequently approved unanimously.

#### **C. Introduction of Visitors:**

1. Stewart and Samara Zuckerbrod
2. Jim Burrough.

#### **D. Citizen Comments, if any:**

1. Samara indicated she is a high school senior and IB student at Bellaire High School. As part of her IB work and personal effort, she is trying to get the city to ban single use plastic straws. She indicated she is working with/through a Seattle based foundation to understand how the ban was implemented in Seattle and how they were able to get businesses on board. She hopes to attend future meetings and update the Board as she continues to gather more information relative to the cause. She would like to solicit support from the

Board when the time comes. There a brief discussion relative to plastic straws but no action taken.

2. Jim indicated he is a retired emergency personnel and has been a long time resident. He indicated he applied to be a member of the ESB and PRAB and look forward to continued service to fellow residents. He also indicated he is an avid composter and has not thrown away a bag of grass clippings from his yard in over 40 years.

**E. Council Liaison Comments – Neil Verma: Absent**

1. None.

**F. Public Works (PW) Update:**

1. Michael indicated that the position of the solid Waste Superintendent was open to replace Darold who is transitioning over to the Police department. He hopes the new person will be able to focus on solid waste and manage the solid waste fleet vehicle maintenance program and not worry with streets and drainage like Darold was.

**G. Board Business:**

1. Updating and approval of the ESB Rules of Procedure
  - a. Micki provided a version of the rules she has modified (mostly formatting) for review.
  - b. Joe indicated the need to update the order of business to reflect current proceedings.
  - c. With no further revisions, Joe motioned for the approval of the rules as modified. Micki seconded and all Board members in attendance voted to approve.
2. Update on requirements for ESB name change
  - a. Item adjourned till next meeting.
  - b. Ayo offered to reach out to the City Clerk; Tracy Dutton to see if she was aware of any procedures to officially change the name of the Board.
3. Follow-up on recommendations for the Solid Waste Truck Wrap
  - a. Michael indicated that the board recommendation has been passed along to the City's Communication Team as an agenda item for their next meeting. Michael will update the Board on any resulting decision by the team.
4. Update on the City's Solid Waste Service Plan.
  - a. Michael handed out a copy of the FY 2019 plan and briefly explained the content of the plan to the Board. There were some questions and discussion on service plan items. There were some possible typos on some dates and numbers. Mike indicated he would review and revise and send a copy of the revised version to the Board.
5. H-GAC FY 2019 Solid Waste Grant Application.

- a. Michael indicated that PW submitted the application to H-GAC earlier in the week for \$25,000 to buy vouchers for HHW disposal as previously done. He indicated the presentation of the application went ok and was hoping to be notified of the results at the next H-GAC monthly meeting. Michael to update the Board after he receives notice from H-GAC.
- 6. Educational Outreach Material.
  - a. Events
    - i. There was a quick recap of the event attended since the last meeting
      - 1. Spring Fling
      - 2. Earth Day event at Evelyn's Park
    - ii. There was a discussion about the need to update the boards used at events and the possibility of having a new board printed instead of using actual materials. No action taken.
  - b. ESB Sign
    - i. There was a brief discussion about the need for the Board to have a sign/banner made for use at events but item pending possible Board name change.
- 7. Ongoing Board Initiatives/Outstanding Items:
  - a. No updates.
- 8. Social Media Posts.
  - a. No activity taken as there were still enough approved posts to last through the next meeting.

#### **H. New Business:**

- 1. Solid Waste Schedule Magnets – Brian asked about the frequency of distribution of the magnets as he recently came across an old magnet at his house. Mike indicated he wasn't sure of the frequency but would update the Board at the next meeting. Joe indicated he recalled getting one recently for 2018 and would confirm if current or not.
- I. Next Meeting:** The next Board meeting will be held on Wednesday June 6, 2018 at the City Council Conference Room.
- J. Adjourn:** Jon motioned to adjourn the meeting. Ayo seconded. There being no further business, the meeting was adjourned at 7:47PM.

Submitted by: Ayobamidele G. Bello



FY 2019  
Public Works – Solid Waste Service Plan

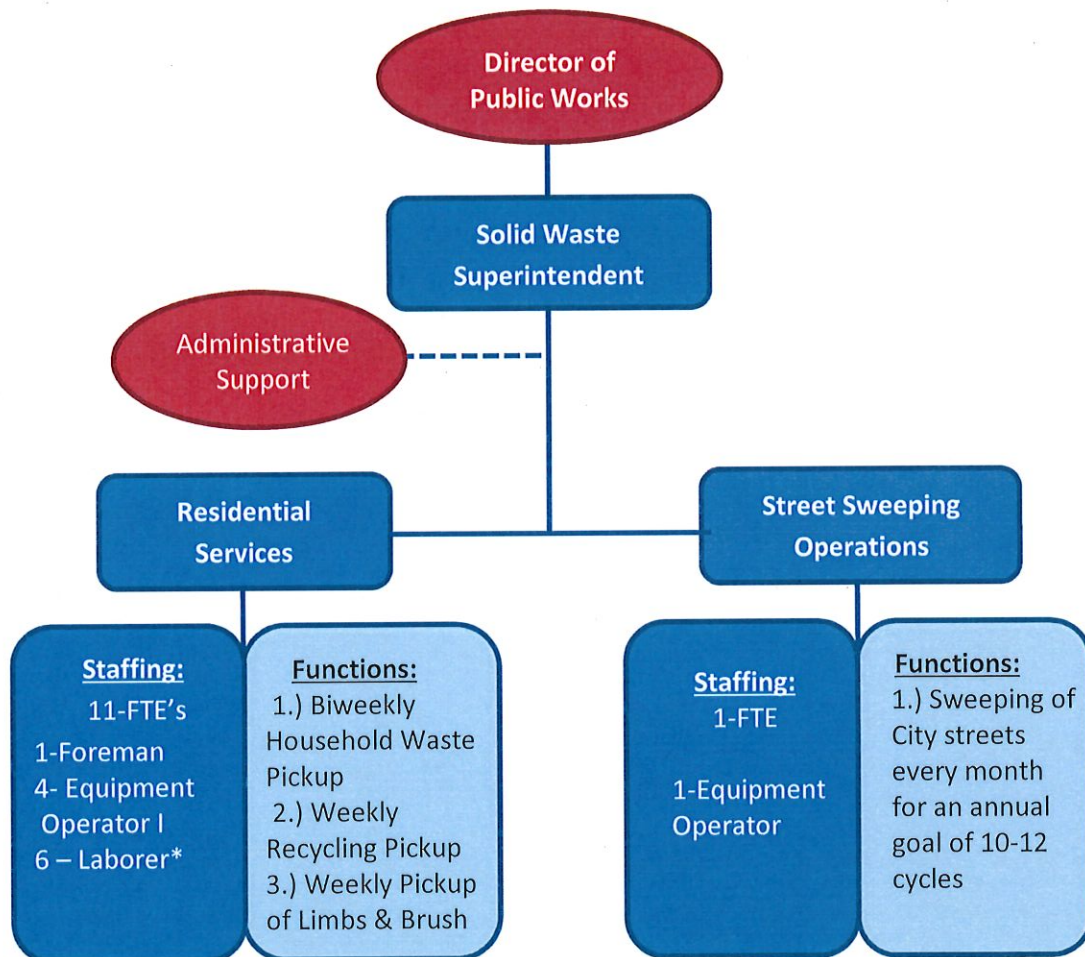
# Table of Contents

Why Statement.....	Page 3
Who's Responsible for What.....	Page 3
What Does the Division Do.....	Page 4
Service: Household Waste Collection.....	Page 4
Service: Tree Limbs and Brush Collection.....	Page 4
Service: Curbside Recycling Collection.....	Page 5
Service: Garbage Bags Provided.....	Page 6
Service: Street Sweeping.....	Page 6
Who Does the Division Serve.....	Page 7
Service Levels & Performance Measures.....	Page 7
Budget.....	Page 9
Revenues/Expenditures.....	Page 9
Fiscal Forecast.....	Page 9
Environmental Scan.....	Page 10
Available Assets.....	Page 11
Future Service Enhancements.....	Page 11
Future Strategy.....	Page 12

## Why Statement

The Solid Waste Division of the Public Works Department is responsible for providing cost-effective and environmentally conscious collection, transportation, and disposition of solid waste, recyclable materials, as well as limbs and brush.

## Who's Responsible for What





# What Does the Division Do?

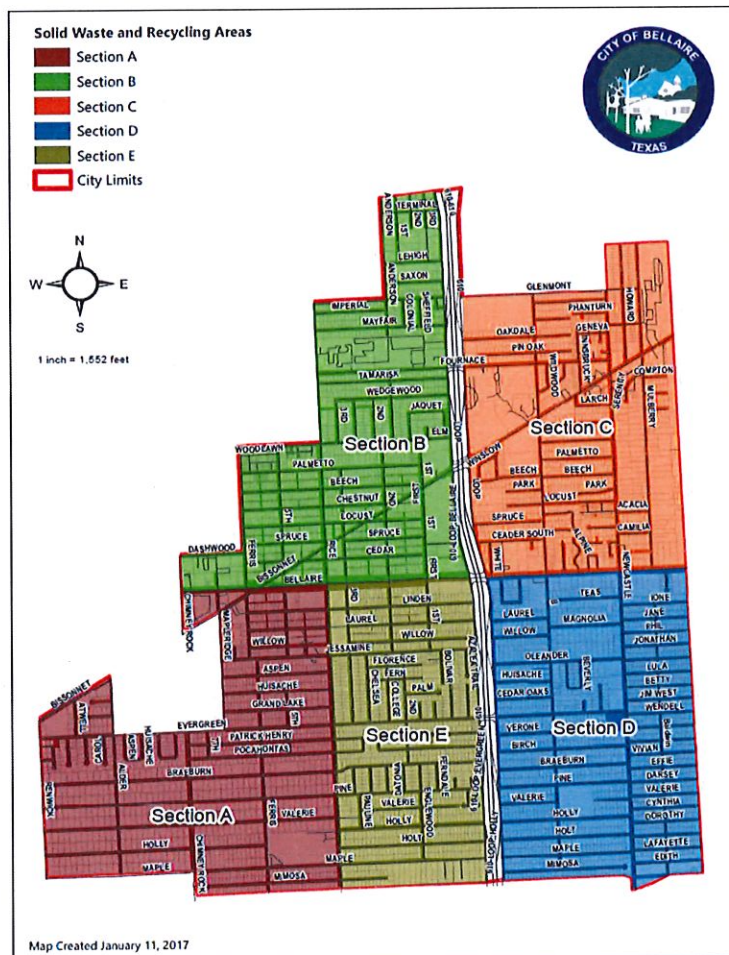
In accordance with Chapter 16 of the City of Bellaire code of ordinances, the Solid Waste Division is responsible for the collection of refuse including: garbage, white goods, heavy trash, and tree limbs on a scheduled basis from residential customers. The division is also responsible for the collection of curbside recycling from residential customers. The refuse is delivered to and processed by a contracted landfill operation. The recyclable materials are taken to a recycling contractor for processing.

## Solid Waste Operations:

The Solid Waste Division has a fleet of six garbage trucks and two limb loaders. The division employs one foreman, five equipment operators and six laborers. This team is sometimes assisted by temporary labor whose services are procured via a contract. Daily operations typically use four trucks to service Solid Waste, Recycling and Limb routes. Each operator is assigned to a route and the one additional operator is utilized as a floater when other operators take vacation.

## Solid Waste Daily Operation Current Service Levels:

The City is broken into five solid waste schedule zones. Each zone is serviced twice weekly for solid waste. Limbs are collected once weekly in each zone. Recycling is collected once weekly as well.



Service	Zone Covered-Crew Assigned				
	Mon	Tue	Wed	Thu	Fri
Solid Waste Pickup #1	A, B, E	C, D			
Solid Waste Pickup #2				A, B, E	C, D
Recycling		B	A, C, D		E
Limbs/Brush	D	E	B	C	A

## Service: Household Waste Collection

The solid waste division collects household waste in accordance with chapter 16 of the City of Bellaire code of ordinances. The following is taken from Chapter 16 and pertains to waste collection requirements for the weight and composition of the waste material.

### Sec. 16-2. - Collection requirements.

Garbage shall be placed in plastic bags, having a minimum thickness of 1.5 mil and a capacity of not less than 20 gallons each and which will not leak when handled. Such bags shall be tightly closed by cord, wire, or rubber band, in such manner as to prevent leakage of contents. Paper bags may be used under the same terms and conditions as plastic bags, provided such paper bags consist of at least two sheets of 50 pound wet strength extensible paper.

- (a) No containers shall be used except for plastic bags and the approved paper bags stated above.
- (b) Garbage shall be placed behind the curb at no more of a distance than three feet behind the curb.
- (c) No more than six garbage bags will be collected per home.
- (d) Each bag shall contain no more than 25 pounds of garbage.
- (e) Garbage must be set out for collection by 7:00 a.m. Garbage collection will commence at 7:00 a.m.
- (f) No garbage shall be set out for collection before 6:00 p.m. the day before the collection date.
- (g) No garbage shall be set out for collection on city holidays.
- (h) All glass being disposed of as garbage such as, but not limited to, windowpanes, sheet glass and broken glass shall be wrapped in cardboard and taped before setting out for collection.
- (i) All sharp objects or objects with sharp, cutting edges being disposed of as garbage such as, but not limited to, broken plastic and metal fragments shall be wrapped in cardboard and taped before setting out for collection.
- (j) Needles shall be put in a bottle or other container secured with a lid before setting out for collection.
- (k) No automotive oil or automotive fluids of any type such as, but not limited to, motor oil, transmission fluid, brake fluid, power steering fluid and windshield wiper fluid shall be deposited nor accepted in the garbage for collection.
- (l) No swimming pool cleaning chemicals or chemicals of any type such as, but not limited to, chlorine and turpentine shall be deposited nor accepted in the garbage for collection.
- (m) Oil-based paint shall not be deposited nor accepted in the garbage for collection. Latex paint may be accepted for collection only if it has been thoroughly dried and hardened.
- (n) No cardboard or aluminum cans shall be accepted in the trash. Cardboard and aluminum cans shall be placed with recyclables for collection.
- (o) The homeowner may also purchase a sticker to be placed on the garbage bags in excess of the allowed six bags for collection.
  - (1) The sticker may be purchased at City Hall, located at 7008 S. Rice Ave., upstairs in the utility billing department.
  - (2) The price for the stickers shall be set by the city manager.

## Service: Tree Limbs and Brush Collection

The solid waste division collects tree, hedge and brush trimmings cut by the owner in accordance with Chapter 16 of the City of Bellaire code of ordinances. The following is taken from Chapter 16 and pertains to tree, hedge and brush trimmings collection requirements:



**Sec. 16-8. - Garbage consisting of tree, hedge, and bush trimmings cut by the owner.**

All limbs, brush and tree sections three inches in diameter or smaller and cut personally by the owner shall be cut in four-foot lengths and tied in a bundle not greater than two feet in diameter and placed with household garbage for collection. The limit shall be three bundles per household per collection day.

All limbs, brush and tree sections greater than three inches in diameter and cut personally by the owner shall not exceed eight inches in diameter and shall be cut in lengths not to exceed four feet and stacked three feet behind the curb in piles not exceeding four feet in height. The weight limit shall not exceed 200 pounds per collection per day.

Limbs and brush cut personally by the owner shall be stacked for collection with no overhead obstructions such as, but not limited to, trees, streetlights and power lines. Vertical clearance shall be 30 feet from the ground.

Brush, limbs and tree sections not collected due to noncompliance with this ordinance shall be removed by the owner within 24 hours of notification at the owner's expense.

It shall be unlawful for any commercial tree trimming, lawn maintenance, gardening or landscaping services, handymen or any others not considered the occupant who shall be employed within the city limits of the city to prune or trim and tree, hedge, or bush, to fail to haul away grass, tree, hedge, bush and landscape trimmings from the city limits of the city to a point outside the city limits of the city.

**Service: Curbside Recycling Collection**

The Solid Waste division will collect up to 25 pounds of approved residential recycling materials per container. Residents are issued one container. Additional containers can be purchased for \$10 per container at the City of Bellaire City Hall.

Information about what is and is not recyclable in Bellaire can be found on the City of Bellaire website at [www.bellairetx.gov](http://www.bellairetx.gov).

**Service: Garbage Bags Provided**

Each household will be provided annually with 3 rolls of City-provided garbage bags. Additional bags can be purchased from the Utility Billing Division of the Finance Department at the City of Bellaire City Hall. Residents are always welcome to purchase bags from their local grocery or hardware store for use at any time.

The Solid Waste team will look into a more cost-effective and creative ways to distribute garbage bags to Bellaire Residents.

**Service: Street Sweeping**

It is the goal of the Public Works Department Solid Waste Division to sweep each street in the City 10 -12 times annually. This can be a challenging goal to reach as the division relies on only one piece of street sweeping equipment. As the street sweeper is used frequently it required frequent service and component failures are occurring more frequently as the machine ages.

A related service is storm preparation. The street sweeper is one of the tools the department uses to prepare the City's storm sewer infrastructure in the event of a pending storm. The sweeper is used to clean storm inlet drains as well as gutter lines with significant debris prior to storms.

## Who Does the Division Serve?

The Solid Waste Division serves the residents of the City of Bellaire by collecting and disposing of their solid waste, items for recycling, along with tree limbs and brush from resident (non-Contractor) yard maintenance.

The Solid Waste Division collects and disposes of recycling material generated by City facilities, provides support and assistance with City events, and oversees sweeping of City streets.

The Solid Waste Division also serves as staff support for the City's Environmental and Sustainability Board (ESB).

The division also provides internal services including the collection of recycled material from City facilities as well as the preparation of the budget and quarterly solid waste and recycling tonnage reports.

## Service Level Performance Measures

Department: Public Works – Solid Waste Division

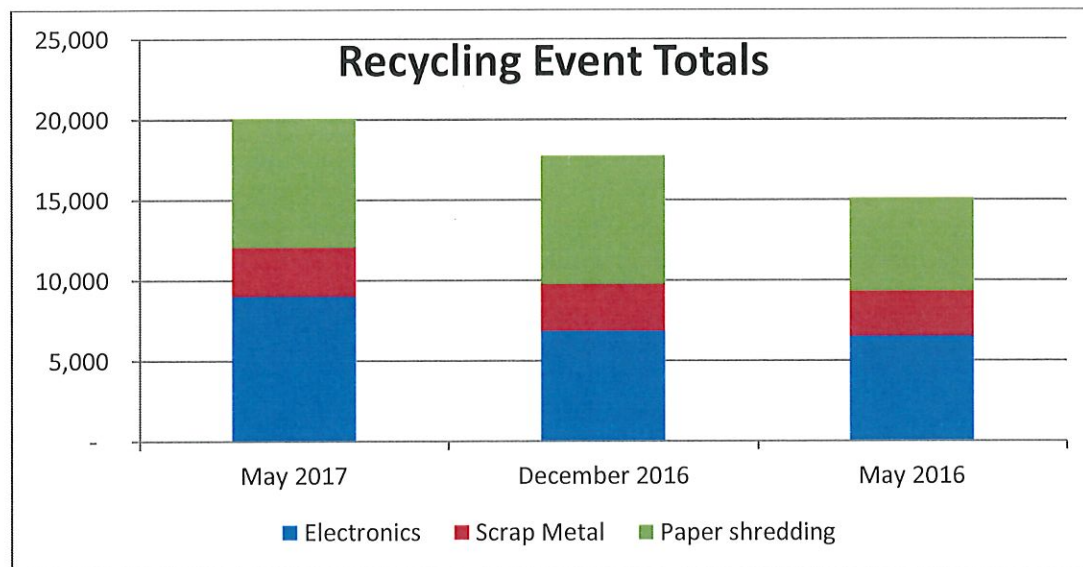
Service	Task	Description	Frequency
<b>Household Waste Collection</b>			
Household Waste Collection	Collection and disposal of household solid waste	All collection routes are fully completed by close of business on the scheduled day	Two times each week
<b>Tree Limbs and Brush Collection</b>			
Tree Limbs and Brush Collection	Collection and disposal of tree limbs and brush	All collection routes are fully completed by close of business on the scheduled day	Each area of the city has once a week collection.
<b>Curbside Recycling Collection</b>			
Curbside Recycling Collection	Collection and disposal of curbside recycling material	All collection routes are fully completed by close of business on the scheduled day	Recycling of the entire City occurs three times a week. This approach allows us to service the entire city.



Garbage Bag Delivery			
Garbage Bag Delivery	Delivery of City-approved garbage bags to each household.	Each household receives one (1) roll of garbage bags per delivery	One roll is delivered three times each year
Event Assistance			
Event Assistance	Provide assistance at City events as directed by the Event Coordinator	Provide any and all assistance as directed	As needed for the event.
Street Sweeping			
Street Sweeping	<u>Internal</u> – A City-owned Street Sweeper will clean City streets along the curb lines throughout the City	City streets shall be swept to maintain a clean and presentable street surface	<u>Internal</u> – All City streets will be swept once every month or at least 10 times per year.

#### Solid Waste/Recycling Data

Solid Wastes Totals (in tons) 2017			
Service	January – May 2017	June-September	October-December
Solid Waste	2,834.70	2,408.21	1,713.57
Recycling	818.05	476.45	430.66
Limbs Brush	333.43	213.71	231.07
Total	3,986.18	3,098.37	2,675.30



\*2018 totals not yet available. Last event occurred 2-17-18. December 2018 was skipped due to Harvey.

# Budget Totals

## Revenues/Expenditures

Department/Fund	Annual Budget			FY 2018 Projections
	FY 2016 Budget	FY 2017 Budget	FY 2018 Budget	
<b>FTE's</b>	11	11	11	
<b>Revenues</b>	\$1,434,500	\$1,487,047	\$1,472,323	
Solid Waste – Garbage & Brush Pickup	SW Rates & Misc. Rev	SW Rates & Misc. Rev	SW Rates & Misc. Rev	
<b>Total</b>	<b>\$1,434,500</b>	<b>\$1,487,047</b>	<b>\$1,472,323</b>	
<b>Expenditures</b>				
Personnel	474,179	698,847	724,880	
Professional Services	341,000	341,000	341,000	
Maintenance	161,500	161,500	161,500	
Contractual Services	40,000	47,800	53,462	
Materials & Supplies	210,500	217,900	191,481	
Capital Equipment*	222,000	0	0	
	69,000	0	0	
<b>Total</b>	<b>1,518,179</b>	<b>1,242,379</b>	<b>1,229,094</b>	

## Fiscal Forecast

Department/Fund	FY 2016	FY 2017
<b>FTE's</b>	11	11
<b>Revenues</b>	\$1,434,500	\$1,434,500
*Source*	SW Rates & Misc Rev	SW Rates & Misc Rev
<b>Total</b>	<b>\$1,434,500</b>	<b>\$1,434,500</b>
<b>Expenditures</b>		
Personnel	560,000	590,000
Professional Services	360,000	363,500
Maintenance	180,000	182,000
Contractual Services	50,000	50,500
Materials & Supplies	225,000	227,500
Capital Equipment Base	222,000	222,000
Cap Equip Supplement	69,000	60,000
<b>Total</b>	<b>1,597,000</b>	<b>1,635,500</b>
<b>Revenues-Expenditures</b>	<b>-162,500</b>	<b>-201,000</b>



# Environmental Scan

- **Decrease in Landfill Waste** - Over the years, the City has seen a decrease in solid waste collection volume and an increase in the volume of recyclables collected. It is believed this can partly be attributed to a greater awareness of the benefits of recycling and “green thinking.” This has been supported by the City’s educational efforts concerning recycling and solid waste services.
- **Increase in Recycling** - Currently, the City is recycling just over 20% of its waste stream. This represents a cost savings as this material is not going to landfill with its associated tipping fees. In addition, the City receives some monetary value from the recyclables collected that are sold. That value is market driven and can change over time.
- **Contractor Communications** - Communicating with mowing contractors to make sure they take their trimmings with them upon completion of work done within the City. The Solid Waste Division Summary of Contractor Communications Program Goals are as follows:
  - Provide educational materials to landscape contractors and residents informing them of the value of the program.
  - Prevent landscape waste from entering the storm sewer system.
  - Drive cost down of handling additional bags of green waste once SW Team has serviced assigned area.
  - To keep our city attractive and to create a community wide partnership that will aide in our efforts

**Partnerships:** - The Public Works Department will continue to partner with its traditional partners to improve or enhance service levels. Two of the traditional partners include the Environmental Sustainability Board (ESB) and The Houston Galveston Area Council. The department will also seek out non- traditional partners such as the private sector. Recently it was observed that some Cities are leasing advertising space on their refuse trucks to generate additional revenues. This is an example of a possible revenue stream that could be used to lower costs to the residents or to provide for an additional service.

## Available Assets

- 6 Garbage trucks
  - Currently includes 3 reserve/backup units
    - Necessary to address maintenance issues and Wednesday Recycling (5 units needed)
    - Allows for additional deployment in areas with heavy loads
    - Will be reduced to 2 once equipment upgrades and route changes are realized
- 2 Limb loaders
  - Includes 1 reserve/backup units
    - Necessary to address maintenance issues
    - Allows for additional deployment in areas with heavy loads
- 2 Pickup truck(s) (Due to Hurricane Harvey the available assets are limited until they are replaced) We anticipate the replacements happening FY18.
- 2 Dump trucks
- Borrows from other divisions as needed
- Environmental & Sustainability Board
- H-GAC (Information resource)
- Communication and Special Events Team (CSET)

## Future Service Enhancements

The division has no plans to modify service levels in the current year nor does it have plans to request significant service level changes or service level enhancements in FY 2019.

Enhancements proposed for FY 2018 and FY 2019 will primarily center around improved management of the Solid Waste fleet. Traditionally the division has made repairs as needed and performed preventative maintenance when possible. Fleet best practices show that a fleet programmed for regular preventative maintenance will see reduced downtime, less repair expenditures and an improved safety record.

There should be no increase in cost associated with the implementation of such a program as adherence to regular preventative maintenance have been shown to ultimately reduce expenditures over time.

The Environmental and Sustainability Board (ESB) continues to encourage for the City to investigate the possibility of the utilization of carts of varying sizes for solid waste and recycling operations. Research on this topic was presented to the ESB in recent years and the proposed program was not well received. The reasons, I am told, center around the capital expense associated with retrofitting of the trucks and the procurement of the carts. In light of the current financial forecast I do not support reinvestigating this service level change at this time.



Additionally, and as cited in the 2017 City of Bellaire Citizen Survey, both solid waste collection and recycling collection received a rating of excellent or above average from more than 85 percent of the respondents. This is a clear indication that the community is largely satisfied with the services being provided.

## Future Strategy

- 1.) **Fleet Operations** - Historically the Public Works Department has not managed fleet operations in a comprehensive manner. This is true for the management of both the light and heavy-duty fleets. Cooperative efforts are underway through the office of the Assistant City Manager as well as the Public Works Department to address this shortcoming. The first step will be the development of a contract for heavy duty unit maintenance. Presently maintenance work is not performed and documented as consistently as need be. The objective is to put in place a contractual arrangement that is both easy for personnel to utilize and effective for the vendor to bill and receive payment. Subsequent and similar programs will be developed for the light duty fleet throughout the organization. Increased and appropriate maintenance will ultimately lower repair costs and decrease vehicle down time.
- 2.) **Separation of Solid Waste from Water and Wastewater Enterprise Fund** - The Public Works Department will partner with the Finance Department in FY 2019 to develop a plan to separate the Solid Waste fund from the Water and Wastewater fund. The two are currently combined and this can cause confusion when looking to define a true cost of service model. This will also provide needed clarity for the public relative to surface water rate increases as those costs are not presently isolated from the remainder of the enterprise fund.
- 3.) **Educational Outreach** - The Solid Waste Division will work on improving educational outreaches to residents and contractors on solid waste and recycling policy to continue to reduce solid waste volumes and increase recycling material volumes. The City's Communication & Special Events Team (CSET) will play a critical role in the development and dissemination of this information.
- 4.) **We will review and possibly revive our Household Hazardous Waste Voucher Program**  
The City does not collect household hazardous waste (HHW). As a result, residents wishing to dispose of HHW are referred to the Harris County collection facility located off of Hwy. 290. If there is a desire to do more, the City may revive the voucher program partnership with the City of Houston to utilize their facilities on Westpark Dr. Vouchers are \$75 each and have a 100 lb limit.
  - Would give residents a much more convenient option to properly dispose of HHW
  - Vouchers could be purchased on periodic basis to address needs
  - Would address customer concerns and confusion regarding options

Another option is annual collection event for HHW where residents would drive to a location on a specific date to dispose of their materials. A contractor would collect, transport and dispose of the HHW. The cost range is \$100 - \$150 per car. Depending on participation levels, the cost for this could quickly escalate and might be hard to predict.

