## **Memorandum**



DATE February 23, 2018

Honorable Members of the Quality of Life, Arts & Culture Committee: Sandy Greyson (chair), Mark Clayton (Vice Chair), Rickey D. Callahan, Jennifer S. Gates, Scott Griggs, B. Adam McGough, Omar Narvaez

SUBJECT Bulk and Brush Program - Update

On Monday, February 26, 2018, you will be briefed on Bulk and Brush Program - Update. The briefing materials are attached for your review.

Please feel free to contact me if you have any questions or concerns.

Joey Zapata

Assistant City Manager

Honorable Mayor and Members of City Council

 T.C. Broadnax, City Manager
 Larry Casto, City Attorney
 Craig D. Kinton, City Auditor
 Bilierae Johnson, City Secretary (Interim)
 Daniel F. Solis, Administrative Judge
 Kimberly Bizor Tolbert, Chief of Staff to the City Manager
 Majed A. Al-Ghafry, Assistant City Manager

Jo M. (Jody) Puckett, P.E., Assistant City Manager (Interim)
Jon Fortune, Assistant City Manager
M. Elizabeth Reich, Chief Financial Officer
Nadia Chandler Hardy, Chief of Community Services
Raquel Favela, Chief of Economic Development & Neighborhood Services
Theresa O'Donnell, Chief of Resilience
Directors and Assistant Directors

# **Bulk and Brush Program - Update**

**Quality of Life, Arts & Culture Committee** 

**February 26, 2018** 

**Kelly High, Director Sanitation Services** 



City of Dallas

## **Presentation Overview**

- Provide a recap of the last bulk and brush collection program briefings
- Provide an overview of current collection program
  - Discuss program challenges
- Discuss recently completed field surveys and examine results
- Discuss Committee feedback on service options
- Summarize and discuss potential next steps



# **Previous Bulk and Brush Briefings**

- In previous bulk and brush briefings to the Committee (December 2016 and February 2017), we discussed:
  - The current bulk and brush collection program and its challenges
  - Program alternatives and estimated financial impacts
  - Need for additional survey information to better inform councilmembers on impacts of potential program changes

# **Current Collection Program**

- Sanitation Services provides collection service to approximately 240,000 residential households
- The current bulk and brush collection program costs over \$20M annually
  - About \$8 of the monthly \$25.18 residential fee
- Bulk and brush service is provided monthly during designated collection weeks
- Broad ordinance language doesn't specify volume limits and allows bulk and brush to be comingled







# **Current Collection Program – Challenges**

- Bulk and brush are comingled and the organic material cannot be easily diverted or re-used
  - Meeting the City's residential diversion goal of 40%, by 2020, requires diversion of brush/yard waste
  - Currently diversion/re-use is at about 20%
    - 12% residential blue bin recycling
    - 8% beneficial re-use of brush







# **Current Collection Program – Challenges**

- With few restrictions, the program tolerates over use or inappropriate use
  - Program utilized by homeowner operated businesses
  - Non-resident material brought to Dallas for collection
  - Large and non-typical waste are set out by some



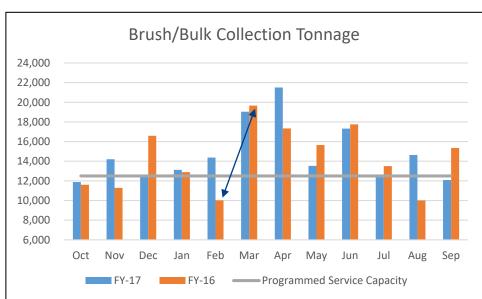


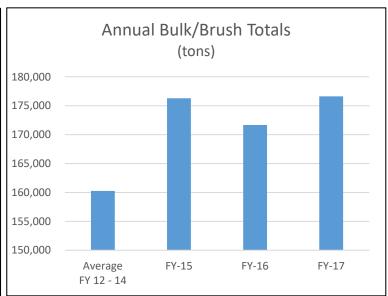




# **Current Collection Program – Challenges** (continued)

- Yearly volumes have increased and monthly volumes range from less than 10K tons to over 20K tons
  - Crews collect over 170,000 tons annually





# **Current Collection Program – Challenges** (continued)

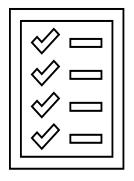
- Volume spikes impact service delivery
  - In the last two years, crews were only able to finish by Friday about 60% -70% of the time
- Frequent collections and limited restrictions can contribute to neighborhood blight
  - Potential indifference toward setting material out during non-collection weeks
  - Over 12,000 bulk and brush violation service requests worked annually by Code Compliance
    - Results in approximately 5,000 citations annually







# **Recent Field Survey Results**



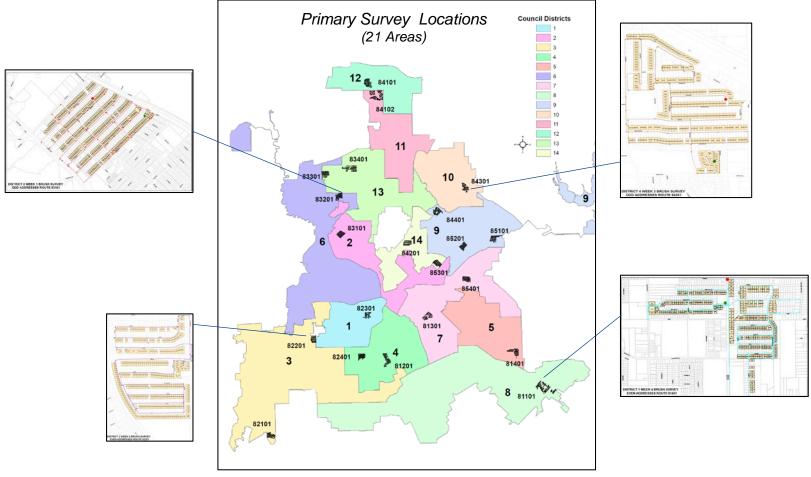
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# **Field Survey Details**

- In 2017, staff conducted field surveys to:
  - Determine how customers utilized the current program
    - Frequency of use (participation levels)
    - Type of material set out (brush, non-brush, bagged leaves)
    - Set-out sizes (cubic yards)
- Two survey components:
  - A primary 6 month survey
    - 21 geographically identified areas Citywide
    - ~250 homes in each area (same 5,250 surveyed each month)
      - Odd side addresses for odd brush weeks and even side addresses for even brush weeks
    - March, April, May, June, November and December
    - At least one area in each Council District and four areas in each Sanitation District (one per brush week)
  - A secondary "support" survey was conducted in July only (2,500 separate homes)



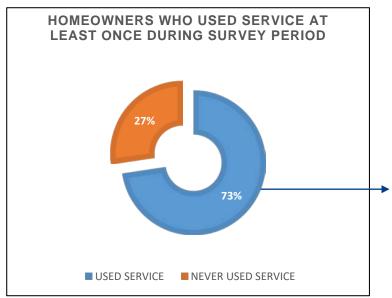
# **Primary Survey Map**

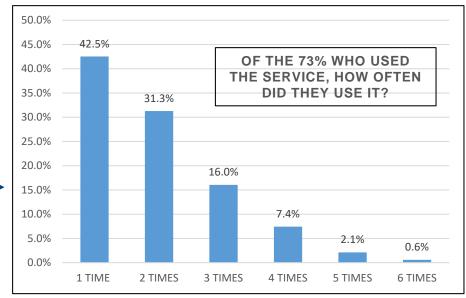


Note: All Council districts, Sanitation districts and Bulk/Brush weeks represented



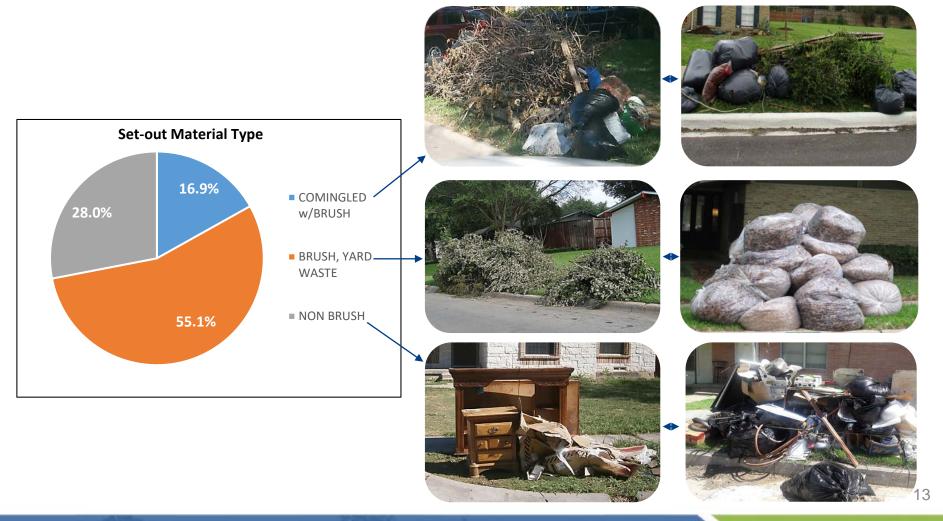
# **Primary Survey Results - Participation**





Note: Of the total number of opportunities available during the 6 months, only 24% of the opportunities utilized.

# **Primary Survey Results - Material Type**

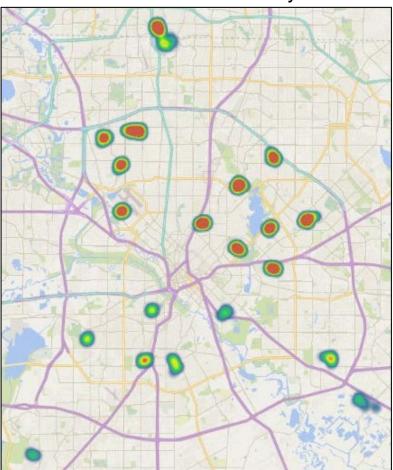




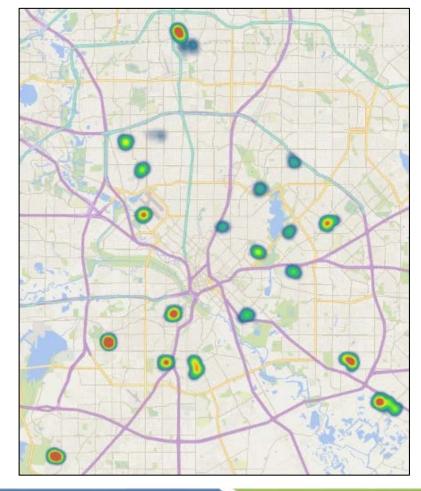
# **Material Type by Area**

(based on percentage)

Brush/Yard Waste Only



Non-brush Waste

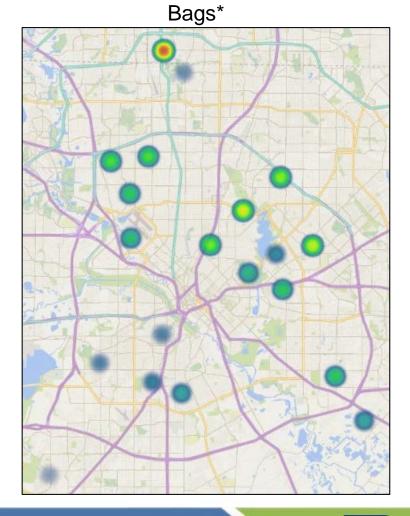


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# **Material Type by Area**

(based on percentage or number\*)

Comingled



# **Primary Survey Results - Sizes**

The survey indicated the following regarding the sizes of individual set outs:

Set Out Size	Percentage
Less than 5 cubic yards	85%
6 – 10 cubic yards	11%
11 – 15 cubic yards	2%
Over 15 cubic yards	2%

#### Note:

- 1 Cubic Yard ~Two 96-gallon roll carts
- 10 Cubic Yards ~ 16 full sized clothes dryers or 6 full sized refrigerators
- 16-18 Cubic Yards ~ Minivan
- 35 Cubic Yards ~ One full brush trailer



# **Primary Survey Results – Size Examples**



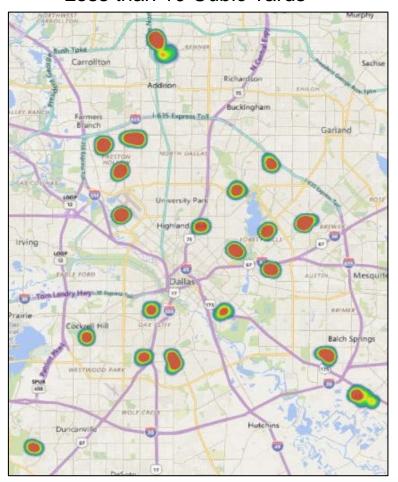




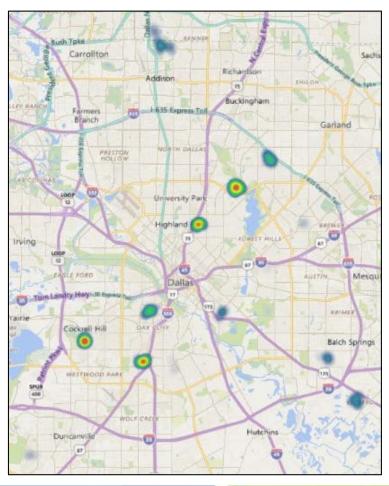


# **Set-out Volume by Area**

Less than 10 Cubic Yards



Over 10 Cubic Yards



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# **Summary of 6 Month Survey Results**

- Most residents (73%) used the City's bulk/brush service at least once during the survey period
- Of the residents that used the service, about 74% only used the service once or twice
- Most residents (85%) put out fewer than 5 cubic yards per collection week
- When service utilized, about 55% was brush/yard waste only and 17% comingled brush/waste

# **Summary of 6 Month Survey Results**

- There were some slight differences among the 21 areas related to:
  - Composition of materials and use of bagged material\*
    - Brush/yard waste only ranging from 30% 77%
    - Non-brush ranging from 8% 53%
  - Volumes of material set out for collection\*
    - Over 10 cubic yards ranging from 0 11.9%
  - Participation and utilization rates\*
    - Participation ranging from 38% 88%
- Although not discussed (in appendix), the July survey data correlated well to primary survey

\*Note: Details by area in appendix



# **Moving Forward - Program Options?**













# Primary Goals for Considering Program Changes:

- Improve citywide neighborhood appearances by reducing and/or mitigating negative collection impacts
- Improve consistency and efficiency of service
- Meet "zero-waste" program goals by increasing diversion or re-use of brush and yard waste, while meeting residents service needs
  - Changes could increase brush diversion from 8% to 19%
  - Over 30-40 years, changes could save 2-3 years of landfill space



# **Program Options for Discussion**

- Separate Bulk and Brush material to increase organic waste diversion or reuse
- Collection schedule options:
  - 1. Same collection week for bulk and brush
    - Materials separated at curb for collection
    - Call-in to 311 to indicate a bulk set-out (for routing)
    - No call-in needed for brush set-out
  - 2. Monthly brush and yard waste, with quarterly bulk
  - 3. Alternating months of bulk and brush collection
  - 4. Monthly brush, but schedule bulk
    - Call-in to 311 to indicate a bulk set-out (for routing)



# **Program Options for Discussion**

- Collection restriction options:
  - Volume restrictions (10 cubic yards)\*:
    - Volumes over limit at an additional charge
  - Bag type restrictions:
    - Require leaves and grass clippings to be in paper yard bags, only if set-out with brush/yard waste
      - Yard waste in plastic bags considered bulk

\*Note: it is estimated that 25-30% of total tons collected is from less than 5% of the set-outs (over 10 cubic yards)



# **Summary**

- The City's current bulk and brush collection program has few limitations and can create an unsightly appearance
  - Monthly collection volumes fluctuate too significantly for efficient and consistent service delivery
- Program changes needed to increase diversion and re-use, reduce tonnage collected, and allow for more consistent service
- Committee feedback is needed on program options and recommendations to refine program changes (if desired)



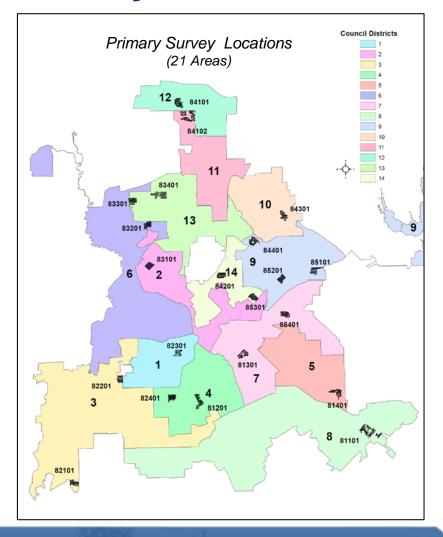
# **Next Step**

- Receive Committee feedback on potential program changes/options
- If the Committee desires program changes and identifies preferred program options, staff would:
  - Develop a complete program based on key service factors and/or levels identified by the Committee
  - Develop estimated financial impacts and implementation plan based on program changes
  - Bring a detailed plan back to the Committee to consideration within 90 days



# **Appendix**

# **Primary Area Profiles**



## Area 81101 Profile - Southeast CD 8

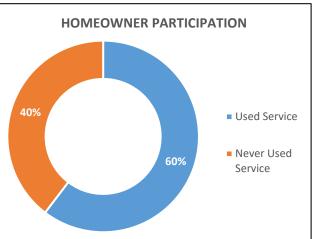
## Area Borders

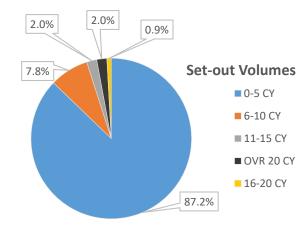
- CF Hawn Fwy
- Jordan Valley
- Kleberg Rd.
- Woody Rd.

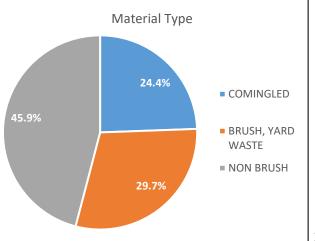
## Number of Homes

- 239 Homes
- General Profile
  - Average volumes
  - Above average nonbrush and below average brush percentages
  - Below average participation
- Other Information
  - Bag Count 148
  - Opportunities Used
    - 21%













## Area 81201 Profile - South CD 4

### Area Borders

- Saner Ave.
- Lancaster Rd.
- Overton Rd.
- Frio Dr.

## Number of Homes

238 Homes

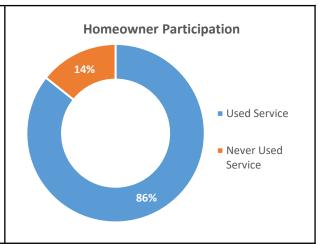
#### General Profile

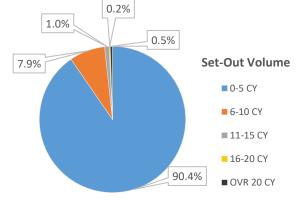
- Slightly below average volumes
- Above average comingled and below average brush percentage
- Above average participation

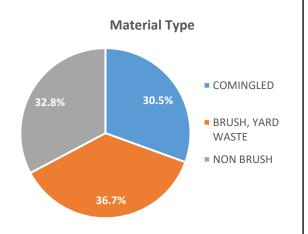
## Other Information

- Bag Count 147
- Opportunities Used
  - 28%









30



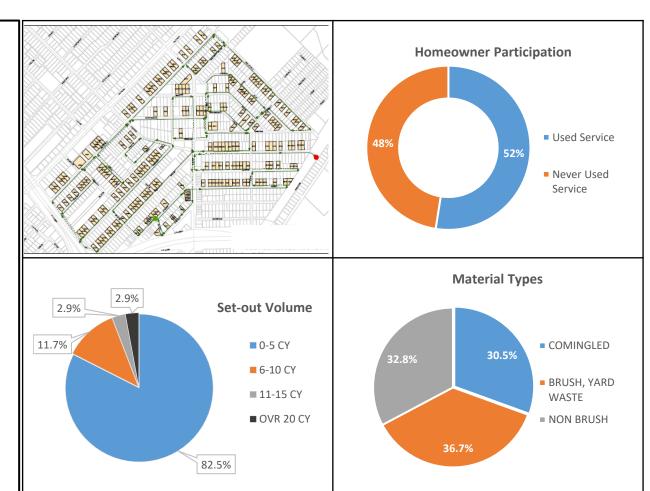
## Area 81301 Profile - South CD 7

## Area Borders

- Hatcher St.
- Malcolm X Blvd.
- CF Hawn Frwy

## Number of Homes

- 238 Homes
- General Profile
  - Average volumes
  - Above average comingled and below average brush percentage
  - Below average participation
- Other Information
  - Bag Count 73
  - Opportunities Used
    - 13%





## Area 81401 Profile - South CD 5

## Area Borders

- Stebbins Dr.
- N. Masters Dr.
- Old Seagoville Rd.
- St. Augustine Rd.

## Number of Homes

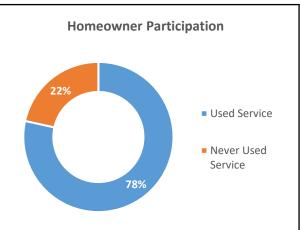
255 Homes

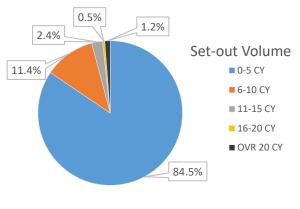
## General Profile

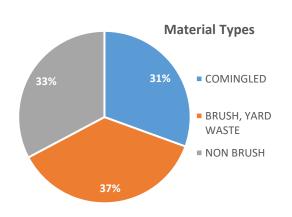
- Average Volumes
- Above average nonbrush and below average brush percentage
- Average participation

- Bag Count 202
- Opportunities Used
  - 27%













## Area 82101 Profile - Southwest CD 3

### Area Borders

- Sorcey/Mt. Creek Pkwy
- Clark Rd.
- Flameleaf Pl
- Oakmore Dr.

#### Number of Homes

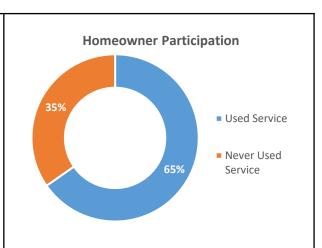
245 Homes

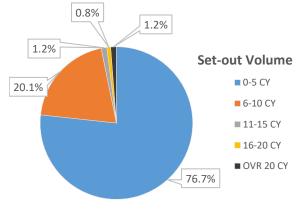
## General Profile

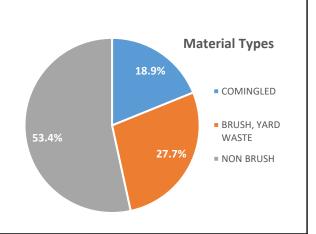
- Above average volumes
- Well above average nonbrush and below average brush percentage
- Slightly below average participation

- Bag Count 93
- Opportunities Used
  - 17%













## Area 82201 Profile - Southwest CD 3

## Area Borders

- Marcell Ave.
- Cockrell Hill Rd.
- Lizzy Dr.
- · Dacki Ave.

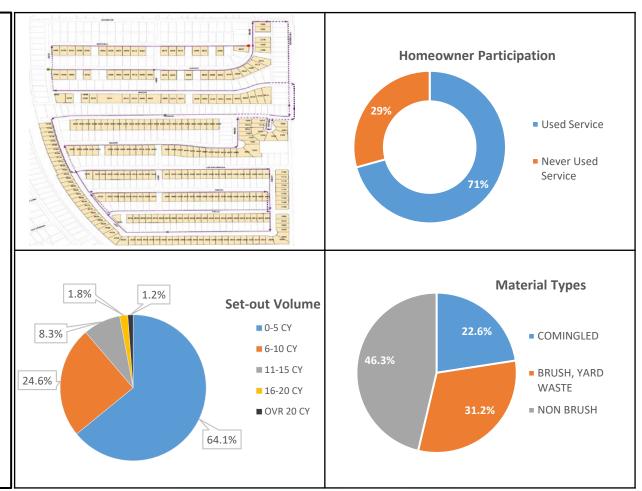
## Number of Homes

280 Homes

#### General Profile

- Above average volumes
- Well above average non-brush and below average brush percentage
- Average participation

- Bag Count 107
- Opportunities Used
  - 20%





## Area 82301 Profile - South CD 1

## Area Borders

- Neches
- Zang Blvd.
- W. Davis St.
- Cedar Hill Ave.

## Number of Homes

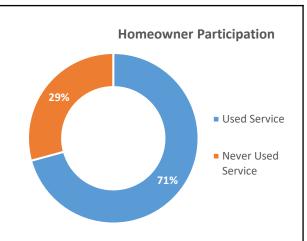
212 Homes

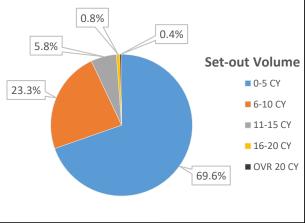
#### General Profile

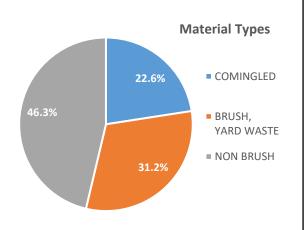
- Above average volumes
- Above average nonbrush and below average brush percentage
- Average participation

- Bag Count 107
- Opportunities Used
  - 18%











### Area 82401 Profile - South CD 4

#### Area Borders

- W. Saner Ave.
- S. Llewellyn
- W. Kiest Ave.
- S. Polk St.

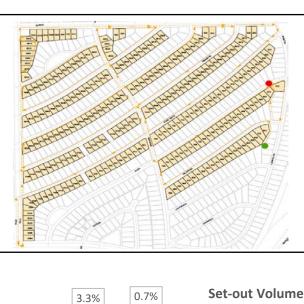
#### Number of Homes

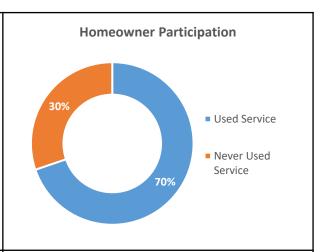
• 258 Homes

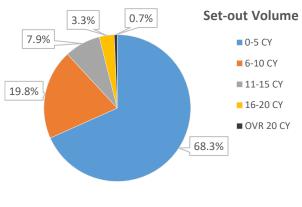
#### General Profile

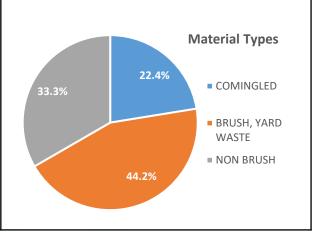
- Above average volumes
- Near average material percentages
- Average participation

- Bag Count 119
- Opportunities Used
  - 19%













## Area 83101 Profile - Northwest CD 2

#### Area Borders

- Burbank St.
- Denton Rd.
- Gilford St.
- Harry Hines Blvd.

#### Number of Homes

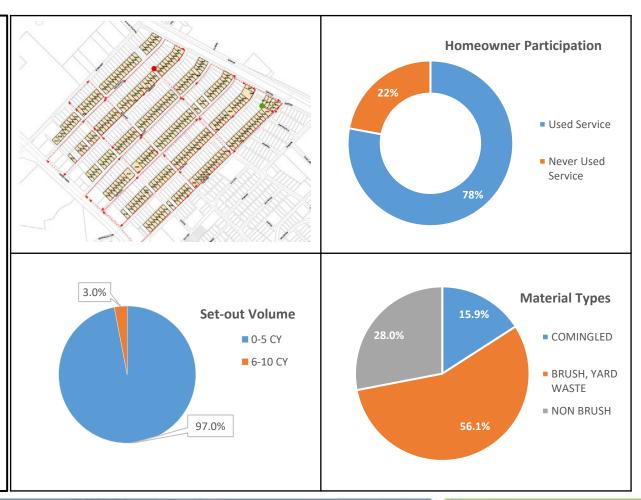
• 258 Homes

#### General Profile

- Below average volumes
- Average material percentages
- Average participation

#### Other Information

- Bag Count 184
- Opportunities Used
  - 25%





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### Area 83201- Northwest CD 6

#### Area Borders

- · Walnut Hill Rd.
- Marsh Ln.
- Linda Dr.
- Webb Chapel Rd.

#### Number of Homes

234 Homes

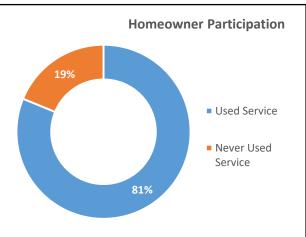
#### General Profile

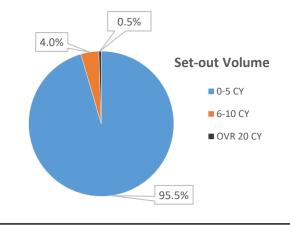
- Below average volumes
- Near average material percentages
- Slightly above average participation

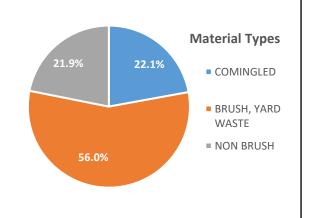
#### Other Information

- Bag Count 201
- Opportunities Used
  - 26%











City of Dallas

### Area 83301- Northwest CD 13

#### Area Borders

- Northaven Rd.
- Webb Chapel Rd.
- Royal Ln.
- Dennis Rd.

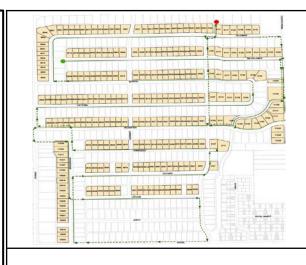
#### Number of Homes

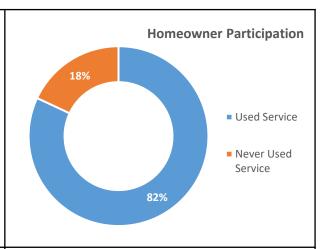
255 Homes

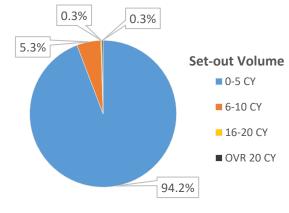
#### General Profile

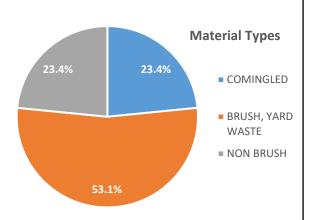
- Below average volumes
- Average material percentages
- Slightly above average participation

- Bag Count 231
- Opportunities Used
  - 26%











### Area 83401 Profile - North CD 13

#### Area Borders

- Goodfellow Dr.
- Midway Rd.
- Northaven Rd.
- Marsh Ln.

#### Number of Homes

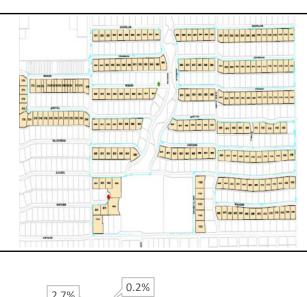
227 Homes

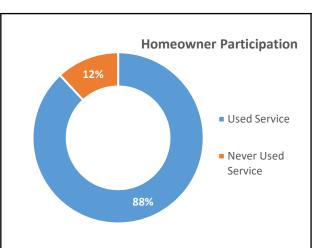
#### General Profile

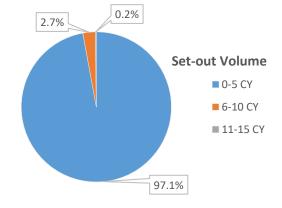
- Below average volumes
- Above average brush and below average non-brush
- Above average participation

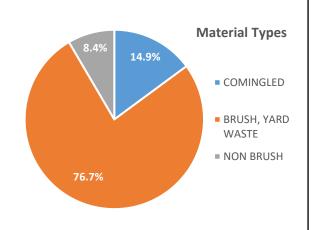
#### Other Information

- Bag Count 232
- Opportunities Used
  - 33%











## Area 84101 Profile - North CD 12

#### Area Borders

- Frankford Rd.
- Ivy Hill Dr.
- Inverrary Ct.
- Spyglass Dr.

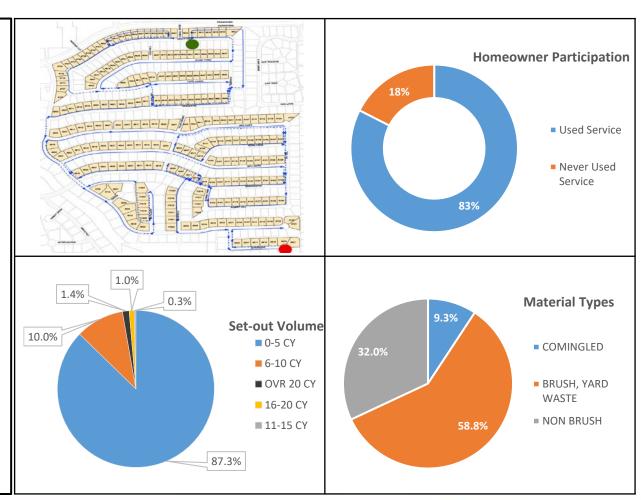
#### Number of Homes

240 Homes

#### General Profile

- Average volumes
- Average material percentages
- Slightly above average participation

- Bag Count 453
- Opportunities Used
  - 40%





### Area 84102 Profile - North CD 11

#### Area Borders

- Chipping Way
- Preston Rd.
- Westgrove Dr.
- Knoll Trail Dr.

#### Number of Homes

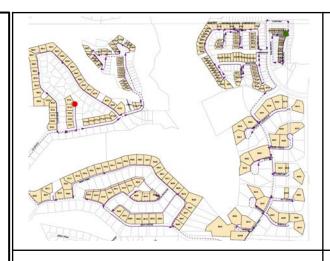
248 Homes

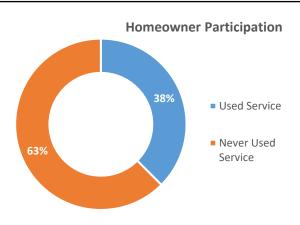
#### General Profile

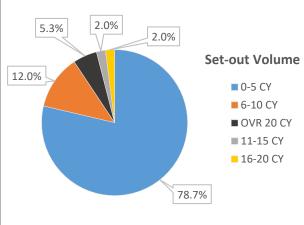
- Slightly above average volumes
- Slightly above average brush
- Well below average participation

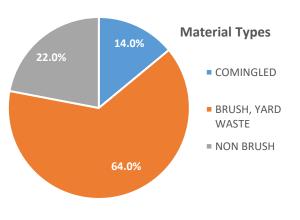
#### Other Information

- Bag Count 101
- Opportunities Used
  - 10%











## Area 84201 Profile - Central CD 14

#### Area Borders

- McCommas Blvd.
- Greenville Ave.
- Vanderbilt Ave.
- Homer St.

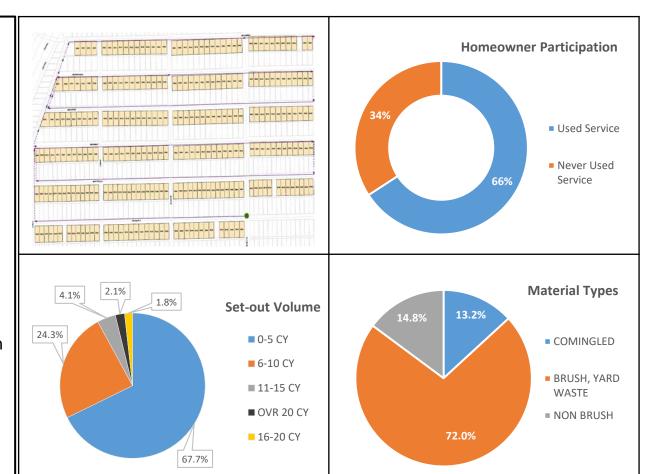
#### Number of Homes

275 Homes

#### General Profile

- Well above average volumes
- Well above average brush percentage
- Average participation

- Bag Count 255
- Opportunities Used
  - 21%





## Area 84301 Profile - Northeast CD 10

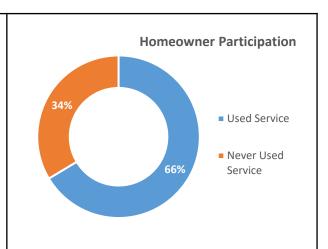
#### Area Borders

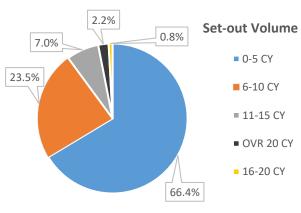
- LBJ Frwy.
- Plano Rd.
- Walnut Hill Ln.

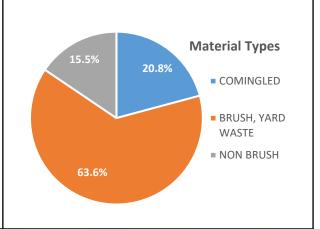
#### Number of Homes

- 256 Homes
- General Profile
  - Well above average volumes
  - Slightly above average brush percentage
  - Average participation
- Other Information
  - Bag Count 270
  - Opportunities Used
    - 22%











## Area 84401 Profile - Northeast CD 9

#### Area Borders

- Walling Ln.
- Wild Valley Dr.
- E. Northwest Hwy.
- Kingsbury Dr.

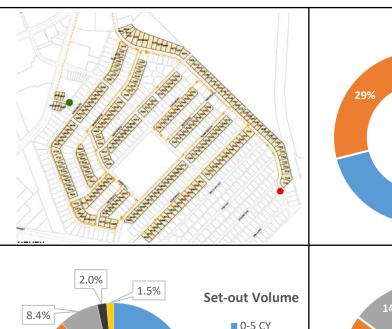
#### Number of Homes

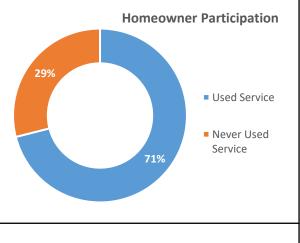
252 Homes

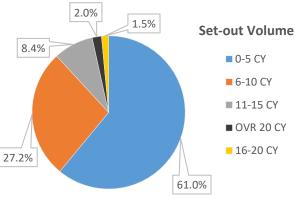
#### General Profile

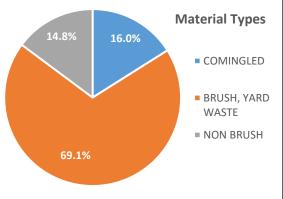
- Well above average volumes
- Above average brush percentage
- Average participation

- Bag Count 319
- Opportunities Used
  - 27%













## Area 85101 Profile - East CD 9

#### Area Borders

- · San Medina Ave.
- · Shiloh Rd.
- Milmar Dr.
- · Ferguson Rd.

#### Number of Homes

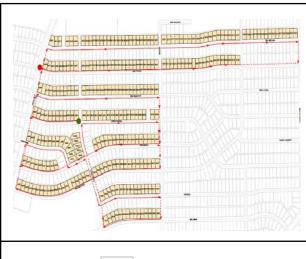
287 Homes

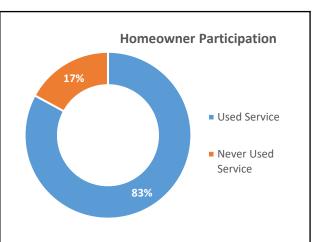
#### General Profile

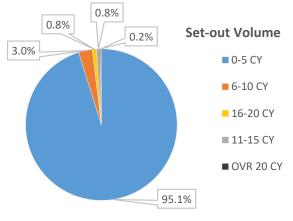
- Below average volumes
- Slightly above average brush and below average comingled percentages
- Slightly above average participation

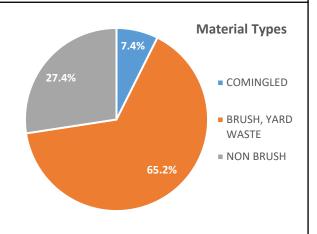
#### Other Information

- Bag Count 302
- Opportunities Used
  - 27%











## Area 85201 Profile - East CD 9

#### Area Borders

- Garland Rd.
- · Old Gate Ln.
- · Diceman Dr.
- Lakeland Dr.

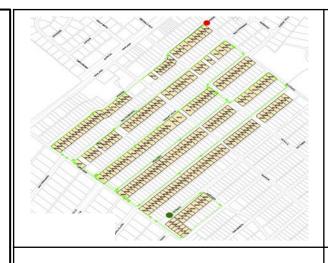
#### Number of Homes

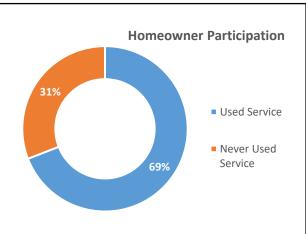
233 Homes

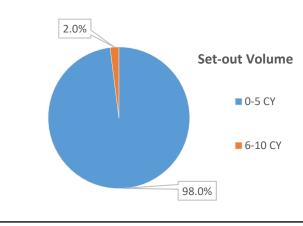
#### General Profile

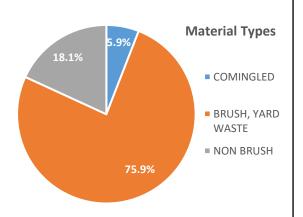
- Below average volumes
- Above average brush and below average comingled percentages
- Average participation

- Bag Count 125
- Opportunities Used
  - 21%













### Area 85301 Profile - Central CD 14

#### Area Borders

- Santa Fe Ave.
- Tenison Memorial
- E. Grand Ave.
- Cordova St.

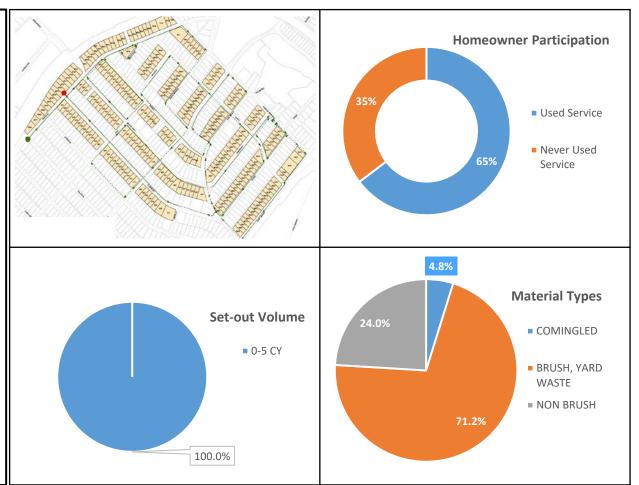
#### Number of Homes

272 Homes

#### General Profile

- Well below average volumes
- Above average brush and below average comingled percentages
- Average participation

- Bag Count 170
- Opportunities Used
  - 20%







## Area 85401 Profile - East CD 7

#### Area Borders

- · Samuel Ave.
- Everglade Rd.
- Menefee Dr.
- Enderly Pl

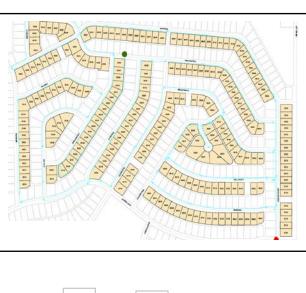
#### Number of Homes

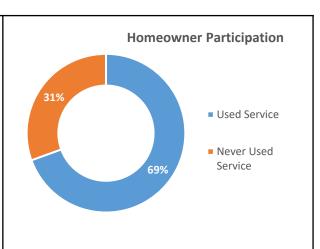
239 Homes

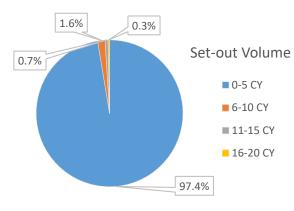
#### General Profile

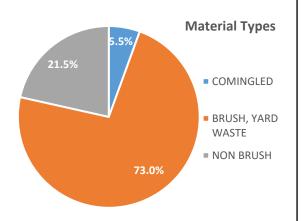
- Below average volumes
- Above average brush and below average comingled percentages
- Average participation

- Bag Count 201
- Opportunities Used
  - 21%



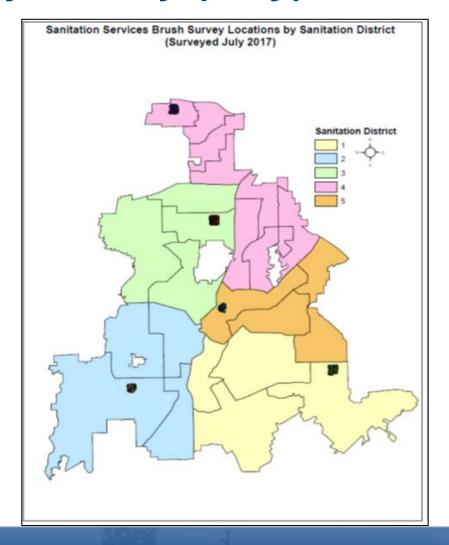








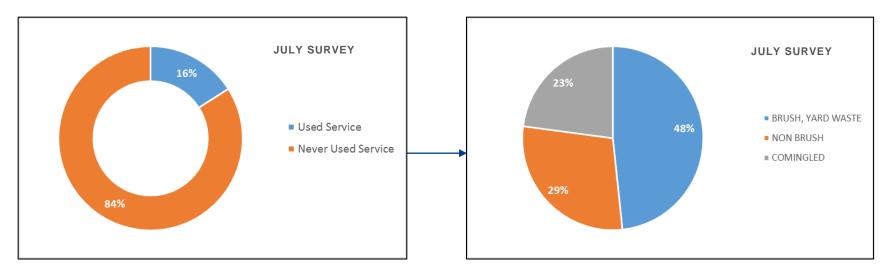
# **Secondary Survey (July) Locations**





# **Secondary Survey Results - Participation**

- Secondary survey (July only) data similar to primary data and differences likely due to seasonal variation\*
  - Service used less (16% utilization vs. 27%)
  - Brush/yard waste percentage lower (48% vs. 55%)
  - Non-brush percentage higher (23% vs. 17%)

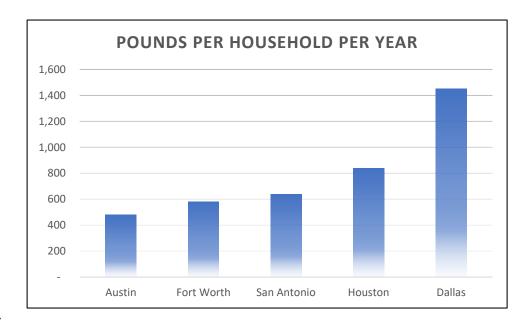


\*Note: 2017 - July tonnage 29% lower than June and 16% lower than August



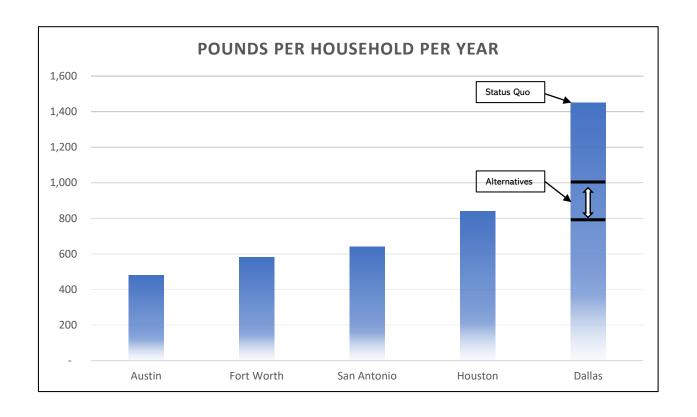
# **Comparison – Other Texas Cities**

- Austin (193,000 households)
  - 2X per year bulk and 2x per year brush (restrictions)
  - Weekly yard waste (restrictions)
- Ft. Worth (207,000 households)
  - Monthly bulk (10 CY limit)
  - No monthly brush, but weekly vard waste (restrictions)
  - Early set-out: Friday 6pm
- Houston (380,000 households)
  - Alternating bulk and brush months (8 CY limit)
  - Weekly yard waste (restrictions)
  - Early set-out: Friday 6pm
- San Antonio (340,000 households)
  - 2X per year bulk and 2x per year brush (8 CY limit)
  - Notified a week before collection is scheduled



City of Dallas

# **Comparison – Other Texas Cities**





# **Previously Reviewed Service Alternatives**

- Three alternatives and their associated financial impact have been previously evaluated:
  - Monthly collection of brush/yard trimmings and scheduled bulk collection (e.g., four times per year)
  - Monthly collection of yard trimmings and twice per year collection of large brush and twice per year collection of bulk items
  - Every other month collection of Brush/Yard Trimmings and Bulk Items

Material Type	Existing System	Alternative 1	Alternative 2	Alternative 3
Yard Trimmings	Monthly	Monthly	Monthly	Every Other Month
Large Brush			Twice per Year	
Bulky Items		Call-in <sup>1</sup>	Twice per Year	Every Other Month

<sup>1.</sup> The analysis assumes that a certain number of collections per year would be included in the base residential rate, with additional collections charged an additional fee.



# **Previously Reviewed Alternatives**

- Each collection alternative evaluated would increase diversion or beneficial re-use, as well as reduce program costs and collected tonnage
- All alternatives include:
  - Volume limits (8-10 cubic yards) on bulky items or large brush
  - Require use of bundles or compostable bags for yard trimmings
  - Would allow for "Cost Plus" option to collect additional waste or non-program waste such as construction or remodeling debris
- Implementation of any alternative would require significant outreach and education costs, as well as potential fleet procurement



## **Previously Reviewed Alternatives**

- Alternatives and their impact on collection tonnage and diversion (at full implementation)
- One of the primary goals of increasing diversion requires separation of bulk and brush materials
  - Consistent with other large Texas cities such as Austin, Ft. Worth, Houston and San Antonio

	2017 Tons			
Material Type	Collected	Alternative 1	Alternative 2	Alternative 3
Yard Waste Tons*		35,000	35,000	
Large Brush Tons*		54,250	31,000	73,500
Bulk Items Tons		31,000	31,000	46,500
Total Tons	176,628	120,250	97,000	120,000
Potential Savings		(\$2.8M)	(\$3.9M)	(\$2.2M)
Residential Fee Impact		(\$0.97)	(\$1.35)	(\$0.76)

