Memorandum



DATE May 11, 2018

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

SUBJECT Bulk and Brush Collection Changes - Update

On Monday, May 14, 2018, you will be briefed on the Bulk and Brush Collection Changes - 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

C: 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 Collection Changes - Update

Quality of Life, Arts & Culture Committee
May 14, 2018

Kelly High, Director Sanitation Services



City of Dallas

Presentation Overview

- Background
- Recap "Why change the current program?"
- Recap February 26 Committee briefing
- Discuss new program scenario and impacts
- Discuss other related program considerations
- Review potential implementation schedule
- Next Steps
- Committee feedback



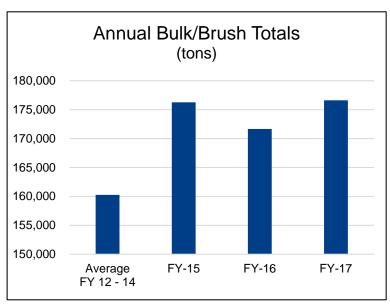
Recap - Why Change the Current Program?

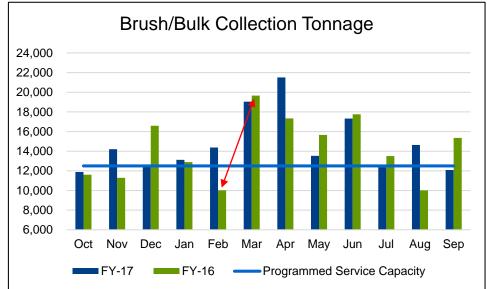
- Collection tonnage has increased by over 25,000 tons annually since 2013
 - In the last two years, crews were only able to finish by Friday about 60% -70% of the time
- Tonnage can vary significantly from week to week and month to month, creating inefficiencies
- Frequent collections and lack of restrictions can contribute to neighborhood blight
- Bulk and brush material is commingled and cannot be effectively diverted
 - ➤ Making progress towards the City's residential diversion goal of 40%, by 2020, requires diversion of brush/yard waste



Recap - Why Change the Current Program?

Annual Increases and Month Variations





City of Dallas

Recap - February 26 Committee Briefing

- Reviewed results of a recently completed citywide field survey related to bulk and brush collections
 - The survey of about 5,200 homes over six months indicated:
 - Most residents used the bulk and brush collection service at least once during the survey period, but 73% only used the service once or twice
 - Over 55% of the material was brush and yard waste, 17% commingled brush and non-brush, and 28% non-brush
 - About 85% of the time residents placed less than 5 cubic yards of material out for collection
- With new survey information available, program alternatives were reviewed



Recap - February 26 Committee Briefing

- The Committee generally supported:
 - ➤ Separating collection of bulk and brush/yard waste
 - Continued monthly brush/yard waste collection
 - Limits on the size and number of bulk collections
 - > Few limits, if any, on brush/yard waste material
- The Committee also asked staff to:
 - ➤ Bring back a preferred alternative based on input and provide cost impacts and timeline for implementation
 - > Review the use of compostable bags for yard waste
 - Evaluate the need to create a free bags program
 - Review and update the current "cost plus" process for better customer experience and efficiency



New Collection Alternative

City of Dallas

New Collection Alternative Developed

- Based on Committee input, a new collection alternative was developed
 - ➤ Maintains monthly <u>brush/yard waste</u> collection
 - Based on Committee feedback, staff recommends a maximum limit of 35 cubic yards (equal to one brush trailer)
 - Bagged yard waste must be in a paper yard bag or compliant compostable bag
 - Yard waste in plastic bags will be considered bulk waste and won't be collected as part of brush and yard waste collection
 - No change in current collection weeks

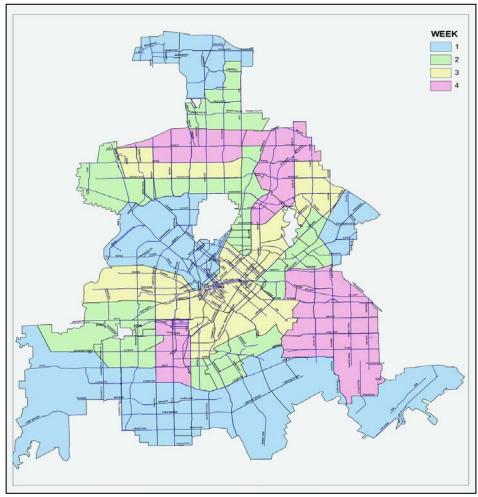


New Bulk and Brush Collection Alternative

- Bulk would only be collected quarterly, but during the same week as brush and yard waste
 - During the quarterly collection bulk and brush/yard waste <u>must be</u> <u>separated</u> at the curb and not commingled
 - Staff recommends a 10 CY limit on bulk material
 - ➤ Each collection week would be divided into 3 separate bulk groups for quarterly collection

Quarterly Bulk Collection Schedule (Draft)					
Schedule A	Schedule B	Schedule C			
January	February	March			
April	May	June			
July	August	September			
October	November	December			

Current Collection Weeks - Overview

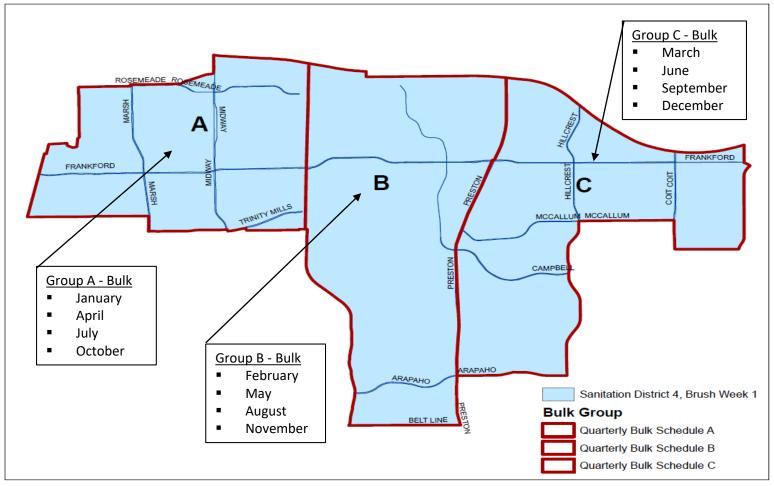


Citywide Bulk and Brush – Weeks of Service



10

Example of Quarterly Schedule Map



Far North – Week 1 (Brush/Yard Waste – All Areas)



New Scenario - Financial Impacts

- The financial impact of the new scenario is short-term neutral, since cost reductions are offset by ongoing or short-term cost increases
 - Slight decrease in Crew Leader positions and Truck Driver positions
 - Estimated decrease in overtime due to reduced tonnage and "right sizing" operations
 - ➤ Increased use of 19 contracted laborers
 - Increased up front capital to procure 18 new rear loaders (amortized over 5 years)
- Net positive operational savings of up to \$1M annually could be realized over the long term



New Scenario - Diversion Opportunities

- It is estimated that the new scenario could divert or allow beneficial re-use of approximately 90,000 tons of brush and yard waste annually
 - ➤ Could increase overall diversion by over 12%
 - From 20% to over 32%
 - Equates to about 2.7M tons over a 30-year period
 - Approximately two years of landfill space
 - Current gate rate value of \$67.5M



New Scenario - Yard Waste Collection Bags

- Diverting yard waste material, such as bagged leaves, will require that the material not be placed in plastic bags
- Two types of bags are typically allowed for yard waste collected for diversion, "kraft" paper yard bags and compostable bags
 - ➤ The cities of Austin, Fort Worth, San Antonio and Plano only allow paper yard bags
 - ➤ Of the major Texas cities, only Houston requires the use of certified compostable bags
- We could tentatively agree to allow both and refine if needed with further research



Bagged Yard Waste - Bag Considerations

- "Kraft" paper yard bags
 - > Reasonable cost
 - > No confusion related to compostable, biodegradable or plastic bags
 - > Due to lack of opacity, "hidden" trash not easily identified
- Compostable bags
 - > Typically allows for better visual inspection of material inside
 - > Slightly higher cost than paper yard bags
 - > Can be confused with other plastic bags or non-compliant bags
 - ➤ Need to meet standards for commercial or municipal composting use (US ASTM D6400 or European EN13432)
- Staff reviewed the need to provide free bags to residents,
 but a program does not appear warranted at this time



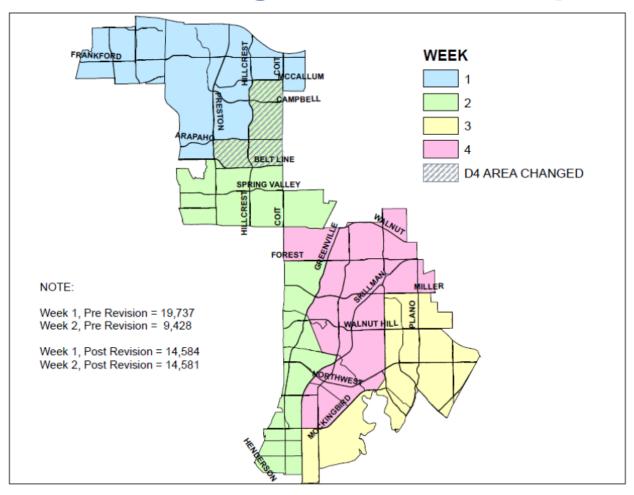
Other Related Program Considerations

Brush/Bulk Week Realignments

- There are a few bulk and brush weeks that currently need realignment to better distribute the number of households collected during a given week
 - > Some weeks have significant household disparities
 - For example, a Sanitation district may have a Week 3 house count of 9,000 homes and a Week 4 house count of 18,000 homes
- Previously, Week 1 and Week 2, in far north Dallas, were realigned based on a disparity of almost 10,000 homes between weeks
 - The realignment was successfully completed and has been beneficial to service delivery and operational efficiency



Brush Week Realignment - Example



Week 1 and Week 2 Realignment (Far North)



Consideration of a Citizen Drop Off Site - Temporary/Pilot Site

- Council could also consider developing a neighborhood drop-off site in coordination with program changes
- A drop-off site would be self-service in an area that currently has limited self disposal options
 - Should be strategically placed for convenient access
 - Minimally staffed, appropriately designed, and landscaped
 - ➤ Intended to discourage neighborhood illegal dumping by providing a convenient drop off location
 - ➤ Per TCEQ regulations, the facility would be "for the convenience and exclusive use of residents" (no commercial or industrial users or collection vehicles)



Consideration of a Citizen Drop Off Site - Temporary/Pilot Site

- Sanitation staff could pursue a facility with minimal start up costs and utilizing existing City property
 - Preliminary estimated annual operating cost of about \$300-\$400K, but site requirement could affect cost
 - Would require purchase of equipment and containers
 - Site could be minimally staffed (2-3 staff members)
 - Site may require some paving, fencing and landscaping
 - May require a small mobile/temporary office building
 - About \$0.12 \$0.16 increase in the residential fee
- A typical, fully developed, neighborhood drop off site requires 1-2 acres and with a capital cost of approximately \$2.5M - \$3.5M
 - > A fully developed site could be considered if temporary site proves to be successful (see appendix for examples)

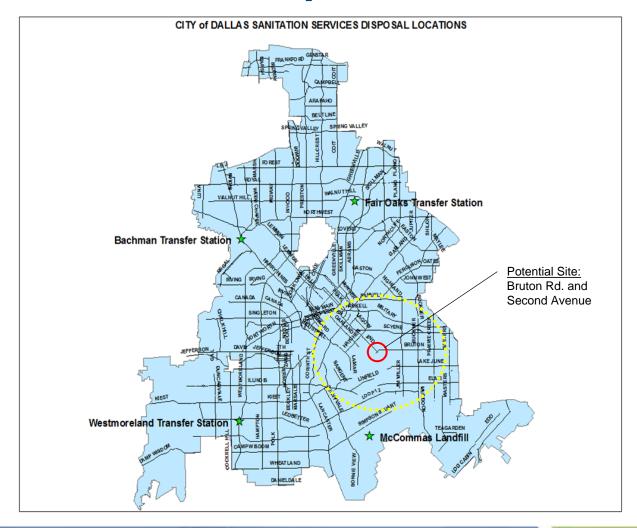


Potential Citizen Drop-Off Site

- A site near Bruton Road and Second Avenue has been identified as a potential citizen drop-off site
 - > Site has good highway and major thoroughfare access
 - > The City owns several parcels of land in this area
 - ➤ Site is situated in a geographic area that could benefit from a convenient citizen drop-off location
- Additional review and research would be needed
 - > Site is in the floodplain which may restrict such site
 - > TCEQ requirements would have to be met, which requires further review
 - Site zoning would have to be reviewed
 - > Unintended consequences would have to be considered
- If the Committee would like to consider this further, staff will proceed with a more detailed review of this site's viability or another site



Potential Citizen Drop-Off Site





Cost Plus Improvements

- Conceptual new process:
 - Citizen calls for service and is informed of potential service cost based on sizes
 - May be e-mailed or referred to Sanitation's website for more cost of service details (including graphics for estimating set-out size)
 - ➤ If citizen wants to proceed, collection is scheduled and they verbally agree to be billed for service based on set-out size at time of collection
 - Before collection the set-out size is measured and photographed
 - Material is collected, paperwork and associated photograph(s) uploaded into CRMS, the service request is closed and referred to billing
 - The department's financial service division will place the collection charge on the citizen's next water bill
- Additional details, documentation and legal requirements, CRMS configuration and process flow need to be further refined



Program Changes – Potential Timeline



Bulk and Brush Program Changes - Implementation Timeline (if approved)

- June 6, 2018
 - Full Council briefing on proposed collection changes
- August/September 2018
 - City Council consideration of collection program changes as part of budget adoption process
- October 1, 2018 through September 30, 2019
 - Equipment Procurement and delivery
 - > Education and Outreach on program changes
- December 2018
 - ➤ Publish 2019 collection schedule, indicating new schedule to begin in October 2019



Bulk and Brush Program Changes - Implementation Timeline (if approved)

- October 1, 2019
 - First quarterly bulk collection, with limits, for Group A
 - October through December "soft opening"
- December 2019
 - ➤ Publish 2020 calendars for the upcoming year



Bulk and Brush Week Realignments

- June 2018
 - > Finalize brush week realignment
- July 2018 and August 2018
 - ➤ Brush week realignment outreach in the community
- September 1, 2018
 - ➤ Begin using new brush week areas



Bulk and Brush Collection Changes - Update

Quality of Life, Arts & Culture Committee
May 14, 2018

Kelly High, Director Sanitation Services



City of Dallas

Appendix

Review of Options - Impacts

Bulk and Brush Collection Scenarios and Potential Long-Term Savings

Material Type	Existing System	Scenario 1	Scenario 2	Scenario 3	New - Scenario 4
Yard Trimmings		Monthly	Monthly	Every Other Month	Monthly
Large Brush	Monthly	Wioritiny	Twice per Year	Lvery Other Month	Wiorithly
Bulky Items		Call- in*	Twice per Year	Every Other Month	Quarterly
Estimated Long-term Savings		(\$2.9M)	(\$4.0M)	(\$2.2M)	(\$1.1M)

^{*} Analysis assumes a certain number of collections per year, with additional collections charged at an additional fee

Bulk and Brush Collection Scenarios and Estimated Collection Tonnage

Material Type	Existing System	Scenario 1	Scenario 2	Scenario 3	New - Scenario 4
Yard Trimmings		35,000	35,000		35,000
				73,500	
Large Brush		54,250	31,000		54,250
Bulky Items		31,000	31,000	46,500	38,750
Total	176,232	120,250	97,000	120,000	128,000
Annual Pounds per	•				
Household	1,469	1,002	808	1,000	1,067

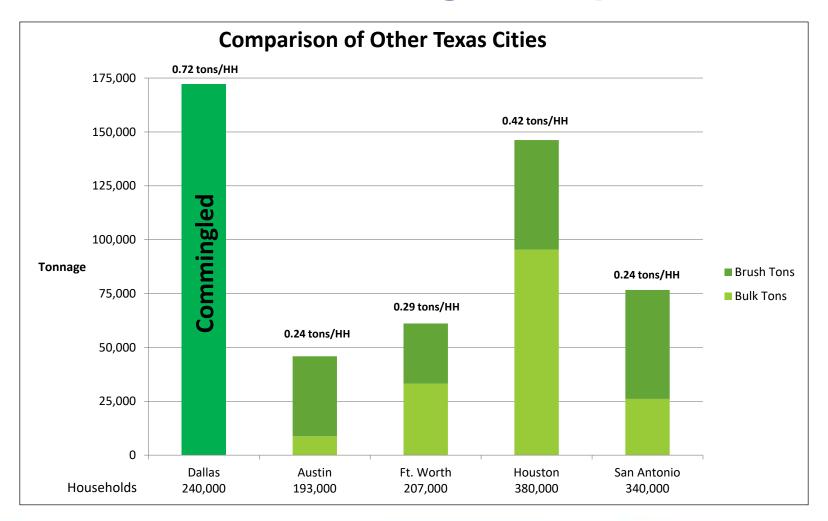
Comparison - Other Texas Cities

- Austin (193,000 households)
 - > 2X per year bulk and 2x per year brush (restrictions)
 - Weekly yard waste (restrictions)
 - Bagged yard waste in "Kraft" paper yard bags only
- Ft. Worth (207,000 households)
 - Monthly bulk (10 CY limit)
 - > No monthly brush, but weekly yard waste (restrictions)
 - Bagged yard waste in "Kraft" paper yard bags only
- Houston (380,000 households)
 - Alternating bulk and brush months (8 CY limit)
 - Weekly yard waste (restrictions)
 - Bagged yard waste in "Kraft" paper yard bags or ASTM 6400D compostable bags
- San Antonio (340,000 households)
 - > 2X per year bulk and 2x per year brush (8 CY limit)
 - Bagged yard waste in "Kraft" paper yard bags only



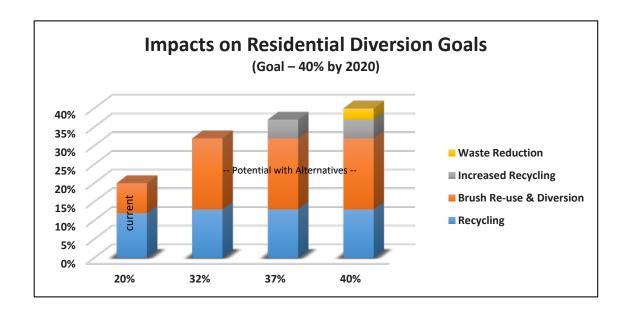
31

Bulk and Brush Tonnage Comparison



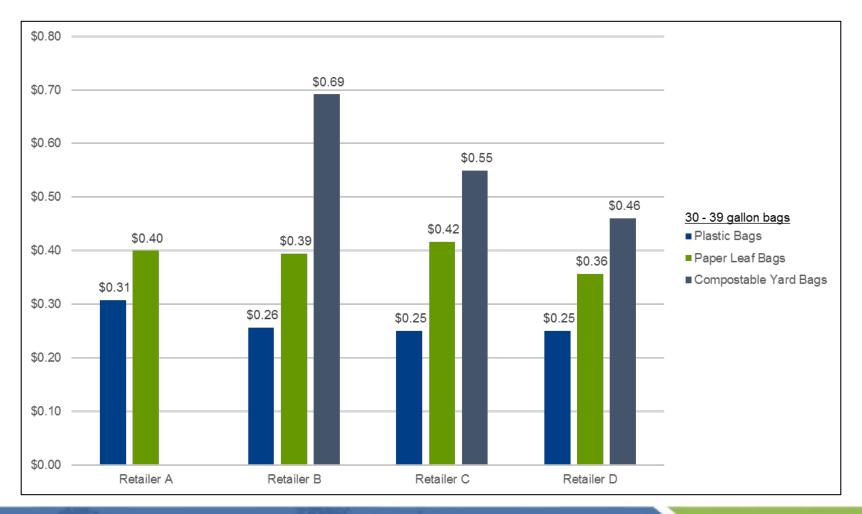


Impacts on Residential Diversion





Bagged Yard Waste - Bag Cost Comparison





34

Brush and Yard Waste Diversion

- Brush and Yard Waste Diversion Program Development
 - ➤ Over the next year, staff will review options and best practices, including in-house, contracted and/or a public/private partnership for operation of a mulching or composting facility
 - Look at options for free citizen mulch and potential to provide mulch for other city departments (e.g., Parks)
 - ➤ Until a new collection program is established and the actual composition of the green waste stream is determined, a long-term diversion solution cannot be fully developed

Citizen Drop-off Site (example)

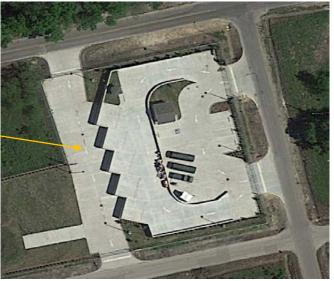


Drop Off

Citizen Drop-off Site (example)

Houston Neighborhood Drop Off





Temporary Drop-off Site – Site Ideas

