

NOTICE OF SPECIAL MEETING

Pursuant to Section 54956 of the Government Code of the State of California, a Special meeting of the **Tracy City Council** is hereby called for:

Date/Time: **Tuesday, November 2, 2021, 5:30 p.m.**
(or as soon thereafter as possible)

Location: **Tracy City Hall**
333 Civic Center Plaza, Tracy, CA.

Government Code Section 54954.3 states that every public meeting shall provide an opportunity for the public to address the Tracy City Council on any item, before or during consideration of the item, however no action shall be taken on any item not on the agenda.

This meeting will be open to the public for in-person and remote participation. In accordance with the California Department of Public Health Guidelines, universal masking indoors is recommended. Masks are required for unvaccinated individuals in indoor public settings. Members of the public may participate remotely in the meeting via the following method:

For Remote Public Comment:

During the Items from the Audience, public comment will be accepted via the options listed below. If you would like to comment remotely, please follow the protocols below:

- *Comments via:*
 - **Online by visiting** <https://cityoftracyevents.webex.com> and using the following **Event Number:** 2558 378 0765 and **Event Password:** TracyCC
 - ***If you would like to participate in the public comment anonymously***, you may submit your comment via phone or in WebEx by typing “Anonymous” when prompted to provide a First and Last Name and inserting Anonymous@example.com when prompted to provide an email address.
 - **Join by phone by dialing** +1-408-418-9388, enter 25583780765#8722922#
- *Protocols for commenting via WebEx:*
 - *If you wish to comment under “Items from the Audience/Public Comment” portion of the agenda:*
 - *Listen for the Mayor to open “Items from the Audience/Public Comment”, then raise your hand to speak by clicking on the Hand icon on the Participants panel to the right of your screen.*
 - *If you no longer wish to comment, you may lower your hand by clicking on the Hand icon again.*
 - *Comments for the “Items from the Audience/Public Comment” will be accepted until the public comment period is closed.*
- **The total allotted time for public comment under “Items from the Audience/Public Comment” will be 15 minutes.**

1. Call to Order
2. Roll Call
3. Items from the audience - *In accordance with Council Meeting Protocols and Rules of Procedure*, adopted by Resolution 2019-240, a five-minute maximum time limit per speaker will apply to all individuals speaking during "Items from the Audience/Public Comment". For non-agendized items, Council Members may briefly respond to statements made or questions posed by individuals during public comment; ask questions for clarification; direct the individual to the appropriate staff member; or request that the matter be placed on a future agenda or that staff provide additional information to Council.
4. WORKSHOP TO CONSIDER A PROPOSED INCREASE TO SOLID WASTE RATES AND AUTHORIZE STAFF TO HOLD A PUBLIC HEARING FOR THE ADOPTION OF PROPOSED SOLID WASTE RATES
5. Council Items and Comments
6. Adjournment



Mayor

Posting Date: October 28, 2021

The City of Tracy is in compliance with the Americans with Disabilities Act and will make all reasonable accommodations for the disabled to participate in employment, programs and facilities. Persons requiring assistance or auxiliary aids in order to participate, should contact the City Manager's Office at (209) 831-6000 at least 24 hours prior to the meeting.

AGENDA ITEM 4

REQUEST

WORKSHOP TO CONSIDER A PROPOSED INCREASE TO SOLID WASTE RATES AND AUTHORIZE STAFF TO HOLD A PUBLIC HEARING FOR THE ADOPTION OF PROPOSED SOLID WASTE RATES

EXECUTIVE SUMMARY

In 2019, the City obtained the services of HF&H Consultants, LLC to perform a solid waste rate study. The purpose of the study was to analyze the increase in service costs for the collection and processing of refuse, recycling, and organics within the City. Also included in the study is the fiscal impact that California Senate Bill (SB) 1383 (mandatory organics recycling) and other State mandates have on the cost of operations.

Comparing the revenue required to cover the cost of providing service with the revenue from current rates indicates the need for rate increases. The rate increases are necessary for several reasons: the City's solid waste rates were last adjusted in January 2012, the service area has increased due to the City's expansion, the cost of collection of solid waste has increased, there have been significant drops in the recycling market, and new State-mandated diversion programs require additional funding.

DISCUSSION

The City of Tracy currently has a Franchise Agreement with Tracy Delta Disposal Service Inc. (Tracy Disposal) for the collection, transportation, and disposal of solid waste within the City. The City also maintains a Service Agreement with Tracy Material Recovery and Solid Waste Transfer, Inc. (Tracy MRF) for material acceptance, processing, and transfer services. The City provides customer service and billing services to the City's solid waste customers and contracts with Tracy Disposal to provide all residential and commercial solid waste, recycling, and organics collection and related transportation, material processing, and disposal services.

SB 1383, passed in 2016 with final regulations adopted in 2020, focuses on the reduction of methane emitted into the atmosphere. The regulations require organics to be diverted from landfills. Organics, as defined in the regulations, include food scraps, yard trimmings, paper, cardboard, and other compostable and recyclable materials. Organic materials will need to be separately collected from the City's generators/customers. For the City, this represents a significant change to current collection practices and is a major driver of the necessary fee increases.

In order to comply with the requirements of SB 1383, additional State mandates, and the increase in cost of service, the City is requesting a rate increase to cover these and other program needs. As a result of the multiple changes needed to implement SB 1383, cities all over the State are expected to increase their solid waste rates. The League of California Cities sent out a survey asking jurisdictions how many of them are expecting to increase their solid waste and recycling rates in the next three years. The

results of the survey are from May 13, 2021, and of the 160 cities that participated in the survey, 50% of the cities are expected to raise their rates anywhere from 11% to 30%, while an additional 11.25% of the cities are expected to raise their rates from 41% to over 100%.

One of the most significant changes within the Solid Waste and Recycling program is the disposal of food waste. The City's residents currently include food waste in the garbage container. Effective January 1, 2022, food waste will not be allowed to be disposed of in the garbage container as per SB 1383 requirements. Rather, residential food waste will have to be placed in the same container as yard waste. Due to the nature of food waste, new non-vented containers are required to provide sanitary disposal of organic materials. This change also requires weekly collection of organics resulting in increased collection and processing costs. The additional costs will include the cost of added labor, maintenance, and vehicle purchases for Tracy Disposal to switch from every *other* week, to *every* week organics collection.

Currently, the residential recycling container is collected on a bi-weekly schedule. In order to eliminate confusion to customers about which containers should be placed in the street for collection, and encourage increased participation in recycling as mandated by Cal Recycle, the recycling container, in addition to the organics container, will also now be collected on a weekly basis.

A vehicle impact analysis was included to determine the cost impact due to the increase in large vehicle traffic on City streets. The analysis identified approximately \$2,057,700 per year in street impacts associated with the City's Refuse Vehicle traffic. In the past, Solid Waste fees did not include this calculation. In order to aid in protecting and improving roadway conditions within the City, and ensuring the impacts on City streets from refuse truck traffic is mitigated, it is vital to implement the practice of including these costs within the rates. Without sufficient funding, delays in preventative maintenance increase the quantity and severity of pavement defects, and result in higher costs during pavement life. Consequently, using only a routine and reactive approach will considerably increase the lifecycle costs of the pavement.¹

The requirements and complexities of SB 1383 necessitate additional education, participation, monitoring, and enforcement to meet State mandates. An additional position is included in the study to provide these and other services to residents and businesses in the City.

The fee study has also factored in additional benefits and services the residents will receive from the Solid Waste program. There are currently several recycling events and services that are available to residents on an annual basis. These events include household hazardous waste disposal, electronic waste recycling, free compost pick-up, and document shredding. Services such as battery recycling, medicinal and sharps disposal, appliance vouchers to dispose of appliances at no additional charge, and an annual pickup of bulky items are available to residents. Coordination and promotion of the popular citywide garage sales is also included. The proposed increased rates will allow the continuation and expansion of these services and other programs offered to residents and businesses.

¹ A Pavement Preventative Maintenance Program; Larry Galehouse, P.E., L.S.; Michigan Department of Transportation.

Also included in the proposed rate structure is a closure in the funding gap between revenues and basic costs of operations. Comparing the revenue required to cover the cost of providing service with the revenue from current rates indicates the need for rate increases. Since the last rate increase in January 2012, the cost of service has increased substantially. The proposed increases are projected to generate the additional needed revenue to close this expanding gap.

In recognition of the impacts the rate increases will have on customers, the Solid Waste and Recycling program's reserve fund has been incorporated into the proposed rates for the first two years to smooth the implementation process and lighten the initial burden on rate payers. The proposed base residential service cost increase for 60-gallon and 90-gallon containers are as follows:

Projected Cost of Service and Proposed Monthly Rate Increase											
Solid Waste, Recycling, and Organics (Residential)	Current Rates	FY 21/22	\$ Change	FY 22/23	\$ Change	FY 23/24	\$ Change	FY 24/25	\$ Change	FY 25/26	\$ Change
60-Gallon Container*	\$36.50	\$44.38	+ \$7.88	\$52.35	+ \$7.96	\$61.18	+ \$8.83	\$65.75	+ \$4.56	\$70.40	+ \$4.66
90-Gallon Container*	\$43.20	\$52.57	+ \$9.37	\$60.87	+ \$8.30	\$70.21	+ \$9.35	\$75.50	+ \$5.29	\$80.89	+ \$5.39

*Only applicable for Residential Customers. Includes a 90 Gallon Recycling and a 90 Gallon Organics container.

The fiscal impact from State mandates, including SB 1383 and the California Air Resources Board which requires the reduction of diesel particulate matter emissions make up a majority of the rate increase in the first two years. The updated service costs also include increases in labor costs and the impacts of expanding service areas due to growth which consequently requires additional equipment and personnel. The impacts of each of these categories to the overall increase is reflected below and corresponds with the cost changes for 60-Gallon Containers shown in the previous table.

Projected Rate Increase per Category					
Residential Increase	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
State Mandates	\$6.65	\$4.62	\$0.48	\$0.24	\$0.25
Service Costs	\$1.24	\$3.34	\$8.35	\$4.32	\$4.41
Total Increase	+ \$7.88	+ \$7.96	+ \$8.83	+ \$4.56	+ \$4.66

When residents sign up for garbage service, they have the option of receiving a 60-gallon or a 90-gallon container for refuse. Each resident also received a 90-gallon container for recycled materials and a 90-gallon container for yard waste, regardless of the container size they have for refuse. Residents also have the option to add additional containers for their use. Currently, residents are not charged for having an additional recycling container but there is a charge for having an additional yard waste container.

As part of the proposed rates, the cost of servicing the additional containers will be charged to the customer. The charges to residential customers for these additional containers will be as follows:

Rates for Additional Carts						
Residential Increase	Current Rate	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Recycle Container*	--	\$4.27	\$5.64	\$6.05	\$6.66	\$7.29
Organics Container*	\$8.70	\$7.77	\$9.94	\$10.54	\$11.35	\$12.18
*The same rate applies to both 60-gallon and 90-gallon customers.						

Upon direction by the City Council, staff will hold a public hearing and will send notification of the public hearing and proposed rate increase to property owners and tenants (if different from the property owner). After the required 45-day notification period, a public hearing will be held to adopt the proposed solid waste rates. The rates are anticipated to become effective beginning January 1, 2022 with an increase each January 1st in the subsequent years with the last scheduled increase on January 1, 2026.

FISCAL IMPACT

The Solid Waste and Recycling program’s reserves will be used for the first two fiscal years to decrease the impact to the City’s rate payers. In doing so, the reserves will decrease by \$2,500,000 in FY 21/22 and FY 22/23. Following the use of the current reserves for the first two years, the remaining reserves are estimated to be \$5,000,000, approximately two months of operating expenditures.

With the new rate increase, the City will receive approximately \$600,000 annually to fund new solid waste-related programs and enhancements to the Community Preservation programs. Additionally, Franchise fees are expected to increase by approximately \$300,000 in FY 21/22. The City will also have the ability to recover costs related to the wear and tear on City streets from solid waste collection vehicles. The total annual financial impact is \$2,057,000 and will be phased over the five-year rate setting period.

STRATEGIC PLAN

This agenda item supports the City’s Governance Strategic Priority:

Governance Strategy

Goal 2: Ensure short and long-term fiscal health

Objective 6: Complete rate and fee studies: Solid Waste, Wastewater, Citywide, Core Fees, Master Impact Fees

RECOMMENDATION

It is recommended that City Council consider a proposed increase to the solid waste rates and make a motion to direct staff to distribute notification to property owners of the proposed solid waste rate increase in accordance with Proposition 218.

Prepared by: Connie Vieira, Management Analyst II

Reviewed by: Don Scholl, Director of Public Works
Karin Schnaider, Director of Finance
Midori Lichtwardt, Assistant City Manager

Approved by: Bob Adams, Interim City Manager

ATTACHMENTS

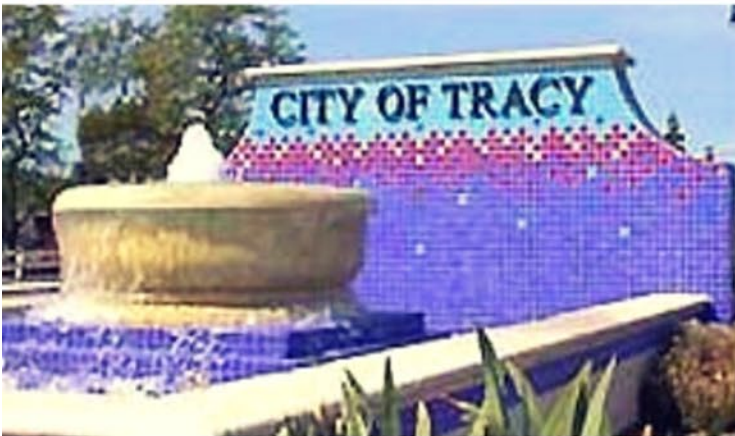
Attachment A – HF&H Consultants, LLC Solid Waste Cost of Service and Rate Study
Attachment B – Solid Waste Rate Study PowerPoint Presentation



CITY OF TRACY

SOLID WASTE RATE

STUDY



October 26, 2021

CITY OF TRACY

520 TRACY BLVD

TRACY, CA 95376



SOLID WASTE RATE STUDY

October 26, 2021

HF&H CONSULTANTS, LLC

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October 26, 2021

Ms. Connie Vieira
Management Analyst
Public Works Department
City of Tracy
520 Tracy Boulevard
Tracy, CA 95376

Subject: Solid Waste Rate Study

Dear Ms. Vieira,

HF&H Consultants, LLC (HF&H) is pleased to submit this Solid Waste Rate Study report to the City of Tracy (City). The report begins with determining how much projected revenue is needed from solid waste, recycling and Organic rates during the next five years, Fiscal Year 2021-2022 through Fiscal Year 2025-2026. The report then describes how the revenue is apportioned between customers receiving bin, cart, and roll off service. The report concludes with a discussion of the rate design that is appropriate for each class to ensure that customers are paying their proportionate share.

The report reflects input from the City and Tracy Delta Solid Waste Management, Inc. (Tracy Disposal) staff in refining the rates. The resulting rate increases are necessary for several reasons: (1) the City's rates have not been adjusted in over nine years (2) the cost of collection of solid waste has increased; and (3) new State-mandated diversion programs require additional funding.

* * * *

We are pleased to have had the opportunity to assist the City with this study and would like to thank you for your support during the project.

If you have any questions, please call Marva at (925) 977-6961 or Scott at (925) 977-6967.

Very truly yours,
HF&H CONSULTANTS, LLC



Marva M. Sheehan, CPA
Vice President



Scott Holt
Project Manger

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ACRONYMS/DEFINITIONS

Bin (Hoppers)	Container provided by the City through partnership with Tracy Disposal and are usually made from metal. Tracy Disposal provides its bin customers with solid waste collection service at varying frequencies in a range of container sizes to meet each customer's needs. These customers are charged a monthly rate based on their subscription level (e.g., one cubic yard bin, serviced one time per week; three cubic yard bin, serviced three times per week) or a per-pickup rate for on-call services.
Cart (Toters)	Container provided by the City through partnership with Tracy Disposal and are usually made from plastic with wheels for portability. Tracy Disposal provides its cart customers with solid waste collection in either 60-, or 90-gallon carts. As part of its contract with the City, Tracy Delta Solid Waste Management Inc. provides collection in 96-gallon recycling carts and 96-gallon yard waste carts to residential and commercial customers.
City	City of Tracy
COS	Cost-of-service
ECU	Equivalent container unit
ECF	Equivalent container factor
Fixed Collection Costs	Costs not dependent on the subscribed volume of service.
Food Waste	Residential and commercial putrescible food waste materials
Frequency Surcharge	Additional cost for receiving service multiple times per week. Routing is negatively impacted when trucks must return to areas previously serviced.
FTE	Full time equivalent
FY	Fiscal year
MSW	Municipal solid waste
Organics	Material includes yard waste and food scraps.
Rate	The rate charged to each customer based on size of container and frequency of service.
Rate Model	The part of the Solid Waste Rate Study where the rates are developed and modeled to meet the City's desired results.
Roll-Off	Container provided by the City through partnership with Tracy Disposal or self-owned by the commercial customer made from metal. Tracy Disposal provides its roll-off customers with solid waste, recycling, construction and demolition, or

	yard waste collection service in a range of container sizes to meet each customer's needs. These customers are charged a per-pickup rate for on-call services based on their debris box size (e.g., 10 cubic yard bin, 20 cubic yard compactor bin, and 40 cubic yard self-contained compactor bin).
Rate Study	Solid Waste Rate Study performed to develop the appropriate rates for the collection, processing and disposal of solid waste, recyclables and organic materials to meet the City's revenue requirements.
SFR	Single-family residential
Tracy Disposal	Tracy Delta Solid Waste Management Inc., the City's franchisee for the collection, transportation, and disposal of refuse and garbage, including the collection of recyclable material, in the City.
Volumetric charge	The variable costs associated with the size of the container subscribed to by residential, multi-family or commercial customers.
Yard Waste	Biodegradable materials such as leaves, grass, weeds, and wood materials from trees and shrubs.

LIMITATIONS

This Solid Waste Rate Study (Rate Study) was prepared solely for the City in accordance with the contract between the City and HF&H and is not intended for use by any other party for any other purpose.

In preparing the Rate Study, HF&H relied on information and instructions from the City and Tracy Disposal and Tracy Material Recovery & Solid Waste Transfer, Inc., which we consider to be accurate and reliable and did not independently verify.

For purposes of the Rate Study, and clarity of this report, a 3% annual inflation factor was applied to operating and overhead costs. Annual growth factors were applied to residential, commercial, and roll-off, per direction of the City.

The Rate Study with its accompanying analyses contain projections of revenues and expenditures based on various assumptions and estimates provided by the City, Tracy Disposal and Tracy Material Recovery & Solid Waste Transfer, Inc. While we reviewed those projections for reasonableness, actual results of operations will usually differ from projections because events and circumstances do not always occur as expected. Those differences may be significant and materially affect the analyses and findings presented in this report.

Rounding differences caused by stored values in electronic models may exist.

The Rate Study addresses relevant laws, regulations, and court decisions but should not be relied upon as legal advice. Questions concerning the interpretation of legal authorities referenced in this study should be referred to a qualified attorney.

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EXECUTIVE SUMMARY

The City of Tracy's (City) Public Works Department oversees solid waste services to the City's residents and businesses in partnership with Tracy Delta Solid Waste Management, Inc. (Tracy Disposal) and Tracy Material Recovery Facility and Solid Waste Transfer, Inc.

The City provides customer service and billing services to the City's solid waste customers and contracts with Tracy Disposal to provide all residential and commercial solid waste, recycling, and Organics collection and related transportation, material processing, and disposal services.

In order to increase rates for these services, the City intends to comply with Article XIID, Section 6 of the California Constitution, which was enacted by Proposition 218 in 1996. This Section requires that (1) revenues derived from fees or charges for property-related service not exceed the cost to provide service; (2) revenues derived from fees or charges not be used for any purpose other than that for which it was imposed; (3) the amount of a fee or charge upon an account not exceed the proportional cost of the service attributable to the parcel; (4) no fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property; and, (5) no fee or charge may be imposed for general governmental services. The analysis conducted in support of this study was founded on legal direction related to Proposition 218, which was provided by City's legal counsel.

Study Purpose and Objectives

The purpose of this Solid Waste Rate Study (Rate Study) is to conduct a comprehensive analysis of the City's solid waste, recyclables and Organics collection rates, including documentation of the analysis, underlying assumptions, and the rationale for the recommended rates.

This Rate Study has several key objectives:

- Determine revenue that is necessary to meet the City's requirements, including operations and maintenance, capital improvement, and maintaining an adequate reserve fund;
- Determine the cost of service attributable to each parcel based upon the subscribed service level; and,
- Ensure that the proposed rate structure is compatible with Proposition 218 mandates.

These objectives are met by applying industry best practices and by complying with all applicable laws.

Findings and Recommendations

In preparing the Rate Study, the following findings were made.

1. Operating cost increases / decreases.

- a. SB 1383 requires the City to remove organic materials from its disposed refuse effective January 1, 2022. To comply with the legal requirements, the City will have to require customers to combine Food Waste and Yard Waste in Organics carts and collect the Organics carts every week, rather than the current practice of every other week, beginning on January 1, 2022. The additional costs to provide weekly organics collection have been included in the Rate Study.

- b. A Refuse Vehicle Road Impact Study was performed in early 2020 to determine the cost impact of the solid waste, recyclables and Organics collection vehicles operating on the City's streets. The financial impact attributable to the solid waste, recyclables, and Organics collection trucks is \$2,057,000, annually. City staff has elected to phase the costs into the rates over the 5-year rate setting period (\$411,540 each year).
 - c. The Rate Study includes additional costs as recommended by the City for code enforcement, community preservation, illegal dumping, and homeless encampment cleanup.
 - d. The Rate Study includes the additional costs to provide weekly collection of residential curbside recycling.
 - e. City staff has elected to use \$2,500,000 of fund balance reserves in FY 21/22 and FY 22/23 (\$5,000,000 total) to mitigate the rate increases necessary in those years.
2. **Projected revenue increases.**

The Rate Study projected increasing rates to generate additional overall revenue to cover the recent cost increases and revenue shortfall. Comparing the revenue required to cover the cost of providing service with the revenue from current rates indicates the need for rate increases sufficient to generate additional revenue as follows:

January 2021 – 23.7% (with use of fund balance reserves)

January 2022 – 12.9% (with use of fund balance reserves)

January 2023 – 16.9%

January 2024 – 8.5%

January 2025 – 8.2%

The percentage increases reflect system-wide increases rather than increases for each material type collected, subscription level, or customer class. It should be noted the projected revenue increase for 2023 includes the annual cost inflators as well as absorbing the costs that were offset with fund balance reserves in the prior two years.

The rate adjustment period for the Rate Study has been changed from fiscal year (July – June) to calendar year (January – December). For reporting purposes, we are using fiscal year (FY XX/XX) to reflect the years with the understanding the adjustments will take place January 1 each year.

3. **Revenue increases by customer class and by material type.**

Customer classes for the purpose of the Rate Study are “cart” customers comprised of both residential and commercial customers, “bin” customers, and “roll-off” customers based on the type of container used. **Figure ES-1** compares the revenue from current rates and the cost to provide service, by customer class, material type, and container type. The COS includes projected growth and inflation as noted in the limitations. This figure indicates how much revenue is needed from service charges, from each customer class, to generate the 23.7% additional overall revenue needed in FY 21/22. As shown, the revenue increase varies by customer class, a 19.4% increase needed in cart rate revenue, a 5.4% increase in bin rates with the largest increase to roll-off customers at 52.8%. An intrinsic part of the Rate Study was to reallocate costs based on material type collected and size of container resulting in different increases by customer class.

Figure ES 1
Current Rate Revenue Compared with the Cost of Service
(FY 21/22)

Service Class Components	Revenue at Current Rates		Cost of Service*		Difference COS less Current Revenue	
Carts						
Solid Waste	\$ 11,058,260	53.6%	\$ 8,158,232	32.0%	\$ (2,900,028)	
Recycling	42,118	0.2%	1,904,580	7.5%	\$ 1,862,462	
Organics	34,007	0.2%	3,227,154	12.6%	3,193,147	
	<u>\$ 11,134,384</u>	<u>53.9%</u>	<u>\$ 13,289,966</u>	<u>52.0%</u>	<u>\$ 2,155,582</u>	<u>19.4%</u>
Bins						
Solid Waste	\$ 4,671,098	22.6%	\$ 4,985,945	19.5%	\$ 314,848	6.7%
Recycling	145,222	0.7%	66,724	0.3%	\$ (78,498)	-54.1%
Organics	23,962	0.1%	48,041	0.2%	24,079	100.5%
	<u>\$ 4,840,281</u>	<u>23.4%</u>	<u>\$ 5,100,710</u>	<u>20.0%</u>	<u>\$ 260,429</u>	<u>5.4%</u>
Roll-Off						
Solid Waste	\$ 4,262,229	20.6%	\$ 6,622,102	25.9%	\$ 2,359,873	55.4%
C&D	401,373	1.9%	\$ 505,524	2.0%	\$ 104,151	25.9%
Organics	3,364	0.0%	\$ 4,937	0.0%	1,572	46.7%
Wood	6,646	0.0%	\$ 10,445	0.0%	3,800	57.2%
	<u>\$ 4,673,612</u>	<u>22.6%</u>	<u>\$ 7,143,008</u>	<u>28.0%</u>	<u>\$ 2,469,396</u>	<u>52.8%</u>
Total	<u>\$ 20,648,277</u>	<u>100.0%</u>	<u>\$ 25,533,684</u>	<u>100.0%</u>	<u>\$ 4,885,407</u>	<u>23.7%</u>

*Includes 2% projected subscription growth for residential accounts, a 4.5% increase for commercial accounts, and 3% annual inflation

4. **Monthly rate increases.** To generate the necessary annual percentage increases in revenue summarized in Item #2 above, monthly rates for both cart and bin service require changes over the next five years. The current and COS-based rates for the most commonly subscribed services are summarized in **Figure ES-2**. Note that the COS rate years include growth and inflation adjustments as noted in the limitations. The City currently offers a monthly rate for bundled solid waste, recycling, and Organics cart collection service for residential customers. The City also offers monthly and per pick-up rates for commercial solid waste, recycling, and Organic bin service, and a bundled recycling and Yard Waste cart collection service for commercial carts. The full rate schedules are included in the Appendices (A-3, A-7, A-9, and A-10).

Figure ES-2
Current and Cost of Service Based Monthly Rates
(Serviced 1 Time per Week)

Solid Waste, Recycling, and Organics	Current Rates	FY 21/22	\$ Change	FY 22/23	\$ Change	FY 23/24	\$ Change	FY 24/25	\$ Change	FY 25/26	\$ Change
60 Gallon Cart*	\$ 36.50	\$ 44.38	\$ 7.88	\$ 52.35	\$ 7.96	\$ 61.18	\$ 8.83	\$ 65.75	\$ 4.56	\$ 70.40	\$ 4.66
90 Gallon Cart*	\$ 43.20	\$ 52.57	\$ 9.37	\$ 60.87	\$ 8.30	\$ 70.21	\$ 9.35	\$ 75.50	\$ 5.29	\$ 80.89	\$ 5.39
*Only applicable for Residential Customers. Includes a 96 Gallon Recycling and 96 Gallon Organics carts.											
Solid Waste	Current Rates	FY 21/22	\$ Change	FY 22/23	\$ Change	FY 23/24	\$ Change	FY 24/25	\$ Change	FY 25/26	\$ Change
60 Gallon Cart*	\$ 39.70	\$ 23.05	\$ (16.65)	\$ 24.73	\$ 1.69	\$ 29.03	\$ 4.29	\$ 31.23	\$ 2.20	\$ 33.48	\$ 2.25
90 Gallon Cart*	\$ 51.85	\$ 31.23	\$ (20.62)	\$ 33.25	\$ 2.02	\$ 38.06	\$ 4.81	\$ 40.99	\$ 2.93	\$ 43.97	\$ 2.98
1.5 Yard Bin	\$ 148.20	\$ 205.94	\$ 57.74	\$ 215.20	\$ 9.26	\$ 264.40	\$ 49.19	\$ 271.00	\$ 6.60	\$ 277.86	\$ 6.87
2 Yard Bin	\$ 191.85	\$ 235.71	\$ 43.86	\$ 246.35	\$ 10.64	\$ 297.03	\$ 50.68	\$ 305.69	\$ 8.65	\$ 314.62	\$ 8.93
3 Yard Bin	\$ 257.55	\$ 297.16	\$ 39.61	\$ 310.74	\$ 13.58	\$ 364.61	\$ 53.87	\$ 377.72	\$ 13.11	\$ 391.13	\$ 13.41
4 Yard Bin	\$ 322.65	\$ 358.61	\$ 35.96	\$ 375.12	\$ 16.52	\$ 432.18	\$ 57.05	\$ 449.75	\$ 17.57	\$ 467.64	\$ 17.89
6 Yard Bin	\$ 440.55	\$ 492.97	\$ 52.42	\$ 516.45	\$ 23.49	\$ 581.12	\$ 64.66	\$ 609.68	\$ 28.56	\$ 638.60	\$ 28.92
*Only applicable for Commercial Customers. Does not include recycling or Organics.											

5. **Reserve Fund Balance.** The City's projected reserve fund balance as of June 30, 2021, is \$10,247,000. The reserve fund balance may be used to assist in implementation of new programs such as those required by SB 1383, help offset future rate increases, or used in an emergency for unforeseen events. Currently the fund balance is sufficient to provide funding for approximately 4-5 months of operations. After using \$5,000,000 of reserves in FY 21/22 and FY 22/23, the reserve fund balance, to phase-in the rate impact of increased costs and revenue shortfall, the City's fund balance is projected to be approximately \$5,000,000, roughly two (2) months of operations.

SECTION 1. INTRODUCTION

The City's Public Works Department oversees solid waste services to the City's residents and businesses in partnership with Tracy Disposal. The City provides customer service and billing services to the City's solid waste customers and contracts with Tracy Disposal to provide all residential and commercial solid waste, recycling, and yard waste collection and related transportation, material processing, and disposal services.

In 2019, the City requested HF&H to assist with developing a COS model and rate structure based on the level of service received by each customer class. Since that time, HF&H, City staff and Tracy Disposal have worked together in developing the Rate Study. The purpose of this report is to document the analysis and summarize our assumptions, findings, and recommendations.

The report is organized to explain how the revenue requirements are determined over the next five years. As part of the documentation, this report includes a copy of the spreadsheet model that was used to derive rates (See Attachments).

Study Purpose

The main purpose of this Rate Study is to document that the City's rates comply with the relevant laws in California for setting solid waste, recyclables and Organics collection rates. Another key purpose is to ensure that the rates generate sufficient revenue to fund the City's operating and capital costs as well as to maintain adequate reserves.

Current Rates

The City's solid waste accounts are billed through the City's Utility Billing System.

The City's single-family rate payers pay one monthly charge for collection and disposal/processing service of solid waste, recycling, and yard waste. Extra recycling carts are available at no charge. Extra yard waste carts are available for an additional charge.

The City's commercial and multi-family rate payers pay one monthly charge for collection and disposal service of solid waste but pay separately for recycling and organics bins. The only bundled rate for commercial and multi-family customers is for a recycling and yard waste cart combination.

The City's Low Income Assistance program currently provides rate relief for low-income senior and low-income disabled customers. Approximately 7% of the 60 gallon residential customers and 3.5% of the 90 gallon residential customers participate in the program. The program is paid through the use of non-rate revenues.

According to the City's franchise agreement with Tracy Disposal, the rates shall be periodically adjusted by the City as needed to ensure sufficient funding for the City to meet all its financial and other obligations under the franchise agreement. The last rate increase was on January 1, 2012. Significant time has passed since the last rate increase that the cost of providing service to the City's customers has increased significantly, both in total and between customer classes, and the current rates no longer reflect the current cost to provide collection, processing, and disposal service.

The current rates for one time per week service are summarized in **Figures 1-1, 1-2, and 1-3**.

Figure 1-1 – Residential Cart Rates

RESIDENTIAL REFUSE, RECYCLING, AND Organics RATES			
Subscription Levels	Current Monthly Rate	Extra Recycling	Extra Organics
60 Gallon Refuse 96 Gallon Recycling 96 Gallon Organics	\$ 36.50	\$ -	\$ 8.70
90 Gallon Refuse 96 Gallon Recycling 96 Gallon Organics	\$ 43.20	\$ -	\$ 8.70

Figure 1-2 – Commercial Cart Rates

COMMERCIAL REFUSE, RECYCLING, AND Organics RATES				
Subscription Levels	Current Monthly Rate	Combination Recycling & Organics	Extra Recycling	Extra Organics
60 Gallon Refuse	\$ 39.70	\$ 43.60	\$ -	\$ 8.70
90 Gallon Refuse	\$ 51.58	\$ 43.60	\$ -	\$ 8.70

Figure 1-2 Bin and Roll-Off Rates **

REFUSE AND RECYCLING BIN RATES		
Subscription Levels	Current Monthly Rate	Temporary Per Load Rate
REFUSE		
1.5 Yards	\$ 148.20	\$ 40.65
2 Yards	\$ 191.58	\$ 55.10
3 Yards	\$ 257.55	\$ 77.70
4 Yards	\$ 322.65	\$ 99.80
6 Yards	\$ 440.55	\$ 140.05
RECYCLING		
1.5 Yards	\$ 130.90	\$ 35.55
2 Yards	\$ 169.70	\$ 48.50
3 Yards	\$ 226.00	\$ 68.70
4 Yards	\$ 280.40	\$ 88.45
6 Yards	\$ 377.15	\$ 124.55
ROLL-OFF RATES*		
Subscription Levels	Current Monthly Rate	Per Load Rate
10 Yards	N/A	\$ 276.90
20 Yards	N/A	\$ 395.95
30 Yards	N/A	\$ 518.05
40 Yards	N/A	\$ 637.10

* Additional fees based on weight may apply

** Partial list of rates. The full rate sheet is included in Appendix A-11.

Legal Requirements

The City is responsible for setting rates in compliance with California law. Voters passed Proposition 218 in November 1996, which enacted Article XIID of the California Constitution. Article XIID1 has five substantive provisions that must be met:

1. Revenue from rates must not exceed the cost of providing service;
2. Revenue from rates must be used for providing service;
3. Fees and charges must be proportional to the cost of providing the service attributable to the parcel;

¹ Sections 6(b) 1 - 5.

4. Fee or charge may not be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property; and,
5. No fee or charge may be imposed for general governmental services.

The basis for setting rates that are proportional to the cost of providing service was not prescribed in Article XIID; therefore, the analyst was responsible for meeting the requirements of Sections 6(b) 1-5, as reasonably as possible. "Reasonable" rates are not capricious (there is a documented source for all data), not arbitrary (decisions required to make assumptions and analyze data have a sound reason), and not discriminatory (the results do not unduly favor one customer at the expense of another).

We interpret this concept to mean that rates must be proportionate to the COS across the range of subscribed service. We further interpret it to mean that the rates for each level of service must correlate with the actual demand that customers place on the vehicles and for which the system must be designed to provide the level of service customers require.

SECTION 2. REVENUE REQUIREMENT PROJECTIONS

To determine whether additional rate revenue is required, projected operating expenses are compared with projected revenue from current rates. Annual surpluses and deficits are then applied to the reserve funds. Rates are then increased so that the expenses are covered and operating and capital reserves are maintained at or close to target levels.

Expense Projections

The City's FY 18/19 actual expenditures and Tracy Disposal's FY 20/21 projected income statement served as the basis for determining the revenue requirement. The City's historical costs were inflated to FY 21/22 values by the factors show in in Figure 2-1. The City budget is developed annually by the Department of Financial Management (Financial Management) and approved by the City Council. The City's overhead costs for solid waste oversight are included in Public Works Admin, Contracted Services, Commodities, and ISC Charges. Expenditures paid to Tracy Disposal for collection, transportation, and disposal of material are included in Contracted Services. The model currently allows inflation to be applied individually to subcategories within the four main categories below, and further by year to accurately reflect anticipated or known increases in personnel, benefits, capital expenses, capital improvements, and new programs. The Rate Model currently accounts for a 3% CPI across all line items for each year, as noted in our limitations.

Figure 2-1. Inflatos used in Cost of Service Study

Sub-Object Title	%	%	%	%	%	%	%
	Inflation FY 19/20	Inflation FY 20/21	Inflation FY 21/22	Inflation FY 22/23	Inflation FY 23/24	% Inflation FY 24/25	Inflation FY 25/26
5100-5199 Public Works Admin	3%	3%	3%	3%	3%	3%	3%
5200-5299 Contracted Services*	3%	3%	3%	3%	3%	3%	3%
5300-5399 Commodities	3%	3%	3%	3%	3%	3%	3%
5400-5499 ISC Charges	3%	3%	3%	3%	3%	3%	3%

* Contracted Services includes the amount paid to Tracy Disposal, City related overhead, and additional known costs. Tracy Disposal projected FY20/21 based on actual costs and known changes. Tracy Disposal costs were adjusted by inflation beginning in FY21/22.

SB 1383 – Short-lived Climate Pollutants: Methane Emissions: Dairy & Livestock; Landfills: Organics

SB 1383, passed in 2016 and final regulations adopted in 2020, focuses on the reduction of methane emitted into the atmosphere. The regulations require organics (as defined in the regulations) to be diverted from the landfill. Therefore, all organic material will need to be separately collected from the City's generators. For the City, this represents a change to current collection practices.

The City's residents currently include food scraps in the solid waste container. Effective January 1, 2022, the food scraps will not be permitted in the solid waste container. Most agencies throughout the state are including the food scraps with the yard waste currently being collected. The City's residential customers will be required to combine food scraps and yard waste in the new Organics container. This will require weekly collection of Organics resulting in increased collection and processing costs. The additional costs will include the cost of added labor, maintenance, and vehicle purchases for Tracy Disposal to switch from every other week to every week organics collection. The timing of converting to weekly collection is expected to commence effective January 1, 2022, so the increase in collection and processing costs will be phased in with one half absorbed in FY 21/22 and one half absorbed in FY 22/23 rate setting.

Migration

When there are significant rate increases, customers may downsize their subscription levels to a lower cost service. Due to the limited options for downsizing carts, minimal increase in solid waste bins, and decrease in recycling bin costs, a major migration is not expected between service levels. Therefore, service migration has been limited to 2% in FY 22/23, the first year after the COS Study rate implementation.

Customers with more than one recycling container will be billed for each additional container beginning FY 21/22. It is not anticipated that customers will reduce recycling services.

Reserve Fund Balance

A Reserve Fund Balance is necessary to help stabilize customers' rates and provide for unexpected contingencies. The Reserve Fund Balance can be drawn on in years when the City experiences above average costs and augmented during years when costs are below average. The City has elected to use \$2.5 million of its Reserve Fund Balance to help mitigate the rate increases for FY21/22 and FY22/23 for a total of \$5.0 million reduction to the reserve balance. The reserve balance is estimated to be approximately \$5.0 million at the end of FY 22/23, roughly two (2) months of expenditures.

Revenue Increases

Revenue increases, along with the use of Reserve Fund Balance, were derived to cover the City's costs. **Figure 2-2** summarizes the projected revenue from current rates, annual revenue requirements, annual variances, and the rate increases necessary to cover the City's costs. It is assumed the full rate increase required to meet the current year revenue requirement is implemented.

When the revenue from current rates is compared with the net revenue requirements (i.e., revenue requirement less non-operating revenue), there is a deficit variance that requires a large revenue increase in FY 21/22 to reach cost of service, and smaller annual increases to match inflationary and growth projections.

Figure 2-2. Rate Increase Calculations

		FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26
Revenue from Current Rates	A	\$ 20,648,277	\$ 25,533,684	\$ 28,819,008	\$ 33,699,872	\$ 36,565,382
Revenue Requirement*		\$ 28,782,768	\$ 32,090,564	\$ 34,494,575	\$ 37,383,925	\$ 40,411,868
Less: Non-operating Revenue		\$ (749,083)	\$ (771,556)	\$ (794,703)	\$ (818,544)	\$ (843,100)
Less: Use of Fund Balance Reserves		\$ (2,500,000)	\$ (2,500,000)	\$ -	\$ -	\$ -
Net Revenue Requirement	B	\$ 25,533,684	\$ 28,819,008	\$ 33,699,872	\$ 36,565,382	\$ 39,568,768
Revenue Shortfall C = A-B		\$ (4,885,407)	\$ (3,285,323)	\$ (4,880,865)	\$ (2,865,509)	\$ (3,003,386)
Rate Increase Necessary	C / A	23.7%	12.9%	16.9%	8.5%	8.2%
* Projected Budget Expenditures						

Revenue increases are achieved by increasing rates. In years when rates are not being restructured to align with the cost of service, rates would be increased by the same percentage to generate the required

revenue increase. For example, a 5% revenue increase would be achieved with a 5% across-the-board increase in the current rates at the various subscription levels.² In this Rate Study, however, rates are being restructured to align with the cost to provide service. As a result, different percentage increases in the service and volume charges will occur. The derivation of these rate increases is explained in the next section of this report.

² The *rate* increase is the same as the *revenue* increase when the rate increase is effective for the whole 12 months. If the rate increase is in effect for less than a whole year, the percentage *rate* increase needs to be higher than the percentage *revenue* increase to generate the required revenue in a shorter period of time.

SECTION 3. COST OF SERVICE STUDY

Methodology

A Rate Study determines the unit cost of the services provided to the City's solid waste customers. Each customer class is charged the same unit cost for its share of the services that it requires. In this way, the total revenue requirement is split between the fixed service charges and the volumetric charges; with the volumetric charges further proportioned among the customer classes. Because the service is provided based on the type of truck and container, we have determined customer classes for this rate study to be classified as "cart", "bin", and "roll-off" customers.

Most the City's solid waste services are related to meeting customer demands for the solid waste, recycling and Organics collection services. The collection services vary based on the customer's subscribed size and type of container (bin vs cart vs roll-off) used for the collection of solid waste materials.

The solid waste collection service levels are defined as follows:

1. **Bin Customers** – Bin customers receive service in a bin that has 1.5- to 6-cubic yards of volume. The bins are collected by a front-loader truck. Typically, these containers are used at multi-family complexes or commercial businesses.
2. **Cart Customers** – Cart customers receive service in a 60- or 90-gallon cart for solid waste, and a 96-gallon cart for recycling and Organics service. The carts are typically collected by a rear-loader or automated truck and are used by residential, multi-family, and commercial customers depending on the amount of capacity required.
3. **Roll-Off Customer** – Roll-Off customers receive on-call service for debris box containers that have 8- to 40-cubic yards of volume.



The complete costs of the collection, transportation, and disposal system includes two main categories: City overhead expenses and Tracy Disposal expenses. City overhead costs include city staff and administrative expenses to bill and oversee solid waste services, including new programs. Tracy Disposal expenses include the direct costs of collection, transportation, overhead, depreciation of fixed assets, and processing and disposal of solid waste, recycling, and organic material.

The direct costs to collect and dispose materials were based on actual expenses. All overhead costs from the City and Tracy Disposal were allocated based on the number of residential vs commercial accounts between carts, bins, and roll-off containers, and further subdivided by the total number of lifts. Leaf pick-up and annual clean-up costs provided by Tracy Disposal were allocated to residential customers. New programs were allocated between residential and commercial accounts, but further allocated by material type impacted by the program. Refer to **Figure 3-1** for the four allocation factors.

Figure 3-1. Allocation Factors

Allocation Factor	Carts						Bins			Roll-Off
	Solid Waste - Residential	Solid Waste - Commercial	Recycling - Residential	Recycling - Commercial	Organics - Residential	Organics - Commercial	Solid Waste	Recycling	Organics	Customers
Weekly Subscribed Volume	25.91%	2.30%	13.29%	0.47%	13.11%	0.21%	16.45%	0.57%	0.09%	27.62%
Residential vs. Commercial	Varies by Program									
Residential Only, by Solid Waste Accounts	100%	-	-	-	-	-	-	-	-	-
Direct Line of Business Expenditure	Directly Charged to Line of Business									

Figure 3-2 provides a detailed breakdown of the expenses and COS allocations for FY 21/22.

Figure 3-2. Cost of Service Allocations

	FY 21-22	Carts				Bins			Roll-Off
	Expenses	Solid Waste	Recycling	Yard Waste	Solid Waste	Recycling	Yard Waste	Customers	
Residential									
City Overhead - Public Works Admin	\$ 566,494	\$ 280,598	\$ 143,929	\$ 141,966	-	-	-	-	
City Overhead - Contracted Services (Excl. Contractor Payment)	272,822	135,135	69,316	68,371	-	-	-	-	
City Overhead - Commodities & ISC Charges (Excl. Franchise Fees)	551,526	273,184	140,127	138,215	-	-	-	-	
City Overhead - New Programs	2,089,048	408,542	626,443	1,054,063	-	-	-	-	
Tracy Delta Overhead - General Admin	1,049,455	519,820	266,636	262,999	-	-	-	-	
Tracy Delta Overhead - Depreciation	667,517	349,805	161,671	156,041	-	-	-	-	
Tracy Delta - Direct Costs	2,604,310	1,232,803	699,305	672,202	-	-	-	-	
Tracy Delta - Leaf Pickup & On-Call Cleanup	895,350	895,350	-	-	-	-	-	-	
Tracy Delta - Franchise Fee	1,244,671	767,822	172,092	304,757	-	-	-	-	
Tracy MRF - Processing and Disposal	4,672,025	3,856,441	-	815,584	-	-	-	-	
Operating Reserve	(1,307,549)	(647,661)	(332,210)	(327,678)	-	-	-	-	
Commercial									
City Overhead - Public Works Admin	\$ 516,628	\$ 24,860	\$ 5,077	\$ 2,302	\$ 179,164	\$ 6,142	\$ 926	\$ 298,156	
City Overhead - Contracted Services (Excl. Contractor Payment)	248,807	11,973	2,445	1,109	86,285	2,958	446	143,591	
City Overhead - Commodities & ISC Charges (Excl. Franchise Fees)	502,978	24,204	4,943	2,241	174,430	5,980	902	290,278	
City Overhead - New Programs	75,109	5,912	18,209	15,721	25,947	1,013	136	8,170	
Tracy Delta Overhead - General Admin	1,097,807	46,055	9,406	4,264	374,676	12,845	1,937	648,624	
Tracy Delta Overhead - Depreciation	690,748	28,130	5,674	2,530	298,914	9,585	1,445	344,470	
Tracy Delta - Direct Costs	3,234,726	118,271	24,517	10,899	1,176,649	39,719	5,988	1,858,682	
Tracy Delta - Franchise Fee	1,259,736	8,992	1,771	1,749	505,756	6,906	4,841	729,720	
Tracy MRF - Processing and Disposal	6,463,012	6,631	-	4,908	2,701,570	-	34,198	3,715,706	
Operating Reserve	(1,192,451)	(57,381)	(11,720)	(5,313)	(413,536)	(14,177)	(2,138)	(688,187)	
Subtotal	\$ 26,202,768	\$ 8,289,486	\$ 2,007,633	\$ 3,326,929	\$ 5,109,854	\$ 70,972	\$ 48,681	\$ 7,349,212	
Non-Rate Revenue	(669,083)	(131,254)	(103,053)	(99,775)	(123,909)	(4,248)	(640)	(206,204)	
Total Revenue Requirement	\$25,533,684								

The customer class allocations and the expense attributable to customer accounts are compared with the estimated revenue from current rates in Figure 3-3. The allocation of costs between volumetric and fixed costs is not available for the current rate year.

Figure 3-3. Current Rate Revenue Compared to Cost of Service

Components of Rate Structure	Current Revenue (No Rate Increase)				Cost of Service (COS)					Difference (COS Minus Current)			
	Carts - Residential & Commercial	Bins	Roll-Off	Total	Carts - Residential	Carts - Commercial	Bins	Roll-Off**	Total	Carts - Residential & Commercial	Bins	Roll-Off	Total
Cost of Service													
Volumetric*													
Solid Waste Collection	N/A	N/A	N/A		\$ 5,923,601	\$ 123,913	\$ 3,878,218	\$ 5,849,769	\$ 15,651,588				
Recycling Collection	N/A	N/A	N/A		1,011,736	35,539	39,719	450,406	1,501,861				
Yard Waste Collection	N/A	N/A	N/A		1,995,294	24,035	40,186	3,934	2,039,414				
Fixed Costs													
Solid Waste Collection	N/A	N/A	N/A		2,034,179	76,539	1,107,727	772,333	3,914,239				
Recycling Collection	N/A	N/A	N/A		836,031	21,273	27,005	65,564	928,600				
Yard Waste Collection	N/A	N/A	N/A		1,193,043	14,783	7,855	1,003	1,201,900				
	\$ 11,134,384	\$ 4,840,281	\$ 4,673,612	\$ 20,648,277	\$12,993,884	\$ 296,083	\$ 5,100,710	\$ 7,143,008	\$ 25,533,684	\$ 2,155,582	\$ 260,429	\$2,469,396	\$4,885,407
									% Shortfall	19.4%	5.4%	52.8%	23.7%

* Based on size of container

N/A - Not Available

** Recycling represents C&D & Wood for Roll-Off

The comparison of revenue from current rates with the revenue requirement indicates a 23.7% (\$4,885,407) increase in revenue is needed overall.

A key component of the Rate Study was to determine the volumetric and fixed components of the rates by customer class (carts, bins, and roll-off) for proper rate design.

Rates need to be designed to generate each class’s share of the revenue requirement. Section 4 provides a recommended rate structure to meet the COS.

SECTION 4. RATE DESIGN – COST OF SERVICE

This section discusses the design of volumetric charges for the various sizes of carts, bins, and roll-off customers, and the fixed service charges for each customer class. All cost categories were evaluated to determine if the cost would fluctuate (variable) or remain constant (fixed) if there were variances in the subscribed service and type of container. The following methodology was used on solid waste, recycling, and Organics. Only the solid waste carts, bins, and roll-off containers, combined residential and commercial, are shown below for purposes of this report.

Volumetric (Variable) Collection Costs

Volumetric (variable) collection costs are proportional costs based on the subscribed size and type of container for carts and bins. In order to properly allocate the variable costs, the various factors identified below were calculated based on existing subscription levels. Compacted bin service receives a variable increase of 25% for additional labor time to service compactor containers. The variable collection costs exclude transfer, disposal and fixed costs which are calculated separately.

Roll-off containers do not use a volumetric approach when determining variable costs, and instead create a per trip fee separate from the type of material disposed or processed, and fixed costs. Compacted materials receive a variable increase of 25% due to the additional labor time to service compactor roll-off containers. Roll-off’s methodology is shown in **Figure 4-6** below.

Full Time Equivalent Route Factor – Carts and Bins

The subscribed level of service, in essence, reserves that equivalent volume of space in the collection vehicle. Tracy Disposal must route its drivers and vehicles in order to ensure the routes have capacity to meet the customers’ demand. Therefore, a “Full Time Equivalent Route Factor” (FTE Route Factor) was calculated for each size of container based on collection truck capacity, average route hours and disposal trip time. **Figure 4-1** lists the FTE Route Factors for Carts and Bins:

Figure 4-1. Full Time Equivalent Route Factor

Customer Class		FTE Route Factor
Carts		
	60 Gallon	0.94
	90 Gallon	1.00
Bins		
	1.5 Yard	0.89
	2 Yard	0.94
	3 Yard	1.03
	4 Yard	1.07
	6 Yard	1.26
	2 Yard COMP	1.07
	3 Yard COMP	1.26
	4 Yard COMP	1.40
	6 Yard COMP	1.72

Equivalent Container Factor – Carts and Bins

An Equivalent Container Factor (ECF) was calculated to determine the variable component of the monthly rates as follows:

1. An adjusted number of loads for each size of container were calculated assuming 100% of customers subscribed to one size.
2. An Adjusted Loads Cost was determined based on the actual collection costs divided by actual loads multiplied by the Adjusted Loads.

The ECF was calculated by dividing the Adjusted Loads Costs (step 2) by the minimum cost per load. **Figure 4-2** lists the ECF for each customer class:

Figure 4-2. Equivalent Container Factor

Customer Class		Equivalent Container Factor (ECF)
Carts		
	60 Gallon	1.00
	90 Gallon	1.60
Bins		
	1.5 Yard	1.00
	2 Yard	1.40
	3 Yard	2.31
	4 Yard	3.22
	6 Yard	5.67
	2 Yard COMP	3.22
	3 Yard COMP	5.67
	4 Yard COMP	8.39
	6 Yard COMP	15.50

Equivalent Container Units – Carts and Bins

Equivalent Container Units (ECU) were calculated in order to properly allocate the variable collection costs, excluding the solid waste transfer and disposal and processing costs. ECUs were calculated by multiplying the number of containers by size by the applicable ECF. **Figure 4-3** shows the calculation of the ECUs for each customer class.

Figure 4-3. Equivalent Container Units

Customer Class		Equivalent Container Factor (ECF)	Current Containers in Service	Equivalent Container Units (ECU)
		A	B	A X B = C
Carts				
	60 Gallon	1.00	19,153	19,153
	90 Gallon	1.60	5,526	8,842
	Total Carts ECUs			27,995
Bins				
	1.5 Yard	1.00	194	194
	2 Yard	1.40	156	219
	3 Yard	2.31	268	620
	4 Yard	3.22	388	1,250
	6 Yard	5.67	304	1,723
	2 Yard COMP	3.22	4	13
	3 Yard COMP	5.67	-	-
	4 Yard COMP	8.39	2	17
	6 Yard COMP	15.50	11	171
	Total Bins ECUs			4,206

Variable Route Collection Costs Calculation

Annual variable costs were determined based on the review of Tracy Disposal’s projected and inflated collection costs for FY 21/22 and contain costs that would fluctuate based on the size of container and frequency of service. Costs include such items as costs for labor, equipment operation, and maintenance.

Cart Customers

Figure 4-4 shows the calculation of the monthly variable route collection costs per month for cart customers.

Figure 4-4. Variable Route Collection Costs per Month - Carts

		Cart Size (Gallons)	
		60	90
Annual Variable Costs	\$ 1,351,074	A	
Equivalent Container Units (ECU)	27,995	B	
Annual Variable Costs per ECU	\$ 48.26	A / B = C	
Monthly Variable Cost per ECU	\$ 4.02	C / 12 = D	
Equivalent Container Factor	E	1.00	1.60
Variable Route Collection Costs per Month	D x E	\$ 4.02	\$ 6.43

Bin Customers

Figure 4-5 shows the calculation of the monthly variable route collection costs per month for bin customers.

Figure 4-5. Variable Route Collection Costs – Bins

		Bin Size (Yards)									
		1.5	2	3	4	6	2 COMP	3 COMP	4 COMP	6 COMP	
Annual Variable Costs	\$ 925,465	A									
Equivalent Container Units (ECU)	4,206	B									
Annual Variable Costs per ECU	\$ 220.05	A / B = C									
Monthly Variable Cost per ECU	\$ 18.34	C / 12 = D									
Equivalent Container Factor	E	1.00	1.40	2.31	3.22	5.67	3.22	5.67	8.39	15.50	
Variable Route Collection Costs per Month	D x E	\$ 18.34	\$ 25.72	\$ 42.41	\$ 59.09	\$ 103.91	\$ 59.09	\$ 103.91	\$ 153.83	\$ 284.24	

Roll Off Customers

Figure 4-6 shows the calculation of the per pull variable collection costs for roll-off customers.

Figure 4-6. Variable Route Collection Costs – Roll Off

		Roll Off	
		Loose	Compacted
Annual Variable Costs	\$ 2,588,403	A	
Annual Pulls	9,096	B	
Variable Cost per Pull	\$ 284.58	A / B = C	
Compaction Factor	D	1.00	1.25
Variable Route Collection Cost per Pull	C x D = E	\$ 284.58	\$ 355.73

Fixed Collection Costs

Fixed collection costs are based on FY 21/22 projected budget costs that are not dependent on the subscribed service volume. Costs include such items as City and Tracy Disposal administration and city-wide programs. Costs are allocated between carts, bins, and roll-offs based on the percentage of each class’s total subscribed gallons. Once the annual fixed costs are allocated between carts, bins and roll-offs, each cost category is divided by the number of customer accounts in each category. Fixed costs for carts are lower than the fixed costs for bins or roll-offs due to a larger container base to allocate costs. **Figure 4-7** shows the calculation of Fixed Costs for solid waste carts, solid waste bins, and roll-off containers.

Figure 4-7. Fixed Collection Costs

		Carts		Bins	Roll Off
		Solid Waste	Solid Waste	Solid Waste	All Materials
Total Annual Fixed Costs	A	\$ 2,102,999	\$ 1,098,527		\$ 838,899
Number of Accounts/ Annual Pulls	B	23,426	760		8,368
Fixed Cost per Year / Pull	A / B = C	\$ 89.77	\$ 1,445.43		\$ 100.25
Fixed Cost per Month	C / 12 = D	\$ 7.48	\$ 120.45		
Residential Leaf & Cleanup*	E	\$ 895,350			
Number of Residential Accounts	F	\$ 23,222			
Cost per Account per Month	E / F / 12 = G	\$ 3.21			

* Residential Cost only. Commercial rates exclude this cost.

Transfer, Disposal and Processing Costs

Transfer, disposal, and processing costs represent the Tracy Disposal FY 21/22 projected and inflated budget costs to dispose/process the collected materials. The cost per gallon or yard is calculated by dividing the actual disposal costs by the number of subscribed gallons or yards. **Figure 4-8** lists the monthly transfer, disposal, and processing costs for carts and bins, and the per-yard per-pull transfer, disposal, and processing cost for roll-offs.

Figure 4-8. Transfer and Disposal Costs

		Solid Waste Carts		Solid Waste Bins*						Solid Waste Roll Off*			
		60 Gal Cart	90 Gal Cart	1.5 YD Bin	2 YD Bin	3 YD Bin	4 YD Bin	6 YD Bin	10 YD	20YD	30YD	40YD	
Total Disposal Costs	A	\$3,801,089		\$2,701,570						\$3,450,328			
Total Subscribed Gallon / Yard	B	1,646,520		5,029						417,125			
Disposal Cost per Gallon / Yard	A / B = C	\$2.31		\$537.20						\$8.27			
Disposal Cost per Month/Pull	C/12 * Siz	\$11.54	\$17.31	\$67.15	\$89.53	\$134.30	\$179.07	\$268.60	\$82.72	\$165.43	\$248.15	\$330.87	

* Calculation is for uncompacted material costs only, on a per yard per pull basis. Compacted material is 3x the cost per yard for disposal.

Residential Leaf and Cleanup Programs

The City offers residential customers a Fall leaf pick-up for excess yard waste beyond what can fit in the Organics cart. Additionally, the City offers an annual cleanup program which allows each residential property to have one scheduled pickup per calendar year. Beginning in 2022, each residential property will be allowed two scheduled pickups per calendar year. The costs for these two programs all allocated to each customer independent of the level of subscribed service.

Figure 4-9a. Base Collection Rates Cart Service (Service 1X per Week, First Container)

	Carts - Residential		Carts - Commercial	
	60 Gallon	90 Gallon	60 Gallon	90 Gallon
Solid Waste Collection - 1st Container				
Variable	\$ 4.02	\$ 6.43	\$ 4.02	\$ 6.43
Fixed	\$ 7.48	\$ 7.48	\$ 7.48	\$ 7.48
Transfer/Disposal	\$ 11.54	\$ 17.31	\$ 11.54	\$ 17.31
Residential Leaf & Cleanup*	\$ 3.21	\$ 3.21	N/A	N/A
	\$ 26.26	\$ 34.44	\$ 23.05	\$ 31.23

*Residential Cost only. Commercial rates exclude this cost.

Figure 4.9b: Base Collection Rate Bin Service (Service 1X per Week, First Container)

	Bins								
	1.5 Yard	2 Yard	3 yard	4 Yard	6 Yard	2 Yard	3 yard	4 Yard	6 Yard
COMPACT COMPACT COMPACT COMPACT									
Solid Waste Collection - 1st Container (before Frequency or Self-Contained Surcharges)									
Variable	\$ 18.34	\$ 25.72	\$ 42.41	\$ 59.09	\$ 103.91	\$ 59.09	\$ 103.91	\$ 153.83	\$ 284.24
Fixed	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45
Transfer/Disposal	\$ 67.15	\$ 89.53	\$ 134.30	\$ 179.07	\$ 268.60	\$ 268.60	\$ 402.90	\$ 537.20	\$ 805.80
	\$ 205.94	\$ 235.71	\$ 297.16	\$ 358.61	\$ 492.97	\$ 448.14	\$ 627.27	\$ 811.48	\$ 1,210.49

Figure 4.9c: Base Collection Rate Roll-Off Service (Per Pull)

	Roll Off - Per Pull			
	10 YD	20 YD	30 YD	40 YD
Solid Waste Collection - Per Pull				
Variable	\$ 284.58	\$ 284.58	\$ 284.58	\$ 284.58
Fixed	\$ 100.25	\$ 100.25	\$ 100.25	\$ 100.25
Transfer/Disposal	\$ 82.72	\$ 165.43	\$ 248.15	\$ 330.87
	\$ 467.55	\$ 550.27	\$ 632.98	\$ 715.70

Multiple Service per Week

A rate for service that is provided to the same customer multiple times per week has the following components:

- First Service Day - Base rate
- Next Service Day – Base rate less fixed portion plus a frequency surcharge. Frequency surcharge is the additional cost for the truck to service a customer in an area outside of the normal route. The frequency surcharge is calculated as the additional labor costs per minute to service the container, multiplied by an average of 10 minutes to service a container outside the normal route. The frequency surcharge increases annually by a 3% inflation factor.

Figure 4-10. Example of Monthly Rate Calculation for 2 Yard Bin Serviced 3 Times per Week

Base Rate - 2 Yard Bin 3x per week	A	\$ 235.71
Fixed Portion	B	\$ 120.45
Frequency Surcharge (per trip beyond the first trip)	C	\$ 22.97
Rate Calculation		
1st Day of Service		
Base Rate	A	\$ 235.71
2nd Day of Service		
Base Rate	A	235.71
Fixed Portion	B	(120.45)
Frequency Surcharge	C	22.97
3rd Day of Service		
Base Rate	A	235.71
Fixed Portion	B	(120.45)
Frequency Surcharge	C	22.97
		\$ 512.16
Total Rate - 2 Yard Bin Serviced 3 Times per Week		<u>\$ 512.16</u>

Second Container

There are occasions, due to service demands, a customer may have more than one solid waste, recycling, or yard waste container. A rate for the second container includes the disposal component, the variable component, and a portion of the fixed container component. The fixed container component only contains the depreciation cost of the additional container. **Figure 4-11** shows a calculation for two 90-gallon residential solid waste carts serviced one time per week.

Figure 4-11. Calculation of Monthly Rate for Two 90 Gallon Carts Service

Base Rate - 90 Gallon Residential Solid Waste Cart	A	\$ 34.44
Disposal	B	\$ 17.31
Additional Fixed (Container)	C	\$ 0.63
Additional Operating Costs	D	\$ 6.43
Rate Calculation		
1st Day of Service		
Base Rate	A	\$ 34.44
2nd Container		
Disposal	B	17.31
Fixed Portion	C	0.63
Variable Portion	D	6.43
		24.37
Total Monthly Rate - Two 90 Gallon Carts Serviced 1 time Per Week		<u>\$ 58.82</u>

SECTION 5. CUSTOMER BILL IMPACTS

The current collection service rates alone will not provide the revenue needed to fund existing and projected operating and capital expenses and maintain the required Fund Balance Reserves Therefore, the service rates must be adjusted.

The future revenue requirements were developed using the following assumptions:

- The City’s FY 18/19 actual expenditures and Tracy Disposal’s FY 20/21 projected income statement served as the basis for determining the revenue requirement by inflating historical costs to FY 21/22 by 3% each year. The model currently allows inflation to be applied individually to subcategories within the four main categories shown in Figure 1 below, and further by year to accurately reflect anticipated or known increases in personnel, benefits, capital expenses, capital improvements, and new programs.

Figure 5-1. Inflators used in Cost of Service Study

Sub-Object	Title	% Inflation FY 19/20	% Inflation FY 20/21	% Inflation FY 21/22	% Inflation FY 22/23	% Inflation FY 23/24	% Inflation FY 24/25	% Inflation FY 25/26
5100-5199	Public Works Admin	3%	3%	3%	3%	3%	3%	3%
5200-5299	Contracted Services*	3%	3%	3%	3%	3%	3%	3%
5300-5399	Commodities	3%	3%	3%	3%	3%	3%	3%
5400-5499	ISC Charges	3%	3%	3%	3%	3%	3%	3%

* Contracted Services includes the amount paid to Tracy Disposal and City related overhead.

- Additional expenditures such as costs to comply with SB 1383, weekly recycling, road impact charges, code enforcement, community preservation, illegal dumping and homeless encampment cleanup were included at the City’s direction in addition to the 3% annual inflation.
- Rates should be sufficient to fund operating and capital expenses and maintain the required Fund Balance Reserve.
- In order to avoid potential Proposition 218 issues in using reserve funds, Fund Balance Reserve monies can only be used to support solid waste related programs.

Figures 5-2, 5-3, 5-4 and 5-5 show the rates necessary to meet the COS revenue requirement.

Figure 5-2. Projected Rates – Residential Cost of Service

		Projected Cost of Service and Monthly Rate Increase									
Solid Waste, Recycling, and Organics (Residential)	Current Rates	FY 21/22	\$ Change	FY 22/23	\$ Change	FY 23/24	\$ Change	FY 24/25	\$ Change	FY 25/26	\$ Change
60 Gallon Cart*	\$ 36.50	\$ 44.38	\$ 7.88	\$ 52.35	\$ 7.96	\$ 61.18	\$ 8.83	\$ 65.75	\$ 4.56	\$ 70.40	\$ 4.66
90 Gallon Cart*	\$ 43.20	\$ 52.57	\$ 9.37	\$ 60.87	\$ 8.30	\$ 70.21	\$ 9.35	\$ 75.50	\$ 5.29	\$ 80.89	\$ 5.39

*Only applicable for Residential Customers. Includes a 96 Gallon Recycling and 96 Gallon Organics carts.

Figure 5-3 Projected Rates – Commercial Cost of Service

Solid Waste (Commercial)	Current Rates	Projected Cost of Service and Monthly Rate Increase									
		FY 21/22	\$ Change	FY 22/23	\$ Change	FY 23/24	\$ Change	FY 24/25	\$ Change	FY 25/26	\$ Change
60 Gallon Cart*	\$ 39.70	\$ 23.05	\$ (16.65)	\$ 24.73	\$ 1.69	\$ 29.03	\$ 4.29	\$ 31.23	\$ 2.20	\$ 33.48	\$ 2.25
90 Gallon Cart*	\$ 51.85	\$ 31.23	\$ (20.62)	\$ 33.25	\$ 2.02	\$ 38.06	\$ 4.81	\$ 40.99	\$ 2.93	\$ 43.97	\$ 2.98
1.5 Yard Bin	\$ 148.20	\$ 205.94	\$ 57.74	\$ 215.20	\$ 9.26	\$ 264.40	\$ 49.19	\$ 271.00	\$ 6.60	\$ 277.86	\$ 6.87
2 Yard Bin	\$ 191.85	\$ 235.71	\$ 43.86	\$ 246.35	\$ 10.64	\$ 297.03	\$ 50.68	\$ 305.69	\$ 8.65	\$ 314.62	\$ 8.93
3 Yard Bin	\$ 257.55	\$ 297.16	\$ 39.61	\$ 310.74	\$ 13.58	\$ 364.61	\$ 53.87	\$ 377.72	\$ 13.11	\$ 391.13	\$ 13.41
4 Yard Bin	\$ 322.65	\$ 358.61	\$ 35.96	\$ 375.12	\$ 16.52	\$ 432.18	\$ 57.05	\$ 449.75	\$ 17.57	\$ 467.64	\$ 17.89
6 Yard Bin	\$ 440.55	\$ 492.97	\$ 52.42	\$ 516.45	\$ 23.49	\$ 581.12	\$ 64.66	\$ 609.68	\$ 28.56	\$ 638.60	\$ 28.92

* Only applicable for Commercial Customers. Does not include recycling or Organics.

Figure 5-4 Projected Rates – Commercial Recycling Cost of Service

Recycling (Commercial)	Current Rates	Projected Cost of Service and Monthly Rate Increase									
		FY 21/22	\$ Change	FY 22/23	\$ Change	FY 23/24	\$ Change	FY 24/25	\$ Change	FY 25/26	\$ Change
96 Gallon Cart*	\$ 43.60	\$ 6.68	\$ (36.92)	\$ 8.91	\$ 2.23	\$ 11.20	\$ 2.29	\$ 12.26	\$ 1.06	\$ 13.34	\$ 1.08
1.5 Yard Bin	\$ 130.90	\$ 90.66	\$ (40.24)	\$ 96.97	\$ 6.31	\$ 137.07	\$ 40.09	\$ 145.54	\$ 8.48	\$ 154.28	\$ 8.74
2 Yard Bin	\$ 169.70	\$ 100.17	\$ (69.53)	\$ 107.34	\$ 7.17	\$ 148.46	\$ 41.12	\$ 158.64	\$ 10.18	\$ 169.14	\$ 10.50
3 Yard Bin	\$ 226.00	\$ 119.17	\$ (106.83)	\$ 128.06	\$ 8.89	\$ 171.24	\$ 43.18	\$ 184.83	\$ 13.59	\$ 198.84	\$ 14.01
4 Yard Bin	\$ 280.40	\$ 138.17	\$ (142.23)	\$ 148.78	\$ 10.61	\$ 194.02	\$ 45.24	\$ 211.03	\$ 17.01	\$ 228.55	\$ 17.53
6 Yard Bin	\$ 377.15	\$ 176.18	\$ (200.97)	\$ 190.23	\$ 14.05	\$ 239.59	\$ 49.36	\$ 263.42	\$ 23.83	\$ 287.97	\$ 24.56

*Current Rates represents a bundled rate of a 96 Gallon Recycling and 96 Gallon Organics carts.

Figure 5-5 Projected Rates – Commercial Organics Cost of Service

Organics/ Organics	Current Rates	Projected Cost of Service and Monthly Rate Increase									
		FY 21/22	% Change	FY 22/23	% Change	FY 23/24	% Change	FY 24/25	% Change	FY 25/26	% Change
96 Gallon Cart*	\$ 43.60	\$ 11.45	-73.7%	\$ 15.46	35.1%	\$ 17.68	14.3%	\$ 18.94	7.2%	\$ 20.24	6.8%
1.5 Yard Bin	\$ 130.90	\$ 293.10	123.9%	\$ 305.15	4.1%	\$ 342.99	12.4%	\$ 357.73	4.3%	\$ 372.92	4.2%
2 Yard Bin	\$ 169.70	\$ 360.04	112.2%	\$ 374.67	4.1%	\$ 415.33	10.9%	\$ 433.62	4.4%	\$ 452.47	4.3%
3 Yard Bin	\$ 226.00	\$ 493.91	118.5%	\$ 513.73	4.0%	\$ 560.01	9.0%	\$ 585.40	4.5%	\$ 611.57	4.5%
4 Yard Bin	\$ 280.40	\$ 658.55	134.9%	\$ 684.97	4.0%	\$ 746.68	9.0%	\$ 780.54	4.5%	\$ 815.43	4.5%

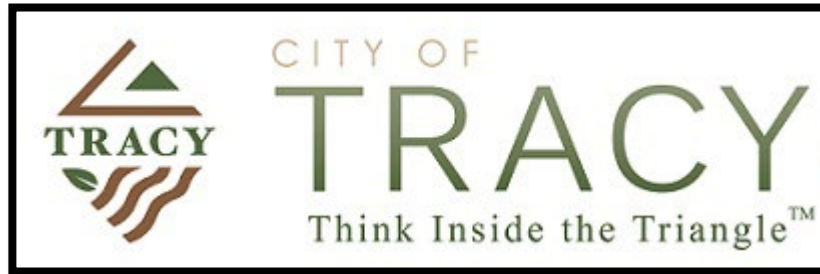
*Current Rates represents a bundled rate of a 96 Gallon Recycling and 96 Gallon Organics carts.

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CITY OF TRACY

520 TRACY BLVD

TRACY, CA 95376



SOLID WASTE RATE STUDY APPENDICES

- A-1 Rate Model Summary
- A-2 Cart Cost of Service Calculations
- A-3 Monthly Cart Rates – Cost of Service
- A-4 Solid Waste Bin Cost of Service Calculations
- A-5 Recycling Bin Cost of Service Calculations
- A-6 Organics Bin Cost of Service Calculations
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- A-8 Roll Off Cost of Service Calculations
- A-9 Roll Off Per Pull Rates – Cost of Service – Loose Material
- A-10 Roll Off Per Pull Rates – Cost of Service – Compact Material
- A-11 Current Rate Schedule

HF&H CONSULTANTS, LLC



APPENDIX A-1: RATE MODEL SUMMARY

Rate Model Summary – FY 21/22 to FY 25/26

CITY OF TRACY
SOLID WASTE RATE MODEL

	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
SUMMARY RESULTS	Preliminary Actual (City Data Projected)	Current Year (City Data Projected)	Projected	Projected	Projected	Projected	Projected
State Grants	\$ 3,867	\$ 3,983	\$ 4,103	\$ 4,226	\$ 4,353	\$ 4,483	\$ 4,618
Charges for Services	20,648,277	20,648,277	25,533,684	28,819,008	33,699,872	36,565,382	39,568,768
Fines and Forfeitures	454,000	467,620	401,649	413,698	426,109	438,893	452,059
Use of Money	248,216	255,662	263,332	271,232	279,369	287,750	296,382
Revenue Total	\$ 21,354,360	\$ 21,375,543	\$ 26,202,768	\$ 29,508,164	\$ 34,409,703	\$ 37,296,507	\$ 40,321,827
City Overhead Costs							
Personnel	\$ 1,020,946	\$ 1,051,575	\$ 1,083,122	\$ 1,115,615	\$ 1,149,084	\$ 1,183,556	\$ 1,219,063
Contracted Services	491,685	506,435	521,628	537,277	553,396	569,997	587,097
Commodities	14,213	14,639	15,078	15,531	15,996	16,476	16,971
ISC Charges	979,759	1,009,152	1,039,426	1,070,609	1,102,727	1,135,809	1,169,883
New Programs	-	-	999,450	1,453,320	1,933,522	2,441,229	2,977,658
Operating Reserve	-	-	(2,500,000)	(2,500,000)	-	-	-
Franchise Fee	2,139,058	2,203,230	2,504,406	2,783,183	2,866,679	2,952,679	3,041,259
City of Tracy Total	\$ 4,645,660	\$ 4,785,030	\$ 3,663,111	\$ 4,475,535	\$ 7,621,404	\$ 8,299,747	\$ 9,011,931
Tracy Disposal							
Operating Expenses - Carts	\$ 20,579,410	\$ 4,940,312	\$ 5,466,379	\$ 5,906,963	\$ 6,526,139	\$ 7,413,858	\$ 8,346,956
MRF / Disposal - Carts		4,459,967	4,683,564	4,908,991	5,174,330	5,454,362	5,749,631
Operating Expenses - Bins		1,750,173	1,921,758	2,088,414	2,304,874	2,613,578	2,938,590
MRF / Disposal - Bins		2,599,757	2,735,767	2,877,598	3,068,505	3,272,973	3,489,365
Operating Expenses - Rolloff		2,641,768	2,851,776	3,047,440	3,276,500	3,636,306	4,006,906
MRF / Disposal - Rolloff		3,607,482	3,715,706	3,827,177	3,941,993	4,060,253	4,182,060
New Program - SB1383			1,164,706	2,376,045	2,495,958	2,545,430	2,596,387
Tracy Disposal Total	\$ 20,579,410	\$ 19,999,459	\$ 22,539,657	\$ 25,032,628	\$ 26,788,299	\$ 28,996,760	\$ 31,309,895
Expenditures Total	\$ 25,225,070	\$ 24,784,489	\$ 26,202,768	\$ 29,508,164	\$ 34,409,703	\$ 37,296,507	\$ 40,321,827
Overall Surplus/(Shortfall)	\$ (3,870,710)	\$ (3,408,946)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
as % of Total Expenditures	-15.3%	-13.8%	0.0%	0.0%	0.0%	0.0%	0.0%

	Preliminary Actual (City Data)	Current Year (Estimated)	Projected	Projected	Projected	Projected	Projected
Operating Reserve							
Beginning of FY (July 1)	\$ 17,527,487	\$ 13,656,777	\$ 10,247,831	\$ 7,450,831	\$ 4,950,831	\$ 4,950,831	\$ 4,950,831
Additions			(2,500,000)	(2,500,000)	-	-	-
Capital Purchases			(297,000)				
End of FY (June 30)	\$ 13,656,777	\$ 10,247,831	\$ 7,450,831	\$ 4,950,831	\$ 4,950,831	\$ 4,950,831	\$ 4,950,831
% of Expenditures			28.4%	16.8%	14.4%	13.3%	12.3%
Months of Expenditures			3.4	2.0	1.7	1.6	1.5

APPENDIX A-2: CARTS COST OF SERVICE CALCULATIONS

Solid Waste Cart Cost of Service Calculations

FY2021/2022			Solid Waste		Cost of Service Information	
103%	Residential	Commercial	Total	CPI INFLATION	CITY OF TRACY	
\$ 547,354	\$ 31,471	\$ 578,825		City Personnel (Includes New Programs)		
\$ 337,915	\$ 12,263	\$ 350,178		City Contracted Services (Includes New Programs)		
\$ 273,184	\$ 24,204	\$ 297,388		City Commodities, ISC & other (Includes New Programs)		
\$ 519,820	\$ 46,055	\$ 565,876		Tracy Disposal General Admin		
\$ 349,805	\$ 28,130	\$ 377,934		Tracy Disposal Depreciation		
\$ (114,061)	\$ (17,193)	\$ (131,254)		Non-Rate Revenue		
\$ (7,322)	\$ (397)	\$ (7,719)		Double Counted Extra Cart Depreciation		
\$ (647,661)	\$ (57,381)	\$ (705,042)		Operating Reserve		
\$ -	\$ -	\$ -				
\$ -	\$ -	\$ -		New Program Variable Costs		
\$ 767,822	\$ 8,992	\$ 776,814		Franchise Fee		
\$ 1,232,803	\$ 118,271	\$ 1,351,074		Tracy Disposal Direct Costs		
\$ 241,055	\$ -	\$ 241,055		Tracy Disposal Leaf Pickup		
\$ 654,295	\$ -	\$ 654,295		Tracy Disposal On Call Cleanup		
				Frequency Surcharge		
				Migration		
\$ (60,994)	\$ (989)	\$ (61,983)		New Program Disposal Costs		
\$ 3,856,441	\$ 6,631	\$ 3,863,072		MSW Transfer/Processing/Disposal Costs		
\$ 3,795,447	\$ 5,642	\$ 3,801,089		Total Disposal Costs		
\$ 7,950,458	\$ 200,055	\$ 8,150,513		Total All Costs		
\$ 2,026,857	\$ 76,142	\$ 2,102,999		Fixed Cost		
\$ 1,232,803	\$ 118,271	\$ 1,351,074		MSW Collection Operations Costs		
				\$ 0.19 MSW Transfer/Disposal per Gallon/Month		
				0.60 MSW Pounds per Gallon		
				19.25 32-Gal MSW Pounds per Setout		
				36.10 60-Gal MSW Pounds per Setout		
				54.15 90-Gal MSW Pounds per Setout		
				0.16 32-Gal Yardage Conversion		
				0.30 60-Gal Yardage Conversion		
				0.45 90-Gal Yardage Conversion		
				201.00 MSW Gal per Yard		
				29 Collection Body MSW Yards		
				8.00 Collection Body MSW Tons		
				\$ 2.23 Cost/min for additional freq. of service		
				\$ 5.00 Additional Service Frequency Time (Minutes)		
				\$ 11.15 Additional Service Frequency Cost		

MSW Cart Rates by Cost of Service				
Container Size	32	60	90	
Setouts				
RESIDENTIAL				
Annual Variable Route Costs	\$ 1,351,074			
ECUs	27,995			
Annual Variable/ECU	\$ 48.26			
Monthly Variable/ECU	\$ 4.02			
Equivalent Container Factor	0.50	1.00	1.60	
Variable Route Costs/Month	\$ 2.00	\$ 4.02	\$ 6.43	
Fixed Costs/Container/Month	\$ 7.48	\$ 7.48	\$ 7.48	
MSW Txfr & Disp Cost/Month	\$ 6.16	\$ 11.54	\$ 17.31	
Residential (Leaf Pickup and Cleanup)	\$ 3.21	\$ 3.21	\$ 3.21	
TOTAL MONTHLY RATE @ 1x/wk Res	\$ 18.85	\$ 26.26	\$ 34.44	
TOTAL MONTHLY RATE @ 1x/wk Com	\$ 15.64	\$ 23.05	\$ 31.23	

Extra Container	Residential 60	Residential 90	Commercial 60	Commercial 90
Disposal	\$ 11.54	\$ 17.31	\$ 11.54	\$ 17.31
Addl Fixed (Depreciation)	\$ 0.51	\$ 0.63	\$ 0.51	\$ 0.63
Addl Operating Costs	\$ 4.02	\$ 6.43	\$ 4.02	\$ 6.43
Total Monthly Rate Extra Container	\$ 16.07	\$ 24.37	\$ 16.07	\$ 24.37

Estimated Cost of Container	\$ -	\$ 60.70	\$ 75.07
Depreciation (10Year life)	\$ -	\$ 0.51	\$ 0.63

PROOF of All Costs Included in the Rates:	Residential	Residential	Commercial	Commercial
Total Carts	17,898	5,324	81	123
Rates	\$ 26.26	\$ 34.44	\$ 23.05	\$ 31.23
First Cart Revenue	\$ 5,639,725	\$ 2,200,503	\$ 22,400	\$ 46,096
Second Carts	1,158	39	16	40
Rates	\$ 16.07	\$ 24.37	\$ 16.07	\$ 24.37
Second Cart Revenue	\$ 223,315	\$ 11,407	\$ 3,086	\$ 11,700
Total Revenue	\$ 8,158,232			
Total Costs	\$ 8,158,232	\$ 7,063,095		
	\$ -			

Residential And Commercial	32.00	60.00	90.00	Total	Check
Variable	-	77,030	35,559	\$ 1,351,074	\$ -
Leaf/Cleanup	-	57,506	17,106	\$ 895,350	\$ -
Fixed	-	134,501	40,749.01	\$ 2,102,999	\$ -
Disposal (First and Second)	-	221,079	95,678	\$ 3,801,089	\$ -
Depreciation	-	643		\$ 7,719	

APPENDIX A-2: CARTS COST OF SERVICE CALCULATIONS

Recycling Cart Cost of Service Calculations

FY2021/2022			Recycling		Cost of Service Information	
103%						
Residential	Commercial	Total	CPI INFLATION			
			CITY OF TRACY			
\$ 280,759	\$ 9,263	\$ 290,022	City Personnel (Includes New Programs)			
\$ 172,516	\$ 2,922	\$ 175,438	City Contracted Services (Includes New Programs)			
\$ 142,527	\$ 4,943	\$ 147,470	City Commodities, ISC & other (Includes New Programs)			
\$ 266,636	\$ 9,406	\$ 276,042	Tracy Disposal General Admin			
\$ 161,671	\$ 5,674	\$ 167,345	Tracy Disposal Depreciation			
\$ (99,541)	\$ (3,512)	\$ (103,053)	Non-Rate Revenue			
\$ (3,461)	\$ (901)	\$ (4,362)	Double Counted Extra Cart Depreciation			
\$ (332,210)	\$ (11,720)	\$ (343,929)	Operating Reserve			
\$ 71,582	\$ 2,525	\$ 74,107	New Program Depreciation			
\$ 312,431	\$ 11,022	\$ 323,453	New Program Direct Costs			
\$ 172,092	\$ 1,771	\$ 173,863	Franchise Fee			
\$ -	\$ -	\$ -	New Program Variable Costs			
\$ 699,305	\$ 24,517	\$ 723,822	Tracy Disposal Direct Costs			
		\$ -	Frequency Surcharge			
		\$ -	Migration			
		\$ -				
		\$ -				
\$ -	\$ -	\$ -	New Program Disposal Costs			
\$ -	\$ -	\$ -	REC Transfer/Processing/Disposal Costs			
\$ -	\$ -	\$ -	Total Disposal Costs			
\$ 1,844,306	\$ 55,912	\$ 1,904,580	Total All Costs			
		\$ -				
\$ 832,570	\$ 20,373	\$ 852,943	Fixed Cost			
		\$ -				
\$ 1,011,736	\$ 35,539	\$ 1,047,275	Recycling Collection Operations Costs			
		\$ -	Transfer/Processing per Gallon/Month			
			0.12 Recyclable Pounds per Gallon			
		23,390	Number of Accounts			
		11	96 - Gal REC Pounds per Setout			
		29	Collection Body REC Yards			
		8.00	Collection Body REC Tons			
		\$ 2.23	Cost/min for additional freq. of service			
		\$ 5.00	Additional Service Frequency Time (Minutes)			
		\$ 11.15	Additional Service Frequency Cost			

Recycling Cart Rates by Cost of Service				
Container Size	96	96	96	96
RESIDENTIAL				
Annual Variable Route Costs	\$ 1,047,275			
ECUs	23,971			
Annual Variable/ECU	\$ 43.69			
Monthly Variable/ECU	\$ 3.64			
Equivalent Container Factor	1.00	1.00	1.00	1.00
Variable Route Costs/Month	\$ 3.64	\$ 3.64	\$ 3.64	\$ 3.64
Fixed Costs/Container/Month	\$ 3.04	\$ 3.04	\$ 3.04	\$ 3.04
Recycling Processing Cost/Month	\$ -	\$ -	\$ -	\$ -
TOTAL MONTHLY RATE @ 1x/wk Res	\$ 6.68	\$ 6.68	\$ 6.68	\$ 6.68
TOTAL MONTHLY RATE @ 1x/wk Com	\$ 6.68	\$ 6.68	\$ 6.68	\$ 6.68
Extra Container				
Recycling Processing Cost/Month	\$ -	\$ -	\$ -	\$ -
Addl Fixed (Depreciation)	\$ 0.63	\$ 0.63	\$ 0.63	\$ 0.63
Addl Operating Costs	\$ 3.64	\$ 3.64	\$ 3.64	\$ 3.64
Total Monthly Rate Extra Container	\$ 4.27	\$ 4.27	\$ 4.27	\$ 4.27
Estimated Cost of Container				
Depreciation (10year life)	\$ 75.07	\$ 75.07	\$ 75.07	\$ 75.07
	\$ 0.63	\$ 0.63	\$ 0.63	\$ 0.63
PROOF of All Costs Included in the Rates:				
Total Carts	23,222	168		
Rates	\$ 6.68	\$ 6.68		
First Cart Revenue	\$ 1,861,369	\$ 13,466		
Second Carts				
Rates	\$ 4.27	\$ 4.27		
Second Cart Revenue	\$ 23,601.47	\$ 6,143.55		
Total Revenue	\$ 1,904,580			
Total Costs	\$ 1,904,580			
	\$ -			

APPENDIX A-2: CARTS COST OF SERVICE CALCULATIONS

Yard Waste Cart Cost of Service Calculations

FY2021/2022		Organics Carts		Cost of Service Information	
103%				CPI INFLATION	
Residential	Commercial	Total		CITY OF TRACY	
\$ 276,929	\$ 4,415	\$ 281,344		City Personnel (Includes New Programs)	
\$ 171,571	\$ 1,488	\$ 173,058		City Contracted Services (Includes New Programs)	
\$ 138,215	\$ 2,241	\$ 140,456		City Commodities, ISC & other (Includes New Programs)	
\$ 262,999	\$ 4,264	\$ 267,263		Tracy Disposal General Admin	
\$ 156,041	\$ 2,530	\$ 158,571		Tracy Disposal Depreciation	
\$ (98,183)	\$ (1,592)	\$ (99,775)		Non-Rate Revenue	
\$ (1,524)	\$ (38)	\$ (1,561)		Double Counted Extra Cart Depreciation	
\$ (327,678.32)	\$ (5,313)	\$ (332,991)		Operating Reserve	
\$ 308,392.69	\$ 5,000	\$ 313,393		New Program Depreciation	
\$ 446,513.49	\$ 7,239.61	\$ 453,753		New Program Direct Costs	
\$ 304,757	\$ 1,749	\$ 306,506		Franchise Fee	
\$ -	\$ -	\$ -		New Program Variable Costs	
\$ 672,202	\$ 10,899	\$ 683,101		Tracy Disposal Direct Costs	
\$ -	\$ -	\$ -		Frequency Surcharge	
\$ -	\$ -	\$ -		Migration	
\$ -	\$ -	\$ -			
\$ -	\$ -	\$ -			
\$ -	\$ -	\$ -			
\$ 60,994	\$ 989	\$ 61,983		New Program Disposal Costs	
\$ 815,584	\$ 4,908	\$ 820,491		ORG Transfer/Processing/Disposal Costs	
\$ 876,578	\$ 5,897	\$ 882,475		Total Disposal Costs	
\$ 3,186,813	\$ 38,780	\$ 3,225,593		Total All Costs	
		\$ -			
\$ 1,191,519	\$ 14,745	\$ 1,206,264		Fixed Cost	
		\$ -			
\$ 1,118,716	\$ 18,138	\$ 1,136,854		Organics Collection Operations Costs	
		\$ 0.03		Organics Transfer/Disposal per Gallon/Month	
		0.17		Organics Pounds per Gallon	
		16.66		96-Gal Organics Pounds per Setout	
		0.48		96-Gal Yardage Conversion	
		23,355		Number of Accounts	
		29		Collection Body Organics Yards	
		8.00		Collection Body Organics Tons	
		\$ 2.23		Cost/min for additional freq. of service	
		5.0		Additional Service Frequency Time (Minutes)	
		\$ 11.15		Additional Service Frequency Cost	

Organics Cart Rates by Cost of Service			
Container Size	96	96	96
RESIDENTIAL			
Annual Variable Route Costs	\$ 1,136,854		
ECUs	23,563		
Annual Variable/ECU	\$ 48.25		
Monthly Variable/ECU	\$ 4.02		
Equivalent Container Factor	1.00	1.00	1.00
Variable Route Costs/Month	\$ 4.02	\$ 4.02	\$ 4.02
Fixed Costs/Container/Month	\$ 4.30	\$ 4.30	\$ 4.30
Organic Processing Cost/Month	\$ 3.12	\$ 3.12	\$ 3.12
TOTAL MONTHLY RATE @ 1x/wk Res	\$ 11.45	\$ 11.45	\$ 11.45
TOTAL MONTHLY RATE @ 1x/wk Com	\$ 11.45	\$ 11.45	\$ 11.45

Extra Container	Residential	Commercial
Organic Processing Cost/Month	\$ 3.12	\$ 3.12
Addl Fixed (Depreciation)	\$ 0.63	\$ 0.63
Addl Operating Costs	\$ 4.02	\$ 4.02
Total Monthly Rate Extra Container	\$ 7.77	\$ 7.77

Estimated Cost of Container	\$ 75.07	\$ 75.07	\$ 75.07
Depreciation (10year life)	\$ 0.63	\$ 0.63	\$ 0.63

PROOF of All Costs Included in the Rates:	Residential	Commercial
Total Carts	23,222	133
Rates	\$ 11.45	\$ 11.45
First Cart Revenue	\$ 3,189,500	\$ 18,267
Second Carts	203	5
Rates	\$ 7.77	\$ 7.77
Second Cart Revenue	\$ 18,920.85	\$ 466.03
Total Revenue	\$ 3,227,154	
Total Costs	\$ 3,227,154	
	\$ -	

APPENDIX A-3: MONTHLY CART RATES

Residential Monthly Cart Rates – Cost of Service

MSW Residential Rates - (19-20 Approved)		
Frequency	60	90
1 /week	\$ 36.50	\$ 43.20
Extra Container	\$ 36.50	\$ 43.20

MSW Residential Rates - 2021-2022 Full COS		
Frequency	60	90
1 /week	\$ 26.26	\$ 34.44
Extra Container	\$ 16.07	\$ 24.37

MSW Residential Rates - 2022-2023 Full COS		
Frequency	60	90
1 /week	\$ 27.98	\$ 36.50
Extra Container	\$ 16.65	\$ 25.29

REC Residential Rates - (19-20 Approved)		
Frequency	96	96
Every Other Week	\$ -	\$ -
Extra Container	\$ -	\$ -

REC Residential Rates - Full COS		
Frequency	96	96
Every Week	\$ 6.68	\$ 6.68
Extra Container	\$ 4.27	\$ 4.27

REC Residential Rates - Full COS		
Frequency	96	96
Every Week	\$ 8.91	\$ 8.91
Extra Container	\$ 5.64	\$ 5.64

Organic Residential Rates - (19-20 Approved)		
Frequency	96	96
Every Other Week	\$ -	\$ -
Extra Container	\$ 8.70	\$ 8.70

Organic Residential Rates - Full COS		
Frequency	96	96
Every Week	\$ 11.45	\$ 11.45
Extra Container	\$ 7.77	\$ 7.77

Organic Residential Rates - Full COS		
Frequency	96	96
Every Week	\$ 15.46	\$ 15.46
Extra Container	\$ 9.94	\$ 9.94

Total Residential Rates - (19-20 Approved)		
Frequency	60	90
1 /week	\$ 36.50	\$ 43.20

Total Residential Rates 2021-2022 - Full COS		
Frequency	60	90
1 /week	\$ 44.38	\$ 52.57

Total Residential Rates 2022-2023 - Full COS		
Frequency	60	90
1 /week	\$ 52.35	\$ 60.87

Total Residential Rates - 2019-2020 vs 2021-2022 \$\$ Change		
Frequency	60	90
1 /week	\$ 7.88	\$ 9.37

Total Residential Rates - 2020-2021 vs 2022-2023 \$\$ Change		
Frequency	60	90
1 /week	\$ 7.96	\$ 8.30

Total Residential Rates - 2019-2020 vs 2021-2022 % Change		
Frequency	60	90
1 /week	22%	22%

Total Residential Rates - 2020-2021 vs 2022-2023 % Change		
Frequency	60	90
1 /week	18%	16%

APPENDIX A-3: MONTHLY CART RATES

Residential Monthly Cart Rates – Cost of Service

MSW Residential Rates - 2023-2024 Full COS			
Frequency	60	90	
1 /week	\$ 32.31	\$	41.34
Extra Container	\$ 17.57	\$	26.72

MSW Residential Rates - 2024-2025 Full COS			
Frequency	60	90	
1 /week	\$ 34.55	\$	44.30
Extra Container	\$ 18.83	\$	28.71

MSW Residential Rates - 2025-2026 Full COS			
Frequency	60	90	
1 /week	\$ 36.83	\$	47.32
Extra Container	\$ 20.12	\$	30.73

REC Residential Rates - Full COS			
Frequency	96	96	
Every Week	\$ 11.20	\$	11.20
Extra Container	\$ 6.05	\$	6.05

REC Residential Rates - Full COS			
Frequency	96	96	
Every Week	\$ 12.26	\$	12.26
Extra Container	\$ 6.66	\$	6.66

REC Residential Rates - Full COS			
Frequency	96	96	
Every Week	\$ 13.34	\$	13.34
Extra Container	\$ 7.29	\$	7.29

Organic Residential Rates - Full COS			
Frequency	96	96	
Every Week	\$ 17.68	\$	17.68
Extra Container	\$ 10.54	\$	10.54

Organic Residential Rates - Full COS			
Frequency	96	96	
Every Week	\$ 18.94	\$	18.94
Extra Container	\$ 11.35	\$	11.35

Organic Residential Rates - Full COS			
Frequency	96	96	
Every Week	\$ 20.24	\$	20.24
Extra Container	\$ 12.18	\$	12.18

Total Residential Rates 2023-2024 - Full COS			
Frequency	60	90	
1 /week	\$ 61.18	\$	70.21

Total Residential Rates 2024-2025 - Full COS			
Frequency	60	90	
1 /week	\$ 65.75	\$	75.50

Total Residential Rates 2025-2026 - Full COS			
Frequency	60	90	
1 /week	\$ 70.40	\$	80.89

Total Residential Rates - 2022-2023 vs 2023-2024 \$\$ Change			
Frequency	60	90	
1 /week	\$ 8.83	\$	9.35

Total Residential Rates - 2023-2024 vs 2024-2025 \$\$ Change			
Frequency	60	90	
1 /week	\$ 4.56	\$	5.29

Total Residential Rates - 2024-2025 vs 2025-2026 \$\$ Change			
Frequency	60	90	
1 /week	\$ 4.66	\$	5.39

Total Residential Rates - 2022-2023 vs 2023-2024 % Change			
Frequency	60	90	
1 /week	17%		15%

Total Residential Rates - 2023-2024 vs 2024-2025 % Change			
Frequency	60	90	
1 /week	7%		8%

Total Residential Rates - 2024-2025 vs 2025-2026 %Change			
Frequency	60	90	
1 /week	7%		7%

APPENDIX A-4: SOLID WASTE BIN COST OF SERVICE CALCULATIONS

Solid Waste Bin Cost of Service Calculations

FY2021/22	Cost of Service Information
103%	CPI INFLATION
	CITY OF TRACY
\$ 204,021	City Personnel (Includes New Programs)
\$ 87,375	City Contracted Services (Includes New Programs)
\$ 174,430	City Commodities, ISC & other (Includes New Programs)
\$ 374,676	Tracy Disposal General Admin
\$ 298,914	Tracy Disposal Depreciation
\$ (123,909)	Non-Rate Revenue
\$ (9,200)	Double Counted Extra Cart Depreciation
\$ (413,536)	Operating Reserve
	New Program Depreciation
\$ -	New Program Direct Costs
\$ 505,756	Franchise Fee
\$ 1,176,649	Tracy Disposal Direct Costs
\$ (251,183)	Frequency Surcharge
\$ -	Migration
	New Program Disposal Costs
\$ 2,701,570	MSW Transfer/Processing/Disposal Costs
\$ 2,701,570	Total Disposal Costs
\$ 4,725,562	Total All Costs
	Fixed Cost
\$ 1,098,527	MSW Collection Operations Costs
\$ 925,465	MSW Transfer/Disposal per Yard/Month
\$ 44.77	MSW Pounds per Yard
155.71	1 Yard MSW Pounds per Setout
233.56	1.5 Yard MSW Pounds per Setout
311.42	2 Yard MSW Pounds per Setout
467.13	3 Yard MSW Pounds per Setout
622.84	4 Yard MSW Pounds per Setout
778.55	5 Yard MSW Pounds per Setout
934.25	6 Yard MSW Pounds per Setout
311.42	1 Yard COMP MSW Pounds per Setout
622.84	2 Yard COMP MSW Pounds per Setout
934.25	3 Yard COMP MSW Pounds per Setout
1245.67	4 Yard COMP MSW Pounds per Setout
1868.51	6 Yard COMP MSW Pounds per Setout
40	Collection Body MSW Yards
12.00	Collection Body MSW Tons
\$ 2.30	Cost/min for additional freq. of service
10.0	Additional Service Frequency Time (Minutes) - Bins
\$ 22.97	Additional Service Frequency Cost - Bins

Container Size	MSW Commercial Rates by Cost of Service						Comp		Comp		Comp	
	1.5	2	3	4	6	2	3	4	6			
Annual Variable Route Costs	\$ 925,465											
ECUs	4,205.64											
Annual Variable/ECU	\$ 220.05											
Monthly Variable/ECU	\$ 18.34											
ECFs	1.00	1.40	2.31	3.22	5.67	3.22	5.67	8.39	15.50			
Variable Route Costs/Month	\$ 18.34	\$ 25.72	\$ 42.41	\$ 59.09	\$ 103.91	\$ 59.09	\$ 103.91	\$ 153.83	\$ 284.24			
Fixed Costs/Account/Month	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45	\$ 120.45			
MSW Txfr & Disp Cost/Month	\$ 67.15	\$ 89.53	\$ 134.30	\$ 179.07	\$ 268.60	\$ 268.60	\$ 402.90	\$ 537.20	\$ 805.80			
TOTAL MONTHLY RATE @ 1x/wk	\$ 205.94	\$ 235.71	\$ 297.16	\$ 358.61	\$ 492.97	\$ 448.14	\$ 627.27	\$ 811.48	\$ 1,210.49			
Extra Container												
Disposal	\$ 67.15	\$ 89.53	\$ 134.30	\$ 179.07	\$ 268.60	\$ 268.60	\$ 402.90	\$ 537.20	\$ 805.80			
Addl Fixed (Depreciation)	\$ 5.50	\$ 6.79	\$ 7.94	\$ 7.02	\$ 10.37	\$ -	\$ -	\$ -	\$ -			
Addl Operating Costs	\$ 18.34	\$ 25.72	\$ 42.41	\$ 59.09	\$ 103.91	\$ 59.09	\$ 103.91	\$ 153.83	\$ 284.24			
Total Monthly Rate Extra Container	\$ 90.99	\$ 122.04	\$ 184.65	\$ 245.18	\$ 382.88	\$ 327.69	\$ 506.81	\$ 691.03	\$ 1,090.03			
Temporary Container												
Monthly Rate/4.33	\$ 47.52	\$ 54.39	\$ 68.57	\$ 82.76	\$ 113.76	\$ 103.42	\$ 144.75	\$ 187.27	\$ 279.34			
Frequency Surcharge X2 (Drop-off and Pick)	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94			
Temporary Container Rate	\$ 93.46	\$ 100.33	\$ 114.51	\$ 128.69	\$ 159.70	\$ 149.35	\$ 190.69	\$ 233.20	\$ 325.28			
Estimated Cost of Container	\$ 660.37	\$ 814.27	\$ 952.79	\$ 842.72	\$ 1,243.87	\$ -	\$ -	\$ -	\$ -			
Bin Depreciation (10 year life)	\$ 5.50	\$ 6.79	\$ 7.94	\$ 7.02	\$ 10.37	\$ -	\$ -	\$ -	\$ -			
PROOF of All Costs Included in the Rates:												
Total Carts	187	149	250	338	286	4	-	1	2			
Rates	\$ 205.94	\$ 235.71	\$ 297.16	\$ 358.61	\$ 492.97	\$ 448.14	\$ 627.27	\$ 811.48	\$ 1,210.49			
First Cart Revenue	\$ 462,130	\$ 421,448	\$ 891,475	\$ 1,454,510	\$ 1,691,858	\$ 21,511	\$ -	\$ 9,738	\$ 29,052			
Second Carts	7	7	18	50	18	-	-	1	9			
Rates	\$ 90.99	\$ 122.04	\$ 184.65	\$ 245.18	\$ 382.88	\$ 327.69	\$ 506.81	\$ 691.03	\$ 1,090.03			
Second Cart Revenue	\$ 7,643.22	\$ 10,251.56	\$ 39,883.44	\$ 147,106.30	\$ 82,701.82	\$ -	\$ -	\$ 8,292.38	\$ 117,723.56			
Total Revenue	\$ 5,395,324											
Total Costs	\$ 4,734,762											
	\$ 660,562											

APPENDIX A-5: RECYCLING BIN COST OF SERVICE CALCULATIONS

Recycling Bin – Cost of Service

FY2021/22	Cost of Service Information
103%	CPI INFLATION
	CITY OF TRACY
\$ 7,052	City Personnel (Includes New Programs)
\$ 3,062	City Contracted Services (Includes New Programs)
\$ 5,980	City Commodities, ISC & other (Includes New Programs)
\$ 12,845	Tracy Disposal General Admin
\$ 9,585	Tracy Disposal Depreciation
\$ (4,248)	Non-Rate Revenue
\$ (899)	Double Counted Extra Cart Depreciation
\$ (14,177)	Operating Reserve
	New Program Depreciation
\$ -	New Program Direct Costs
\$ 6,906	Franchise Fee
\$ 39,719	Tracy Disposal Direct Costs
\$ (2,205)	Frequency Surcharge
\$ -	Migration
	New Program Disposal Costs
\$ -	Recycling Transfer/Processing/Disposal Costs
\$ -	Total Disposal Costs
\$ 63,620	Total All Costs
	Fixed Cost
	Inflation Factor
\$ 37,514	REC Collection Operations Costs
\$ -	Recycling Transfer/Disposal per Yard/Month
23.91	Recycling Pounds per Yard
23.91	1 Yard Recycling Pounds per Setout
35.86	1.5 Yard Recycling Pounds per Setout
47.82	2 Yard Recycling Pounds per Setout
71.73	3 Yard Recycling Pounds per Setout
95.63	4 Yard Recycling Pounds per Setout
119.54	5 Yard Recycling Pounds per Setout
143.45	6 Yard Recycling Pounds per Setout
47.82	1 Yard COMP Recycling Pounds per Setout
95.63	2 Yard COMP Recycling Pounds per Setout
143.45	3 Yard COMP Recycling Pounds per Setout
191.27	4 Yard COMP Recycling Pounds per Setout
286.90	6 Yard COMP Recycling Pounds per Setout
	35 Number of Accounts
40	Collection Body Recycling Yards
12.00	Collection Body Recycling Tons
\$ 2.30	Cost/min for additional freq. of service
10.0	Additional Service Frequency Time (Minutes)
\$ 22.97	Additional Service Frequency Cost

Container Size	Recycling Commercial Rates by Cost of Service						Comp	Comp	Comp	Comp
	1.5	2	3	4	6	2	3	4	6	
Annual Variable Route Costs	\$ 37,514									
ECUs	110									
Annual Variable/ECU	342.08									
Monthly Variable/ECU	\$ 28.51									
ECFs	1.00	1.33	2.00	2.67	4.00	2.67	4.00	5.33	8.00	
Variable Route Costs/Month	\$ 28.51	\$ 38.01	\$ 57.01	\$ 76.02	\$ 114.03	\$ 76.02	\$ 114.03	\$ 152.03	\$ 228.05	
Fixed Costs/Account/Month	\$ 62.16	\$ 62.16	\$ 62.16	\$ 62.16	\$ 62.16	\$ 62.16	\$ 62.16	\$ 62.16	\$ 62.16	\$ 62.16
REC Trfr & Disp Cost/Month	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL MONTHLY RATE @ 1x/wk	\$ 90.66	\$ 100.17	\$ 119.17	\$ 138.17	\$ 176.18	\$ 138.17	\$ 176.18	\$ 214.19	\$ 290.21	

Extra Container	1.5	2	3	4	6	2	3	4	6
Disposal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Addl Fixed (Depreciation)	\$ 5.50	\$ 6.79	\$ 7.94	\$ 7.02	\$ 10.37	\$ -	\$ -	\$ -	\$ -
Addl Operating Costs	\$ 28.51	\$ 38.01	\$ 57.01	\$ 76.02	\$ 114.03	\$ 76.02	\$ 114.03	\$ 152.03	\$ 228.05
Total Monthly Rate Extra Container	\$ 34.01	\$ 44.79	\$ 64.95	\$ 83.04	\$ 124.39	\$ 76.02	\$ 114.03	\$ 152.03	\$ 228.05
Temporary Container									
Monthly Rate/4.33	\$ 20.92	\$ 23.12	\$ 27.50	\$ 31.89	\$ 40.66	\$ 31.89	\$ 40.66	\$ 49.43	\$ 66.97
Frequency Surcharge X2 (Drop-off and Pick	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94	\$ 45.94
Temporary Container Rate	\$ 66.86	\$ 69.05	\$ 73.44	\$ 77.82	\$ 86.59	\$ 77.82	\$ 86.59	\$ 95.37	\$ 112.91

Estimated Cost of Container	\$ 660.37	\$ 814.27	\$ 952.79	\$ 842.72	\$ 1,243.87	\$ -	\$ -	\$ -	\$ -
Bin Depreciation (10year life)	\$ 5.50	\$ 6.79	\$ 7.94	\$ 7.02	\$ 10.37	\$ -	\$ -	\$ -	\$ -

PROOF of All Costs Included in the Rates:										
Total Carts	9	7	9	11	7	-	-	-	-	-
Rates	\$ 90.66	\$ 100.17	\$ 119.17	\$ 138.17	\$ 176.18	\$ 138.17	\$ 176.18	\$ 214.19	\$ 290.21	
First Cart Revenue	\$ 9,792	\$ 8,414	\$ 12,870	\$ 18,239	\$ 14,799	\$ -	\$ -	\$ -	\$ -	
Second Carts	-	10	-	1	-	-	-	-	-	
Rates	\$ 34.01	\$ 44.79	\$ 64.95	\$ 83.04	\$ 124.39	\$ 76.02	\$ 114.03	\$ 152.03	\$ 228.05	
Second Cart Revenue	\$ -	\$ 5,375.28	\$ -	\$ 996.47	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Revenue	\$ 70,486									
Total Costs	\$ 64,519									
	\$ 5,967									

APPENDIX A-7: COMMERCIAL CART AND BIN RATES – COST OF SERVICE

Commercial Cart and Bin Rates – Cost of Service – FY 2019-2020 and FY 2021-2022

Current Commercial MSW Rates - Approved							
Frequency	60	90	1.5	2	3	4	6
1 /week	\$ 39.70	\$ 51.85	\$ 148.20	\$ 191.85	\$ 257.55	\$ 322.65	\$ 440.55
2 /week	\$ 79.40	\$ 103.70	\$ 296.40	\$ 383.70	\$ 515.10	\$ 645.30	\$ 881.10
3 /week	\$ 119.10	\$ 155.55	\$ 444.60	\$ 575.55	\$ 772.65	\$ 967.95	\$ 1,321.65
4 /week	\$ 158.80	\$ 207.40	\$ 592.80	\$ 767.40	\$ 1,030.20	\$ 1,290.60	\$ 1,762.20
5 /week	\$ 198.50	\$ 259.25	\$ 741.00	\$ 959.25	\$ 1,287.75	\$ 1,613.25	\$ 2,202.75
6 /week	\$ 238.20	\$ 311.10	\$ 889.20	\$ 1,151.10	\$ 1,545.30	\$ 1,935.90	\$ 2,643.30
Temporary	N/A	N/A	\$ 40.65	\$ 55.10	\$ 77.70	\$ 99.80	\$ 140.05
Second Container	\$ 39.70	\$ 51.85	\$ 148.20	\$ 191.85	\$ 257.55	\$ 322.65	\$ 440.55

Current Recycling Commercial Rates - Approved							
Frequency		96*	1.5	2	3	4	6
1 /week		\$ 43.60	\$ 130.90	\$ 169.70	\$ 226.00	\$ 280.40	\$ 377.15
2 /week		N/A	\$ 261.80	\$ 339.40	\$ 452.00	\$ 560.80	\$ 754.30
3 /week		N/A	\$ 392.70	\$ 509.10	\$ 678.00	\$ 841.20	\$ 1,131.45
4 /week		N/A	\$ 523.60	\$ 678.80	\$ 904.00	\$ 1,121.60	\$ 1,508.60
5 /week		N/A	\$ 654.50	\$ 848.50	\$ 1,130.00	\$ 1,402.00	\$ 1,885.75
6 /week		N/A	\$ 785.40	\$ 1,018.20	\$ 1,356.00	\$ 1,682.40	\$ 2,262.90
Temporary		N/A	\$ 35.55	\$ 48.50	\$ 68.70	\$ 88.45	\$ 124.55
Second Container		\$ -	\$ 130.90	\$ 169.70	\$ 226.00	\$ 280.40	\$ 377.15

*Combination Rate for a 96 Gallon Recycling and a 96 Gallon Yard Waste Container.

Current Organic Commercial Bin Rates - Approved							
Frequency		96*	1.5	2	3		
1 /week		\$ 43.60	\$ 130.90	\$ 169.70	\$ 226.00		
2 /week		N/A	\$ 261.80	\$ 339.40	\$ 452.00		
3 /week		N/A	\$ 392.70	\$ 509.10	\$ 678.00		
4 /week		N/A	\$ 523.60	\$ 678.80	\$ 904.00		
5 /week		N/A	\$ 654.50	\$ 848.50	\$ 1,130.00		
6 /week		N/A	\$ 785.40	\$ 1,018.20	\$ 1,356.00		
Second Container		\$ 8.70	\$ 130.90	\$ 169.70	\$ 226.00		

*Combination Rate for a 96 Gallon Recycling and a 96 Gallon Yard Waste Container.

Current MSW Commercial Rates - Approved - COMPACTOR							
Frequency		2	3	4	6		
1 /week							
2 /week							
3 /week							
4 /week							
5 /week							
6 /week							
Per Pickup		\$ 222.45	\$ 236.10	\$ 249.75	\$ 284.50		
Second Container							

Recycling Commercial Rates - (19-20 Approved) COMPACTOR							
Frequency		2	3	4	6		
1 /week							
2 /week							
3 /week							
4 /week							
5 /week							
6 /week							
Per Pickup		\$ 210.75	\$ 221.50	\$ 232.25	\$ 259.55		
Second Container							

2021/2022 Commercial MSW Rates - Full COS							
Frequency	60	90	1.5	2	3	4	6
1 /week	\$ 23.05	\$ 31.23	\$ 205.94	\$ 235.71	\$ 297.16	\$ 358.61	\$ 492.97
2 /week	\$ 49.76	\$ 66.13	\$ 314.40	\$ 373.93	\$ 496.83	\$ 619.73	\$ 888.45
3 /week	\$ 76.47	\$ 101.03	\$ 422.85	\$ 512.16	\$ 696.51	\$ 880.85	\$ 1,283.93
4 /week	\$ 103.19	\$ 135.93	\$ 531.31	\$ 650.39	\$ 896.18	\$ 1,141.98	\$ 1,679.41
5 /week	\$ 129.90	\$ 170.83	\$ 639.76	\$ 788.61	\$ 1,095.85	\$ 1,403.10	\$ 2,074.89
6 /week	\$ 156.62	\$ 205.72	\$ 748.22	\$ 926.84	\$ 1,295.53	\$ 1,664.22	\$ 2,470.37
Temporary Container	N/A	N/A	\$ 93.46	\$ 100.33	\$ 114.51	\$ 128.69	\$ 159.70
Second Container	\$ 16.07	\$ 24.37	\$ 90.99	\$ 122.04	\$ 184.65	\$ 245.18	\$ 382.88

2021/2022 Recycling Commercial Rates - Full COS							
Frequency		96	1.5	2	3	4	6
1 /week		\$ 6.68	\$ 90.66	\$ 100.17	\$ 119.17	\$ 138.17	\$ 176.18
2 /week		\$ 21.47	\$ 142.14	\$ 161.14	\$ 199.15	\$ 237.16	\$ 313.18
3 /week		\$ 36.26	\$ 193.61	\$ 222.12	\$ 279.13	\$ 336.15	\$ 450.17
4 /week		\$ 51.05	\$ 245.09	\$ 283.10	\$ 359.11	\$ 435.13	\$ 587.16
5 /week		\$ 65.84	\$ 296.56	\$ 344.07	\$ 439.09	\$ 534.12	\$ 724.16
6 /week		\$ 80.63	\$ 348.04	\$ 405.05	\$ 519.08	\$ 633.10	\$ 861.15
Temporary Container		N/A	\$ 66.86	\$ 69.05	\$ 73.44	\$ 77.82	\$ 86.59
Second Container		\$ 4.27	\$ 34.01	\$ 44.79	\$ 64.95	\$ 83.04	\$ 124.39

2021/2022 Organic Commercial Rates - Full COS							
Frequency		96	1.5	2	3	4	
1 /week		\$ 11.45	\$ 293.10	\$ 360.04	\$ 493.91	\$ 658.55	
2 /week		\$ 29.74	\$ 516.88	\$ 650.76	\$ 918.50	\$ 1,224.67	
3 /week		\$ 48.03	\$ 740.66	\$ 941.47	\$ 1,343.10	\$ 1,790.80	
4 /week		\$ 66.32	\$ 964.44	\$ 1,232.19	\$ 1,767.69	\$ 2,356.92	
5 /week		\$ 84.61	\$ 1,188.22	\$ 1,522.91	\$ 2,192.28	\$ 2,923.04	
6 /week		\$ 102.90	\$ 1,412.00	\$ 1,813.63	\$ 2,616.87	\$ 3,489.16	
Second Container		\$ 7.77	\$ 207.71	\$ 276.28	\$ 411.66	\$ 548.87	

2021/2022 MSW Commercial Rates - Full COS COMPACTOR							
Frequency		2	3	4	6		
1 /week		\$ 517.05	\$ 696.17	\$ 880.39	\$ 1,279.39		
2 /week		\$ 936.61	\$ 1,294.86	\$ 1,663.30	\$ 2,461.30		
3 /week		\$ 1,356.17	\$ 1,893.54	\$ 2,446.20	\$ 3,643.20		
4 /week		\$ 1,775.73	\$ 2,492.23	\$ 3,229.11	\$ 4,825.11		
5 /week		\$ 2,195.29	\$ 3,090.92	\$ 4,012.01	\$ 6,007.02		
6 /week		\$ 2,614.85	\$ 3,689.60	\$ 4,794.92	\$ 7,188.93		
Per Pickup - Compactor		\$ 218.26	\$ 259.60	\$ 302.11	\$ 394.19		
Second Container		\$ 327.69	\$ 506.81	\$ 691.03	\$ 1,090.03		

2021/2022 Recycling Commercial Rates - Full COS COMPACTOR							
Frequency		2	3	4	6		
1 /week		\$ 207.08	\$ 245.09	\$ 283.10	\$ 359.11		
2 /week		\$ 374.97	\$ 450.99	\$ 527.00	\$ 679.04		
3 /week		\$ 542.86	\$ 656.89	\$ 770.91	\$ 998.96		
4 /week		\$ 710.75	\$ 862.79	\$ 1,014.82	\$ 1,318.89		
5 /week		\$ 878.64	\$ 1,068.68	\$ 1,258.73	\$ 1,638.81		
6 /week		\$ 1,046.53	\$ 1,274.58	\$ 1,502.63	\$ 1,958.74		
Per Pickup		\$ 146.73	\$ 155.50	\$ 164.27	\$ 181.81		
Second Container		\$ 76.02	\$ 114.03	\$ 152.03	\$ 228.05		

APPENDIX A-7: COMMERCIAL CART AND BIN RATES – COST OF SERVICE

Commercial Cart and Bin Rates – Cost of Service – FY 2022-2023 and FY 2023-2024

2022/2023 Commercial MSW Rates - Full COS							
Frequency	60	90	1.5	2	3	4	6
1 /week	\$ 24.73	\$ 33.25	\$ 215.20	\$ 246.35	\$ 310.74	\$ 375.12	\$ 516.45
2 /week	\$ 52.37	\$ 69.40	\$ 328.12	\$ 390.41	\$ 519.18	\$ 647.96	\$ 930.62
3 /week	\$ 80.00	\$ 105.55	\$ 441.03	\$ 534.47	\$ 727.63	\$ 920.79	\$ 1,344.78
4 /week	\$ 107.63	\$ 141.70	\$ 553.94	\$ 678.53	\$ 936.08	\$ 1,193.62	\$ 1,758.95
5 /week	\$ 135.26	\$ 177.86	\$ 666.85	\$ 822.59	\$ 1,144.52	\$ 1,466.46	\$ 2,173.11
6 /week	\$ 162.89	\$ 214.01	\$ 779.77	\$ 966.65	\$ 1,352.97	\$ 1,739.29	\$ 2,587.27
Temporary Container	N/A	N/A	\$ 96.98	\$ 104.17	\$ 119.02	\$ 133.88	\$ 166.50
Second Container	\$ 16.65	\$ 25.29	\$ 94.92	\$ 127.39	\$ 192.97	\$ 256.41	\$ 401.18

2022/2023 Recycling Commercial Rates - Full COS							
Frequency		96	1.5	2	3	4	6
1 /week		\$ 8.91	\$ 96.97	\$ 107.34	\$ 128.06	\$ 148.78	\$ 190.23
2 /week		\$ 25.39	\$ 151.72	\$ 172.44	\$ 213.89	\$ 255.33	\$ 338.23
3 /week		\$ 41.87	\$ 206.46	\$ 237.54	\$ 299.72	\$ 361.89	\$ 486.23
4 /week		\$ 58.35	\$ 261.20	\$ 302.65	\$ 385.54	\$ 468.44	\$ 634.22
5 /week		\$ 74.83	\$ 315.95	\$ 367.75	\$ 471.37	\$ 574.99	\$ 782.22
6 /week		\$ 91.31	\$ 370.69	\$ 432.86	\$ 557.20	\$ 681.54	\$ 930.22
Temporary Container		N/A	\$ 69.69	\$ 72.09	\$ 76.87	\$ 81.65	\$ 91.21
Second Container		\$ 5.64	\$ 36.75	\$ 48.44	\$ 70.35	\$ 90.13	\$ 135.02

2022/2023 Organic Commercial Rates - Full COS							
Frequency		96	1.5	2	3	4	6
1 /week		\$ 15.46	\$ 305.15	\$ 374.67	\$ 513.73		
2 /week		\$ 36.24	\$ 537.38	\$ 676.44	\$ 954.55		
3 /week		\$ 57.02	\$ 769.62	\$ 978.20	\$ 1,395.37		
4 /week		\$ 77.79	\$ 1,001.86	\$ 1,279.97	\$ 1,836.19		
5 /week		\$ 98.57	\$ 1,234.10	\$ 1,581.74	\$ 2,277.01		
6 /week		\$ 119.34	\$ 1,466.34	\$ 1,883.50	\$ 2,717.83		
Second Container		\$ 9.94	\$ 215.48	\$ 286.64	\$ 427.19		

2022/2023 MSW Commercial Rates - Full COS COMPACTOR							
Frequency		2	3	4	6		
1 /week		\$ 538.32	\$ 725.76	\$ 918.78	\$ 1,338.30		
2 /week		\$ 974.34	\$ 1,349.22	\$ 1,735.26	\$ 2,574.32		
3 /week		\$ 1,410.37	\$ 1,972.69	\$ 2,551.75	\$ 3,810.33		
4 /week		\$ 1,846.39	\$ 2,596.15	\$ 3,368.23	\$ 5,046.34		
5 /week		\$ 2,282.42	\$ 3,219.62	\$ 4,184.72	\$ 6,282.35		
6 /week		\$ 2,718.44	\$ 3,843.08	\$ 5,001.21	\$ 7,518.37		
Per Pickup - Compactor		\$ 226.14	\$ 269.39	\$ 313.93	\$ 410.75		
Second Container		\$ 341.39	\$ 528.83	\$ 721.86	\$ 1,141.38		

2022/2023 Recycling Commercial Rates - Full COS COMPACTOR							
Frequency		2	3	4	6		
1 /week		\$ 219.76	\$ 261.20	\$ 302.65	\$ 385.54		
2 /week		\$ 396.59	\$ 479.48	\$ 562.38	\$ 728.17		
3 /week		\$ 573.43	\$ 697.77	\$ 822.11	\$ 1,070.79		
4 /week		\$ 750.26	\$ 916.05	\$ 1,081.84	\$ 1,413.41		
5 /week		\$ 927.10	\$ 1,134.33	\$ 1,341.56	\$ 1,756.03		
6 /week		\$ 1,103.93	\$ 1,352.61	\$ 1,601.29	\$ 2,098.66		
Per Pickup		\$ 152.62	\$ 162.19	\$ 171.75	\$ 190.88		
Second Container		\$ 82.89	\$ 124.34	\$ 165.79	\$ 248.68		

2023/2024 Commercial MSW Rates - Full COS vs Current Rates							
Frequency	60	90	1.5	2	3	4	6
1 /week	\$ 29.03	\$ 38.06	\$ 264.40	\$ 297.03	\$ 364.61	\$ 432.18	\$ 581.12
2 /week	\$ 57.92	\$ 75.98	\$ 382.08	\$ 447.35	\$ 582.49	\$ 717.64	\$ 1,015.51
3 /week	\$ 86.80	\$ 113.90	\$ 499.75	\$ 597.66	\$ 800.38	\$ 1,003.09	\$ 1,449.91
4 /week	\$ 115.69	\$ 151.82	\$ 617.43	\$ 747.98	\$ 1,018.26	\$ 1,288.55	\$ 1,884.31
5 /week	\$ 144.58	\$ 189.74	\$ 735.11	\$ 898.29	\$ 1,236.15	\$ 1,574.01	\$ 2,318.70
6 /week	\$ 173.47	\$ 227.66	\$ 852.79	\$ 1,048.61	\$ 1,454.04	\$ 1,859.47	\$ 2,753.10
Temporary Container	N/A	N/A	\$ 109.75	\$ 117.28	\$ 132.87	\$ 148.47	\$ 182.84
Second Container	\$ 17.57	\$ 26.72	\$ 99.15	\$ 133.15	\$ 201.94	\$ 268.54	\$ 421.03

2023/2024 Recycling Commercial Rates - Full COS							
Frequency		96	1.5	2	3	4	6
1 /week		\$ 11.20	\$ 137.07	\$ 148.46	\$ 171.24	\$ 194.02	\$ 239.59
2 /week		\$ 28.41	\$ 195.61	\$ 218.39	\$ 263.95	\$ 309.52	\$ 400.64
3 /week		\$ 45.63	\$ 254.15	\$ 288.32	\$ 356.66	\$ 425.01	\$ 561.70
4 /week		\$ 62.85	\$ 312.69	\$ 358.25	\$ 449.38	\$ 540.50	\$ 722.76
5 /week		\$ 80.06	\$ 371.23	\$ 428.18	\$ 542.09	\$ 656.00	\$ 883.81
6 /week		\$ 97.28	\$ 429.77	\$ 498.11	\$ 634.80	\$ 771.49	\$ 1,044.87
Temporary Container		N/A	\$ 80.37	\$ 82.99	\$ 88.25	\$ 93.51	\$ 104.02
Second Container		\$ 6.05	\$ 40.01	\$ 52.76	\$ 76.77	\$ 98.58	\$ 147.69

2023/2024 Organic Commercial Rates - Full COS							
Frequency		96	1.5	2	3		
1 /week		\$ 17.68	\$ 342.99	\$ 415.33	\$ 560.01		
2 /week		\$ 39.38	\$ 584.38	\$ 729.06	\$ 1,018.42		
3 /week		\$ 61.09	\$ 825.76	\$ 1,042.78	\$ 1,476.82		
4 /week		\$ 82.79	\$ 1,067.15	\$ 1,356.51	\$ 1,935.23		
5 /week		\$ 104.50	\$ 1,308.54	\$ 1,670.24	\$ 2,393.64		
6 /week		\$ 126.20	\$ 1,549.92	\$ 1,983.96	\$ 2,852.04		
Second Container		\$ 10.54	\$ 223.92	\$ 297.90	\$ 444.07		

2023/2024 MSW Commercial Rates - Full COS COMPACTOR							
Frequency		2	3	4	6		
1 /week		\$ 600.26	\$ 796.70	\$ 999.26	\$ 1,441.17		
2 /week		\$ 1,053.81	\$ 1,446.67	\$ 1,851.80	\$ 2,735.62		
3 /week		\$ 1,507.36	\$ 2,096.65	\$ 2,704.34	\$ 4,030.07		
4 /week		\$ 1,960.90	\$ 2,746.63	\$ 3,556.88	\$ 5,324.52		
5 /week		\$ 2,414.45	\$ 3,396.60	\$ 4,409.42	\$ 6,618.97		
6 /week		\$ 2,867.99	\$ 4,046.58	\$ 5,261.95	\$ 7,913.42		
Per Pickup - Compactor		\$ 243.49	\$ 288.82	\$ 335.56	\$ 437.54		
Second Container		\$ 356.08	\$ 552.51	\$ 755.07	\$ 1,196.98		

2023/2024 Recycling Commercial Rates - Full COS COMPACTOR							
Frequency		2	3	4	6		
1 /week		\$ 267.12	\$ 312.69	\$ 358.25	\$ 449.38		
2 /week		\$ 454.32	\$ 545.45	\$ 636.57	\$ 818.83		
3 /week		\$ 641.52	\$ 778.21	\$ 914.90	\$ 1,188.27		
4 /week		\$ 828.71	\$ 1,010.97	\$ 1,193.22	\$ 1,557.72		
5 /week		\$ 1,015.91	\$ 1,243.73	\$ 1,471.54	\$ 1,927.17		
6 /week		\$ 1,203.11	\$ 1,476.49	\$ 1,749.86	\$ 2,296.62		
Per Pickup		\$ 166.61	\$ 177.13	\$ 187.64	\$ 208.67		
Second Container		\$ 91.13	\$ 136.69	\$ 182.25	\$ 273.38		

APPENDIX A-7: COMMERCIAL CART AND BIN RATES – COST OF SERVICE

Commercial Cart and Bin Rates – Cost of Service – FY 2024-2025 and FY 2025-2026

2024/2025 Commercial MSW Rates - Full COS							
Frequency	60	90	1.5	2	3	4	6
1 /week	\$ 31.23	\$ 40.99	\$ 271.00	\$ 305.69	\$ 377.72	\$ 449.75	\$ 609.68
2 /week	\$ 61.74	\$ 81.25	\$ 394.88	\$ 464.26	\$ 608.32	\$ 752.37	\$ 1,072.24
3 /week	\$ 92.25	\$ 121.51	\$ 518.76	\$ 622.83	\$ 838.91	\$ 1,055.00	\$ 1,534.81
4 /week	\$ 122.76	\$ 161.78	\$ 642.63	\$ 781.40	\$ 1,069.51	\$ 1,357.63	\$ 1,997.37
5 /week	\$ 153.27	\$ 202.04	\$ 766.51	\$ 939.97	\$ 1,300.11	\$ 1,660.26	\$ 2,459.93
6 /week	\$ 183.78	\$ 242.31	\$ 890.39	\$ 1,098.54	\$ 1,530.71	\$ 1,962.88	\$ 2,922.49
Temporary Container	N/A	N/A	\$ 112.73	\$ 120.74	\$ 137.36	\$ 153.98	\$ 190.89
Second Container	\$ 18.83	\$ 28.71	\$ 104.79	\$ 140.89	\$ 214.18	\$ 285.20	\$ 448.79

2025/2026 Commercial MSW Rates - Full COS							
Frequency	60	90	1.5	2	3	4	6
1 /week	\$ 33.48	\$ 43.97	\$ 277.86	\$ 314.62	\$ 391.13	\$ 467.64	\$ 638.60
2 /week	\$ 65.64	\$ 86.63	\$ 408.01	\$ 481.52	\$ 634.54	\$ 787.55	\$ 1,129.48
3 /week	\$ 97.81	\$ 129.28	\$ 538.15	\$ 648.42	\$ 877.95	\$ 1,107.47	\$ 1,620.35
4 /week	\$ 129.97	\$ 171.94	\$ 668.29	\$ 815.33	\$ 1,121.36	\$ 1,427.39	\$ 2,111.23
5 /week	\$ 162.14	\$ 214.59	\$ 798.44	\$ 982.23	\$ 1,364.76	\$ 1,747.30	\$ 2,602.11
6 /week	\$ 194.30	\$ 257.25	\$ 928.58	\$ 1,149.13	\$ 1,608.17	\$ 2,067.22	\$ 3,092.99
Temporary Container	N/A	N/A	\$ 115.82	\$ 124.31	\$ 141.96	\$ 159.62	\$ 199.07
Second Container	\$ 20.12	\$ 30.73	\$ 110.49	\$ 148.69	\$ 226.49	\$ 301.97	\$ 476.69

2024/2025 Recycling Commercial Rates - Full COS							
Frequency		96	1.5	2	3	4	6
1 /week		\$ 12.26	\$ 145.54	\$ 158.64	\$ 184.83	\$ 211.03	\$ 263.42
2 /week		\$ 30.42	\$ 209.93	\$ 236.13	\$ 288.52	\$ 340.90	\$ 445.68
3 /week		\$ 48.59	\$ 274.32	\$ 313.61	\$ 392.20	\$ 470.78	\$ 627.94
4 /week		\$ 66.75	\$ 338.71	\$ 391.10	\$ 495.88	\$ 600.65	\$ 810.21
5 /week		\$ 84.91	\$ 403.10	\$ 468.59	\$ 599.56	\$ 730.53	\$ 992.47
6 /week		\$ 103.08	\$ 467.49	\$ 546.07	\$ 703.24	\$ 860.40	\$ 1,174.73
Temporary Container	N/A	N/A	\$ 83.78	\$ 86.81	\$ 92.85	\$ 98.90	\$ 110.99
Second Container		\$ 6.66	\$ 45.30	\$ 59.80	\$ 87.26	\$ 112.45	\$ 168.49

2025/2026 Recycling Commercial Rates - Full COS							
Frequency		96	1.5	2	3	4	6
1 /week		\$ 13.34	\$ 154.28	\$ 169.14	\$ 198.84	\$ 228.55	\$ 287.97
2 /week		\$ 32.47	\$ 224.70	\$ 254.41	\$ 313.82	\$ 373.24	\$ 492.08
3 /week		\$ 51.60	\$ 295.11	\$ 339.67	\$ 428.80	\$ 517.93	\$ 696.19
4 /week		\$ 70.74	\$ 365.53	\$ 424.94	\$ 543.78	\$ 662.62	\$ 900.29
5 /week		\$ 89.87	\$ 435.94	\$ 510.21	\$ 658.76	\$ 807.31	\$ 1,104.40
6 /week		\$ 109.00	\$ 506.36	\$ 595.48	\$ 773.74	\$ 951.99	\$ 1,308.51
Temporary Container	N/A	N/A	\$ 87.31	\$ 90.73	\$ 97.59	\$ 104.45	\$ 118.16
Second Container		\$ 7.29	\$ 50.76	\$ 67.06	\$ 98.06	\$ 126.74	\$ 189.92

2024/2025 Organic Commercial Rates - Full COS					
Frequency		96	1.5	2	3
1 /week		\$ 18.94	\$ 357.73	\$ 433.62	\$ 585.40
2 /week		\$ 41.79	\$ 610.50	\$ 762.29	\$ 1,065.85
3 /week		\$ 64.65	\$ 863.28	\$ 1,090.95	\$ 1,546.30
4 /week		\$ 87.50	\$ 1,116.05	\$ 1,419.61	\$ 2,026.75
5 /week		\$ 110.35	\$ 1,368.82	\$ 1,748.28	\$ 2,507.19
6 /week		\$ 133.20	\$ 1,621.59	\$ 2,076.94	\$ 2,987.64
Second Container		\$ 11.35	\$ 234.58	\$ 312.10	\$ 465.38

2025/2026 Organic Commercial Rates - Full COS					
Frequency		96	1.5	2	3
1 /week		\$ 20.24	\$ 372.92	\$ 452.47	\$ 611.57
2 /week		\$ 44.27	\$ 637.42	\$ 796.52	\$ 1,114.72
3 /week		\$ 68.29	\$ 901.92	\$ 1,140.57	\$ 1,617.87
4 /week		\$ 92.32	\$ 1,166.42	\$ 1,484.62	\$ 2,121.02
5 /week		\$ 116.35	\$ 1,430.92	\$ 1,828.67	\$ 2,624.16
6 /week		\$ 140.38	\$ 1,695.42	\$ 2,172.72	\$ 3,127.31
Second Container		\$ 12.18	\$ 245.55	\$ 326.73	\$ 487.33

2024/2025 MSW Commercial Rates - Full COS COMPACTOR					
Frequency		2	3	4	6
1 /week		\$ 622.88	\$ 831.73	\$ 1,047.64	\$ 1,521.80
2 /week		\$ 1,098.63	\$ 1,516.34	\$ 1,948.16	\$ 2,896.48
3 /week		\$ 1,574.39	\$ 2,200.95	\$ 2,848.68	\$ 4,271.16
4 /week		\$ 2,050.15	\$ 2,885.56	\$ 3,749.20	\$ 5,645.84
5 /week		\$ 2,525.91	\$ 3,570.17	\$ 4,649.72	\$ 7,020.52
6 /week		\$ 3,001.66	\$ 4,254.78	\$ 5,550.24	\$ 8,395.20
Per Pickup - Compactor		\$ 251.86	\$ 300.05	\$ 349.88	\$ 459.30
Second Container		\$ 375.36	\$ 584.22	\$ 800.13	\$ 1,274.29

2025/2026 MSW Commercial Rates - Full COS COMPACTOR					
Frequency		2	3	4	6
1 /week		\$ 645.96	\$ 867.31	\$ 1,096.63	\$ 1,603.13
2 /week		\$ 1,144.20	\$ 1,586.89	\$ 2,045.54	\$ 3,058.54
3 /week		\$ 1,642.44	\$ 2,306.48	\$ 2,994.45	\$ 4,513.96
4 /week		\$ 2,140.68	\$ 3,026.07	\$ 3,943.36	\$ 5,969.37
5 /week		\$ 2,638.92	\$ 3,745.65	\$ 4,892.27	\$ 7,424.78
6 /week		\$ 3,137.16	\$ 4,465.24	\$ 5,841.18	\$ 8,880.20
Per Pickup - Compactor		\$ 260.43	\$ 311.51	\$ 364.43	\$ 481.31
Second Container		\$ 394.84	\$ 616.18	\$ 845.50	\$ 1,352.01

2024/2025 Recycling Commercial Rates - Full COS COMPACTOR					
Frequency		2	3	4	6
1 /week		\$ 286.32	\$ 338.71	\$ 391.10	\$ 495.88
2 /week		\$ 489.36	\$ 594.14	\$ 698.92	\$ 908.47
3 /week		\$ 692.40	\$ 849.57	\$ 992.40	\$ 1,291.91
4 /week		\$ 895.44	\$ 1,105.00	\$ 1,314.55	\$ 1,733.66
5 /week		\$ 1,098.48	\$ 1,360.43	\$ 1,622.37	\$ 2,146.25
6 /week		\$ 1,301.52	\$ 1,615.86	\$ 1,930.19	\$ 2,558.85
Per Pickup		\$ 174.19	\$ 186.28	\$ 198.37	\$ 222.55
Second Container		\$ 104.78	\$ 157.17	\$ 209.55	\$ 314.33

2025/2026 Recycling Commercial Rates - Full COS COMPACTOR					
Frequency		2	3	4	6
1 /week		\$ 306.11	\$ 365.53	\$ 424.94	\$ 543.78
2 /week		\$ 525.47	\$ 644.30	\$ 763.14	\$ 1,000.81
3 /week		\$ 744.83	\$ 923.08	\$ 1,101.34	\$ 1,457.85
4 /week		\$ 964.18	\$ 1,201.86	\$ 1,439.53	\$ 1,914.88
5 /week		\$ 1,183.54	\$ 1,480.64	\$ 1,777.73	\$ 2,371.91
6 /week		\$ 1,402.90	\$ 1,759.41	\$ 2,115.92	\$ 2,828.95
Per Pickup		\$ 182.00	\$ 195.71	\$ 209.42	\$ 236.85
Second Container		\$ 118.84	\$ 178.26	\$ 237.67	\$ 356.51

APPENDIX A-8: ROLL OFF COST OF SERVICE CALCULATIONS

Roll-Off All Materials – Cost of Service

FY2021/22	Cost of Service Information
103%	CPI Adjustment
	CITY OF TRACY OVERHEAD
\$ 740,195	City Personnel, Contracted Service, Commodities & ISC Charges (Including New Programs)
\$ 648,624	Tracy Disposal General Admin
\$ 344,470	Tracy Disposal Depreciation
\$ (206,204)	Non-Rate Revenue
\$ (688,187)	Operating Reserve
\$ 729,720	Franchise Fee
\$ 1,858,682	Tracy Disposal Direct Costs
	Equipment Replacement
\$ 3,450,328	MSW Transport/Processing/Disposal Costs
\$ 1,209	Wood Transport/Processing/Disposal Costs
\$ -	REC Transport/Processing/Disposal Costs
\$ 1,088	YW Transport/Processing/Disposal Costs
\$ 263,081	C&D Transport/Processing/Disposal Costs
\$ 7,143,008	Total All Costs
\$ 838,899	Fixed Cost
\$ 132.35	MSW Per Ton Disposal Cost
\$ -	REC Per Ton Disposal Cost
\$ 103.08	DIRT Per Ton Disposal Cost
\$ 134.64	C&D Per Ton Disposal Cost
\$ 83.71	YW Per Ton Disposal Cost

	Box Rates by Cost of Service									
	Total	MSW	REC	C&D	Wood	YW - Loose	MSW - Comp	Rec - Comp	YW Comp	
Setouts/Max Load	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Total Containers	8,368	4,794	-	630	24	10	2,910	-	-	
"FTE Route Factor"	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.25	
Disposal Factor		4.00								
Routes if All Subs	9,095.50	4,794.00	-	630.00	24.00	10.00	3,637.50	-	-	
Cost per Route	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Cost all Routes	\$ 853.61	\$ 853.61	\$ 853.61	\$ 853.61	\$ 853.61	\$ 853.61	\$ 1,067.01	\$ 1,067.01	\$ 1,067.01	
Minimum	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Equivalent Cart Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.25	
Accounts by Size	8,368	4,794	-	630	24	10	2,910	-	-	
Equivalent Cart Units (ECU)	9,096	4,794	-	630	24	10	3,638	-	-	
Annual Variable Route Costs	\$ 2,588,403									
ECUs	9,096									
Annual Variable/ECU	\$ 284.58									
Variable/ECU	\$ 284.58									
Equivalent Cart Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.25	
Variable Route Costs/Pull	\$ 284.58	\$ 284.58	\$ 284.58	\$ 284.58	\$ 284.58	\$ 284.58	\$ 355.73	\$ 355.73	\$ 355.73	
Fixed Costs/Container/Pull	\$ 100.25	\$ 100.25	\$ 100.25	\$ 100.25	\$ 100.25	\$ 100.25	\$ 100.25	\$ 100.25	\$ 100.25	
MSW Txfr & Disp Cost/Pull										
REC Collection Cost/Pull										
OCC Txfr & Proc Cost/Pull										
YW/CD Txfr & Proc Cost/Pull										
TOTAL RATE PER PULL BEFORE DISP/PRX	\$ 384.83	\$ 384.83	\$ 384.83	\$ 384.83	\$ 384.83	\$ 384.83	\$ 455.98	\$ 455.98	\$ 455.98	

Roll off Tons	Disposal Costs	Per Ton
MSW 26,070	\$ 3,450,328	\$ 132.35
YW 13	\$ 1,088	\$ 83.71
C&D 1,954	\$ 263,081	\$ 134.6
Wood 16	\$ 1,209	\$ 75.6
28,053	\$ 3,715,706	\$ 106.57 Average Cost/ton

Convert Tons to Yards			
Tons	Total Yards	Ratio of Compacted to Non	
MSW 26,070	215,115	38%	
Non-compacted Yardage			
114,110	\$ 3,450,328	Disposal	
Compacted Yardage \$ 2,506,446 Disposal Cost for Compacted			
This mean 3x as much 101,005 \$ 943,882 Disposal Cost for Non-Compacted			
Compactor = 3 - 1 303,015			
\$ 24.82 Per Yard Costs Compacted			
\$ 8.27 Per Yard Costs Non-Compacted			
RATE			
# of Pulls	Total Yards	Total Cost	
10 535	5,350	\$ 44,254	\$ 83 \$ 384.83 \$ 467.55
20 2735	54,700	\$ 452,461	\$ 165 \$ 384.83 \$ 550.27
30 690	20,700	\$ 171,224	\$ 248 \$ 384.83 \$ 632.98
40 834	33,360	\$ 275,944	\$ 331 \$ 384.83 \$ 715.70
10 0	-	\$ -	\$ 248 \$ 455.98 \$ 704.13
20 66	1,320	\$ 32,756	\$ 496 \$ 455.98 \$ 952.28
25 321	8,025	\$ 199,141	\$ 620 \$ 455.98 \$ 1,076.35
30 911	27,330	\$ 678,196	\$ 744 \$ 455.98 \$ 1,200.43
35 30	1,050	\$ 26,056	\$ 869 \$ 455.98 \$ 1,324.50
40 1582	63,280	\$ 1,570,297	\$ 993 \$ 455.98 \$ 1,448.58
		\$ 3,450,328	

Convert Tons to Yards					
	Tons	Total Yards	Cost per Yard		RATE
C&D	1,954	25,200	\$ 10.44		
# of Pulls Total Yards Total Cost					
Yards 8	0	0	\$ -	\$ 384.83	\$ 83.52 \$ 468.35
Yards 10	0	0	\$ -	\$ 384.83	\$ 104.40 \$ 489.23
Yards 20	0	0	\$ -	\$ 384.83	\$ 208.79 \$ 593.63
Yards 30	0	0	\$ -	\$ 384.83	\$ 313.19 \$ 698.02
Yards 40	630	25200	\$ 263,081	\$ 384.83	\$ 417.59 \$ 802.42
Convert Tons to Yards					
	Tons	Total Yards	Cost per Yard		RATE
YW	13	150	\$ 7.25		
# of Pulls Total Yards Total Cost					
Yards 8	0	0	\$ -	\$ 384.83	\$ 58 \$ 442.87
Yards 10	5	50	\$ 362.74	\$ 384.83	\$ 73 \$ 457.38
Yards 20	5	100	\$ 725.47	\$ 384.83	\$ 145 \$ 529.93
Yards 30	0	0	\$ -	\$ 384.83	\$ 218 \$ 602.47
Yards 40	0	0	\$ -	\$ 384.83	\$ 290 \$ 675.02
COMPACT 10	0	0	\$ -	\$ 455.98	\$ 218 \$ 673.62
COMPACT 20	0	0	\$ -	\$ 455.98	\$ 435 \$ 891.26
COMPACT 25	0	0	\$ -	\$ 455.98	\$ 544 \$ 1,000.08
COMPACT 30	0	0	\$ -	\$ 455.98	\$ 653 \$ 1,108.90
COMPACT 35	0	0	\$ -	\$ 455.98	\$ 762 \$ 1,217.72
COMPACT 40	0	0	\$ -	\$ 455.98	\$ 871 \$ 1,326.54
Convert Tons to Yards					
	Tons	Yards	Cost per yard		RATE
Wood	16	189.35	\$ 6.30		
# of Pulls Total Yards Total Cost					
Yards 8	24	189	\$ 1,209.43	\$ 384.83	\$ 50 \$ 435.22

APPENDIX A-9: ROLL OFF PER PULL RATES – COST OF SERVICE – LOOSE MATERIAL

Roll Off Per Pull Rates – Cost of Service – Loose Material - FY 2019-2020 through FY 2025-2026

MSW Roll Off Rates - (19-20 Approved)					
Per Pull	8	10	20	30	40
1	N/A	\$ 276.90	\$ 395.95	\$ 518.05	\$ 637.10

MSW Roll Off Rates - 2021-2022 Full COS					
Per Pull	8	10	20	30	40
1	N/A	\$ 467.55	\$ 550.27	\$ 632.98	\$ 715.70

MSW Roll Off Rates - 2022-2023 Full COS					
Per Pulls	8	10	20	30	40
1	N/A	\$ 497.69	\$ 582.89	\$ 668.09	\$ 753.28

Recycling Roll Off Rates - (19-20 Approved)					
Per Pull	8	10	20	30	40
1	N/A	N/A	N/A	N/A	N/A

Recycling Roll Off Rates - 2021-2022 Full COS					
Per Pull	8	10	20	30	40
1	\$ 384.83	\$ 384.83	\$ 384.83	\$ 384.83	\$ 384.83

Recycling Roll Off Rates - 2022-2023 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 412.49	\$ 412.49	\$ 412.49	\$ 412.49	\$ 412.49

Yard Waste Roll Off Rates - (19-20 Approved)					
Per Pull	8	10	20	30	40
1	N/A	\$ 276.90	\$ 395.95	\$ 518.05	\$ 637.10

Yard Waste Roll Off Rates - 2021-2022 Full COS					
Per Pull	8	10	20	30	40
1	\$ 442.87	\$ 457.38	\$ 529.93	\$ 602.47	\$ 675.02

Yard Waste Roll Off Rates - 2022-2023 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 472.27	\$ 487.21	\$ 561.94	\$ 636.66	\$ 711.38

C&D Roll Off Rates - (19-20 Approved)					
Per Pull	8	10	20	30	40
1	N/A	\$ 276.90	\$ 395.95	\$ 518.05	\$ 637.10

C&D Roll Off Rates - 2021-2022 Full COS					
Per Pull	8	10	20	30	40
1	\$ 468.35	\$ 489.23	\$ 593.63	\$ 698.02	\$ 802.42

C&D Roll Off Rates - 2022-2023 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 498.51	\$ 520.02	\$ 627.55	\$ 735.08	\$ 842.61

Wood Box - 8 yd | \$ 435.22

Wood Box - 8 yd | \$ 464.39

MSW Roll Off Rates - 2023-2024 Full COS					
Per Pulls	8	10	20	30	40
1	N/A	\$ 612.46	\$ 700.21	\$ 787.97	\$ 875.72

MSW Roll Off Rates - 2024-2025 Full COS					
Per Pulls	8	10	20	30	40
1	N/A	\$ 659.58	\$ 749.97	\$ 840.36	\$ 930.75

MSW Roll Off Rates - 2025-2026 Full COS					
Per Pulls	8	10	20	30	40
1	N/A	\$ 708.12	\$ 801.22	\$ 894.32	\$ 987.42

Recycling Roll Off Rates - 2023-2024 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 524.71	\$ 524.71	\$ 524.71	\$ 524.71	\$ 524.71

Recycling Roll Off Rates - 2024-2025 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 569.20	\$ 569.20	\$ 569.20	\$ 569.20	\$ 569.20

Recycling Roll Off Rates - 2025-2026 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 615.03	\$ 615.03	\$ 615.03	\$ 615.03	\$ 615.03

Yard Waste Roll Off Rates - 2023-2024 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 586.28	\$ 601.67	\$ 678.64	\$ 755.60	\$ 832.57

Yard Waste Cart Rates - 2024-2025 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 632.62	\$ 648.47	\$ 727.75	\$ 807.02	\$ 886.29

Yard Waste Cart Rates - 2025-2026 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 680.35	\$ 696.68	\$ 778.33	\$ 859.98	\$ 941.64

C&D Roll Off Rates - 2023-2024 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 613.31	\$ 635.46	\$ 746.21	\$ 856.97	\$ 967.72

C&D Roll Off Rates - 2024-2025 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 660.46	\$ 683.28	\$ 797.35	\$ 911.43	\$ 1,025.51

C&D Roll Off Rates - 2025-2026 Full COS					
Per Pulls	8	10	20	30	40
1	\$ 709.03	\$ 732.53	\$ 850.03	\$ 967.52	\$ 1,085.02

Wood Box - 8 yd | \$ 578.17

Wood Box - 8 yd | \$ 624.26

Wood Box - 8 yd | \$ 671.74

APPENDIX A-10: ROLL OFF PER PULL RATES – COST OF SERVICE – COMPACTED MATERIAL

Roll Off Per Pull Rates – Cost of Service – Compact Material - FY 2019-2020 through FY 2025-2026

MSW Compacted Roll Off Rates - (19-20 Approved)						
Per Pulls	10	20	25	30	35	40
1	\$ 320.35	\$ 481.10	\$ 561.55	\$ 641.90	\$ 722.30	\$ 802.65

MSW Compacted Roll Off Rates - 2021-2022 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 704.13	\$ 952.28	\$1,076.35	\$1,200.43	\$ 1,324.50	\$ 1,448.58

MSW Compacted Roll Off Rates - 2022-2023 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 744.78	\$1,000.37	\$1,128.17	\$1,255.97	\$1,383.76	\$1,511.56

REC Compacted Roll Off Rates - (19-20 Approved)						
Per Pulls	10	20	25	30	35	40
1	\$ 284.05	\$ 412.20	\$ 476.50	\$ 540.65	\$ 604.70	\$ 668.85

REC Compacted Roll Off Rates - 2021-2022 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 455.98	\$ 455.98	\$ 455.98	\$ 455.98	\$ 455.98	\$ 455.98

REC Compacted Roll Off Rates - 2022-2023 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 489.18	\$ 489.18	\$ 489.18	\$ 489.18	\$ 489.18	\$ 489.18

Yard Waste Cart Rates - 2021-2022 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 673.62	\$ 891.26	\$1,000.08	\$1,108.90	\$ 1,217.72	\$ 1,326.54

Yard Waste Cart Rates - 2022-2023 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 713.35	\$ 937.52	\$1,049.61	\$1,161.69	\$1,273.78	\$1,385.86

MSW Compacted Roll Off Rates - 2023-2024 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 870.74	\$1,134.01	\$1,265.64	\$1,397.27	\$1,528.90	\$1,660.53

MSW Compacted Roll Off Rates - 2024-2025 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 932.80	\$1,203.97	\$1,339.55	\$1,475.13	\$1,610.71	\$1,746.29

MSW Compacted Roll Off Rates - 2025-2026 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 996.73	\$ 1,276.02	\$ 1,415.67	\$ 1,555.32	\$ 1,694.97	\$ 1,834.62

REC Compacted Roll Off Rates - 2023-2024 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 607.48	\$ 607.48	\$ 607.48	\$ 607.48	\$ 607.48	\$ 607.48

REC Compacted Roll Off Rates - 2024-2025 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 661.64	\$ 661.64	\$ 661.64	\$ 661.64	\$ 661.64	\$ 661.64

REC Compacted Roll Off Rates - 2025-2026 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 717.43	\$ 717.43	\$ 717.43	\$ 717.43	\$ 717.43	\$ 717.43

Yard Waste Cart Rates - 2023-2024 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 838.38	\$1,069.27	\$1,184.72	\$1,300.17	\$1,415.61	\$1,531.06

Yard Waste Cart Rates - 2024-2025 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 899.47	\$1,137.29	\$1,256.20	\$1,375.11	\$1,494.02	\$1,612.93

Yard Waste Cart Rates - 2025-2026 Full COS						
Per Pulls	10	20	25	30	35	40
1	\$ 962.39	\$ 1,207.35	\$ 1,329.83	\$ 1,452.30	\$ 1,574.78	\$ 1,697.26

APPENDIX A-11: CURRENT RATE SCHEDULE

RESIDENTIAL REFUSE, RECYCLING, AND YARD WASTE RATES			
Subscription Levels	Current Monthly Rate	Extra Recycling	Extra Yard Waste
60 Gallon Refuse 96 Gallon Recycling 96 Gallon Yard Waste	\$ 36.50	\$ -	\$ 8.70
60 Gallon Refuse - LIRA 96 Gallon Recycling 96 Gallon Yard Waste	\$ 31.50	\$ -	\$ 8.70
90 Gallon Refuse 96 Gallon Recycling 96 Gallon Yard Waste	\$ 43.20	\$ -	\$ 8.70

COMMERCIAL REFUSE, RECYCLING, AND YARD WASTE RATES				
Subscription Levels	Current Monthly Rate	Combo Recycling & Yard Waste	Extra Recycling	Extra Yard Waste
60 Gallon Refuse	\$ 39.70	\$ 43.60	\$ -	\$ 8.70
90 Gallon Refuse	\$ 51.58	\$ 43.60	\$ -	\$ 8.70

REFUSE AND RECYCLING BIN RATES		
Subscription Levels	Current Monthly Rate	Per Dump Rate
REFUSE		
1.5 Yards	\$ 148.20	\$ 40.65
2 Yards	\$ 191.58	\$ 55.10
3 Yards	\$ 257.55	\$ 77.70
4 Yards	\$ 322.65	\$ 99.80
6 Yards	\$ 440.55	\$ 140.05
RECYCLING		
1.5 Yards	\$ 130.90	\$ 35.55
2 Yards	\$ 169.70	\$ 48.50
3 Yards	\$ 226.00	\$ 68.70
4 Yards	\$ 280.40	\$ 88.45
6 Yards	\$ 377.15	\$ 124.55

APPENDIX A-11: CURRENT RATE SCHEDULE

ROLL-OFF RATES*		
Subscription Levels	Current Monthly Rate	Per Dump Rate
10 Yards	N/A	\$ 276.90
20 Yards	N/A	\$ 395.95
30 Yards	N/A	\$ 518.05
40 Yards	N/A	\$ 637.10

* Additional fees based on weight may apply

COMPACTOR REFUSE RATES*		
Subscription Levels	Per Dump Rate - Self Contained	Per Dump Rate - Stationary
2 Yards	\$ 222.45	N/A
3 Yards	\$ 236.10	N/A
4 Yards	\$ 249.75	N/A
6 Yards	\$ 284.50	N/A
8 Yards	\$ 311.80	N/A
10 Yards	\$ 338.95	\$ 320.35
20 Yards	\$ 499.70	\$ 481.10
25 Yards	\$ 580.15	\$ 561.55
30 Yards	\$ 660.50	\$ 641.90
35 Yards	\$ 740.90	\$ 722.30
40 Yards	\$ 821.25	\$ 802.65

* Additional fees based on weight may apply

COMPACTOR RECYCLING RATES*		
Subscription Levels	Per Dump Rate - Self Contained	Per Dump Rate - Stationary
2 Yards	\$ 210.75	N/A
3 Yards	\$ 221.50	N/A
4 Yards	\$ 232.25	N/A
6 Yards	\$ 259.55	N/A
10 Yards	\$ 302.85	\$ 284.05
20 Yards	\$ 430.60	\$ 412.20
25 Yards	\$ 494.85	\$ 476.50
30 Yards	\$ 558.90	\$ 540.65
35 Yards	\$ 623.40	\$ 604.70
40 Yards	\$ 687.60	\$ 668.85

* Additional fees based on weight may apply



SOLID WASTE RATE STUDY

NOVEMBER 2021

COLLABORATORS

- HF&H Consultants, LLC

Marva Sheehan

Scott Holt

- Tracy Disposal/MRF

Mike Repetto

Scott Stortroen

Anna Lovecchio



SERVICES PROVIDED

City

- Oversees Agreements
- Coordinates Recycling and Other Events
- Provides Various Services
 - Billing
 - Compliance

Tracy Disposal

- Collection
- Transportation
- Disposal of Solid Waste Materials

Tracy MRF

- Material Acceptance
- Processing and Disposition of Recycled Materials and Organics
- Transfer Services





Think Inside the Triangle™

BASIS FOR RATE INCREASE

- State Mandates
- Rates Last Adjusted in 2012
- Increased Service Area
- Cost Increases
- Drop in Recycling Market

State Mandates

Assembly Bill 341

- Approved May 2012
- Mandatory Commercial Recycling

Assembly Bill 1826

- Signed by Governor October 2014
- Mandatory Commercial Organics Recycling

Senate Bill 1383

- Approved November 2020
- California's Short-Lived Climate Pollutant Reduction Strategy

Cal Cities Waste Rate Survey

- Conducted December 2020
- Statewide Rate Increases in Next Three Years
- 194 Participating Cities
- 92% Anticipating Rate Increase



Think Inside the Triangle®

Rates Last Adjusted in 2012

- Adjustment for Consumer Price Index (CPI) Not Included
- No Change to Rates

Increased Service Area

- Ellis
- Tracy Hills
- Industrial Area



Increase in Costs

- Personnel
 - Workers' Comp
 - Cost of Living
 - Insurance
- Maintenance
 - Parts
 - Shipping
- Operations
 - Fuel Costs
 - Mandate to Reduce Emissions

Drop in Recycling Market

- National Sword Policy
 - Material No Longer Sent Overseas
 - Limited Facilities Available
- Contamination
 - Improper Sorting by Generator



STUDY METHODOLOGY

- Each Container Reserves “Space” in the Truck
- All 3 Material Types
- New Metrics
 - Full Time Equivalent Route Factors
 - Equivalent Container Factor
 - Equivalent Container Units



Think Inside the 'Triangle'

STUDY METHODOLOGY

• The Mechanics...

TRUCK CAPACITY SUPPORT	
0.60	MSW Pounds per Gallon
36.10	60-Gal MSW Pounds per Setout
54.15	90-Gal MSW Pounds per Setout
201.00	MSW Gal per Yard
29	Collection Body MSW Yards
8.00	Collection Body MSW Tons

From financial/
subscription
data

ASSUMPTIONS
23,222 Residential Customers
204 Commercial Cart Customers
Disposal trip time - 0.5 hours
Approx 8 hour day

CALCULATION OF NUMBER OF OPTIMUM CONTAINERS PER LOAD	
16,000	pounds (8 X 2,000)
443	number of 60 gallon containers per load
295	number of 90 gallon containers per load



443



295



Think Inside the 'Triangle'

STUDY METHODOLOGY

- The Results...

Capacity-based Methodology

RESIDENTIAL SOLID WASTE PORTION OF RATES	Container Size	
	60 Gallon	90 Gallon
Refuse Collection - 1st Container		
Variable	\$ 4.02	\$ 6.43
Fixed	\$ 7.48	\$ 7.48
Transfer/Disposal/Processing	\$ 11.54	\$ 17.31
Other	\$ 3.21	\$ 3.21
	\$ 26.26	\$ 34.44

\$5.77

Traditional Thinking Methodology

RESIDENTIAL SOLID WASTE PORTION OF RATES	Container Size	
	60 Gallon	90 Gallon
Refuse Collection - 1st Container		
Variable	\$ 4.81	\$ 4.81
Fixed	\$ 7.48	\$ 7.48
Transfer/Disposal/Processing	\$ 11.54	\$ 17.31
Other	\$ 3.21	\$ 3.21
	\$ 27.04	\$ 32.81

\$8.18



Think Inside the 'Triangle'

KEY RESIDENTIAL RATE CHANGES

Projected Cost of Service and Monthly Rate Increase

Solid Waste, Recycling, and Organics (Residential)	Current Rates	FY 21/22	\$ Change	FY 22/23	\$ Change	FY 23/24	\$ Change	FY 24/25	\$ Change	FY 25/26	\$ Change
60-Gallon Container*	\$36.50	\$44.38	+ \$7.88	\$52.35	+ \$7.96	\$61.18	+ \$8.83	\$65.75	+ \$4.56	\$70.40	+ \$4.66
90-Gallon Container*	\$43.20	\$52.57	+ \$9.37	\$60.87	+ \$8.30	\$70.21	+ \$9.35	\$75.50	+ \$5.29	\$80.89	+ \$5.39

*Only applicable for Residential Customers. Includes a 90 Gallon Recycling and a 90 Gallon Organics container.

Rates for Additional Carts

Residential Increase	Current Rate	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Recycle Container*	--	\$4.27	\$5.64	\$6.05	\$6.66	\$7.29
Organics Container*	\$8.70	\$7.77	\$9.94	\$10.54	\$11.35	\$12.18

*The same rate applies to both 60-gallon and 90-gallon customers.



KEY CHANGES TO RESIDENTIAL SERVICES

- Container Changes
- All Three Containers Collected Weekly
- Bulky Pick-Up Increased From One to Two Annually
- Continuation and Expansion of Recycling Events
 - Compost Pick-Up
 - Battery Recycling
 - Citywide Garage Sales
 - Document Shredding

CONTAINER CONTENTS

Gray

Garbage

- Pet Waste
- Food Soiled Wrappers
- Diapers
- Kitchen Plates and Cups
- Plastic Bags and Wrap
- Used Clothing That is Unable to be Donated



Blue

Recyclable Material

- Junk Mail
- Newspapers
- Non-Food Soiled Wrappers
- Cardboard/Paper
- Styrofoam (Excluding Packing 'Peanuts')
- Glass Bottles and Jars
- Aluminum Cans
- Plastic Bottles and Tubs



Green

Organics

- Yard Trimmings:
 - Grass Clippings, Weeds, Leaves, Flowers
- Food Scraps:
 - Dairy, Fruit, Veggies, Egg Shells, Bread, Meat, Bones



OTHER BENEFITS AND OUTCOMES

- Complying with State Mandates
- Increase Bulky Pickups Annually
- Expand Current Recycling Events
- Increase of Approximately \$2M for Roadway Improvements and Maintenance
- Improve City's Diversion Rate Resulting in Positive Environmental Impacts





Questions?

