

SANTA ANA SOLID WASTE CONTRACT EVALUATION REPORT

**Prepared for the
City of Santa Ana**

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1. EXECUTIVE SUMMARY

A. INTRODUCTION

Sloan Vazquez, Inc. (SV or SV Team) is a consulting firm focused exclusively on municipal solid waste planning and management services, specializing in waste composition and characterization studies, feasibility studies, municipal contract analysis, residential and commercial collection operations, and management of MRF project development. Together, the firm's principals have over 60 years of wide-ranging expertise and experience in municipal waste management and recycling.

The SV Team conducted a rate evaluation on behalf of the City of Santa Ana to survey the rates and identify services provided in the following waste hauling contracts:

- Cities of Anaheim, Fullerton, Garden Grove, and Huntington Beach contracts with Republic Services (Republic).
- Cities of Irvine, Mission Viejo and Santa Ana contracts with Waste Management of Orange County (WM).
- Cities of Lake Forest and Orange contracts with CR&R.
- City of Westminster [member of the Midway City Sanitary District (MCSD), which uses MCSD-provided residential services] contracts through MCSD with Rainbow Environmental Services, a Republic Services company (Rainbow) and CR&R for commercial services.
- Orange County Unincorporated Areas contracts with CR&R, Republic, Ware and WM.

The contracts evaluated in this study were selected by City of Santa Ana staff among the contracts throughout Orange County due to each city's size and/or proximity to the City of Santa Ana. The SV Team agrees that the selected contracts provide an appropriate level of comparison for the purposes of this evaluation.

B. EVALUATION GOALS

The goals of the evaluation are as follows:

- Assess the overall value of the existing City of Santa Ana contract in comparison to municipal contracts included in this study.
 - Compare the rates of residential and commercial services, along with any notable residential and commercial program and service elements.
 - Provide an overview of the overall value of the contract to the municipality, including free services designated by and on behalf of the municipality, fees, discounts, contributions to municipal programs and services, as well as other benefits offered to each municipality through the contract.
 - Review diversion programs and results as well as disposal per capita reporting for each municipality.
- Provide options, review implications and recommend next steps regarding the City of Santa Ana contract, as the current contract term comes to an end on June 30, 2018.

C. METHODOLOGY

For the purposes of ranking the contracts included in this report, the SV Team assessed the **rates** paid to the contractor for services, the **contractually required contributions** from the contractor to the municipality in both funds and services, and the **contractually required diversion programs** and resulting reduction in the average pounds per day (PPD) disposed by residents and businesses in each municipality.

Rates paid to contractor: the rates represent value to the residents and businesses located in the city.

Contractually required contributions: the contributions of funds and free services to each city represents increased resources for city programs and reductions in the overall costs of city operations.

Contractually required diversion programs: the diversion programs and their results represent each city's ability to achieve state and local diversion requirements and comply with Assembly Bills (AB) 939, 341 and 1826.

To assess the overall value of these three components, the SV Team evaluated the following seven categories:

1. Residential rates paid to contractor
2. Effective residential rates paid to contractor per capita
3. Commercial rates paid to contractor
4. Overall estimated value of contractually required contributions, cost reimbursements, fees, funding, grants, payments, and revenue sharing by contractor to the municipality (excluding franchise fees and surcharges)
5. Estimated value of contractually required free city services
6. Contractually required diversion programs
7. Combined performance of both actual reported CalRecycle PPD per resident data for 2014 and the percentage that the actual reported PPD per resident is better than the 2014 CalRecycle goal
8. Combined performance of both actual reported CalRecycle PPD per employee for 2014 and the percentage that the actual reported PPD per employee is better than the 2014 CalRecycle goal

The municipalities were evaluated, then ranked in each category, with a high score of one and a low score of 11 (a total of 11 contracts were evaluated, with the County of Orange contracts evaluated as a single contract). Where two contracts were assigned the same ranking, the next highest rated contract was assigned the following number in sequence (i.e., if two contracts were ranked fifth, the next highest rated contract was rated sixth). The average of the rankings from each of the seven categories were then calculated and the resulting scores were used to rank the overall value of the contracts.

Categories 1, 2, 3, 7 and 8 were purely data-based, and the rankings reflect publicly available data. The rankings for categories 4, 5 and 6 necessitated in-depth analysis of contractual requirements, the application of available data, documentation and public information, and the assigning of standard industry-based values and reasonable assumptions in order to estimate value. The SV Team applied its 60 years of industry experience and extensive understanding of regional contracts to assess the value of additional contractual requirements including payments to the city by the contractor, as well as the estimated costs associated with free city services, and project the estimated impact of recycling programs and infrastructure.

D. FINDINGS

After rating each contract according to the criteria of the seven designated categories, ranking the contracts within each category, then averaging the rankings for each contract, an overall value ranking was calculated. Through this process, the City of Santa Ana contract has been appraised as providing the **third highest overall value** among those contracts evaluated.

OVERALL VALUE RANKING

The following is the overall ranking of the evaluated contracts, when evaluated for the criteria described above and among the contracts included in this report.

- | | |
|---------------------|---------------------|
| 1. Lake Forest | 7. Huntington Beach |
| 2. Mission Viejo | 8. Anaheim |
| 3. Santa Ana | 9. Fullerton |
| 4. Irvine | 10. Garden Grove |
| 5. Orange | 11. Orange County |
| 6. Westminster | |

Residential and Commercial Rate Comparison

The City of Santa Ana's residential rate paid to the contractor for services is 2.8% below the average rate. The rate is \$4.57 higher than the lowest reviewed rate, and \$3.73 lower than the highest reviewed rate. The rate is sixth highest among the 11 rates included in this study. Because Santa Ana has the highest number of persons per household among the 11 municipalities, but only the sixth highest residential rate (per household, per month), the resulting per capita rate of \$3.62 per month, which is the lowest, is 31% lower than the average per capita rate of \$5.24, and the lowest overall. Santa Ana's rate paid to the contractor for one three-yard bin, serviced once per week, is 7% below the average rate, \$50.88 higher than the lowest evaluated rate, and \$57.99 lower than the highest evaluated rate.

Table 1: Residential and Commercial Rates Paid to Contractor

Residential Rate Paid to Contractor		Residential Per Capita Rate Paid to Contractor		Commercial Rate Paid to Contractor	
Irvine	\$11.32	Santa Ana	\$3.62	Orange	\$52.08
Mission Viejo	\$12.26	Orange	\$4.18	Mission Viejo	\$62.51
Orange	\$12.95	Irvine	\$4.24	Lake Forest	\$77.32
Lake Forest	\$13.52	Mission Viejo	\$4.39	Irvine	\$100.66
Westminster (MCSD)	\$14.75	Westminster (MCSD)	\$4.42	Westminster	\$102.17
Santa Ana	\$15.89	Lake Forest	\$4.45	Santa Ana	\$102.96
County of Orange (Avg.)	\$17.88	Garden Grove	\$5.22	County of Orange	\$118.94
Huntington Beach	\$18.21	Anaheim	\$5.75	Garden Grove	\$140.94
Fullerton	\$18.98	County of Orange (Avg.)	\$5.88	Huntington Beach	\$150.52
Garden Grove	\$19.31	Fullerton	\$6.26	Anaheim	\$152.11
Anaheim	\$19.62	Huntington Beach	\$6.95	Fullerton	\$160.95

Additional Contractual Requirements

The Santa Ana contract ranked first for both the overall value of additional contractual requirements, including the funds paid to the city by the contractor, as well as the value of the free city services required through the contract, both of which significantly exceed those of the other contracts included in this study. Specifically, the City's contractor is required to make annual payments of nearly \$2 million. In addition, the annual value of free services at City facilities, which includes materials generated through city operations such as landscaping, exceeds \$750 thousand. Furthermore, the level of bulky item collection conducted in city alleys two weeks each month, after quarterly garage sales, and after neighborhood clean-up events goes far beyond the requirements of any other contract and represents substantial financial value to the City.

Diversion Program Requirements and CalRecycle Diversion Outcomes

While the Santa Ana contract's ranking for both residential and commercial PPD results was fourth, the contract was rated lowest for required diversion programs. The contractual requirements for, and consequently the results achieved by, the current commercial recycling program are deficient. In 2015, only 6.4% of solid waste collected through commercial bin service and taken to a transfer station for processing was diverted.

E. RECOMMENDATIONS

The current Santa Ana contract term commenced April 5, 2005, and has an end date of June 30, 2018. The current contract is based on an original agreement established in 1993. The contract was amended in 1996, to facilitate the implementation of curbside recycling collection service, then amended again in 1997, to further clarify responsibilities. Typically, a contract with this maturity level would not be expected to rank as highly as Santa Ana's. However, this contract has been and continues to represent a strong value for the City and is ranked third among the contracts included in this report.

The two higher ranked contracts, in the cities of Lake Forest and Mission Viejo, are also the two newest contracts among those included in this study. Even though Santa Ana's rates are competitive, both the Lake Forest and Mission Viejo contracts feature lower rates paid to the contractor, as well as stronger diversion program requirements and reported outcomes. However, neither the Lake Forest and Mission Viejo contracts, nor any other contract included in this report, requires the level of funding or free city services provided through the current City of Santa Ana contract.

LONG TERM OPPORTUNITIES

In the long term, the use of a competitive procurement process to select a long-term contractor can provide the City of Santa Ana with the mechanism to secure competitive rates, achieve program and service enhancements, ensure compliance with current and emerging legislative requirements, and secure the level of contractually required benefits to the City necessary to support essential city operations and address community needs. **While a competitive procurement is a standard process used by municipalities to achieve the greatest value for ratepayers, in this City and at this time there are risks inherent in the municipal procurement process, especially considering the unique components of this contract.**

Potential Risks

- **Residential Rates and Diversion Programs:** Due to both the higher-than-average number of persons per household in Santa Ana, as well as the ongoing impact of the significantly higher rate of scavenging on residential curbside recycling tonnage, the City is currently at risk for receiving proposals that include either increased residential rates, additional rates charged to residents for additional carts, or

proposed rates that cannot be sustained for the long-term and result in requests for unscheduled rate increases.

- **Commercial Rates and Diversion Programs:** Regulatory requirements driven by AB 341 and AB 1826 necessitate significant changes to the current commercial and multi-family recycling programs. The implementation of the new services could considerably impact current bin-service rates. The City runs the risk that any regulation-driven service changes and corresponding rate increases may be attributed to the procurement process instead of legislative mandates.
- **Contractually Required Benefits:** The City currently receives an array of free services and other benefits that significantly exceeds the contractual requirements of comparable municipalities in the region. It is critical that the City measure and mitigate the potential impact any changes to contractually-required free City services could have on the City's operating costs, as well as quantify the effect that any potential increase or decrease to the rates charged by the contractor for services could have on future City funding. The pursuit of a new, long-term service contract at this time could make it difficult to assure the maintenance of funding for vital city services and the continuance of no-cost solid waste and recycling services for all municipal operations and venues, while maintaining or enhancing the competitive rates and other values currently afforded to residents and businesses by the existing contract.
- **Emerging Technologies:** Recent legislation, including AB 341 and AB 1826, as well as the increased development of new and innovative solid waste collection and recycling processing technologies, have combined to incentivize the development of renewable energy programs. At the same time, the current prices of crude oil, natural gas, and other commodities are at historically low levels. Many commodity futures speculators have projected that the world market may be in a five-year price slump for traditional carbon-based energy sources. **By entering into a new, long-term contract at a time when fuel and commodity markets are in decline and new processes are being tried and tested, the City risks missing an opportunity to benefit from renewable energy innovations that prove to be commercially viable when energy and commodity prices rebound.** Locally, private companies including WM, Republic, and CR&R, which are the largest municipal service providers in Orange County, are each at various stages of the development of first-generation renewable energy production facilities. The County of Orange is also studying the potential for developing renewable energy production facilities. Time and market forces will ultimately determine the success or failure of these and other innovations. A short-term contract would provide the City with the time and flexibility to fully benefit from the technologies that emerge as optimal over the next few years.

SHORT TERM OPPORTUNITIES

As described above, there are a number of risks associated with entering into a long-term contract **in this City, at this time**. Customer rates could be negatively impacted, the funding and free services provided to the City could decrease, and the opportunity to benefit operationally and financially from emerging technologies could be missed. An extension of the City's current contract may be in order so as to allow the current contractor and the city to avail themselves of opportunities to address service and diversion issues, mitigate potential impacts to the rates paid by customers, stabilize associated city revenues, and identify the successful technologies that will be needed to meet current and future legislative requirements.

The findings of this evaluation indicate that the current contract continues to provide a strong value to the City. Additionally, City staff have recognized that the current contractor provides good service and has

consistently demonstrated its commitment to being a partner to the City by agreeing to provide programs that exceed contractual requirements. Given these factors, there is an opportunity to pursue a short-term extension with the current contractor that would provide the time and means to address the identified challenges and better position the City to benefit from a long-term contract in the future.

RECOMMENDED NEXT STEP

It may be beneficial for the City to approach the current contractor regarding the possibility of an amendment to the contract to create a short-term extension. We recommend that the City request a proposal from the contractor to include specific programmatic service enhancements and their value to residents, businesses, and the City. If the proposed terms allow the City to address the potential risks in the short term, while better positioning the City for maximizing the results of a competitive procurement process in the long term, the City could continue to benefit from the existing high-value contract, maintain or improve the funding derived from the contract, improve city services and optimize ongoing value for the ratepayers in both the short and long term.

2. INTRODUCTION

The ten cities and unincorporated Orange County areas included in this evaluation range in size, with populations estimated from 77,000 to 345,000 in 2014, according to the US Census¹, with 2014 disposal volumes ranging from 54,000 to 401,000 tons (CalRecycle 2014 Jurisdiction Disposal by Facility Report).

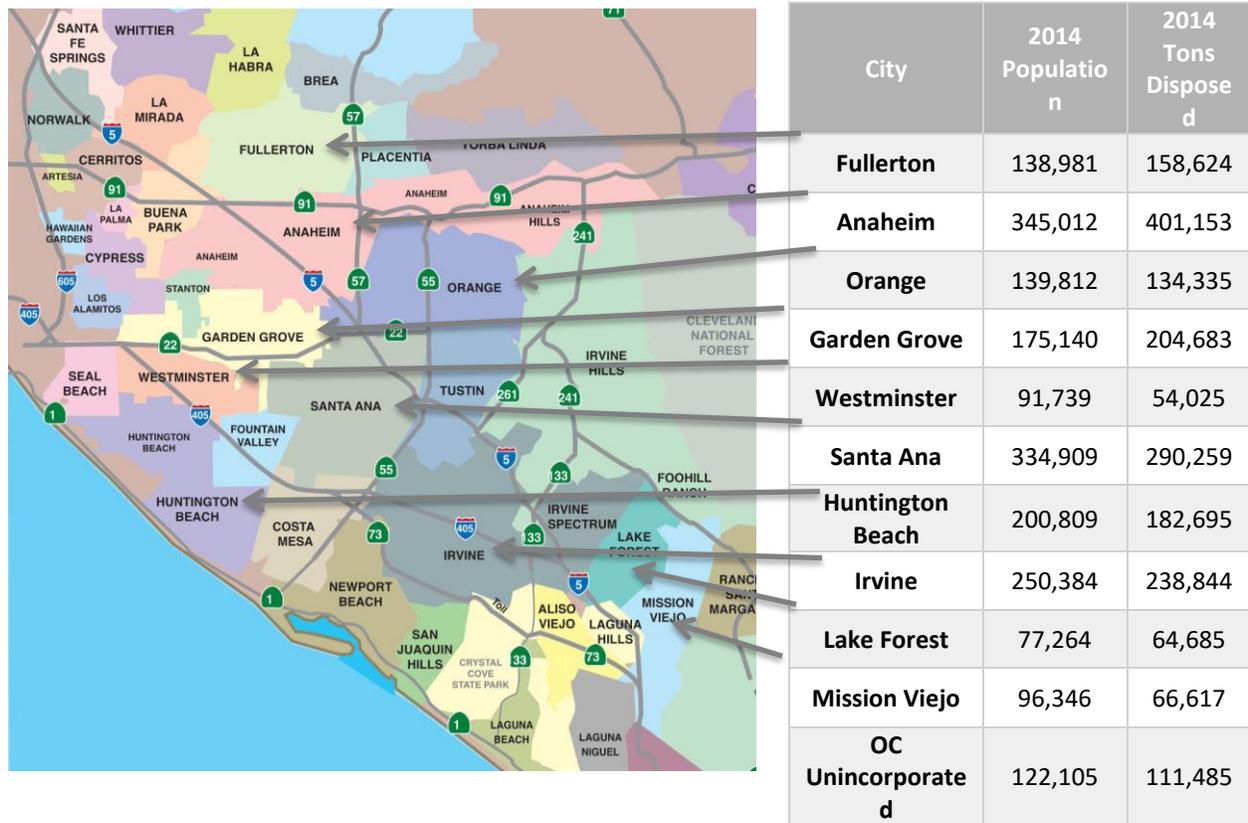


Figure 1: Selected City Map, 2014 Population and 2014 Tons Disposed

3. RESIDENTIAL AND COMMERCIAL RATE AND PROGRAM COMPARISONS

Residential and commercial rates charged throughout Orange County vary greatly from city to city. Residents in the city with the highest rates pay nearly double what the residents in the city with the lowest rates are charged, and commercial customers in the city with the highest rates can pay as much as triple as those with the lowest.

While the rates vary greatly, there are a number of similarities within the solid waste and recycling system in Orange County. All cities provide automated curbside residential collection services with a three-cart program including solid waste (MSW), recycling and green waste. All cities are required to use an Orange County Waste and Recycling landfill system for disposal of MSW and are subject to the same per-ton disposal rates. All contractors fall under the same South Coast Air Quality Management District rules regarding the use of natural gas collection vehicles. The majority of contractors in Orange County operate under union labor agreements,

¹ (<https://www.census.gov/popest/data/cities/totals/2014/index.html>)

with comparable terms and requirements. Additionally, all cities fall under CalRecycle governance and must meet the requirements of AB 939 (50% diversion), AB 341 (commercial and multi-family recycling) and AB 1826 (organics recycling).

A. RESIDENTIAL RATE COMPARISON

Throughout Orange County, there is a wide range of monthly rates per household paid by residential customers for weekly, curbside solid waste, recycling and green waste services. The rates paid per household, including the impact of fees and surcharges, range anywhere from approximately \$12.00 to \$23.00. The actual amount paid to the contractor for the collection, disposal and recycling services, not including surcharges or fees, or fees collected by the city and not remitted to the contractor, fall between approximately \$11.00 to \$21.00.

Because the cities included in this rate comparison vary greatly in the fees and surcharges that are included in each program, the most comparable rates are the actual rates paid to the contractor for services, exclusive of any fee or surcharge that may be included in some program. As shown below, it is estimated that the City of Santa Ana's residential rate is 2.8% below the average rate. The rate is \$4.57 higher than the lowest reviewed rate, and \$3.73 lower than the highest reviewed rate.

Table 2: Comparable Residential Rates Paid to Contractor

City	Residential Rate Paid to Contractor	Percent under (-) or over average
Irvine	\$11.32	-30.7%
Mission Viejo	\$12.26	-24.8%
Orange	\$12.95	-20.8%
Lake Forest*	\$13.52	-17.3%
Westminster	\$14.75	-9.7%
Santa Ana	\$15.89	-2.8%
Average	\$16.34	
OC Unincorporated**	\$17.88	9.4%
Huntington Beach	\$18.21	11.3%
Fullerton	\$18.98	16.2%
Garden Grove	\$19.31	18.2%
Anaheim	\$19.62	20.1%

*Lake Forest implements a graduated rate based on MSW container size. For the basis of comparison, the 95-gallon cart rate was used, as the majority of programs utilize a 96-gallon default cart size program.

** OC Unincorporated service rates vary by Franchise Area, Collection Area and Contractor. An average of the rates was used for the purpose of comparison. The lowest rate is \$15.62 and the highest rate is \$24.19.

B. RESIDENTIAL RATE COMPARISON PER CAPITA

Residential rates are charged on a per household, per month basis. While rate comparisons are typically conducted on a per-household basis, because there is a wide range in the average number of persons per household among the cities included in this report, an average rate per capita is provided as an additional point of reference. The average number of persons per household in Santa Ana is 38% higher than the average, and 29% higher than the next closest city (Anaheim). Because Santa Ana has the highest number of persons per

household among the 11 cities, but only the sixth highest residential rate (per household, per month), the resulting per capita rate is 31% lower than the average per capita rate, and the lowest overall.

Table 3: Residential Rate Per Capita

City	Monthly Rate Per Household	Persons per Household	Monthly Rate Per Capita	Per Capita Ranking (Low-High)
Santa Ana	\$15.89	4.39	\$3.62	1
Anaheim	\$19.62	3.41	\$5.75	9
Fullerton	\$18.98	3.03	\$6.26	10
Garden Grove	\$19.31	3.7	\$5.22	7
Huntington Beach	\$18.21	2.62	\$6.95	11
Irvine	\$11.32	2.67	\$4.24	3
Lake Forest	\$13.52	2.93	\$4.45	6
Mission Viejo	\$12.26	2.79	\$4.39	5
Orange	\$12.95	3.1	\$4.18	2
OC Unincorporated	\$17.88	3.04	\$5.88	8
Westminster	\$14.75	3.34	\$4.42	4

C. RESIDENTIAL PROGRAM COMPARISON

A brief review of the key residential program components is provided in the table below for comparison. In general, programs include 96 gallon carts, with no charge for additional recycling and green waste carts, as well as a bulky waste program including various numbers and frequencies of collections. Santa Ana's residential services are comparable with those offered by the other cities included in this study with two items of note:

- While the free bulky item pick-up service appears to be less frequent than what is available in other cities, typically the maximum level of bulky item collection is rarely used by the majority of individual residents, and increased numbers of collection opportunities or items per collection can serve as perceived, rather than actual benefits to the average rate payer.
- Some of the comparable contracts offer one or more additional recycling and green waste carts at no additional charge. Given the scavenging and contamination challenges that have impacted the Santa Ana program, and which are further described later in this report, this contract component would not likely be to the benefit of the City at this time.

Table 4: Residential Program Overview

City	Residential Programs
Santa Ana	<ul style="list-style-type: none"> • Three cart program with choice of 96, 64 or 35-Gallon carts • Bulky items - two pick-ups of up to four items or twenty bags of green waste at no charge
Anaheim	<ul style="list-style-type: none"> • 96-Gallon default cart program • Reduced rate for 64 Gallon MSW cart (\$.88 reduction) • No charge for additional recycling or green waste carts • Bulky Items - first three collections, up to 20 items per collections free for single family and multifamily residents at no charge • Minimum Diversion Rates by waste stream (Recycling carts: 85%, Yard Waste carts: 98%)
Fullerton	<ul style="list-style-type: none"> • 96-Gallon default cart program • No charge for additional recycling carts and first additional green waste carts • Unlimited on-call single family and multifamily resident bulky item collection at no charge
Garden Grove	<ul style="list-style-type: none"> • 96-Gallon default cart program • No charge for additional recycling and green waste carts • Bulky Items – three pick-ups per year at no charge
Huntington Beach	<ul style="list-style-type: none"> • 95-Gallon default cart program • No charge for additional recycling and green waste carts • Bulky items - four pick-ups of up to 10 items at no charge • Free drop off of hazardous waste at contractor’s transfer station facility, contingent upon contractor’s existing funding source
Irvine	<ul style="list-style-type: none"> • 64-Gallon default cart program, no additional charge for 95-Gallon cart • Reduced rate for 35-Gallon cart • No charge for additional recycling and green waste carts • Bulky items - two pick-ups of up to four items at no charge
Lake Forest	<ul style="list-style-type: none"> • Three cart program with graduated rates: <ul style="list-style-type: none"> • 90-Gallon MSW: 14.20 • 64-Gallon MSW: 13.73 • 35-Gallon MSW: 13.40 • Bulky Items – two collections per year, four items per collection at no charge • Two HHW, E-waste, U- waste drop-off events

Mission Viejo	<ul style="list-style-type: none"> • 96-Gallon default cart program • Can place up to four items (MSW only – no bulky, HHW, E-waste or U-waste) adjacent to MSW cart • No charge for additional recycling and green waste cart • HHW, U-Waste and E-Waste curbside and drop off collection programs, not to exceed \$60,000 per rate year • Bulky Items – Three collections per year, five items per collection at no charge • Annual compost give-away
Orange	<ul style="list-style-type: none"> • Choice of cart size • MSW overage collected up to two times per year • No charge for up to two additional recycling and green waste carts • Minimum of 50% of waste collected to be recycled
Westminster	<ul style="list-style-type: none"> • Up to two 96-Gallon MSW carts included in rate. Each additional cart charged at full rate • Unlimited 96-Gallon recycling carts • Bulky items - up to two items per month at no charge

D. COMMERCIAL RATE COMPARISON

Like residential curbside collection rates, commercial rates also vary significantly throughout Orange County. Rates for MSW bin collection range more than \$100 per month for similar levels of service. These differences are due to a number of factors, which can make a comparison challenging. For example, in some cities such as Irvine, the contractor is required to offer commercial recycling services at no charge. In other cities, such as Lake Forest, commercial customers are required to participate in commercial recycling services, and the contractor charges a fee for the service.

Additionally, some cities require commercial services that go beyond the basic collection and disposal. Cities including Anaheim and Lake Forest include recycling outreach and education personnel with mandatory hours as part of the contractual requirement. These additional expenses can impact the overall cost, and consequently, the rate that is charged for a commercial program. Some contracts include sorting components such as the processing of mixed waste materials to extract recyclables, which add a layer of costs that are different from single-stream recycling programs. Another factor in the cost of service is the impact of topography in cities with significant coastal and canyon service areas. Combined, these and other factors impact the overall expense and ultimate cost of service.

The standard industry practice is to compare the rates for the most common commercial service level, which is one, three-yard bin serviced once per week (1x3x1). To ensure that the differences between the 1x3x1 rates were reasonably representative of other typical service levels, the twice per week and three times per week service levels were also reviewed. Similar differences between rates were confirmed.

The following table shows the comparable rates paid to contractor, not including fees or surcharges, for the 1x3x1 service level in the evaluated cities. The City of Santa Ana's rate is 7% below the average rate, \$50.88 higher than the lowest evaluated rate, and \$57.99 lower than the highest evaluated rate.

Table 5: Comparable Commercial Rates Paid to Contractor

City	Commercial 1x3x1 Rate Paid to Contractor	Percent under (-) or over average
Orange	\$52.08	-53%
Mission Viejo	\$62.51	-44%
Lake Forest	\$77.32	-30%
Irvine	\$100.66	-9%
Westminster	\$102.17	-8%
Santa Ana	\$102.96	-7%
Average	\$111.01	
County of Orange	\$118.94	7%
Garden Grove	\$140.94	27%
Huntington Beach	\$150.52	36%
Anaheim	\$152.11	37%
Fullerton	\$160.95	45%

E. COMMERCIAL PROGRAM COMPARISON

CURRENT CITY OF SANTA ANA REQUIREMENTS AND RESULTS

The City of Santa Ana Agreement states that the "CONTRACTOR shall operate a Recycling program as described herein for Bin Service. Such Recycling program shall require that CONTRACTOR take the Solid Waste in bins which have clean "dry" loads to a MRF which is acceptable to the CITY for Processing and diversion. CONTRACTOR shall guarantee that, at a minimum, fifty (50%) percent of the tonnage of Solid Waste which is contained in bins and which is determined to have a high recyclable content will be transported to a MRF. All Solid Waste which is transported to said MRF shall be processed and the portion thereof which is recyclable shall be recycled by Waste Type in amounts so as to comply with CIWMA and the CITY'S SRRE."

In 2015, the contractor collected 136,438 tons of solid waste through bin service. Of this, 100,094 tons, or 73 percent, was taken to a MRF. However, only 6,431 tons were ultimately diverted, with 35 percent of the diversion achieved with green waste tonnage and over 40 percent of the diversion achieved through C&D-type materials including wood, concrete, asphalt, tin and metal. The 6,431 tons of diversion represents only 6.4 percent of the 100,094 tons of solid waste collected through bin service taken to the MRF, and only 4.7 percent of the 136,438 tons of the total solid waste collected through bin service.

COMMERCIAL PROGRAM COMPARISONS

The following is a selection of any notable commercial programs that go beyond the standard bin collection and disposal or recycling services. In particular, a few cities have taken early steps in implementing organics programs and one contract, Lake Forest, proactively addresses AB 341 and AB 1826 requirements.

Table 6: Notable Commercial Programs or Services

City	Notable Commercial Programs
Santa Ana	<ul style="list-style-type: none"> Bin service – contractor shall guarantee a minimum of 50% of material contained in bins and which is determined to have a highly recyclable content shall be delivered to a MRF for processing
Anaheim	<ul style="list-style-type: none"> Minimum Diversion Rates by Waste Stream (mixed waste processing – 34% for commercial and multi-family bin customers) Commercial food waste pilot including Anaheim resort district, Anaheim Stadium and Honda Center
Irvine	<ul style="list-style-type: none"> Free single-stream and source-separated recycling collection services to Village commercial customers Commercial food waste recycling program offered Recycling specialist for business recycling education (no set hours) Free bulky item collection for multi-Family bin customers
Lake Forest	<ul style="list-style-type: none"> 2016 Requirement (requirement for contract extension): 200 new commercial recycling customers, 100 multifamily commercial bins, 70 new organics customers
Mission Viejo	<ul style="list-style-type: none"> Food waste recycling program offered

4. CONTRACTUALLY REQUIRED PROVISIONS

In addition to the services specifically offered to residential and commercial customers, a number of additional programs and services are included in franchise contracts to benefit the city and community at large. Each contract also details a number of fees, surcharges, discounts and community contributions.

The City of Santa Ana’s additional services are notable in a few key areas:

- The extent of the bulky item and debris collection, which is conducted quarterly after garage sales as well as the first and third week of each month in alleys, and through the commitment of 200 roll off boxes for community clean ups annually, significantly exceeds the service levels required in all other reviewed contracts. Santa Ana’s contract includes both the collection and disposal of all materials collected. The contract also stipulates designated staffing for the garage sale and alley clean-ups at a level that considerably exceeds the requirements of comparable contracts. As a result, in 2015, the contractor collected 25,253 items weighing in at 432.35 tons. This service represents both a sizeable financial benefit to the City, and contributes to the health, safety and curb appeal of the community.
- While the Santa Ana contract is not explicit regarding components such as food waste services, aspects of public education, and the extent of community involvement required, the contractor – both independently and through the direction of City staff – have implemented a number of

activities similar to those described in the contracts included in this report that go beyond technical contractual requirements. A few examples include:

- School and HOA education presentations and community event participation
- Food waste pilot program implementation, outreach and education
- Support of community organizations through charitable donations and in-kind services

A. FREE CITY SERVICES, PUBLIC EDUCATION AND OTHER PROGRAMS

The following table is a compilation of free services, community involvement and other programs offered to each municipality through the contract. As is standard, each of the reviewed contracts include free services for city operations, with some minor variations. Additionally, each contract includes similar language regarding the development and distribution of public education materials.

Table 7: Additional Contractual Components

City	Additional Contractual Components
Santa Ana	<ul style="list-style-type: none"> • Free services for city operations, including city facilities as well as materials generated through any city operations and delivered to city facilities (i.e. green waste from City park landscaping and maintenance) • Free neighborhood clean-up event services and disposal for up to three hundred roll-off boxes annually • Free parkway clean-up following garage sales, including two employees for up to 60 hours each for six working days to remove debris, including bulky items, following quarterly garage sales • Free alley clean-up the first and third week of each month, including two employees for up to 60 hours each for six working days to remove debris, including bulky items, in alleyways
Anaheim	<ul style="list-style-type: none"> • Free services at city facilities • Free services at eight designated city events • Free neighborhood clean-up event services and disposal for up to one hundred roll-off boxes annually • Free collection service of 325 containers at bus stops (disposal costs reimbursed) • City abandoned item collection, contractor may charge for the per ton costs • Recycling coordinator (1,000 hours annually) • Public education including school assemblies, HOA, civic groups, educational inserts
Fullerton	<ul style="list-style-type: none"> • Free services at city facilities • Recycling assistance for special events, including pre-event waste reduction and recycling plan and post-event waste characterization report • Contractor shall conduct school assemblies and promote recycling through presentations and educational materials to the Chamber of Commerce, HOAs, construction contractors and other civic groups, and provide articles on recycling for local newsletters.
Garden Grove	<ul style="list-style-type: none"> • Free services at city facilities • Free collection and disposal for neighborhood clean-up events (up to 16 roll off boxes)

	<ul style="list-style-type: none"> Contractor shall conduct school assemblies and promote recycling through presentations and educational materials to the Chamber of Commerce, HOAs, construction contractors and other civic groups, and provide articles on recycling for local newsletters
Huntington Beach	<ul style="list-style-type: none"> Free services at city facilities up to \$870,000 annually (annual CPI adjustment applied) Free collection of 40-gallon trash cans in downtown commercial area
Irvine	<ul style="list-style-type: none"> Free services at city facilities Provide and service 100 litter modules, increase by 5 each year 20 City Code Enforcement or other bulky item calls per month at no charge for the city
Lake Forest	<ul style="list-style-type: none"> Free services at city facilities City events for up to 20 city-sponsored special events per calendar year (MSW, recyclable and food scraps) City requested bulky items (expected to be 20 or fewer items per month) Two full-time recycling and public education coordinators
Mission Viejo	<ul style="list-style-type: none"> Free City Services Free services at all City-Sponsored events
Orange	<ul style="list-style-type: none"> Free City services Free collection from City-sponsored events Street litter container collection Abandoned item collection Street sweeping material collection (may charge for disposal)
Westminster	<ul style="list-style-type: none"> Free provision of bins and collection for clean-up days (not responsible for transfer station fees) Public education including field trips to Materials Recovery Facility (MRF) for 3-6 graders attending City of Westminster schools, including funded bus transportation

B. OTHER CONTRACTUAL FEES, DISCOUNTS AND COMMUNITY CONTRIBUTIONS

The following table is a compilation of fees, discounts, reimbursements, revenue shares and other contributions contractually required in each municipality.

Table 8: Contractual Fees, Discounts and Community Contributions

City	Contractual Fees, Discounts and Community Contributions
Santa Ana	<ul style="list-style-type: none"> Contract exclusivity guarantee payment of \$1,000,000 in first year, then \$500,000 annually for remaining 13 years System savings of \$1,351,500 annually, paid in monthly installments of \$112,625 Solid waste program surcharge of 18% based upon gross receipts received by contractor NPDES fee of 2.8% Protection from loss of recyclable value (CRV) due to decrease in market value or theft
Anaheim	<ul style="list-style-type: none"> Host Fee of \$1.50 per ton for all non-City MSW delivered to contractor facility, paid monthly (annul CPI adjustment applied)

	<ul style="list-style-type: none"> • \$1.25M Host Fee Guarantee paid 2012, offset against future host fees • Annual contribution of \$60,000 to community programs (annul CPI adjustment applied) • Franchise fee for Roll-off Box and bin per pull/tip basis • Capital improvement contribution of \$2.5M for Canyon Business District • Recycling Revenue and CRV payments can be negotiated
Fullerton	<ul style="list-style-type: none"> • \$7M paid for term extension of 13 years, paid in 13 graduated annual payments (Year one: \$4-61.4M, Years 2-3: \$933K, Years 4-6: \$467K, Years 7-13: \$333K) • Annual Community Program Contribution of \$300,000 (annul CPI adjustment applied) • Annual administrative cost reimbursement of \$100,000 (annual CPI adjustment applied) • CRV revenue share payment of \$18,000 per month (annual CPI adjustment applied) • Reimbursement of Contract Renegotiation Costs • Franchise fee of 7% • AB 939 Fee (complex table based on formulas set for specific residential and commercial service level, frequency, tonnage and other factors)
Garden Grove	<ul style="list-style-type: none"> • 7.25% Franchise Fee for Residential, Commercial and Roll Off Routes • Annual administrative Cost Reimbursement of \$140,000 (annual CPI adjustment applied) • Annual \$60,000 cash or in-kind services contribution to community programs • Recycling Revenue and CRV payments can be negotiated • 15% discount for Disabled or Low Income Senior Citizens • Reimbursement of Contract Renegotiation Costs
Huntington Beach	<ul style="list-style-type: none"> • 5% Franchise Fee on Commercial services • Contractor pays City a Transfer Station usage fee of 2% on all paid receipts for refuse deposited at the facility • Annual Water Quality Compliance Grant of \$150,000 (CPI)
Irvine	<ul style="list-style-type: none"> • 5% Franchise Fee • 5% of recyclable sales revenue over \$500K per year • Single payment of \$30K for administrative costs related to contract negotiations • Public education funding of \$1 per dwelling (CPI) • Guarantee of lowest available residential service rate in the county for similar service
Lake Forest	<ul style="list-style-type: none"> • Reimbursement for procurement costs - \$84,700 • 5% franchise fee • AB 939 waste reduction fee \$40,000 annually (annul CPI adjustment applied)
Mission Viejo	<ul style="list-style-type: none"> • One-time, lump sum payment of \$150,000 Contracting Fee • One-time, lump sum payment of \$1,500 staff administration fee

	<ul style="list-style-type: none"> • 5% Contractor Fee Payment on gross receipts • \$60,000 annual fund for Commercial waste audit (annul CPI adjustment applied) • \$5/ton of recyclables collected from SFD/MFD customer during National Library Month • Discounts include 20% Senior Citizen Discount, 5% Collective Billing Discount for HOAs and 10% no Green Waste Discount for HOA's with landscape contracts
Orange	<ul style="list-style-type: none"> • One-time Contracting Fee of \$42,000 for costs associated with RFP process • Annual Public Education fee of \$15,000 • Annual Administrative fee of \$6,500
Westminster	<ul style="list-style-type: none"> • Franchise Fee of 9% on bin collection services revenue

5. DIVERSION PROGRAMS AND DISPOSAL PER CAPITA

A. RECYCLING PROGRAMS

Each year, jurisdictions report the number and type of recycling programs implemented in support of each CalRecycle component, including the following:

- Composting
- Facility Recovery
- Household Hazardous Waste
- Policy Incentives
- Public Education
- Recycling
- Source Reduction
- Special Waste Materials
- Transformation

The number of programs that cities included in this report have implemented range between 37 and 52, with an average of 43. The City of Santa Ana currently implements 47 programs and addresses each of the CalRecycle components.

It is notable that the current level of food waste programs and services currently offered in Santa Ana, exceed the contractual service requirements. The outreach, education and services developed by the contractor in support of AB 1826, provide additional value to the City.

B. 2014 CALRECYCLE POUNDS PER DAY DISPOSAL DATA

The results of the residential and commercial diversion services as well as the additional outreach and education programs and services conducted by the City and the contractor is reflected in the pounds per person data submitted to CalRecycle. The most recent data submitted (pending approval by CalRecycle staff) is for 2014. Each city has a unique pound per day goal for residents and employees. For the purposes of this comparison, both the actual pounds per day achieved in 2014, as well as the percent under goal were measured and ranked.

The City of Santa Ana had the fifth lowest pound per day goal for residents, and achieved the fourth overall lowest number of pounds, with 4.8 pounds on a goal of 7.5, which is 36% under goal. Similarly, the City had the fifth lowest pound per day goal for employees. Santa Ana achieved the fourth lowest pounds per day, which at 10.9 was 35% under the goal of 16.9 pounds. Both Santa Ana's resident and employee pounds per day performance was consistently in the top four or five of cities compared in this report.

Table 9: Pounds per Day Disposal Data and Rankings

City	2014 Resident Pounds per Day			2014 Employee Pounds per Day		
	Goal	Actual	% Better than Goal	Goal	Actual	% Better than Goal
Santa Ana	7.5	4.8	36%	16.9	10.9	35%
Anaheim	8.2	6.3	23%	16.3	12.7	22%
Fullerton	7.9	6.2	22%	19.5	15.6	20%
Garden Grove	6.6	6.5	2%	26.1	24.2	7%
Huntington Beach	10.4	5.1	51%	31.2	14.4	54%
Irvine	10.1	5.4	47%	9.3	5.9	37%
Lake Forest	10.6	4.5	58%	24.2	9.3	62%
Mission Viejo	5.7	3.9	32%	16	10.7	33%
Orange	10.1	5.3	48%	14.4	7.4	49%
OC Unincorporated	5.9	5	15%	32.4	39	-20%
Westminster	6.3	3.2	49%	27.7	13.3	52%

6. RECYCLING LOCATIONS IN SANTA ANA

According to CalRecycle, there are currently 126 permitted recycling locations, or “buy back centers” in Orange County, where California Redemption Value (CRV) is paid to any person exchanging the designated items for “buy back”. CRV is the subsidy that is paid by consumers for soda, beer, and other specified beverages that are bottled and/or sold in the State of California. Of these facilities, 28 are located within the City of Santa Ana, which is more than are located in any other Orange County city. In comparison, Anaheim has 17 centers, Garden Grove has 11, Fullerton, Irvine and Orange have fewer than 10 and Huntington Beach, Lake Forest, Mission Viejo and Westminster have five or less. Santa Ana-based recycling locations represent 22% of the permitted facilities in the County, and 30% of the facilities among the cities included in this report.

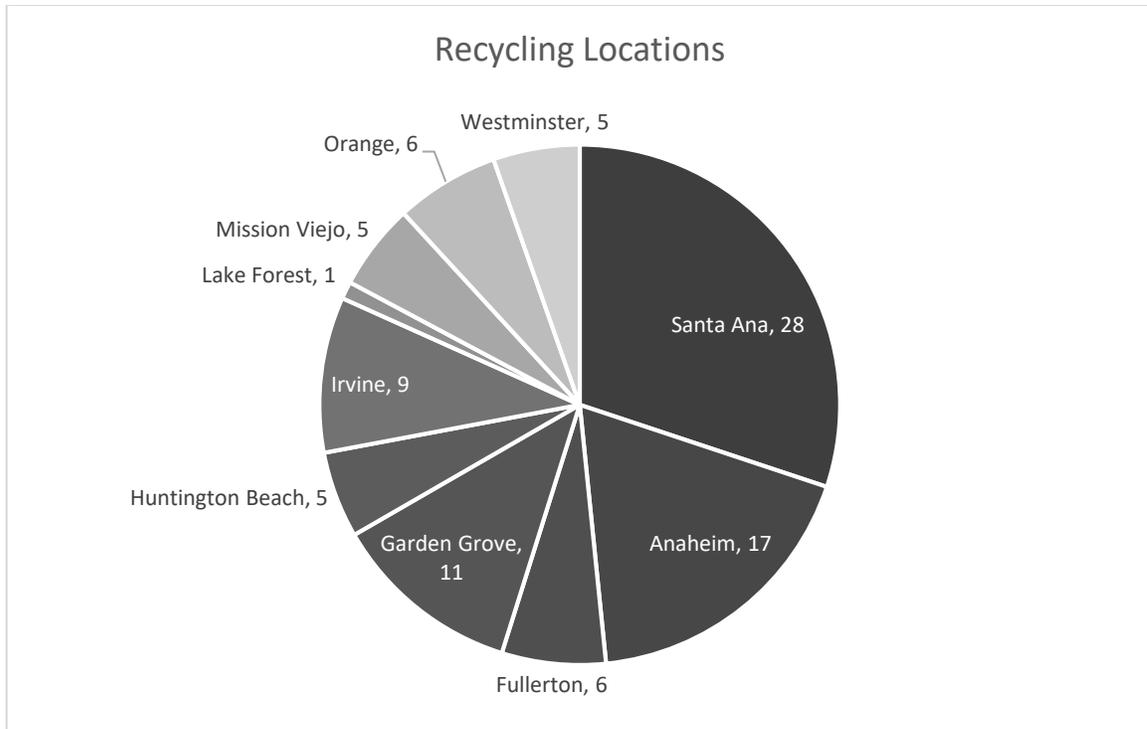


Figure 2: Recycling Locations

The disproportionate number of recycling facilities located in the City of Santa Ana is of significance as there is often a correlation between the proximity and accessibility of CRV recycling locations and the amount of scavenging that occurs within a city. This has been seen firsthand in Santa Ana, where scavengers have learned the collector's route dates, times and locations for curbside recyclable collection and can often be seen mining the high-value materials from residential recycling carts and placing the commodities into flatbed pickup trucks ahead of the collector's route truck. While the collector offers locking carts as well as cart stickers to warn that scavenging is prohibited, this issue continues to be a challenge in the City.

7. IMPACT OF SCAVENGING AND CONTAMINATION ON CURBSIDE RECYCLING

Both scavenging and contamination, which is the placement of refuse that does not belong in the recycling cart or recyclable items that are contaminated with refuse and must be extracted from other recyclables and landfilled as residue, impact both the volume of recyclables collected through the curbside program in Santa Ana, as well as the value of the materials that are collected.

A. IMPACT OF SCAVENGING ON VOLUME OF RECYCLABLES COLLECTED

The impact of this scavenging on a recycling program, and ultimately the weight of materials collected through the program, is most evident when a curbside recycling program generates fewer pounds per home of recyclables each week than what is found in similar programs. An average three-cart curbside program will typically be composed of approximately 60% refuse, 20% recycling and 20% green waste in terms of weight. When this ratio is applied to the City of Santa residential pounds per home, where the average combined total weight of refuse, recycling and green waste collected through the curbside program was 100.9 pounds/week/household, this would equate to a rounded 60 pounds of refuse, **20 pounds of recyclables** and

20 pounds of green waste. Even in similar cities with comparable programs that generate lower than average recycling pounds/week/household, the volume would not be expected to be lower than **14 pounds/week/household** of recyclables. In 2015, the average weight of recyclables collected through the residential curbside program was **6.9 pounds/week/household**².

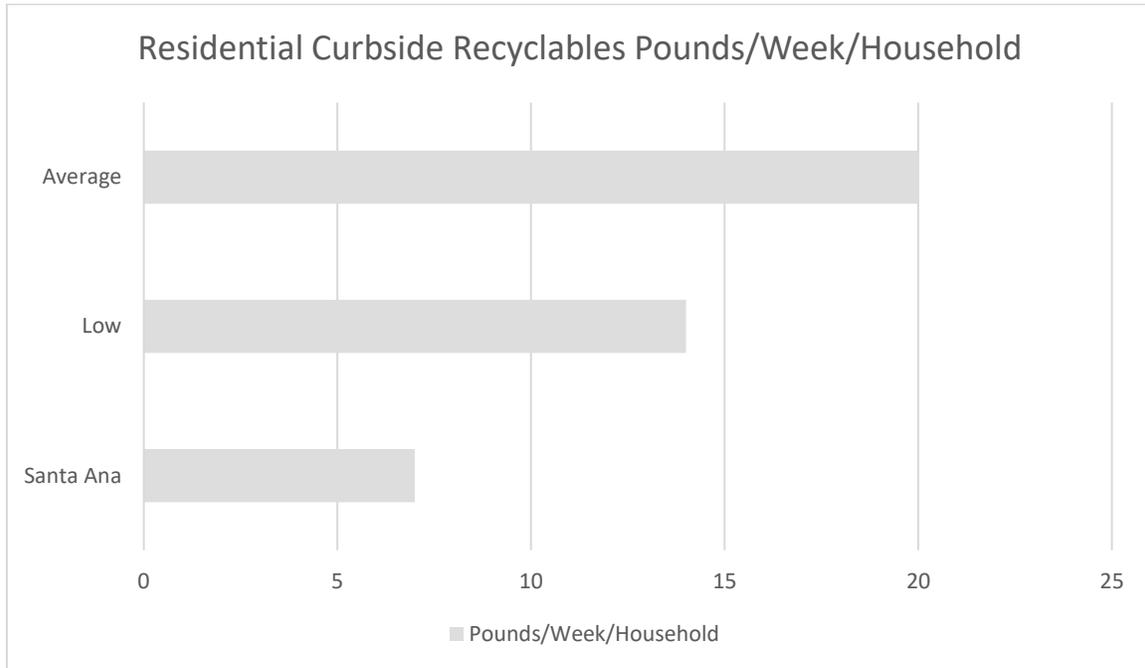


Figure 3: Curbside Recycling Pounds/Week/Household – Average/Low/Santa Ana Actual

After factoring in 52 weeks per year and an estimated 42,000 households billed for services in 2015 over time, this difference, the difference between approximately 7 pounds/week/household and 14 pounds/week/household is substantial: it would be the equivalent of an increase of more than **7,750 tons per year** in the curbside commingled recycling program, more than doubling the current annual residential commingled tonnage collected in Santa Ana.

B. IMPACT OF SCAVENGING AND CONTAMINATION ON COMPOSITION OF RECYCLABLES COLLECTED

In addition to the reduction in overall pounds per week of recyclables collected at each household, scavenging also impacts the composition, and consequently the value, of the material collected. The expected value of a typical load of commingled recyclables collected through a curbside program is significantly higher than the value of one that is mined for CRV and other high-value commodities prior to collection. In fact, when the revenues generated by the sale of other recovered recyclables decline, the redemption of CRV bottles and cans by franchise contractors is often the factor that keeps the franchise recycling program/services in the black. In addition to the impact of the reduction in high-value recyclables that have been mined by scavengers, the contamination of curbside recyclables through the placement of refuse or other materials not included in the recycling program into the designated commingled recyclables cart is amplified because of the increased proportional impact of the residue. The contractor has identified contamination as one of the biggest

² City of Santa Ana 2015 Annual Report: Commingled Curbside Tons

challenges facing the City's residential collection program, noting that 849 cart tags were issued to notify residents of contamination found inside their recycling cart. The City, with the contractor, has implemented a proactive program to increase awareness of the acceptable materials that may be placed in the recycling carts and to reward community members who are "Recycling Right". Even with the tagging of carts and the positive recognition program, contamination challenges continue to impact the composition of curbside commingled materials collected in Santa Ana.

Under current market conditions, an average ton of residential curbside recyclables is worth an estimated \$108.42³. After conservatively adjusting the ratio of each material stream included in a commingled recycling program based on the proportional impact of removing the materials targeted through scavenging and the high rate of contamination, and then applying the current market rates for each commodity, the projected value of a ton curbside recyclables collected in Santa Ana is estimated at \$58.74 per ton. In other words, the material remaining in the cart after scavengers mine CRV and other high-value recyclables is reduced in worth by an estimated 45%. The average cost of processing (sorting the commingled recyclables) is \$80-90 per ton. Currently, depending upon the actual composition and residue (contamination), the described program would lose an estimated \$21-31 per ton, whereas a program with recyclables valued at \$108.42 would profit by an estimated \$18-28 per ton.

When both the tonnage and the composition impacts of scavenging are applied to the value of the materials collected through the curbside commingled program in Santa Ana, the significance of the scavenging impact on the contractor's cost of operating is most evident. The commodity value of the 7,499 tons collected in Santa Ana's curbside commingled program in 2015, using \$58.74, which is the rate per ton adjusted for scavenging, the estimated value of the materials is \$440,491. In contrast, the annual tonnage that would be collected in a city with 42,000 households and curbside commingled program with an average of 14 pounds/household/week would generate 15,288. This volume, with the composition that had not been impacted through the mining of high-value materials by scavengers, when using the estimated rate per ton of \$108.42, would have an estimated annual value of \$1,657,678. **The difference that scavenging makes in the number of tons, and the ratio of high-value commodities found in those tons, represents more than one million dollars in financial impact on the contractor annually.**

³ The estimated rate per ton represents current market conditions that are negatively impacted by reduced demand from China and historically low crude oil prices. Most analysts expect these market conditions to persist into the foreseeable future.

Table 10: Impact of Scavenging on Volume and Value of Curbside Recyclables

	Pounds per Week per Household	Annual Tons for 42,000 Households		Estimated Rate per Ton	Estimated Annual Value
Lowest Recyclable Pounds Typically Observed in Comparable City	14	15,288	Curbside Commingled Recyclables	\$108.42	\$1,657,678
2015 Santa Ana Recyclable Pounds	7	7,499 (actual)	Curbside Commingled Recyclables (Adjusted for reduction in high-value commodities)	\$58.74	\$440,491
Annual Difference - Tons		7,789	Annual Difference – Value		\$1,217,1817

Even if a more conservative weekly household average of 10 pounds per home were to be used as a point of comparison for the purposes of this report, the significance of the impact of scavenging would remain. Although the annual value of a 10 pound per home recyclable program would be estimated at \$1,184,056 per year, the difference of \$743,564 would still represent a unique, and important, difference in the costs of providing service in the City of Santa Ana.

When the cost of processing the materials is factored in, the conservative impact on weight and composition of scavenging and contamination results in a program generating 7,499 tons of materials at an estimated value of \$58.74/ton, with an average processing cost of \$85 per ton, resulting in a program deficit of \$196,924, before accounting for the cost of operations, etc. The conservative expectations for a program generating 14 pounds/week/household would result in 15,288 tons of materials at an estimated value of \$108.42/ton, with an average processing cost of \$85 per ton, resulting in a program revenue of \$358,045, before accounting for the cost of operations, etc. Again, accounting for the cost of processing, and the impact of scavenging and contamination, this represents a \$550,000 difference, or loss, between the projected program results.

8. SUMMARY

The City's contract represents a good value for the rate payers of Santa Ana. In general, the rates are well within the average of what residents and business are currently paying in the cities compared for the purposes of this report. Additionally, the service levels are comparable and in some cases provide exceptional benefit to the City. In particular, the monthly fees rendered to the City by the contractor as well as the exceptionally high level of free services required by the contract, including collection and disposal of all materials at City facilities generated through City operations, and the extraordinary level of free bulk item collection services provided to the City as part of the contract are of significant, measurable value to the City.

While there are new and emerging opportunities to address ongoing legislative impacts on municipal solid waste and recycling requirements, and new strategies that could be utilized to address challenges such as scavenging and contamination, which have had a significant impact on the City's curbside recycling program, the current programs and services reflect a contract that is well managed. This is evident in the CalRecycle Disposal per Capita reporting, where the City continues to achieve strong results on a pound-per-day basis in spite of the challenges described above. Additionally, the active guidance of City staff is evident in the level of programming that is provided that exceeds the specific requirements of the contract.