



# City of Sunnyvale

## Bay Counties Waste Services Collection Performance Review



**Final Report**  
**November 28, 2018**



**HF&H Consultants, LLC**

*This document is formatted for double-sided printing*



201 N. Civic Drive, Suite 230  
Walnut Creek, California 94596  
Telephone: 925/977-6950  
[www.hfh-consultants.com](http://www.hfh-consultants.com)

Robert D. Hilton, Emeritus  
John W. Farnkopf, PE  
Laith B. Ezzet, CMC  
Richard J. Simonson, CMC  
Marva M. Sheehan, CPA  
Robert C. Hilton, CMC

November 28, 2018

Mr. Mark Bowers  
Solid Waste Programs Division Manager  
Environmental Services Department  
City of Sunnyvale  
456 W. Olive Avenue  
Sunnyvale, CA 94086

**Transmitted via email**

**Subject: Bay Counties Waste Services - Collection Performance Review**

Dear Mr. Bowers,

It is with pleasure that we transmit the "Bay Counties Waste Services - Collection Performance Review" report to the City of Sunnyvale. It is our hope that the report will assist the City Council and senior staff in understanding and assessing its options for contracting for solid waste, recycling and organics collection services beyond 2021. We appreciate the opportunity to assist with this key aspect of the Post 2021 effort, and look forward to discussing our findings and recommendations with staff and Council.

\* \* \* \* \*

Please contact Peter Deibler at (925) 977-6968 or [pdeibler@hfh-consultants.com](mailto:pdeibler@hfh-consultants.com); or, Marva Sheehan at (925) 977-6961 or [msheehan@hfh-consultants.com](mailto:msheehan@hfh-consultants.com) to discuss our report.

Very truly yours,  
HF&H CONSULTANTS, LLC

A handwritten signature in blue ink that reads "Marva M. Sheehan".

Marva M. Sheehan, CPA  
Vice President

A handwritten signature in black ink that reads "Peter Deibler".

Peter Deibler  
Senior Manager

*This page intentionally left blank*

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
Overview .....	1
City-Company Interaction .....	1
<b>SECTION 1 BACKGROUND .....</b>	<b>3</b>
<b>SECTION 2 OVERVIEW .....</b>	<b>4</b>
2.1 Techniques .....	4
2.2 Limitations of the Analysis .....	4
<b>SECTION 3 FINDINGS AND RECOMMENDATIONS .....</b>	<b>6</b>
3.1 Management Systems .....	6
Scope of Work.....	6
Management Structure and Transition .....	6
Communication and Documentation .....	7
FoodCycle Cart Rollout .....	7
Management and Supervisory Staffing Levels and Responsibilities .....	9
Compliance with the Agreement .....	9
Quality Control for BCWS Financial Submittals .....	10
3.2 Collection Operations.....	11
Scope of Work.....	11
Staffing - Driver Hiring and Retention.....	11
Staffing - Driver Training .....	12
Staffing - Driver Casual Pool and Overtime .....	12
Routing - Route Mapping and Sequencing .....	13
Routing - Efficiency of Collection.....	14
Routing - Route Rebalancing; Addition of Routes.....	14
Routing - Route Supervision .....	15
Collection Quality .....	15
Container Maintenance .....	16
Equipment Inventory .....	17
Disposition of Old Equipment .....	18
Maintenance and Safety .....	18
3.3 Customer Service .....	18
Scope of Work.....	18
Complaint Management .....	19
Customer Satisfaction .....	20
Completion of Work Orders.....	20
Customer Service Training.....	21
3.4 Regulatory Compliance.....	21
Scope of Work.....	21

*This page intentionally left blank*

## EXECUTIVE SUMMARY

### Overview

Bay Counties Waste Services (BCWS) provides exclusive collection services to City of Sunnyvale's (City) residents and businesses under the terms of a franchise agreement scheduled to terminate on June 30, 2021. Solid waste agreements are commonly the largest, or one of the largest, municipal contracts. The annual value of the City's agreement with BCWS is currently in excess of \$22 million. The City has also contracted with BCWS to operate the SMaRT Station® under an agreement that also terminates in 2021.

On July 31, 2018, the City Council directed staff to review BCWS' performance, and to return to Council with the results of the review to request direction on whether to conduct a single source process (negotiation with the current franchisee) or a competitive process.

### City-Company Interaction

The provision of solid waste services in Sunnyvale is atypical due to the degree in which City and BCWS staff share several key areas of responsibility. The City bills customers, remits billing revenues as compensation to BCWS, is active in developing and implementing collection programs, and reviews and approves major expenditures (such as adding routes). While individually, these City responsibilities may not be unusual, taken together they are atypical.

In general, City staff perceive BCWS to be a good partner. Most aspects of service have worked well and continue to do so. For example:

- Collection trucks are well maintained and clean, presenting a positive image in the community. Containers are maintained in good condition, with quick graffiti removal and repainting as needed.
- BCWS has a low rate of turnover, both among drivers and among management and supervisory staff. In general, staffing continuity is beneficial to the provision of quality service.
- BCWS is flexible in developing and implementing programs to meet City needs. Following early difficulties during implementation, FoodCycle is proving to be an effective food scraps program that is capturing large amounts of material with minimal contamination relative to similar programs in nearby communities.
- BCWS is a proactive, early adapter of new, beneficial technology. BCWS was one of the first collection contractors to convert its fleet to compressed natural gas (CNG) and is in the forefront of adding "smart" technology to collect data that can enhance service performance, efficiency, and safety.
- Customers benefit from access to local customer service staff, providing assistance specific to Sunnyvale services.
- BCWS has a strong safety record as measured by state workers compensation claims for both the collection and SMaRT Station operations.

There are some areas in which improvement is necessary. A key area is a need to ensure effective, ongoing communication between BCWS and City staff. The findings and recommendations in this section focus on the interaction of BCWS and City staff, drawing in part on more specific findings and recommendations

discussed later in the Review in the areas of Management Systems, Collection Operations, Customer Service, and Regulatory Compliance.

### **Findings**

1. BCWS has provided quality collection service for nearly 30 years.
2. Providing the high level of customer and billing services Sunnyvale residents and businesses have come to expect requires that BCWS and City staff work closely together in collecting, sharing, and using data to address customer issues.
3. Maintaining this close working relationship is an ongoing challenge for both parties. At times, the City and BCWS have different perceptions regarding specific issues.

### **Recommendations**

1. In general, City and BCWS staff should meet no less than monthly. We also suggest City and BCWS management staff schedule a standing twice monthly or even weekly call to check on the status of issues, to anticipate problems, and to air any concerns.
2. City and BCWS staff should discuss their respective obligations, responsibilities and constraints in order to gain a mutual appreciation for each party's role.
3. Both parties should gain a fuller understanding of key shared data systems and, to the degree possible, ensure consistency in how they are used. This may involve working with information technology staff to ensure software systems and data can be utilized to their full capability.



## SECTION 1 BACKGROUND

Bay Counties Waste Services (BCWS) provides exclusive collection services to City of Sunnyvale's (City) residents and businesses under the terms of a franchise agreement scheduled to terminate on June 30, 2021. Solid waste agreements are commonly the largest, or one of the largest, municipal contracts. The annual value of the City's agreement with BCWS is currently in excess of \$22 million. The City also contracts operation of the SMaRT Station® to BCWS under an agreement that terminates in 2021. This Performance Review (Review) does not address the SMaRT Station.

In February 2018, the City Council prioritized Study Issue ESD18-02 regarding options for solid waste collection contracting after 2021. Council requested staff conduct a study addressing the costs, implications, and mechanics of the three options for addressing the expiration of the current franchise agreement, including:

1. Seeking voter approval of an amendment to the City Charter to remove or change the existing 30-year limit on franchises.
2. Implementing a competitive process to select a franchisee for collection services beyond 2021. The time required for such a process, including potential transition to a new franchisee, is approximately 36 months.
3. Negotiating a new franchise agreement with the incumbent franchisee, including a work plan option that preserves the City's opportunity to implement a competitive process for the award of a new franchise if needed.

The Environmental Services Department contracted with HF&H Consultants, LLC (HF&H) to conduct the study. HF&H staff presented its findings at a June 12, 2018 Council study session, which included in part:

- The City cannot *extend* the current franchise term with BCWS without modifying the Charter, but can award a new franchise with a new agreement.
- The City likely has adequate time for a competitive process, a single source process, or a competitive process following an unsuccessful single source process.
- A new, short "bridge" agreement with BCWS of 1 to 3 years may be needed, depending on the selected approach.
- Neither a competitive nor a single source process is inherently superior; Council should select whichever best meets City goals.

On July 31, 2018, the Council approved the staff recommendations, which included in part:

- Direct staff to review the performance of the current franchisee.
- Direct staff to return following the review to request direction on whether to conduct a single source process (negotiation with the current franchisee) or a competitive process.

There is precedent for City review of BCWS' collection operations. Prior to extending the agreement with BCWS in 2005, the City conducted a review of BCWS' performance. Among the results was a recommendation that routes be consolidated to improve efficiency and reduce costs. As a result, the agreement as extended in 2005, eliminated two garbage routes and required changes in the process of developing residential routes. The 2004 review also resulted in the addition of new requirements for customer service training and reporting.

## SECTION 2 OVERVIEW

The City contracted with HF&H to conduct the Review. The draft scope for the Review was provided to Council as an attachment to the staff report for the July 31, 2018 meeting. The Review is a targeted, high-level assessment addressing performance in four key areas:

- Management Systems
- Collection Operations
- Customer Service
- Regulatory Compliance

### 2.1 Techniques

HF&H's Review team conducted the following activities:

- Initial and follow-up information requests to BCWS and the City, with a total of five requests to BCWS.
- Onsite and phone interviews with BCWS Board members and management staff.
- Onsite observation at BCWS' offices.
- Limited fieldwork to observe collection quality and container condition.
- Calls and meetings with City staff.
- Calls to regulatory agency staff to confirm compliance with regulatory requirements.

BCWS was very helpful in arranging interviews with Board members and management staff, who were quite open in sharing information. BCWS' General Manager (GM) participated in two interviews and a number of phone calls. BCWS' responses to our requests for information were timely, and our information requests were never questioned.

### 2.2 Limitations of the Analysis

The primary limitation of the Review was the rapid seven week schedule for collecting information, conducting the analysis, and preparing the findings and recommendations. There are a number of other areas of performance covered by the agreement that were not within the scope of work, and that we did not address. We appreciate the efforts of both City and BCWS staff to help us in meeting the timeline.

Our limitations include:

- The Review covered a wide range of topics at a relatively high level. The recommendations thus include several areas for suggested follow-up analysis related to specific issues.
- The information provided in the Review is, to the best of our understanding, accurate based on the data and information as provided, and was reviewed for reasonableness within industry standards.

- The Review did not entail independent verification of the accuracy or completeness of all of the source documents provided by BCWS.
- While the recommendations identify potential areas for improvement, the Review scope of work did not include development of specific remedies.
- Other matters might have come to our attention that would have been reported to the City had we addressed additional topic areas, additional issues within topic areas, and/or performed additional procedures.
- The Review team generated random numbers to select samples for testing, but did not use procedures that would provide statistically-valid results.

## SECTION 3 FINDINGS AND RECOMMENDATIONS

Findings and recommendations are organized in four areas:

1. Management Systems
2. Collection Operations
3. Customer Service
4. Regulatory Compliance

### 3.1 Management Systems

#### Scope of Work

- A. Review Transition – Review recent generational transition in management to ensure continuity of strong management practices.
- B. Review Management and Supervisory Staffing – Review management and supervisory staffing levels relative to those of similar operations. Review roles and responsibilities, reporting lines, and coordination between management, supervisory, and line staff.
- C. Financial Data Tracking and Reporting – Review quality assurance and quality control practices and mechanisms to ensure the accuracy of financial information reported to the City.

The analysis of management systems, and the resulting findings and recommendations, are based on review of information requested from BCWS, interviews with BCWS Board members and management staff, and comparative industry productivity data. Findings and recommendations for this task are addressed below, grouped as key issues identified and discussed during the interviews.

#### Management Structure and Transition

The following findings and recommendations are based on individual interviews with a majority of BCWS' Board members and BCWS' GM.

#### Findings

1. BCWS has been providing continuous service for nearly 30 years, through several generational changes among the families in the ownership group. The current General Manager (GM) has been in the position for most of the current ten year agreement.
2. Since its inception, BCWS' owners have been shareholders from two locally-owned Bay Area collection operations, located in Pleasanton and South San Francisco.
3. There are four Board members. In the event of a tie vote or potential tie vote, BCWS' contract attorney acts to mediate, or to break ties if necessary.
4. The Board intends to continue to draw future Board members and key management staff from the shareholders and family members associated with the current ownership group.
5. The GM is an employee with relative autonomy in running daily operations. The GM reports to, and receives direction from, the Board on larger substantive issues.

## Recommendations

1. Should the Council choose to enter into single source negotiations with BCWS for a new agreement, the City should review current agreement assignment language to ensure that it provides the City with state-of-the-art protections to address changes in ownership structure or sale to a third party.
2. Should the Council choose to enter into single source negotiations with BCWS for a new agreement, the City should consider including a provision providing it the opportunity to review and comment on pending BCWS decisions regarding hiring or reassignment of staff to key management positions.

## Communication and Documentation

### Findings

1. BCWS provided documentation indicating provision of harassment training for management and union staff.
2. BCWS management has not documented activity related to major decisions with significant cost impacts, such as the sale of used equipment with remaining useful life (Collection Operations).

### Recommendations

1. BCWS staff should be more proactive in communicating with the City, and should actively work to keep City staff apprised of important issues in a timely manner, anticipating problems and minimizing surprises.
2. BCWS staff should document formats, processes, and procedures including for data generation, management, access, and retention; verbal, written and electronic communications; and, complaint and work order management and resolution (Collection Operations and Customer Service).
3. BCWS management should fully document activity related to major decisions such as the sale of used equipment with remaining useful life (Collection Operations).

## FoodCycle Cart Rollout

While the new FoodCycle program is working effectively now, initial provision of service was problematic. Based on our interviews, City and BCWS staff have different understandings of how the cart delivery and removal process worked, and why. A related issue, cart labeling and inventory, is discussed in Collection Operations.

According to City staff:

1. Of the five new service roll-outs completed by BCWS, this was the first with substantial problems.
2. City staff were diverted from focusing on crucial, time-sensitive messaging to residents regarding the new service by the need to intervene with BCWS' management to address serious service disruptions created by BCWS' cart delivery contractor, and especially its non-performing cart removal subcontractor.

3. The actions of the cart delivery contractor and cart removal subcontractor were not properly coordinated and that BCWS management did not closely monitor their activities. BCWS management did not know of the unscheduled cart removals until it began hearing from customers, and that until informed by City staff, was unaware that the cart removal subcontractor was using a street adjacent to a public park rather than BCWS' corporation yard to disassemble the old carts. City staff finally directed BCWS to have the subcontractor cease its activities and to have them immediately replaced.
4. The cart removal subcontractor was compensated with a flat, per-cart payment that provided an incentive for carts to be removed from outside of the daily planned area, including areas in which new carts were not yet scheduled to be delivered.
5. BCWS did not have a contingency plan to anticipate and address difficulties in cart delivery and removal.

According to BCWS management:

1. The City staggered the cart delivery and removal process over several weeks to reduce customer disruption, but that it would have been preferable to use a standard one week roll-out such as BCWS has used in past. With a one week process for delivery and removal, all Monday routes would have been addressed on one Monday, etc. The next week could then have been used to address any cart delivery and removal issues.
2. BCWS' route supervisors were in the field and had the phone numbers for lead contractor and subcontractor staff. The role of the route supervisors was not to "oversee so much as to assist as needed", and in particular in helping contractor and subcontractor staff identify the areas in which cart delivery and removal were to be occurring. However, each firm had multiple crews, and the route supervisors could not "cover them all at once".
3. City and BCWS staff heard simultaneously from customers about unscheduled cart removals.
4. BCWS' GM stopped disassembly of old carts adjacent to the public park "as soon as it was brought to my attention" by City staff.
5. The cart removal subcontractor was paid a flat per-cart rate, which is standard practice. There was no incentive to collect the carts more quickly, or in a different order than planned.
6. For future cart roll-outs, BCWS intends to require that the cart delivery contractor use its own staff for cart removal rather than allowing that activity to be subcontracted.

## Findings

1. The level of route supervision was inadequate to ensure that the contractor and subcontractor performed as required. BCWS management was unaware of cart removal problems until informed by customers and the City.
2. We did not evaluate how the cart removal subcontractor compensated its own staff.

## Recommendations

1. Prior to finalizing plans for any future service roll-out, BCWS should develop a detailed plan for all aspects of implementation for review and comment by City staff. The plan should identify all activities that require coordination with, or approval from the City.

2. City staff should review and comment on any proposed BCWS contractors and contracts related to significant future program roll-outs.

### **Management and Supervisory Staffing Levels and Responsibilities**

City staff expressed a lack of clarity regarding the roles and responsibilities of BCWS management and staff. HF&H requested BCWS provide a management organization chart with accompanying job descriptions for key staff. During subsequent management staff interviews, supervisory and reporting roles were discussed in greater detail.

### **Findings**

1. BCWS' management and supervisory staffing levels are reasonable for the size and type of the collection operation.
2. Job descriptions were provided by BCWS upon receipt of our request. One supervisor had not seen their own description prior to discussing it during an interview with the Review team. One Board member and officer voluntarily provided a more detailed job description for their role.

### **Recommendations**

1. BCWS should provide detailed job descriptions, and additional related information as requested, and should submit a revised organization chart, updated job descriptions, and related information no less than annually. [See related discussion of route supervision under Collection Operations.]
2. City staff should have a clear and current understanding of the roles, responsibilities, and reporting functions for all BCWS management and supervisory staff. City and BCWS management should review the organization chart and the job descriptions together.

### **Compliance with the Agreement**

While the Review does not include a task specific to assessing compliance with the agreement, we identified several important areas in which BCWS is not in compliance, or in strict compliance with relation to issues addressed in the Review. The following addresses the agreement itself, BCWS compliance with the agreement, and penalties for failure to comply.

### **Findings**

1. The agreement requires all BCWS staff receive periodic training on the requirements of the agreement. Based on interviews with BCWS management and staff, staff are not consistently trained on the requirements of the agreement. Most importantly, customer service staff do not receive this training.
2. BCWS is not in compliance, or may be in partial compliance, with requirements to sequence residential collection routes (Collection Operations), submit route maps (Collection Operations), complete scheduled bin maintenance (Collection Operations), and train customer service staff regarding the provisions of the agreement (Customer Service).
3. City assessment of liquidated damages has been quite small in recent years, for instance just \$1,200 from June 2017 through September 2018. On October 29, 2018, the City sent BCWS a letter indicating its intent to assess damages totaling \$7,800 for missed collection of 26 recycling carts, most of which were on the same street (Collection Operations). BCWS' GM states that this was the result of a new driver missing part of the route.

## Recommendations

1. The current agreement is structured in a manner that can make it difficult to find specific provisions. Thus we suggest City staff prepare a summary of the key provisions of the current agreement in a simple, tabular form, with references to detailed text where needed. City and BCWS staff should use the same summary as the primary reference to the provisions of the agreement.
2. BCWS should identify for City review and discussion any areas of the agreement, including those discussed in the Review, for which it believes it is in compliance with the spirit, if not the letter of the agreement.
3. BCWS should identify the key provisions of the agreement it believes BCWS staff should be trained in, and develop for City review and approval a written protocol for ensuring that such trainings are conducted and documented.
4. Should the Council choose to enter into single source negotiations with BCWS for a new agreement, City staff should provide the company an opportunity to review and provide comment on draft City changes to the agreement.

## Quality Control for BCWS Financial Submittals

The City annually adjusts BCWS' compensation as provided in the agreement. BCWS staff prepare and submit a compensation adjustment package to document allowable costs, resulting compensation, and related information in support of the adjustment. The following findings and recommendations are based on interviews with BCWS' Chief Financial Officer (CFO), GM, and Controller, as well as with City and HF&H staff involved in review of BCWS' annual compensation adjustment submittal.

## Findings

1. BCWS' compensation package submittal is the basis for determining company compensation, currently about \$22 million annually, and is the company's most important financial submittal to the City.
2. BCWS' compensation represents approximately 40 percent of the City's total costs to provide solid waste related services, and of solid waste rates paid by City residents and businesses.
3. The Controller prepares the package primarily on her own, with some assistance from an accounting firm. This activity is in addition to her day-to-day fiscal responsibilities.
4. BCWS does not have sufficient backup staff, should the Controller be unavailable to prepare the submittal or to respond to questions during review of the package.
5. BCWS' annual compensation adjustment packages are often found to contain mathematical errors
6. BCWS staff do not have a clear, independent, and documented process for ensuring the accuracy of the data and the mathematical formulas contained in the submittal. The GM stated he reviews the packages and checks formulas. The CFO stated that he assumes quality control has been completed before he reviews the package.



## Recommendations

1. BCWS should ensure adequacy of trained staff to assist the Controller during preparation of the package, to prepare the package should the Controller be unavailable, and to assist the Controller with other duties during review of the package.
2. The Controller should receive additional training or other assistance as needed to help ensure preparation of error-free submittals to the City.
3. BCWS should document practices to ensure accuracy of all future financial submittals.

## 3.2 Collection Operations

### Scope of Work

- A. Review Driver Hiring - Review driver hiring practices, assess potential cost and safety impacts of projected increased use of overtime, and compare the number of spare drivers to best industry practice.
- B. Assess Number and Type of Routes – Review the number and type of routes relative to those of similar operations.
- C. Collection Quality - Review quality of collection on randomly selected routes by observing placement of containers following collection, and observing the condition of carts and bins. Review and document company procedures for addressing container damage, repair and replacement issues.
- D. Inventory Collection Equipment – Review the remaining useful life trucks and containers in anticipation of the end of the current agreement. Compare the ratio of spare trucks to regular trucks relative to best industry practice.
- E. Assess Disposition of Old Equipment – Assess company practice for disposition of old equipment relative to the goal of maximizing ratepayer benefit.
- F. Review Maintenance and Safety – Compare level of maintenance supervision and staffing to that of similar operations. Assess average percent of time trucks are out of service relative to best practices. Review adequacy of preventive maintenance practices. Review safety record as measured by state rates for workers compensation insurance coverage.

The analysis of collection operations, and the resulting findings and recommendations, are based on review of information requested from BCWS, interviews with BCWS and City utilities staff, comparative industry productivity data, route observations, and onsite observations at BCWS. Findings and recommendations for this task are addressed below, grouped by topic.

### Staffing - Driver Hiring and Retention

With a strong economy and high cost of living, finding and retaining qualified drivers is a systemic problem for collection contractors. Inadequate staffing can result in increased overtime, with added cost and potentially reduced safety.

**Findings**

1. BCWS management state they have no difficulty in hiring drivers, and have a list of applications on file to fill vacancies as needed.
2. In general, BCWS appears to have no significant difficulty retaining drivers; 77 percent of drivers have a tenure greater than 10 years with BCWS, and the average tenure of drivers is in excess of 17 years.
3. City staff noted that some new drivers do not stay with the company very long. BCWS states that new drivers may find the job “is not for them”. Some drivers anticipate being assigned immediately to automated routes, in which the drivers generally do not need to leave the truck. These drivers may be unhappy to find that with low seniority, they are initially assigned to multi-family routes which require spending significant time out of the truck positioning wheeled bins for collection.
4. City staff and BCWS management have different perspectives on whether, and how residential routes are “sequenced”, with collection occurring in a specified and consistent order as required by the agreement. This issue is discussed below under Routing.

**Recommendations**

Recommendations related to the fourth finding are provided under Routing. We have no other recommendations at this time.

**Staffing - Driver Training**

A strong driver training program is important for driver retention, collection efficiency, and safety.

**Findings**

BCWS provided documentation to demonstrate use of training process. Drivers are trained and certified for one type of truck and route at a time. During this period they spend 30 days on-route with a trainer before driving the route on their own. At the end of each day, a route supervisor discusses that day's training with the perspective driver to obtain an independent understanding of how training is progressing.

**Recommendations**

We have no recommendations at this time.

**Staffing - Driver Casual Pool and Overtime**

Collection operations require a pool of spare or casual drivers to fill in for sick and vacationing drivers, and to meet spikes in demand for roll-off or other subscription services.

**Findings**

1. BCWS has a relatively high number of drivers designated as “casual”. However, a number of drivers designated as “casual” worked more than 2,080 hours per year and in some cases had substantial amounts of overtime, presumably due to taking weekend shifts. If these drivers are instead classified as “regular”, the casual pool is significantly smaller, with the number of casual drivers being low relative to the mean and median for the industry.

2. Overtime data provided in BCWS' recent annual compensation adjustment packages shows consistent growth in overtime cost. BCWS states that higher levels of overtime are primarily on residential recycling routes, which are experiencing growth in the number of customer set-outs and in tonnage, and are semi-automated in nature; drivers must manually dump cardboard, oil, and batteries. This issue is discussed below with regard to Routing. BCWS states that having drivers on disability is also contributing to overtime.

### Recommendations

1. The City should discuss regular and casual pool designations with BCWS management to ensure all parties have the same understanding of how BCWS assigns casual drivers.
2. The City should continue to monitor the use of overtime during annual review of compensation.
3. Should the City decide to expand residential recycling routes, it should monitor the resulting impact on use of the casual pool and on overtime hours.

### Routing - Route Mapping and Sequencing

Field observations during the 2004 performance review resulted in a recommendation to require residential route sequencing to maximize safety by minimizing left turns and reversing. Routing software to maximize efficiency and safety was then coming into wide use. The current agreement requires BCWS develop route maps, and sequence the order of collection on residential routes using route software to optimize safety and efficiency.

### Findings

1. BCWS provided residential maps that outline the area for collection without specifying the sequence by which streets should be collected. BCWS provided a single City-wide handwritten commercial route map.
2. BCWS has not regularly generated, or submitted updated route maps to the City as required by the agreement. BCWS states that given data requirements route maps must be generated by the City, not the company.
3. BCWS is not sequencing residential routes in full compliance with the provisions of the agreement. BCWS states that it tested route sequencing software several years ago, but found that routes were better prepared by creating maps based on driver and supervisor knowledge, using Air-Trak and ongoing driver feedback. Several years ago, BCWS management created hand-drawn maps with arrows to show sequencing and right turns, to minimize backing, left turns, and U-turns, where possible. Each driver had input in creating the maps.

### Recommendations

1. City staff should review BCWS' current residential route sequencing practices in consultation with BCWS to determine if they are sufficient or need revision. It may be advantageous for morale to allow some flexibility for drivers to alter routes, as well as provide some variation in ways to avoid high use residential areas, such as schools at opening and closing. Any changes to sequencing procedures should reference the agreement language, and be documented in writing.
2. BCWS should train drivers as necessary to meet City-approved procedures for sequencing, and retrain on an approved schedule.

### **Routing - Efficiency of Collection**

Efficiency of collection is in part a function of having a sufficient, but not excessive, number of routes for each type of service such as residential recycling and commercial organics. Field observations during the 2004 review resulted in a recommendation to eliminate two routes, which was adopted by the City. Comparing the number of accounts per route to that of other collection operations provides a high-level means of assessing efficiency.

#### **Findings**

1. A sampling of BCWS' residential routes indicate level of productivity that is a slightly higher than the average, and ten percent higher than the median.
2. Accounts on BCWS' commercial routes are about 30 percent higher than the average and more than double the median. The City has recently approved expanding commercial organics collection to additional days.

#### **Recommendations**

We have no recommendations at this time.

### **Routing - Route Rebalancing; Addition of Routes**

Over time, routing efficiency is affected by factors such as population and commercial growth, changes in services and increased participation in recycling and organics programs. As a result, there is a need to balance route size. These types of changes can ultimately lead to the need for added routes.

#### **Findings**

1. BCWS documented a sequential process it uses to evaluate whether it needs to request City approval to add one or more routes. A first step is assessing to what extent existing routes can be rebalanced with small changes in the number of accounts. BCWS recently used this process to obtain approval for expanded commercial organics collection. BCWS is now using this process to request an expansion of residential recycling routes.
2. Residential route boundaries have not been significantly revised in a number of years.

#### **Recommendations**

1. BCWS should continue to use best practices to rebalance routes day-to-day and over the longer term.
2. The City should review BCWS' process for documenting any request for City authorization for additional routes to ensure the information as provided fully addresses the City's evaluation needs. As part of the evaluation, the City should compare proposed route efficiencies with industry data, with a focus on total container lifts.
3. BCWS and the City should conduct an assessment of whether current route boundaries need revision given substantial changes in current and planned residential housing, mixed-use developments, and campus complexes in Sunnyvale. A key objective in doing so should be to avoid, or to minimize, changing collection days for residential customers.

## Routing - Route Supervision

Route supervisors perform a key function by monitoring collection activity, and serving as a bridge between collection operations on the street and the customer service activities performed by BCWS and City staff. The route supervisors perform a range of activities such as monitoring driver safety and efficiency, addressing customer complaints including missed pickups, ensuring work orders are completed, and managing equipment breakdowns.

### Findings

1. BCWS has two route supervisors; the agreement requires a minimum of one. The agreement requires that the route supervisors spend a minimum of 50 percent of their time in the field. The two route supervisors have staggered shifts in order to cover a twelve hour day from early morning to late afternoon, with an overlap at mid-day.
2. City staff stated they would like to be able to access route supervisor(s) in the field in order to better address complaints in real-time.

### Recommendation

BCWS and City staff should meet to determine how to best address City's interest in having real-time information regarding route supervisor location and activity.

## Collection Quality

To assess collection quality and container conditions, HF&H staff conducted post-collection spot observations over two days. The field work focused primarily on residential routes, with observations for portions of multifamily and commercial routes. The observations were anecdotal in nature and involved spot sampling of a number of routes to provide a general sense of post-collection conditions, to note good practices, and to identify areas for potential improvement. The observations did not result in data that allows for comparison to totals, such as the percentage of carts with open lids relative to all carts on the route, and were not intended to provide statistically significant results.

HF&H staff observed post-collection conditions (such as placement of containers, open lids, and knocked over carts) as well as maintenance issues (such as broken or missing lids, graffiti, and lack of paint). At City staff request, HF&H staff also noted whether there were still old black carts (solid waste only) left on the residential routes. All black carts were to have been replaced by split carts for solid waste and food scraps as part of the FoodCycle rollout; drivers are supposed to note any remaining black carts as the first step in ensuring they are switched out for split carts.

### Findings

1. With regard to post-collection placement of containers, containers generally appeared to be near where they had been placed for collection.
2. The most common issue observed in the residential sector was carts with open lids with 100 instances, followed by 19 instances of carts on their sides. By comparison, the agreement provides for assessment of liquidated damages for in excess of fifteen instances per year, per customer for these types of infractions.

3. There were seven observed instances of litter that appeared to be left following collection. The agreement provides for assessment of liquidated damages for in excess of ten instances per year, per customer for litter.
4. Most carts appeared to be in relatively good condition.
5. Most bins appeared to be in excellent condition, with recent coats of paint.
6. There were five instances of residential carts with broken or missing lids.
7. There were two instances in which multifamily bins visibly needed paint or repairs.

### Recommendations

1. Route supervisors should communicate and reinforce with drivers the need to meet the collection standards specified in the agreement.
2. BCWS needs to take further steps to ensure drivers report the need for cart replacements for broken or missing lids, and bin painting and repair needs.
3. Route supervisors should directly monitor routes to ensure driver compliance with collection quality standards.

### Container Maintenance

The container maintenance review focused on multifamily and commercial bins, which are generally from one to 8 cubic yards in size.

### Findings

1. The agreement provides a high standard for bin appearance. Most bins appear to be recently painted and in good repair. However, we observed several instances of bins in poor condition.
2. Full compliance with the container maintenance requirements of the agreement requires a proactive process for monitoring bin painting and repair. The process as documented by BCWS is primarily reactive, based on receipt of customer complaints and reliance on reports from drivers.
3. Based on our field observations, drivers are not consistently reporting carts that need lid replacement and bins requiring painting or repair.

### Recommendations

1. City staff should review the specific procedures for monitoring and completing bin maintenance contained in the agreement to determine whether they meet current City needs.
2. BCWS should develop for City review, detailed, proactive procedures for monitoring and completing bin maintenance as required by the agreement.
3. Route supervisors should communicate and reinforce with drivers the need to report cart and bin painting and repair needs.
4. Route supervisors should monitor routes to ensure reporting of maintenance and repair needs.

## Equipment Inventory

This Review task entailed reviewing BCWS' stock of in-place, spare, and inventoried trucks and containers, any extant purchase orders, as well as any plans to acquire additional trucks, containers or other equipment prior to the end of the current agreement on July 1, 2021. One objective of the task is to document the remaining undepreciated life of applicable equipment with relation to the City's right to direct BCWS to make equipment available for sale at book value at the end of the current agreement. We also compared the ratio of spare trucks to regular trucks, relative to best industry practice and reviewed a FoodCycle-related issue regarding cart labeling and inventory tracking.

BCWS provided the following explanation regarding labeling and inventory issues related to FoodCycle carts. The ID labels on a group of carts were labeled incorrectly, in a way that was not compatible with the barcode scanners that were used by the delivery crews. To facilitate cart delivery, these carts were relabeled with a temporary paper barcode sticker to allow the ID to be correctly scanned and associated with an address. The incorrect molded numbers still referenced the correct cart size for inventory purposes. Once the bulk deliveries were complete, either number, molded or decal, could be used for inventory and billing purposes, as both numbers reference which size cart the resident has. BCWS completed several site checks to confirm serial numbers and associated cart sizes, after the initial deliveries were complete.

## Findings

1. BCWS documented undepreciated value as of July 1, 2021 of \$4.1 million for existing trucks, and \$2.9 million related to planned purchase of five new trucks during FY 2019-20.
2. BCWS documented undepreciated value as of July 1, 2021 of \$4.9 million for existing containers, and \$460,000 of projected undepreciated value related to planned purchases of new containers.
3. BCWS' ratio of spare trucks to regular trucks, is relatively high compared to industry practice. Several factors may contribute to this. First, BCWS' GM noted that converting from yardwaste trucks to more specialized split compartment FoodCycle trucks eliminated the ability to use yardwaste trucks as spares for garbage service, and vice versa. Second, near the end of a contract term, such as is the case for BCWS, it is common to keep older trucks in lieu of buying new trucks. This is generally advantageous for the City.
4. Regarding FoodCycle cart inventory tracking, BCWS notes that the molded number and the decal are not linked, each customer is only allowed one garbage cart, and the City system does not allow duplicate numbers. Thus, either number showing the correct size will show the correct inventory. The linking of numbers can be accomplished by programming an RFID with either number.

## Recommendations

1. The City should review BCWS' plans for maintenance, repairs, and life extending procedures for existing trucks, including the degree to which such expenses should be amortized.
2. The City should review BCWS' plans for purchase of five new trucks as part of evaluating the compensation request for FY 2019-20.
3. City staff should review FoodCycle cart inventory tracking with BCWS staff to ensure the process as described by BCWS is workable.



### Disposition of Old Equipment

The scope of work for the Review calls for analysis of company practice for disposition of old equipment relative to the goal of maximizing ratepayer benefit. Subsequent to finalizing the scope of work for the Review, City staff separately requested that HF&H conduct a more detailed analysis specific to this issue. The analysis, and resulting findings and recommendations are contained in a recent HF&H memo provided under separate cover for City review.

### Maintenance and Safety

HF&H compared the reported level of maintenance supervision and staffing to that of similar operations, reviewed BCWS' preventive maintenance procedures, and reviewed BCWS' recent safety record as measured by state rates for workers compensation insurance coverage. BCWS' collection and SMaRT Station operations are covered by a single workers compensation policy.

### Findings

1. BCWS' maintenance supervision relative to the number of route trucks is low, while maintenance staffing relative to the number of route trucks is at or above the average and median for other operations.
2. BCWS has documented procedures for conducting and tracking preventive and routine maintenance.
3. BCWS has a good worker injury record resulting in relatively low premiums for state workers compensation insurance. The insurance covers both the collection and the SMaRT Station operations, with quite different types of work – collection truck driving and material recovery sorters.
4. BCWS documented property damages claims as follows: for FY 2018/19, eight incidents with two claims totaling less than \$6,000; for FY 2017/18, 29 claims with 17 settled for a total of \$115,000. Total claims for FY 2016/17 were about \$30,000, and for FY 2015/16 about \$55,000.

### Recommendation

BCWS should suggest a means for separately tracking and worker injury rates for the collection and the SMaRT Station operations.

## 3.3 Customer Service

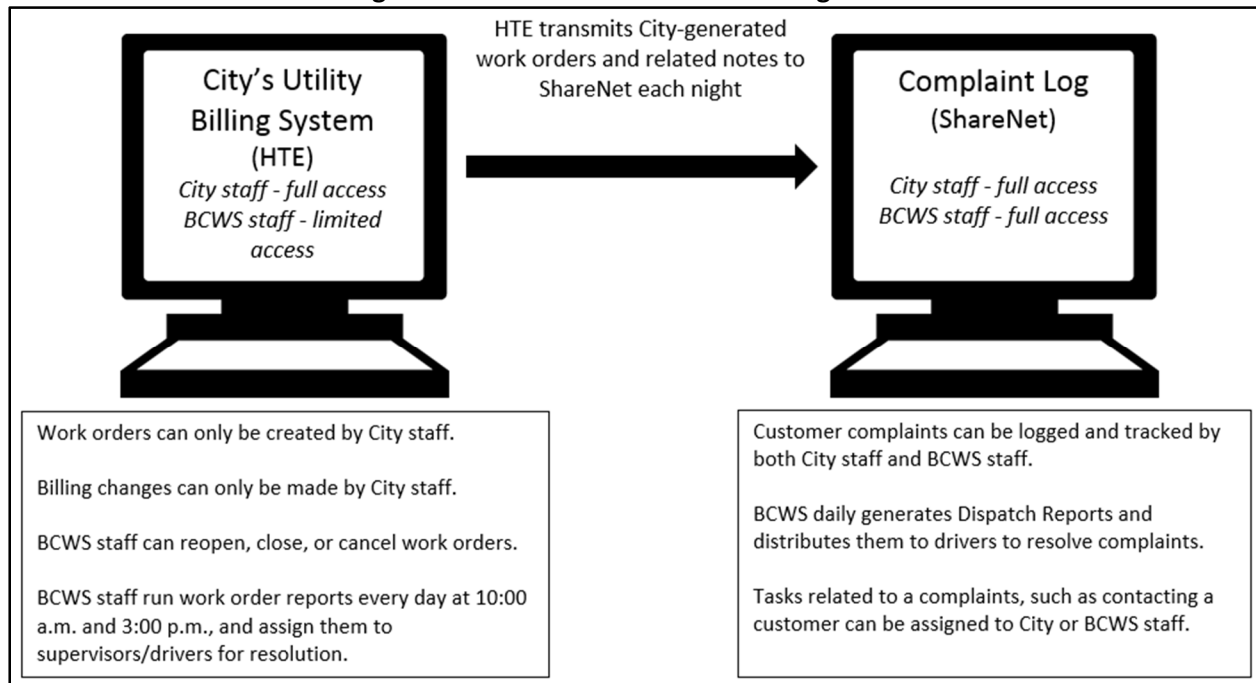
### Scope of Work

- A. Review Complaint Management Process – Review complaint management process and randomly selected complaints/requests to determine if complaints were properly resolved and documented. Assess customer satisfaction over time.
- B. Review Work Order Management - Interview City utility billing and BCWS staff; summarize BCWS process for ensuring work orders (e.g. customer request for change in cart size) are completed and properly documented.
- C. Review Customer Service Training - Review training of CSRs (customer service representatives) relative to agreement standards and company procedures.



The analysis of customer service, and the resulting findings and recommendations are based on review of information requested from BCWS and the City Finance Department's utilities staff, interviews with BCWS and City utilities staff, and onsite observations at BCWS. Findings and recommendations for this task are addressed below, grouped by topic. Figure 1 provides a simplified picture of data flows and responsibilities for reference in reviewing the customer service issues discussed below.

**Figure 1: Customer Service Data Management**



## Complaint Management

HF&H observed use of the complaint data management system to develop an understanding of the complaint management process used by BCWS and the City. HF&H reviewed BCWS complaint logs, and tested resolution of specific complaints to verify resolution within the allowed timeframes, and to determine whether the City can verify resolution.

## Findings

1. HF&H reviewed a sample of 15 randomly selected customer complaints to test whether, and how the complaints were resolved. Based on the provided documentation, we were only able to verify that six of 15 (40 percent) of the sampled complaints were resolved.
2. For complaints that involve transmitting information to, or from drivers and/or route supervisors BCWS does not consistently document information in a manner that would be necessary to ensure such complaints are resolved. Verbal communication to drivers without electronic documentation is inadequate. When written documentation is available, it is filed in hard copy but is not maintained in digital form. As a result, the City has no direct means to verify completion of these types of complaints.
3. BCWS' GM noted that the "customer is always right" and that residential complaints such as missed pickups are addressed by the company without question. BCWS provides Airtrak data and video to City staff to verify provision of service, as needed.

**Recommendations**

1. City and BCWS staff should review the complaint resolution process, and modify as necessary to ensure that resolution can be independently verified in a manner that meets City needs and the requirements of the agreement.
2. BCWS should establish a consistent methodology to document that a complaint has been resolved and the elapsed time to do so for instances in which the driver is verbally notified of a complaint.
3. BCWS should maintain digital documentation of written materials to verify complaints have been resolved. This could be easily accomplished by scanning and entering them in the system.
4. BCWS staff should fully document, and be more transparent regarding sharing customer service procedures related to complaint management and resolution with City staff.
5. BCWS staff should be proactive in identifying any areas related to complaint management and resolution in which its customer service staff need information or assistance from City staff.

**Customer Satisfaction**

HF&H analyzed the number of complaints for the months of July 2016, October 2017, and April 2018 to determine whether complaints increased, decreased, or stayed consistent over time. The three months were selected to be prior to, during, and well after the FoodCycle program roll-out in September 2017.

**Findings**

1. Total complaints more than doubled during the FoodCycle roll-out, from 157 complaints in July 2016 to 378 complaints in October of 2017. Customer satisfaction, as measured by the number of complaints is returning to historic levels, with total 208 complaints in April 2018. The percentage of complaints requiring resolution in the field, such as missed pickups, is also moving towards the 2016 level. Complaints requiring resolution in the field totaled 130 in July 2016, 323 in October 2017, and 165 in April 2018.
2. BCWS customer service representatives classify the priority of incoming complaints in four categories from “low” to “urgent”. The City uses a similar, but not identical approach. Subjective measures are subject to individual interpretation.

**Recommendations**

City and BCWS staff should review the priority categories used to classify complaints, to determine if they are being used in an appropriate and consistent manner by all parties.

**Completion of Work Orders**

City utility billing staff generate work orders daily for implementation by BCWS, addressing service-related issues such as providing service to a new customer or changing cart size for an existing customer. Work orders are primarily used to direct BCWS to provide customers with new services or changes to service. Work orders must be addressed within the timeframes required by the agreement, and City staff must be able to verify completion in a timely manner in order to commence or modify customer billing as appropriate.

**Findings**

1. BCWS staff assign and complete work orders in a consistent manner.

2. We were able to verify that a sample of ten work orders were all resolved within five working days.
3. BCWS staff generate reports of open work orders every six months to identify work orders that have yet to be resolved.

### **Recommendations**

1. BCWS staff should generate reports of open work orders on a more frequent basis, such as monthly, so City staff are updated more frequently on the number and status of work orders awaiting resolution.
2. BCWS staff should fully document, and be more transparent regarding sharing customer service procedures related to work order management and resolution with City staff.
3. BCWS staff should be proactive in identifying any areas related to work orders in which its customer service staff need information or assistance from City staff.

### **Customer Service Training**

Customer service representatives (CSRs) must provide customers with consistent and accurate information regarding services and billing information.

### **Findings**

1. BCWS does not provide structured customer service training to CSRs, as required by the agreement.
2. One BCWS CSR stated that CSR's do not review the provisions of the agreement on a regular basis. The agreement contains broad language regarding "training on the agreement", although many aspects of the agreement are not relevant to CSR information needs.

### **Recommendations**

1. City staff should share City training materials and methods with BCWS staff to ensure CSRs from BCWS and the City have the same knowledge of the agreement, and are logging information in a consistent manner.
2. BCWS customer service staff should meet on a regular and frequent basis to discuss relevant service and billing issues and to ensure consistency in messaging.
3. City and BCWS staff should agree on which portions of the agreement must be covered in CSR trainings.

## **3.4 Regulatory Compliance**

### **Scope of Work**

The scope of work for this task includes review of compliance with key local, county and state regulatory and permitting requirements. The Review Team requested verification from BCWS of permit/regulatory compliance in eight areas, such as business licensing, driver licensing and medical certification, truck safety, fire permitting, and hazardous materials management. The Review Team randomly selected six of the eight areas for review. We were able to verify compliance for five of the six areas based on review of compliance documents, inspection reports and related information, and interviews of regulatory agency

staff. We were awaiting confirmation of compliance for the CNG facility as the final draft report was completed.

**Findings**

BCWS is in compliance with requirements in the five sampled regulatory areas for which we received adequate documentation.

**Recommendations**

We have no recommendations at this time.