

T&amp;E AGENDA: 12-03-07

ITEM: 6



## Memorandum

**TO:** TRANSPORTATION AND ENVIRONMENT COMMITTEE

**FROM:** John Stufflebean

**SUBJECT:** COMMERCIAL SOLID WASTE SYSTEM REDESIGN AND ENHANCEMENT OPTIONS

**DATE:** 11-15-07

Approved

Date

11/20/07

### RECOMMENDATION

1. Accept this report on Commercial Solid Waste System Redesign and Enhancement Options; and
2. Direct staff to return to the Transportation and Environment Committee in June of 2008 with the results of the stakeholder input process and re-design options for Committee review.

### OUTCOME

Approval of this recommendation will provide an opportunity to enhance the current commercial solid waste systems to increase recycling participation, offer more service options, improve customer service, and potentially reduce vehicle traffic and emissions. These initiatives support the City's Green Vision goals # 5 and #7, the City's Zero Waste goal, and Urban Accords Action # 3, #4, and #6. Recycling more of the City's commercial solid waste stream will be fundamental for reaching the City's 75% diversion goal by 2013.

### BACKGROUND

Over the past six months, the City has adopted aggressive environmental goals, including reductions in greenhouse gas emissions, zero waste, and 100% landfill diversion. In order to achieve these goals, significant changes are needed to the current commercial solid waste management system. The Environmental Services Department (ESD) has identified increased commercial and multifamily recycling as an essential part of achieving 75% diversion by 2013, and ultimately, Zero Waste by 2022.

The City implemented a non-exclusive franchise system in 1995 for collecting commercial solid waste (garbage and recyclables). In this system, hauling companies may apply for a Commercial Solid Waste and Recyclables Collection Franchise (CSW Franchise) and compete with each other on a customer-by-customer basis to provide solid waste and commingled recyclables

collection services to San José businesses. There are currently 24 haulers in San José operating with a CSW Franchise. The City provides no compensation to the franchised haulers as the haulers bill their customers directly. Service rates are agreed upon between the hauler and the customer. The City does not regulate these rates. Franchised haulers pay a franchise fee to the City based on the volume of garbage collected. They also collect source reduction and recycling fees (AB939 fees) from the waste generators and remit those fees to the City. The current franchised haulers were notified in May of 2001 that the City may provide or will contract for exclusive solid waste collection services for the non-residential sector after July 2006. State law requires the City to notify the franchised haulers five years in advance of implementing any exclusive franchise(s).

On February 6, 2007, Council approved an agreement with HF&H Consultants, LLC (HF&H) to assist the City with identifying options for redesigning the CSW management system, with the goal of implementing these changes by July 1, 2010. The first phase of this effort is the attached report which provides an assessment of the City's current Commercial Solid Waste Management system and establishes a framework for further evaluation of system redesign options. To support this effort, ESD and HF&H have surveyed other jurisdictions that have implemented different systems for commercial solid waste collection that the City may want to consider; a description of these systems is also included in the report.

### ANALYSIS

The analysis of the CSW Franchise system redesign will focus on changes to the existing system that support Zero Waste and the City's Green Vision goals of increasing solid waste diversion and reducing the collection system's environmental impacts. In addition, ESD is examining the opportunities to improve the quality of commercial collection services provided to the business community and to stabilize rates. Preliminary findings from HF&H are described in detail in the attached report "Commercial Redesign White Paper." Key findings are as follows:

- Significant opportunities exist to increase diversion of materials from the commercial waste stream;
- The environmental impact of the commercial program, including greenhouse gas emissions, may be reduced through more efficient routing and use of lower emission vehicles;
- Customer service and hauler compliance to franchise agreement and municipal code provisions is inconsistent and difficult to ensure enforce in the current system; and
- There are opportunities to create more rate equity among the customers and to provide economic incentives for waste diversion.

### Status of Current Non-exclusive Collection System:

ESD staff and HF&H conducted a detailed survey and analysis of the existing non exclusive system to determine the current diversion levels, what solid waste activities are occurring within

the downtown area, and the market share held by franchised haulers in the downtown area. This analysis is provided in the attached report. Some key elements include:

- When compared with the 52% diversion rate by City's Single-Family Recycle Plus program, the Commercial sector achieved 10.5% recycling diversion rate excluding construction and demolition (C&D) waste during 2006-2007.
- Approximately 75% of the annual solid waste volume is hauled in front-load collection vehicles with the remaining 25% being hauled in roll-off boxes. Front-load services are provided by only four haulers: Allied Waste, Stevens Creek Disposal & Recycling, GreenWaste Recovery, and GT Waste. All 24 haulers provide roll-off box services.
- 2 of the 24 franchised haulers, Allied Waste and Stevens Creek Disposal & Recycling, service 87% of the commercial accounts capturing 82% of the solid waste tonnage. The market share by the third and fourth largest haulers, GT Waste and GreenWaste Recovery, represents 7% and 5% respectively.
- The largest two haulers, Allied Waste and Stevens Creek Disposal & Recycling recycled only 7% to 8% of the total waste tonnage they collected. The remaining two front-load service providers, GreenWaste Recovery and GT Waste, had higher recycling rate, 46% and 53.6% respectively.
- Hauler service rates for commercial customers varied widely and inconsistently, and do not seem to be tied to customer size, ease of service, and/or recycling participation.
- 40 to 60 front-load collection vehicles collect solid waste, recyclables, and organic materials Citywide. 15 to 30 roll-off vehicles collect solid waste, recyclables, and C&D waste city-wide.
- Because all non-exclusive haulers collect Citywide, a large number of relatively older vehicle fleets are deployed inefficiently, resulting in adverse environmental impacts, including vehicle emissions, traffic, noise, and public safety. Quality of service and customer satisfaction is difficult to measure due to the large number of companies operating in commercial solid waste collections and the lack of information provided to the City.

#### Commercial Solid Waste Collection Systems in Similar Jurisdictions:

In order to develop various options for the City's commercial solid waste collection system, HF&H identified 19 large cities and/or jurisdictions. ESD staff selected six jurisdictions (Austin, TX; Charlotte, NC; Portland, OR; San Francisco, CA; Stockton, CA; and Seattle, WA) for a more detailed study based on their size, location, and diversity of collections systems. HF&H are actively engaged in studying commercial solid waste systems in these five comparable municipalities to develop system redesign options for the City. Detailed results will be available by the end of 2007. A brief description of the commercial solid waste collections systems used in these jurisdictions is outlined in Table 1.

Table-1 Collection Systems in Other Jurisdictions

Options	Description	City Being Surveyed
1	Permit system throughout the City with multiple collection companies; customers required to recycle by city ordinance	Portland, OR
2	One City-wide exclusive permit for all materials except C&D. No mandatory recycling requirement for customers.	San Francisco, CA
3	One exclusive franchise agreement for the downtown for all materials and a non-exclusive permit system for the remaining portion of the City. Recycling required for businesses with 100 or more employees by city ordinance.	Austin, TX.
4	Multiple exclusive franchise agreements for all materials; each hauler assigned to different area of the city. Businesses required to recycle by city ordinance.	Charlotte, NC Seattle, WA
5	Exclusive franchise agreements assigning two or three haulers the right to collect different material type (e.g., solid waste, recyclables, organics) throughout the City. No mandatory recycling requirement.	Central Contra Costa Solid Waste Authority* (Similar to City's current residential collection system)

\* This jurisdiction is not included in the detailed study, but HF&H had readily available information.

In evaluating potential changes to the CSW collection system, there are a number of policy issues to consider:

- Requirements on Businesses (waste generators) - The City of San Diego passed an ordinance in October 2007 requiring its entire commercial sector to implement specific and aggressive recycling programs at their facilities. Under this mandate, facility owners/operators are required to provide on-site recycling collection services for cardboard, plastic bottles and jars, paper, newspaper, metal and glass containers, wood pallets, scrap metal, and to provide recycling containers, signage, and an employee education program. The mandate will be enacted using a scaled approach, by focusing first on the largest businesses, with the goal of including all businesses by 2010. San Diego's goal is to improve its recycling rate by establishing requirements on the business that generate the waste instead of the haulers that collect and process the waste. Currently, San José does not require any recycling participation by its businesses.
- Requirements on Solid Waste Haulers – San Francisco uses a single franchised hauler throughout the city and requires the hauler to maintain certain recycling rates. Currently, San José's commercial franchise agreements do not require any recycling performance

standard. San José's current system was designed to provide the franchised haulers incentives to provide comprehensive recycling services to their customers. By restructuring its current franchise system, the City has an opportunity to increase the diversion of recyclables by requiring haulers to achieve a designated recycling target.

- Recycling Processing Infrastructure - It is crucial that the City provide adequate infrastructure for recycling. Commercial solid waste collectors operating in San José are all limited by the permitted capacity and availability of local facilities to process the material. The facilities handling food waste/ organic waste composting, and commingled recyclables recovery facilities are particularly scarce. One approach to address these issues is to implement a commercial system with allocated processing capacities in local markets. One benefit of keeping the processing facilities local is reduced vehicle miles traveled which has a direct impact on customer rates, and adverse environmental impacts associated with vehicle emissions, noise, traffic, and safety.

#### Construction and Demolition (C&D) Recycling

The goal of the C&D Recycling program is to establish financial incentives and to develop processing infrastructure that facilitates the recycling and/or reuse of waste from construction and demolition projects. Due to the large volume and highly specialized makeup of C&D waste, the City has implemented a separate collection system for this waste stream. C&D waste is generated from both the residential sector and the commercial sector but is serviced by the commercial franchised haulers or through self-haul where C&D waste generators directly haul the material to processing facility. Of the total 36% diversion rate reported from non-residential customers, 26% is attributed to the C&D programs and the remaining 10% is derived from the Commercial recycling programs (paper, cardboard, cans & bottles, scrap metal, scrap wood, etc.). The City is promoting C&D recycling through two means; the fiscal incentive of setting franchise fees on C&D material at \$0, and through the City's Construction and Demolition Diversion Deposit Program.

#### Construction Demolition Diversion Deposit Program (CDDD)

As part of the CSW system, the City currently administers a successful C&D debris recycling program which accounts for 71% of the tonnage collected and diverted from disposal of the non residential recyclables stream. Under this program, the City currently diverts approximately 82% of C&D debris from City landfills. While the program has been able to achieve significant diversion rates, and has been used as a model by many other cities, there is also a potential to achieve greater diversion and reduce contamination in this waste stream. The 2008-2009 ESD work plan includes a full evaluation of this program, including an evaluation of the use of C&D debris as Alternative Daily Cover (ADC) at landfills and recertification of the CDDD facilities, in order to identify additional diversion opportunities and to ensure the highest and best use for all of the recycled material.

### Preliminary Timeline for Collection System Redesign

December, 2007	T&E Committee discussion of current systems and alternatives
December to May, 2008	ESD completes evaluation including stakeholder input
June, 2008	T&E update on stakeholder process and presentation of the most viable options for consideration.
June-September, 2008	Finalize recommendations
October, 2008	Present redesign recommendations to Council
October, 2008	Begin procurement process, if necessary
June, 2009	Award new collection system contracts, if necessary
January 1, 2011	New system is implemented

### EVALUATION AND FOLLOW-UP

Staff will return to the Transportation and Environment Committee in June 2008 with an update and additional analysis of commercial redesign options.

### PUBLIC OUTREACH/INTEREST

Environmental Services Department staff met with the four largest franchised haulers to brief them on the preparation of this report. As part of the development of the final Commercial System Redesign recommendations, staff will conduct stakeholder input processes with both commercial solid waste customers and the current franchised haulers.

### COORDINATION

This memo has been coordinated with the Department of Planning Building and Code Enforcement, Finance Department and the Office of Economic Development, the City Attorney's Office, and the City Manager's Budget Office.

### COST SUMMARY/IMPLICATIONS

The June and September 2008 staff reports will include a discussion of customer service rates, and Commercial Solid Waste Franchise Fee and AB939 Fee revenue implications of the recommended option.

TRANSPORTATION AND ENVIRONMENT COMMITTEE

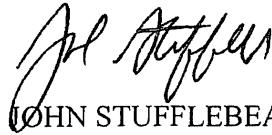
11-15-07

**Subject: Commercial Solid Waste System Redesign and Enhancement Options**

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**CEQA**

Not a project.



JOHN STUFFLEBEAN  
Director, Environmental Services

Attachment:

City of San José Commercial Redesign White Paper

For questions, please contact Jo Zientek, Deputy Director, Integrated Waste Management Division, Environmental Services Department, at 408-535-8557.

**The City of San José**

**Commercial Redesign White Paper**

**Current System Performance and  
Alternative System Arrangements**

**November 14, 2007**

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**Exhibit:** Commercial Collection Strategies in Five Major Cities

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## Section 1

### Executive Summary

HF&H Consultants, LLC (HF&H) was retained by the City of San José (City) to prepare this white paper to examine the current performance of commercial collection system and present alternatives for redesigning the City's commercial collection system. The commercial collection system provides all commercial customers with collection services for solid waste, recyclable materials, organic materials, and construction and demolition debris (C&D) materials and provides for the regulation of haulers conducting the collection services.<sup>1</sup> In this section, the purpose of the white paper is described and key findings and issues of the current commercial collection system are summarized. In addition, the organization of the report is described.

#### 1.1 Purpose of White Paper

In San José, 24 collection companies serve commercial customers under terms and conditions of non-exclusive commercial franchise agreements. Four agreements expire June 30, 2008, and the remaining agreements expire June 30, 2009 (unless extended). The upcoming expiration of the existing franchise agreements provides an excellent opportunity to make system improvements. In addition, the City is also planning to achieve higher diversion levels established through recent City policies. In summary, the City's Environmental Services Department (ESD) is evaluating the merits of redesigning its commercial collection system as part of its planning efforts related to the:

- Expiration of the commercial franchise agreements;
- Council-adopted goal of 75% waste diversion by 2013;
- Council-Adopted Goal of Achieving Global Sustainable City Status as defined by the Urban Environmental Accords; and,
- The City's Green Vision Goals.

ESD's proposed Commercial Redesign Project will focus on improvements to the existing system to support Zero Waste and the Green Vision goals by increasing diversion and reducing collection vehicle impacts. In addition, the City's goals include improving the quality of commercial collection services provided to the business community and provision of rational customer rates.

Deciding how to redesign the commercial collection system is complex. It requires an understanding of the current situation and needs; examination and analysis of options; stakeholder input, and consideration of various customer types and different materials. This report address begins the process by describing the current system and why improvements are

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<sup>1</sup> For the purposes of this report, recyclable materials include the following material categories: cardboard, food and beverage containers, glass, green waste, metal, mixed paper, office paper, organics, plastics, and other recyclables items. Organics include green waste and food waste. C&D includes C&D materials, inerts, and wood waste.

warranted and introduces the types of collection system alternatives the City may want to evaluate. It does not include analysis of alternatives or assessment of approaches to handling of various types of customer classes and material types.

## 1.2 Key Findings and Issues of the Current System

An assessment of the current non-exclusive franchise system (refer to Sections 3 and 4) identifies several components that do not meet the City's goals and interests. The key findings and issues that may need improvement are summarized below.

- **Supporting City Goals**
  - Diversion - The commercial diversion level for FY 2006/07 is 36.0%, which is 25.5% C&D and 10.5% recyclables and organics. The diversion level is low compared to the estimated quantities of materials being disposed and compared to results of other cities. To achieve the 75% diversion and Zero Waste goals, the commercial diversion level will need to be significantly improved.
  - Minimize Environmental Impacts - Opportunities exist to reduce the impact of the collection vehicles by converting fleets to newer equipment with improved emissions technology and by using alternative fuels. Furthermore, routes of front-load collection vehicles (that service multiple customers before traveling to the processing or disposal site) may be more efficient if fewer haulers operate which may result in a reduction of traffic, fuel consumption, wear and tear on streets, noise, etc. These improvements support the City's Green Vision.
- **Customer Participation in Diversion** - Currently, recycling accounts equal 51% of the solid waste accounts. As the City plans for 75% diversion and Zero Waste additional participation of businesses in diversion programs will be key for success. Customer participation may be improved by strengthening financial incentives through rate structure policies or adoption of City policies mandating customer recycling efforts.
- **Hauler Participation in Diversion** - 10.5% of the tonnage collected by haulers is recyclables and organic materials. While some haulers are achieving higher diversion levels for these materials than others, the two largest haulers are diverting only 7% to 8% of the materials they collect through recyclables and organics diversion. (Note that these figures exclude C&D). Significant quantities of recyclables and organics remain in the waste stream and can be captured for diversion.
- **Rational Customer Rates** - Current rates favor some customers and not others. Implementation of changes in the commercial system could include establishment of rational and consistent rates for customers encourage diversion.
- **Customers' Quality of Service** - Few performance standards are established and monitored through the current non-exclusive franchise agreements. New performance standards can be established and enforced to manage the quality of collection containers and aesthetics of container setouts, reliability of service, and customer assistance. To increase customers' understanding and convenience of the collection services, haulers can be required to offer a consistent and comprehensive set of services that may allow for focused public education and a clear message about diversion programs. Current

haulers tend to focus on providing an array of recycling services to larger businesses. However, small and medium size businesses appear to participate less in recycling services likely because haulers do not explain the availability of the recycling services or price the recycling services in a manner that discourages participation.

It is possible that these improvements may be accomplished by modifying the requirements of the current non-exclusive franchise system or through implementation of some form of exclusive franchise system for collection of some or all types of materials. In an exclusive system, one franchise hauler is granted rights to collect (i.e., not competing with other haulers) some or all types of materials from some or all types of customers. Section 5 of this white paper introduces systems in place in five major cities and Section 6 describes several collection system scenarios that the City can evaluate to determine which system can best support the types of improvements needed to meet the City's goals and interests.

### **1.3 Report Organization**

The organization of the report is as follows.

- Section 1 provides an executive summary.
- The next three sections of the report (Sections 2 through 4) provide the background needed to understand why the City is considering changes to the commercial collection system.
  - Section 2 presents the City's goals and interests for the redesign.
  - Section 3 describes the current commercial collection system and diversion results.
  - Section 4 explains why a change may be needed to support City goals.
- Section 5 summarizes a survey of five major cities, with different commercial collection systems, to provide perspective on what other commercial collection system options are available to the City.
- Section 6 focuses on how the City's commercial collection system can be changed.
- Lastly, the Exhibit provides summary information of five large cities surveyed about their commercial collection systems.

## Section 2 City Objectives

ESD is evaluating the merits of redesigning its commercial collection system as part of its planning efforts related to the expiration of the commercial franchise agreements, the City's adoption of the Urban Environmental Accords and Zero Waste Policy, and the City's Green Vision.

### 2.1 Guiding City and State Policies

In March 2006, ESD introduced the commercial redesign project to the City Council and described its objectives to improve services to the business community, support the City's environmental goals, and provide tools to improve the administration of the system and stabilize revenue flow. The project included consideration of an exclusive franchise arrangement for the downtown area to better manage traffic, noise, and collection container appearance and set out issues. The City's focus on increasing City-wide diversion activities has recently intensified. In November 2005, the City approved support of the Urban Environmental Accords including Action 4 of the Accords, which sets a goal of 75% diversion by 2013. Furthermore, the City adopted a goal of Global Sustainable City on October 30, 2007, which is achieved by implementing at least 19 Urban Environmental Accords actions. In October 2007, two new and significant policies were adopted by the City Council that further support the need to examine the commercial collection system and its diversion results. One policy, the Zero Waste Policy, sets a goal of 75% diversion by 2013 and Zero Waste by 2022 (adopted by Council October 30, 2007). Another policy, the City's Green Vision, is comprised of ten goals including diversion of 100% of waste from landfill and converting waste to energy (adopted by Council October 30, 2007).

The Urban Environmental Accords, Zero Waste Policy, and the Green Vision all identify a key City objective of substantially increasing diversion activities. This increase will be needed to raise the City's current diversion rate of 61% to 75% by 2013 and then to Zero Waste by 2022. This effort will require all sectors – single-family, multi-family, and commercial – to make changes. In addition to the City's aggressive diversion goals, the Green Vision introduces a goal of ensuring that 100 percent of the public fleet use alternative fuels to reduce vehicle-related impacts such as air emissions. While the City does not own the commercial collection fleet, the size of the fleet and the City's ability to establish standards may make this a significant opportunity to help achieve the goal.

The above discussion highlights three City policies (Urban Environmental Accords, Zero Waste Policy, and Green Vision) driving the commercial redesign. Other City and State policies also need to be supported by the commercial redesign project. These relevant policies and laws are summarized on the following page.

**City Policies**

- Commitment to source reduction, recycling, and composting rather than disposal pursuant to the City's Source Reduction and Recycling Element, approved by Council in 1995.
- More than 50% diversion of waste from disposal and provision of storage and collection of recyclables at every location solid waste is generated per Level of Service Policy 20 of the San José 2010 General Plan.

**State Laws**

- 50% diversion by January 1, 2000 as mandated by the California Integrated Waste Management Act (Division 30 of the California Public Resources Code - AB 939 of 1989).
- 80% recycling goal for beverage containers pursuant to the California Beverage Container Recycling and Litter Reduction Act (Division 12.1 of the California Public Resources Code - AB 2020 of 1987).
- Pending legislation (Senate Bill 1020) that would establish a goal of achieving a 75% statewide diversion rate on or before January 1, 2020 (Council approved support of SB 1020 on August 17, 2007).

**2.2 City Goals**

As described above, the City's policies clearly identify a goal of substantially increasing diversion and reducing vehicle impacts. ESD identified several other interests in a March 7, 2006 Council report. These included: improving services provided to businesses; supporting the City's environmental goals; and providing tools for improved administration of the system and stabilization of revenue flow.

During the process of preparing this white paper on the commercial redesign project, the City's goals were discussed by the ESD staff members, including the Deputy Director and members of the commercial services team, and the consultant team. The key goals, which are presented in Table 2-1, were established to guide the commercial redesign discussion presented in this white paper.



**Table 2-1  
Key City Goals**

Goals	Measures of Achievement
Supporting City's Zero Waste Goals, Urban Accords, and City's Green Vision	<ul style="list-style-type: none"> <li>• Increased diversion of commercial solid waste</li> <li>• Increased customer and hauler participation in diversion programs</li> <li>• Reduced traffic, which reduces congestion, noise, and wear and tear on streets and increases public safety</li> <li>• Reduced fuel consumption and vehicle emissions</li> </ul>
Increasing Customer and Hauler Participation in Diversion Programs	<ul style="list-style-type: none"> <li>• Higher percentage of commercial accounts with recycling and organics service</li> <li>• Higher diversion level for recycling and organics</li> </ul>
Delivering Rational Customer Rates	<ul style="list-style-type: none"> <li>• Equivalent costs for comparable services, and appropriate costs for "greener" and higher quality service</li> </ul>
Improving Customers' Quality of Service	<ul style="list-style-type: none"> <li>• Improved aesthetics (control of graffiti and litter; and specification of container types, quality, and placement)</li> <li>• Improved customer convenience (such as broader range of collection programs and container options; improved call center responsiveness; and enhanced outreach assistance)</li> </ul>

## **Section 3**

### **Current Non-Exclusive Commercial Collection Arrangements**

The City of San José established a non-exclusive franchise system in 1995 for collection of commercial solid waste, recyclable materials, organic materials, and C&D from businesses. This section includes an overview of the system and presents data about the commercial customers, quantities of materials collected, the non-exclusive haulers, and diversion results.

#### **3.1 Overview**

In San José, private haulers compete with each other to provide solid waste, recyclable materials, organic materials, and C&D materials collection services to commercial customers. All haulers are required to obtain a Commercial Solid Waste and Recyclables Collection Franchise granted by the City Council that allows them to provide these hauling services on a "non-exclusive" basis. The current non-exclusive franchise agreements grant the franchise haulers the right to compete to collect solid waste and commingled recyclables from non-residential properties in San José and to provide temporary debris box services to residences and construction sites. There are currently 24 companies with commercial franchises. Four commercial franchise agreements expire June 30, 2008 and 22 expire June 20, 2009, unless extended. Businesses are able to choose the franchised hauler that offers the rates and services which meet their needs.

Current non-exclusive franchise haulers rely on traditional collection methods. These methods include customer use of cans, wheeled carts, 1 to 6 cubic yard bins, 10 to 40 yard drop boxes, and compactors with bins or drop boxes. These containers are serviced primarily by two types of collection vehicles. One vehicle type, the front-load collection vehicle, makes multiple stops servicing many bins before filling the collection vehicle and traveling to the processing site or landfill. Because there are multiple haulers operating in the City, each day several front-load collection vehicles cross each other's paths to service customers on the same streets. This routing inefficiency may result in increased traffic, fuel consumption, air emissions, and hauler operating costs. The second vehicle type, the roll-off truck, services drop box containers and roll-off compactor units. Because drop boxes and compactor units are large in size, roll-off trucks separately collect and transport each box to the processing or disposal site.

Haulers offer customers a range of collection services including solid waste, recyclables, organics, and C&D collection services. Materials are separated by customers and haulers for the purposes of disposal and processing. Solid waste is collected and transported to a landfill site for disposal. Commingled recyclables (mixed recyclables such as bottles, cans, and papers) are collected and delivered to processing facilities. Source separated recyclables (such as cardboard, office paper, and metals) are placed in separate containers and hauled to buy-back centers or processing facilities. C&D is also segregated for collection and processing. Organics, including separated materials such as green waste and food scraps or mixed food scraps and green waste, are collected and delivered to composting facilities.

## 3.2 Customer Account and Tonnage Information

The non-exclusive franchise agreements require that haulers submit monthly reports to the City. The reports include the number of customers served and the volume (cubic yards) and tonnage of materials collected, listed separately for various material types. In addition, the City made a special request in August 2007 to the four haulers providing front-load collection service in the downtown area to report downtown customer account data.<sup>2</sup> This data was used to compile statistics presented in Table 3-1.

The hauler-provided data indicates that 51% of the customers have recycling service City-wide, while only 37% of the customers in the downtown area have recycling service. In a focus group study, all downtown business owner participants reported recycling at least some of their business's waste.<sup>3</sup> Among the non-downtown business owners, two-thirds of the participants reported recycling in some capacity.<sup>4</sup> An opinion research study of commercial businesses reported that 71% of businesses with fewer than 100 employees are recycling at some level.<sup>5</sup>

## 3.3 Hauler Information

The City has granted non-exclusive franchise agreements to 24 companies. Two haulers, Allied Waste Services (Allied) and Stevens Creek Disposal (a Norcal Waste Systems company) service 87% of the commercial accounts according to December 2006 account data, capturing 82% of solid waste tonnage and 61% of total tonnage collected by the non-exclusive franchise haulers. Front-load collection service is provided by only four haulers: Allied, Stevens Creek Disposal, GreenWaste Recovery, and GT Waste. Drop-box collection service is provided by all 24 haulers.

Hauler data reported to the City indicates that approximately 75% of the annual solid waste volume is hauled in front-load collection vehicles, and the remaining 25% of the solid waste is hauled in drop boxes. Some recyclable materials and organic materials are collected in carts and bins serviced by front-loaders and some are collected and hauled in drop boxes. All C&D material is hauled in drop boxes. Table 3-2 presents hauler information reported to the City including tonnage collected annually and number of accounts.

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<sup>2</sup> For the purpose of data collection in this study, the downtown area was defined as the areas bounded on four sides by 280, Park Ave, 11 Street, and Hedding Street.

<sup>3</sup> "Garbage and Recycling Services in San José Businesses, Report on Focus Group Findings," Fairbank, Maslin, Maullin & Associates, June 2003.

<sup>4</sup> Ibid.

<sup>5</sup> "Finding from Opinion Research, San José Commercial Sector Recycling Study," Goodwin Simon Strategic Research, April 2005.

**Table 3-1  
Account, Volume and Tonnage Data  
for the Downtown Area and City-Wide**

	Downtown Area*	City-Wide**	Downtown as % of City-Wide
<b>Accounts</b>			
Solid waste accounts	854	9,616	8.9%
Recycling accounts	315	4,874	6.5%
Total accounts	1,169	14,490	8.1%
Recycling accounts as % of solid waste accounts	37%	51%	
<b>Monthly Volume (cubic yards)</b>			
Solid waste volume	21,344	297,294	7.2%
Recyclables and organics volume***	9,368	N.A.	---
Total volume	30,712	505,998	6.1%
Recycling and organics as % of Total	31%	---	---
<b>Annual Tonnage (FY 2006/07)</b>			
Recyclables and organics tonnage***	N.A.	42,350	---
C&D tonnage****	N.A.	105,287	---
Solid waste tonnage	N.A.	253,920	---
Total tonnage	N.A.	401,558	---
Recycling and organics as % of total	N.A.	10.5%	---
C&D as % of Total	N.A.	26.2%	---
<b>Total Diversion</b>	N.A.	<b>36.7%</b>	---

N.A. - not available

\* Downtown data as of August 2007

\*\* City-wide account data reflects monthly average for 2006; City-wide monthly volumes based on 2006 data; annual tonnage based on FY 2006/07 data.

\*\*\* Recyclables and organics tonnage includes materials diverted by the non-exclusive haulers reported under the following categories: cardboard, food and beverage containers, glass, greenwaste, metal, mixed paper, office paper, organics, other, and plastics.

\*\*\*\* C&D tonnage include materials diverted by the non-exclusive haulers reported under the following categories: C&D, inerts, and wood.

**Table 3-2  
Hauler Tonnage and Account Data\***

	Allied	Stevens Creek Disposal	Green Waste Recovery	GT Waste	Other Haulers	Total
<b>Annual Tonnage</b>						
Solid waste	109,587	98,946	7,598	11,792	25,997	253,920
Recyclables	4,681	6,557	1,726	3,287	3,851	20,102
Organics	3,714	1,997	4,749	10,348	1,440	22,248
C&D	6,513	14,425	43,842	385	40,122	105,287
Total Materials	124,495	121,925	57,915	25,813	71,410	401,558
Hauler Diversion (excluding C&D)	7.1%	8.0%	46.0%	53.6%	16.9%	10.5%
<b>Hauler % of Annual Tonnage</b>						
Solid waste	43.2%	39.0%	3.0%	4.6%	10.2%	100.0%
Recyclables	23.3%	32.6%	8.6%	16.3%	19.2%	100.0%
Organics	16.7%	9.0%	21.3%	46.5%	6.5%	100.0%
C&D	6.2%	13.7%	41.6%	0.4%	38.1%	100.0%
Total Materials	31.0%	30.4%	14.4%	6.4%	17.8%	100.0%
<b>Accounts</b>						
Solid waste	3,134	4,029	379	259	60	7,861
Recycling	1,861	1,244	240	580	24	3,949
Total	4,995	5,273	619	839	84	11,810
Hauler % of Total	42.4%	44.6%	5.2%	7.1%	0.7%	100.0%

\* Accounts as of December 2006; tonnage reported for FY 2006/07.

Note that the City has not audited the accuracy of hauler-provided information in Tables 3-1 and 3-2, and inaccuracies have been identified in account information. However, the information should provide a perspective on the haulers' operations.

In FY 2006/07, 13 of the 24 non-exclusive franchise haulers provided recyclables collection services to the City's commercial generators. Of these haulers, only four companies provided front-load recyclables collection service; the others provided service using roll-off boxes. Recyclable materials collected by these haulers included: cardboard, food and beverage containers, mixed paper and office paper, scrap metal, and plastics.

Annually since 2003, 4 to 6 haulers have been responsible for organics collection and 3 to 7 haulers have been responsible for green waste collection.

Using the tonnage data provided by the hauling companies, it is estimated that:

- City-wide approximately 40 to 60 front-load collection vehicles collect solid waste, recyclable materials, and organic materials;
- City-wide approximately 15 to 30 roll-off vehicles collect solid waste, recyclable materials, and C&D;
- The downtown area requires operation of 3 to 4 solid waste front-load trucks and 1 to 2 recycling/organics collection vehicles per day;
- Annual collection in the downtown area is approximately 19,400 tons of solid waste, 3,400 tons of recyclables, and 470 tons of organics; and,
- Annual revenues for the downtown accounts may be in the range of \$2 to \$3 million, based on the number of cubic yards serviced and the average rate per cubic yard.

### **3.4 Diversion Results**

San José's diversion rate is 61%, as reported in the City's 2005 Annual Report, pending California Integrated Waste Management Board (CIWMB) approval. This diversion rate reflects diversion activities of residential and commercial franchise haulers, self haulers, processing facility and landfill operators, developers handling C&D, and other programs.

To understand how the commercial sector contributes to the City-wide diversion level, commercial tonnage data can be used to estimate the diversion accomplished through the non-exclusive franchise system. Annually, from 2003 through 2006, 34% to 40% of the materials collected have been diverted from disposal. C&D, inerts, and wood waste make up a significant portion of the quantity of materials diverted. For FY 2006/07, C&D, inerts, and wood waste were 71.3% of the tonnage collected and diverted from disposal. Recyclable materials including cardboard, food and beverage containers, glass, metal, mixed recyclables, mixed paper, office paper, and plastics, accounted for 13.6% of tonnage collected and diverted from disposal. Green waste, food scraps, and organics accounted for the remaining 15.1%. Table 3-3 presents FY 2006/07 solid waste, recyclables, organics, and C&D data.

**Table 3-3  
FY 2006/07 Diversion Data**

Material Type	Tons*	% of Total
Mixed C&D	67,317	
Inerts	22,282	
Wood	11,411	
<b>Subtotal C&amp;D</b>	<b>101,010</b>	<b>25.5%</b>
Food and Beverage Containers	831	
Glass	46	
Metal	2,016	
Cardboard	6,287	
Mixed Paper	7,067	
Office	3,302	
Plastics	73	
Other	286	
<b>Subtotal Recyclables</b>	<b>19,908</b>	<b>5.0%</b>
Greenwaste	5,036	
Food waste	4,252	
Organics	12,511	
<b>Subtotal Organics</b>	<b>21,800</b>	<b>5.5%</b>
<b>Total Diversion</b>	<b>142,718</b>	<b>36.0%</b>
Solid Waste	253,920	64.0%
<b>Total Collected</b>	<b>396,638</b>	

\* Tons diverted equals tons collected less residue.

In FY 2006/07, 36.0% of the commercial materials collected were diverted through recycling, organics, and C&D programs. C&D accounts for 25.5% of the total tonnage diverted, while recycling and organics account for approximately 5.0% and 5.5%, respectively. The CIWMB waste stream profile for commercial waste disposed in San José estimates that 15% of disposed tons are food scraps; 5.2% of disposed tons are leaves and grass; and 30% are recyclables (including paper, cardboard, glass bottles and containers, and PET and HDPE containers).<sup>6</sup> This CIWMB data illustrates significant opportunities to capture more recyclable and organic materials from commercial businesses.

The 4 largest haulers (Allied, Stevens Creek, GT Waste, and GWR) collected approximately 88% of the total recycling and organics tonnage in FY 2006/07, excluding the C&D materials. The largest two haulers (Allied and Stevens Creek), which collect approximately 82% of the commercial solid waste tonnage, only diverted 7% to 8% of the total tonnage they collected (excluding C&D, inerts, and wood). GT Waste diverted 54% and GreenWaste Recovery

<sup>6</sup> CIWMB Solid Waste Characterization Database, San José: 1999 Overall Commercial Waste Stream Sorted by Percent of Waste Stream.

diverted 46%. Both GT Waste and GreenWaste Recovery diversion efforts include a focus on organics collection as well as recyclables.

### 3.5 Hauler Compensation and Customer Rates

Commercial franchise haulers are compensated for the collection services through the rates they charge commercial customers. The rates are agreed upon between the hauler and the customer and are influenced by direct competition between haulers. The City does not regulate these rates.

While limited rate information was available from haulers, the available data demonstrated a wide range in the customers' cost for service as shown in Table 3-4.

**Table 3-4  
Rate per Cubic Yard  
Collected per Week**

	Minimum Rate	Average Rate	Maximum Rate
<b>Solid Waste</b>			
Carts (average for all carts customers)	\$7.28	\$18.26	\$34.86
Bins (average for all bin customers)	\$2.84	\$7.96	\$32.69
2 cubic yard bin, 1 per week pick-up	\$57.44	\$97.76	\$279.44
3 cubic yard bin, 1 per week pick-up	\$47.25	\$119.30	\$196.75
4 cubic yard bin, 1 per week pick-up	\$79.45	\$139.60	\$222.40
<b>Recycling Bin Customers</b>			
Average for all bin customers	\$0.51	\$4.21	\$15.94
2 cubic yard bin, 1 per week pick-up	\$26.25	\$54.07	\$87.99
3 cubic yard bin, 1 per week pick-up	\$16.91	\$49.40	\$119.99
4 cubic yard bin, 1 per week pick-up	\$16.81	\$72.65	\$200.39

While variations in the solid waste rates are difficult to explain, variations in rates for recyclable materials may be attributable to different commodity values. Examination of the limited rate data reveals that haulers do not appear to use a formulaic calculation to determine rates because the average per cubic yard rate varies so significantly and because rates for identical service are different. This rate information demonstrates that there is rate inequity among customers and inconsistent rate-setting methods.

### 3.6 City Fees

Franchise haulers are required to pay franchise fees to the City for the privilege of collecting, transporting, or disposing of commercial solid waste. Franchise fees are directed to the General Fund. Franchise haulers also collect Source Reduction and Recycling Fees, referred to as the



“AB 939 Fee,” that are assessed by the City on the generators of solid waste based on the total cubic yards of solid waste service. AB 939 Fees are used by the City’s Integrated Waste Management (IWM) Division to implement and manage its diversion activities under the State’s AB 939 mandate.

Recyclables collection is also subject to franchise fees and AB 939 fees; however, historically, these fees have been set to \$0.00. By not assessing fees for recyclables collection, commercial haulers are provided a financial incentive to reuse or recycle and divert materials from landfill disposal. This financial incentive is substantial as the franchise fees and AB 939 fees add 10% to 25% to solid waste rates and the City’s landfill disposal facility tax levied at City landfills increase the haulers’ cost of providing solid waste collection even more.

## Section 4 Need for Change

In this section, the findings of the current non-exclusive franchise system are compared to the City's goals to identify the areas of performance that are not currently meeting the City's goals. This analysis highlights improvements needed for the commercial redesign project.

### 4.1 Assessment of Current System

#### Supporting City's Zero Waste Goals, Urban Accords, and City's Green Vision

##### Higher Diversion

One method of examining the potential for increasing the diversion level beyond the current rate is to understand what recoverable materials may be in the waste disposed that can be targeted for diversion. The CIWMB 1999 waste stream profile for commercial waste disposed in San José estimates that 15.0% of disposed tons are food scraps and 5.2% of disposed tons are leaves and grass. If the current diversion level of organics is 5.5%, significant volumes of organics have not yet been captured. The CIWMB waste stream profile estimates that 30.0% of disposed tons are recyclables (including paper, cardboard, glass bottles and containers, and PET and HDPE containers). Like organic materials, the current diversion level of recyclables (5.0%) can be increased to capture more of the volumes disposed.

Results in other cities can provide benchmarks for comparison. Obtaining comparative data can be challenging as detailed below:

- Differences in the non-exclusive, exclusive, permit systems, and/or open market collection systems;
- Variations in the scope of services provided to customers;
- Different types of recyclable and organic materials collected;
- Variations and capabilities of processing facilities;
- The type, methodology, and accuracy of reported information; and,
- Other factors.

As a result, the few benchmarks provided herein should be used to provide a perspective rather than a direct comparison to the City's results.

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**Table 4-1  
Diversion Levels in Other Major Jurisdictions**

	Commercial Diversion Level	Notes
SBWMA*	20.7% in 2006	Reflects diversion accomplished by the one exclusive franchise hauler; does not include non-putrescible and C&D tonnage collected in drop boxes in an open market; includes commercial food waste
Austin, TX	13% for downtown area only	Exclusive franchise in downtown area and hauler only collects paper and cardboard; remainder of City serviced by 10 permitted haulers; diversion level excludes C&D diversion
Portland, OR	57.5%	Open market collection; mandatory recycling requirement for commercial generators of 50% diversion; diversion level includes C&D diversion
San Francisco, CA	44%	Exclusive franchise City-wide; commercial food scraps collection; integrated waste management rate structure; diversion level excludes recycling and C&D collected in the open market
Seattle, WA	47%	Two exclusive franchise agreements for two different service areas; mandatory recycling for commercial generators; diversion level includes C&D diversion
Stockton, CA	40-50%	Two exclusive franchise agreements granting two haulers right to compete with each other City-wide; mandatory generator recycling requirement; diversion level includes some, but not all C&D
Fremont, CA	45% in 2006	Reflects diversion accomplished by the one exclusive franchise hauler; does not include C&D tonnage; includes commercial food waste

\* The SBWMA is the South Bayside Waste Management Authority, which is a joint powers authority that represents 12 member agencies in San Mateo County, including Atherton, Belmont, Burlingame, East Palo Alto, Foster City, Hillsborough, Menlo Park, Redwood City, San Carlos, San Mateo, West Bay Sanitary District, and some unincorporated portions of the County.

The higher commercial diversion levels in other major jurisdictions and the CIWMB waste stream profile data, which shows that high levels of organics and recyclables are in the

commercial disposal tonnage, demonstrate that the current non-exclusive commercial franchise system is not achieving the levels of diversion that are reasonably attainable.

#### **Reduced Adverse Environmental Impacts**

Four hauling companies provide front-load collection service of solid waste, recyclables, and organics throughout the City. As a result, their collection vehicles are traveling throughout the City crossing each other's routes and traveling the same streets to service different customers. This results in inefficient routing, which leads to more truck time on the streets (compared to a routing system implemented by one company where routes are typically efficiently planned to minimize route hours). The increased truck time translates into higher fuel consumption and air emissions (including green house gas emissions); more traffic, noise, and wear and tear on the streets; and, increased public safety concerns. These vehicle-related impacts could be reduced if fewer haulers or one hauler provides front-load collection service.

In addition to impacts related to routing inefficiencies, air emissions impacts may be higher than with other systems because the 24 hauling companies may be using older collection vehicles to minimize costs and because the companies are not using alternative fuels. The average age of the trucks is eight years old based on data from two of the City's haulers. Of these vehicles, 80% are 5 to 10 years old, and 6% are more than 10 years old. While the older vehicles are required to comply with California Air Resources Control Board (CARB) regulations, the vehicles are not likely to be relying on the latest technology, which can yield better fuel efficiency and reduced air emissions. New equipment and use of alternative fuels may result in air emission reductions.

#### **Increasing Customer and Hauler Participation in Diversion Programs**

Customer participation in diversion programs can be improved as commercial recycling accounts equal only 51% of the solid waste accounts. At this time, haulers offer some different solid waste, recycling, and organics programs. Haulers may offer some services to some customers and not to others depending on the size or characteristics of the businesses. In an opinion research study, it was reported that one in four San José businesses surveyed that were not recycling claimed they were prevented from doing so by lack of availability; and those businesses that were recycling reported not receiving adequate containers for recycling collection.<sup>7</sup> Customer participation may be improved by offering a wide range of services to all customers on a consistent basis and educating the customers about their choices, which was expressed as a need in the 2005 opinion survey. The current system, which includes setting the City's franchise and AB 939 fees to zero for recyclable, organic, and C&D materials does not seem to create a financial incentive for businesses to recycle as evidenced by the low diversion rates for commercial recyclables and organic materials. To reach 75% diversion and Zero Waste goals, additional participation of businesses in diversion programs will be a key for success.

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<sup>7</sup> "Finding from Opinion Research, San José Commercial Sector Recycling Study," Goodwin Simon Strategic Research, April 2005.

### **Delivering Rational Customer Rates**

While the current system allows customers to negotiate their own rates, the customers do not know what others are paying for comparable service so the customer does not know if their arrangement is reasonable compared to others. Limited rate data revealed that there is both an inequity in the rates charged customers for the same type of service and an inconsistency in the rates charged by the same hauler.

The City may want to provide customers with rational rates that:

- Reflect the cost of service;
- Reflect a logical relationship of volumes and frequency of service;
- Are applied consistently;
- Are communicated to customers; and,
- Create incentives for improving customer recycling participation.

### **Improving Customers' Quality of Service**

Currently, collection quality is difficult to enforce due to the large number of companies operating and the challenge of identifying which company is responsible for specific complaints filed by customers. Many collection containers are damaged and/or not well maintained. Numerous containers are regularly overflowing and surrounded by spilled materials. A wide variety of container types and sizes are used, which results in non-uniform set outs and can be confusing for customers that are negotiating services and rates. All of these container issues lead to poor aesthetics in the container storage and set out areas, a condition that is more visible in the downtown area. The City is interested in minimizing these quality issues.

While the City provides customer service to residential customers, commercial customers work directly with their franchise hauler. As a result, the City does not routinely receive customer complaints unless customers were unable to resolve their concerns with their haulers. Because the haulers are the primary point of contact for businesses, the City does not track commercial customers' level of customer satisfaction with the hauling companies. To understand commercial customer perception of the collection system, the City has conducted opinion surveys. A 2003 focus group study reported that business owners were very satisfied with the garbage and recycling service they receive.<sup>8</sup> In a 2005 opinion survey conducted of San José commercial businesses, recycling collection companies received very high satisfaction ratings from the businesses.<sup>9</sup> In survey results in other communities, customers often rate their collection companies favorably. For example, in Milpitas, 86% of the businesses reported having recycling service, and 98% of these businesses rated the recycling service provided by

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<sup>8</sup> "Garbage and Recycling Services in San José Businesses, Report on Focus Group Findings," Fairbank, Maslin, Maullin & Associates, June 2003.

<sup>9</sup> "Finding from Opinion Research, San José Commercial Sector Recycling Study," Goodwin Simon Strategic Research, April 2005.

the single franchise hauler as good to excellent.<sup>10</sup> The South Bayside Waste Management Authority's commercial survey data showed that 83% of the respondents had recycling services, and 79% of these businesses secure recycling services from the exclusive solid waste franchise hauler even though they have the choice of selecting a recycler in an open market.<sup>11</sup>

While the opinion surveys reflect high satisfaction levels for haulers, the quality of service can also be evaluated by the convenience provided to customers and the array of service options. The availability and type of solid waste, recycling, and organics programs are determined by the haulers at their discretion. As described on the previous page, many businesses were not recycling because of the lack of availability; and many businesses that were recycling reported not receiving adequate containers for recycling collection.<sup>12</sup> The quality of the customers' service may be enhanced by providing a higher level of convenience. Convenience may include offering a wide range of services to all customers on a consistent basis and educating the customers about their choices, which was expressed as a need in the 2005 opinion survey. Given that some customers reported a lack of recycling program availability, inadequate recycling containers, and the need for education on the choices available, it seems that customers are not fully satisfied with the convenience of recycling service. The level of convenience may not have been reflected in the high customer satisfaction ratings as questions pertaining to convenience or the range of services offered may not have been asked.

Effectively monitoring and managing 24 haulers is time consuming, difficult, and practically impossible in some instances. For example, it is difficult for City staff to determine which party is responsible for particular problems related to collection spills, overflowing containers, collection outside of authorized hours, noise, etc.

## 4.2 Summary of Improvements Needed

The analysis of the current non-exclusive franchise system identifies several facets that do not meet the City's goals and interests. Improvements are needed as summarized below.

- **Increase Diversion** - The commercial diversion level for recyclables and organics is low compared to the estimated quantities of these materials being disposed and compared to results of other cities. Customer and hauler participation in the programs can be enhanced beyond current levels. To achieve the 75% diversion and Zero Waste goals, the commercial diversion level will need to be significantly increased.
- **Minimize Adverse Environmental Impact of Collection Vehicles** - Opportunities may exist to reduce the impact of the collection vehicles by converting fleets to newer equipment with improved emissions technology and by using alternative fuels. Front-load collection routes may be more efficient if operated by one hauler resulting in

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<sup>10</sup> "2006 Customer Service Satisfaction Survey, Allied Waste Services - City of Milpitas Commercial Garbage and Recycling Services and Comparative Analysis of 2004-2005 Surveys," Environmental Planning Consultants, 2006.

<sup>11</sup> The South Bayside Waste Management Authority: Survey of Commercial Facility Managers," GLS Research, April 2006.

<sup>12</sup> "Finding from Opinion Research, San José Commercial Sector Recycling Study," Goodwin Simon Strategic Research, April 2005.

reduction of traffic, fuel consumption, wear and tear on streets, noise, etc. More efficient routing is likely to decrease hauler operating costs.

- **Rational and Consistent Rates** - Current rates favor some customers and not others. Implementation of changes in the commercial system can include establishment of rational and consistent rates for customers. Because of the wide variation in rates, it is likely that some customers will experience rate increases for the same services or expanded services and other customers will experience rate decreases.
- **Improve Quality of Service** - Establishing and enforcing new performance standards may result in improvement management of the quality of collection containers and aesthetics of container setouts, reliability of service, and customer assistance. To increase customers' understanding and convenience of the collection services, requiring all haulers offer a consistent and comprehensive set of services may allow for focused public education and a clear message about recycling programs.

## **Section 5**

### **Survey of Other Major Cities**

Throughout the United States, each city's commercial collection strategy is influenced by their unique conditions such as: local and state laws, policies, and goals; historical role and existing infrastructure of collection companies; number, location, and ownership of recycling, transfer, and disposal facilities; customer interests; relationships among haulers, City staff, and elected officials; cost of landfill disposal; and, other considerations. The spectrum of options is very broad. With dozens of variables related to the type of customers, material types, hauler regulation methods, and geographic service areas, the combinations could result in hundreds of commercial system options. On one end of the spectrum are cities, such as Los Angeles, Denver, and Houston, where haulers service commercial customers in an open, unregulated market. On the other end of the spectrum are cities, such as San Francisco, Oakland, and Las Vegas, where only one hauler collects solid waste from commercial customers and the collection activities are regulated through exclusive franchise agreements.

In addition to the two collection system described above, other examples include, but are not limited to: (i) regulation of numerous haulers through permits or non-exclusive franchise agreements that allow for hauler competition throughout a city but in a regulated environment (e.g., San José, Sacramento, San Diego, Portland); and, (ii) regulation of multiple franchise haulers each assigned exclusive collection rights in a separate geographic service areas (e.g., Fresno County, San Bernardino County, and Charlotte, North Carolina). Additional differences in the wide range of collection systems include, but are not limited to, the handling of recyclable and organic materials and various customer categories (such as mixed used, multi-family, commercial, and roll-off accounts). For example, the level of exclusive rights can be defined in terms of: (i) geographic area; (ii) material type; (iii) customer type; and/or (iv) service type (cart, bin, drop box).

As part of this study, the general arrangements of commercial collection systems in 20 large jurisdictions (19 cities and one county) in the United States were identified. The 20 jurisdictions were considered because information was readily available about their commercial collection system and/or their commercial collection system was known to be structured in a manner that represented a different strategy than the others. A focus on western cities was a factor in the assessment although, where information was readily available about eastern cities, these cities were included.

Of these 20 jurisdictions, the City chose to survey five large cities that represented diverse methods of regulating commercial collection companies. The cities surveyed included: Austin, Texas; Portland, Oregon; San Francisco, California; Stockton, California; and, Seattle, Washington. The survey objectives were to learn about the unique characteristics of their systems and the diversion results. Table 5-1 provides a side-by-side summary of commercial collection systems and relevant City policies for San José and the five cities surveyed. Table 5-2 highlights any policies that may impact the commercial collection system. A description of each city's system is presented in the exhibit to this report.



The findings from the survey illustrate the range of commercial systems available and types of differences among the systems. The five systems begin to demonstrate that an “industry” or “regional” standard does not exist for commercial collection systems. The descriptions of the systems highlight the complexity and multitude of possibilities available to San José. These examples are intended to provide a perspective on the types of alternatives that may be available to the City. It is interesting to note that two cities on the opposite end of the spectrum – Portland with 55 haulers competing for commercial collection service, and San Francisco with one hauler that has exclusive rights to commercial collection service – report similar commercial diversion levels (44% for San Francisco (excluding C&D diversion) and 57.5% for Portland (including C&D diversion)). For San Francisco, this high diversion level could be the result of the requirements placed on the exclusive franchise hauler for recycling and organics collection and their integrated waste management rate structure. For Portland, this high diversion level could be a result of the specific recycling requirements that Portland established for waste generators (businesses) themselves.

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**Table 5-1  
Profile of Commercial Systems of Large Cities Surveyed**

	San José	Austin	Portland	San Francisco	Stockton	Seattle
Exclusive Hauling Arrangements						
Exclusive hauling arrangements	No	Yes	No	Yes	Yes	Yes
Service areas	---	1 area (covering downtown only)	---	1 area	1 area	2 areas
Number of haulers with exclusive rights	---	1 hauler	---	1 hauler	2 franchised haulers; 1 small permitted hauler	2 haulers
Scope of exclusive rights for commercial materials	---	Solid waste and single-sort recyclables	---	Solid waste, yard recyclables, yard waste, food scraps, mixed organics	Solid waste	Solid waste and C&D only
Open Market Arrangements						
Open market competition	Yes	Yes	Yes	Yes	Yes	Yes
Method of regulating open market collection and processing activities	Non-exclusive franchise agreements	Permit system for haulers in City (excluding downtown area)	Permit system	C&D haulers must be registered.	Permit system	"Recycling Business License" system
Number of permitted or non-exclusive franchise haulers	24 haulers	10 haulers	55 haulers	Unlimited	Unlimited	Approx. 100 haulers; 4 to 5 major haulers
Scope of haulers rights	All materials	All materials	All materials	C&D and recycling service provided at no charge to customers	<ul style="list-style-type: none"> <li>• Recyclables with 10% or less contamination/residue</li> <li>• Industrial waste materials (including C&amp;D)</li> </ul>	Recyclables

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	San Jose	Austin	Portland	San Francisco	Stockton	Seattle
<b>Commercial Statistics</b>						
Number of Accounts	14,490 accounts	400 accounts (downtown only)	18,100 (commercial and multi-family accounts)	20,243 accounts	5,000 accounts	~10,000 accounts
Annual commercial tonnage						
Recyclables	42,350 tons	Unavailable	532,944 tons	57,006 tons	25,846 tons	150,818 tons
Organics	In recycling		In recycling	13,117 tons	2,216 tons	28,638 tons
Solid waste	<u>253,920 tons</u>		<u>393,700 tons</u>	<u>89,671 tons</u>	<u>83,986 tons</u>	<u>205,637 tons</u>
Total	296,270 tons (excludes C&D)		926,664 tons (includes C&D)	159,794 tons (excludes C&D recycled)	112,048 tons (includes some, but not all, C&D)	385,093 tons (includes C&D)
Diversion level (based on hauler tonnages)	16.7% excluding C&D; 36% including C&D	13% for downtown excluding C&D	57.5% including C&D	44% excluding C&D	25% in 2005; 40 to 50% estimated for 2006	47% including C&D

**Table 5-2  
Relevant Policies of Large Cities Surveyed**

	San José	Austin	Portland	San Francisco	Stockton	Seattle
Zero Waste Goal or High Diversion Goal	Yes, Zero Waste by 2022 (adopted Oct. 2007)	Yes, Zero Waste by 2040 per Long-Range Solid Waste Plan	Yes, 75% by 2015	Yes, Zero Waste by 2020 (75% by 2010)	No	Yes, 60% by 2012; 70% by 2025
Mandatory Commercial Recycling Requirements for Waste Generators (Businesses)	No	Yes, all multi-family complexes with 100+ units; businesses office buildings with 100+ employees	Yes; customers to divert 50% (established Jan. 1996)	No, but City is planning on requiring mandatory customer participation in recycling programs	Yes, businesses are required to separate recyclables from solid waste	Yes (see ban described below)
Bans on Disposal of Recyclables	No	No	Collectors prohibited from using material recovery facilities	Food vendors prohibited from using polystyrene foam disposable food service ware. (June 2007)	No	Yes (Jan. 2005); significant amounts of paper, cardboard, and yard waste can not be disposed
Other	No	No	City considering restructuring commercial system; considering exclusive franchises	<ul style="list-style-type: none"> <li>Food vendors must use compostable or recyclable to-go containers</li> <li>Plastic bag ordinance requiring recyclables and compostable bags</li> </ul>	Commercial rates include 4 cubic yards of recycling and 90 gallons of green waste/food waste	Franchise haulers required to provide small businesses with recycling service

## Section 6

# Alternative Collection System Arrangements

The City's commercial collection system makes available to all commercial customers with collection services for solid waste, recyclable materials, organic materials, and C&D and regulates the haulers conducting the collection services. It is possible that improved recycling may be accomplished by modifying the requirements of the current non-exclusive franchise system, particularly if new policies and requirements are established to increase diversion responsibilities for customers and haulers and materials processing opportunities are expanded. Alternatively, the improvements identified for the current system may be best accomplished through implementation of some form of exclusive franchise system for collection of some or all types of materials. In an exclusive system, one or more franchise haulers would be granted rights to collect exclusively (i.e., not competing with other haulers) for some or all types of materials from some or all types of customers.

This section of the white paper reviews a wide range of municipal commercial collection systems. It introduces several collection system scenarios that the City may want to consider to determine which scenario can best support the types of improvements needed to meet the City's goals and interests. To illustrate the complexity of the analysis that will be involved in selecting a future commercial collection system, potential advantages and disadvantages of two commercial collection system scenarios are presented.

### 6.1 Wide Array of Commercial Collection Systems

The commercial collection system must address the requirements of all types of commercial customers, various classifications of material types, geographic service areas, and hauler regulation arrangements. Table 6-1 on the following page provides a sampling of the variables that need to be addressed in designing the commercial collection system.

Different commercial collection systems handle these variables in different ways. Some materials such as solid waste may be collected on an exclusive basis and others such as recyclables on a non-exclusive basis as exemplified by Seattle's system. Services such as C&D drop box collection can be collected in an open market environment (through non-exclusive agreements or permits) while one hauler has exclusive rights to solid waste like San Francisco's model. Multiple service areas can be created as Seattle has done to accommodate more than one hauler. Mandatory commercial customer recycling requirements can be adopted as demonstrated by the Sacramento Regional Solid Waste Authority (SWA), California; Santa Cruz County, California; Portland, Oregon; Seattle, Washington; and, Montgomery County, Maryland.

**Table 6-1**  
**Example of Variables in Commercial Collection Systems**

Customer Type	Material Types	Geographic Areas	Hauler Regulation
Retail	Recyclables	City-wide area	Non-Exclusive
Small (cart)	Commingled	Downtown area	franchise
Medium (bin)	Separated	Industrial area	Exclusive franchise
Large (roll-off)	Specialty types	Multiple areas	Exclusive with
Office	Organics	Other	exceptions
Small	Green waste		Permit system
Medium	Food waste		Unregulated
Large	Mixed organics		
Industrial	Unique organics		
Small	(spent grain, food		
Medium	processing		
Large	residuals)		
Mixed Use	C&D		
Small	Mixed		
Medium	Separated		
Large	Mixed Waste		
Other	Putrescibles		
	Dry waste		
	Other		

There are potentially hundreds of system options available to the City. Analysis of all options is not practical so the City will want to focus on identifying and evaluating scenarios that reflect a range of options on the spectrum of commercial collection systems. The City's analysis of its options will need to start with a focus on making "big picture" decisions such as:

- Will haulers be regulated through an exclusive or non-exclusive system or a combination thereof?
- If an exclusive system is implemented,
  - Will it be implemented on a City-wide basis, for a small portion of the City, or through establishment of multiple service areas?
  - Will separate contracts be granted for collection of different material types by different companies?
  - What are the parameters of system design which could impact customer rates?
- If a non-exclusive system is continued,
  - Will the City regulate some or all types of materials?
  - Will it apply on a City-wide basis or for a designated portion of the City?

## 6.2 Example Collection System Scenarios

The City plans to conduct an analysis of collection system scenarios focused on the “big picture” framework by assessing a representative range of scenarios. Table 6-2 presents seven examples of collection systems that cover a range of options. Example 1 represents one end of the spectrum of choices. It considers a non-exclusive franchise system supported by City policies for mandatory customer and hauler participation in diversion programs. This example is the existing system with enhanced diversion through mandatory participation policies. Example 7, an exclusive City-wide franchise system for all materials, represents the other end of the spectrum. Examples 3 through 6 represent other points in between these two ends of the spectrum. These examples consider establishing an exclusive franchise for some or all of the City or for a portion of the material types generated by commercial customers.

**Table 6-2  
Example Collection System Scenarios**

Example	Description	City Surveyed
1	Non-exclusive system throughout the City with multiple collection companies and mandatory customer participation and hauler responsibilities.	Portland, OR
2	One exclusive franchise agreement for the downtown area for all materials with a non-exclusive system for the other portions of the City.	Austin, TX
3	Multiple exclusive franchise agreements for all materials assigning each hauler a different area of the City. Under this scenario, two or more service areas can be established.	Seattle, WA
4	Exclusive franchise agreements assigning two or three haulers the right to collect different material types (e.g., solid waste, recyclables, organics) throughout the City.	None (Note: This is San José’s approach for two of its residential service areas.)
5	Exclusive franchise agreement(s) for recyclable and/or organic materials and non-exclusive system for solid waste.	None
6	Two exclusive franchise agreements allowing two haulers to compete throughout the City.	Stockton, CA
7	One City-wide exclusive agreement with one company for all materials.	San Francisco, CA

## 6.3 Future Evaluation Process for System Scenarios

The City plans to initiate analysis of various collection system alternatives. The evaluation of the alternative commercial collection systems may involve two phases. The first phase is the big picture phase; and, the second phase involves defining the details of the big picture. Both phases are described in this section.

### **First Phase – Defining the General Framework of the Collection System**

The first phase of the evaluation process encompasses making the “big picture” decisions about the general framework of the commercial system. The City will commence this phase of the evaluation process by defining the number and nature of the commercial collection systems it wants to evaluate. It will then establish criteria for its analysis and analyze how each scenario would fulfill the City’s evaluation criteria. The findings of the analysis will serve as the basis for selecting the future commercial collection system.

Tables 6-3 and 6-4 present a preliminary examination of two systems that represent examples on opposite ends of the spectrum – Example 1, Non-Exclusive System with Mandatory Participation Policies; and Example 7, Exclusive City-Wide Franchise System. These tables are introduced at this time to illustrate the complexity of the issues the City will be examining in its analysis. The information is preliminary in nature and not intended for decision-making purposes.

For the purposes of Table 6-3, the non-exclusive system anticipates that the existing hauling companies in San José can continue to operate and other hauling companies can establish business in the City at their option. It also anticipates that the City would establish requirements for increasing customer and hauler participation in diversion programs. For example, customer participation may be required through a mandatory generator recycling policy and hauler participation may be required through new provisions of the non-exclusive franchise or City ordinance requiring that the haulers provide specific diversion programs and establish performance standards for diversion. This type of system resembles Portland’s system.

For the purposes of Table 6-4, Example 7 considers establishing one exclusive franchise agreement for commercial collection in the City, that would result in a single service provider for all types of materials generated by commercial premises (with a few minor exceptions). It anticipates that the exclusive franchise will encompass all materials collected in carts and bins (including bins with compactor units) including solid waste, recyclable materials, and organic materials. The example does not consider service for drop boxes and roll-off compactors that transport solid waste, C&D, recyclables, and organic materials because roll-off trucks do not achieve the same types of benefits from an exclusive franchise agreement, as each drop box is separately hauled so hauling efficiencies can not be enhanced.



**Table 6-3**  
**Example 1 Preliminary Examination:**  
**Non-Exclusive System, Mandatory Participation**

	Advantages	Disadvantages
Supporting City Zero Waste Goals, Urban Accords' Goals, and Mayor's Green Vision	<ul style="list-style-type: none"> <li>• City may benefit from haulers' creativity of an open market environment</li> <li>• City can increase diversion control by requiring customer to have recycling and/or organics services</li> <li>• City can increase diversion through diversion standards for haulers</li> <li>• City structured franchise and AB 939 fees may be adjusted to create more incentives for diversion</li> <li>• City may establish vehicle requirements to benefit from state-of-the-art air emissions control and fuel efficiency technology and use of alternative fuels</li> </ul>	<ul style="list-style-type: none"> <li>• City may not realize diversion objectives if mandatory customer and hauler participation policies are not effective or are not enforced</li> <li>• City's fee structure, which is designed to incentivize diversion because franchise fees and AB 939 fees (as well as disposal facility taxes) are not paid on recyclables collected, does not seem to be providing adequate incentives for haulers and customers to participate in recycling programs</li> <li>• City does not minimize adverse vehicle-related environmental impacts associated with route inefficiencies</li> <li>• Additional staff would be needed to ensure that businesses City-wide are complying with City requirements</li> <li>• Customer rates may be impacted because economies of scale may not be realized if extensive recycling services are required in an open market system because haulers may have limited customer base</li> </ul>
Increasing Customer Participation in Diversion Programs	<ul style="list-style-type: none"> <li>• Customers can be offered a wide range of diversion services if City specifies haulers' obligations to provide them</li> <li>• Customer compliance with mandatory participation policy may increase commercial diversion levels</li> </ul>	<ul style="list-style-type: none"> <li>• Customers can be confused about different programs offered by different haulers.</li> <li>• Educating businesses can be difficult for the City due to variety of hauler programs</li> <li>• Customers may object to mandatory participation policies</li> </ul>
Increasing Hauler Diversion Results	<ul style="list-style-type: none"> <li>• Haulers can be innovative in providing service for the City-approved recycling and organic materials categories</li> <li>• Haulers' compliance with diversion standards may increase commercial diversion levels</li> </ul>	<ul style="list-style-type: none"> <li>• If financial incentives or diversion requirements are weak, haulers may not achieve diversion goals</li> <li>• Some haulers are not focused on diverting materials</li> <li>• When recyclable materials market conditions are down, haulers often stop collecting low value recyclables</li> </ul>

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	Advantages	Disadvantages
Delivering Reasonable Customer Rates	<ul style="list-style-type: none"> <li>An open market environment provides competition among haulers that should, theoretically, result in lower rates for the customers</li> <li>Competitive pricing of open market benefits some customers</li> </ul>	<ul style="list-style-type: none"> <li>City can not easily adopt rate policies to incentivize customer diversion</li> <li>Difficult for haulers in an open market system to take advantage any of economies of scale, including infrastructure, equipment, and efficient routing; this can result in higher customer rates</li> <li>Rates may increase due to new hauler requirements related to diversion programs, equipment, education, etc.</li> <li>Average cubic yard rate for solid waste and recyclables varies widely, demonstrating inequity in charges</li> <li>Smaller businesses may have limited time or experience to negotiate effectively with haulers</li> </ul>
Improving Customers' Quality of Service	<ul style="list-style-type: none"> <li>Customers have a choice of companies, which allows them to negotiate services and their rates</li> <li>Customers have control over the quality of service because they can change haulers if they are unhappy with service</li> <li>Performance standards, including diversion goals, can be established and monitored to ensure customers receive quality service</li> </ul>	<ul style="list-style-type: none"> <li>Collection quality is difficult to measure and enforce due to large number of companies operating and the challenge of identifying which company is responsible for specific complaints filed by customers</li> <li>Smaller customers are often overlooked by haulers because profit margins are typically low. As a result, the smaller customers may not know about the services available</li> </ul>

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	Advantages	Disadvantages
Other City Benefits	<ul style="list-style-type: none"> <li>• City does not need to displace any haulers</li> </ul>	<ul style="list-style-type: none"> <li>• City franchise and AB 939 fee revenues may be impacted by increased diversion if a new basis for setting these fees is not established</li> <li>• City's task of monitoring and managing 24 haulers and enforcing mandatory business recycling policy may be challenging</li> <li>• City's ability to enforce hauler contract provisions or resolve complaints can be difficult because identification of the responsible hauler may not be practical or the haulers may blame other companies</li> <li>• City's ability to audit accuracy of franchise and AB 939 fee payments requires considerable time. As a result, City may not collect its full share of fees</li> </ul>

**Table 6-4**  
**Example 7 Preliminary Examination:**  
**One Exclusive City-Wide Franchise**

	Advantages	Disadvantages
Supporting City Zero Waste Goals, Urban Accords' Goals, and Mayor's Green Vision	<ul style="list-style-type: none"> <li>• City may more easily implement diversion services with one company</li> <li>• City may create financial incentives for increasing hauler's diversion results</li> <li>• With one hauler, it may be easier to ensure compliance with performance standards for quality and diversion</li> <li>• City's increased control may lead to higher diversion</li> <li>• A reduction in green house gases and other air emissions may result from:                             <ul style="list-style-type: none"> <li>- Improved routing efficiencies with only one company</li> <li>- Newer collection vehicles with latest air emissions and fuel technology</li> <li>- Use of alternative fuels</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• City does not benefit from creativity and competitive pricing of an open market environment</li> <li>• City may not realize diversion objectives if hauler does not have strong financial incentives or does not perform well</li> </ul>
Increasing Customer Participation in Diversion Programs	<ul style="list-style-type: none"> <li>• All customers have access to recycling and organics programs, whether big or small generators</li> <li>• Customers can be offered a wide array of services tailored to meet their needs</li> <li>• Customer's understanding of services may increase because public education focused on a single message</li> <li>• Incentives offered hauler for diversion results may benefit customer rates</li> <li>• Customer can be assured diversion programs when market conditions are down</li> </ul>	<ul style="list-style-type: none"> <li>• Customers may not be able to secure extra diversion-related services from hauler such as floor-to-floor collection or confidential document destruction</li> <li>• Customer rates may reflect hauler obligation to deliver wide array of diversion programs</li> </ul>

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	Advantages	Disadvantages
Increasing Hauler Diversion Results	<ul style="list-style-type: none"> <li>• Hauler may be incentivized to achieve diversion goals</li> <li>• Hauler may have more control over materials and customers</li> </ul>	<ul style="list-style-type: none"> <li>• If financial incentives are weak, hauler may not achieve diversion goals</li> <li>• The hauler may not have recycling expertise, and/or may not consider recycling "core" part of business</li> <li>• Without competition of other haulers, one company may not be driven to meet performance goals</li> </ul>
Delivering Reasonable Customer Rates	<ul style="list-style-type: none"> <li>• Customers will be charged consistent rates for same level of service</li> <li>• City may structure rates to incentivize customers to divert materials</li> <li>• City may review and adjust rates</li> <li>• This scenario may be most cost-effective scenario because of numerous collection and operational efficiencies for hauler operating one large system</li> </ul>	<ul style="list-style-type: none"> <li>• Competitive pricing of open market eliminated, and customers can not negotiate rates</li> <li>• Consistent rates may result in rate increases for some customers and rate decreases for others</li> <li>• Current rates may increase as a result of new programs, equipment specifications, quality standards, and performance requirements</li> </ul>
Improving Customers' Quality of Service	<ul style="list-style-type: none"> <li>• Performance standards, including diversion goals, can be established and monitored to ensure customers receive quality service</li> <li>• City can specify standards for quality and monitor only one hauler</li> <li>• Complaints received may be attributable to only one hauler</li> <li>• Customer does not negotiate services and rates, which is particularly convenient for small business</li> </ul>	<ul style="list-style-type: none"> <li>• Customers will not have ability to negotiate arrangements and rates</li> <li>• Customers can not change haulers if they receive poor service</li> <li>• City can not compare company performance to another company to create a competitive environment if only one franchise; this could be mitigated by creating more than one franchise similar to the Recycle Plus residential service.</li> </ul>
Other City Benefits	<ul style="list-style-type: none"> <li>• City can audit franchise fees and AB 939 fees more thoroughly to ensure City collects all fees due</li> <li>• May result in reduced staff time allowing staff more time to focus on diversion program efforts and other City initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Revenues from franchise and AB 939 fees may be impacted by increased diversion if the method of calculating fees is not modified</li> <li>• By selecting only one contractor to service the entire area, the ability for another contractor to replace them quickly in the event of default or termination may be reduced</li> </ul>

## **Second Phase – Defining the Details of the Collection System**

The second phase of the analysis of commercial collection system alternatives will occur after the City makes its big picture decision for the general framework of the commercial collection system. The City will then need to make numerous decisions to define all aspects of the collection system.

For example, if the City determines that establishment of one or more exclusive commercial franchise agreements is in the best interest of the businesses and the City, the scope of the exclusive franchise agreement(s) needs to be defined. Key questions that typically arise when considering the scope of exclusive collection services include:

- What types of customers will be serviced by the exclusive commercial hauler? Small commercial customers? Medium commercial customers? Large commercial customers? Mixed use customers? City facilities? Government and school facilities?
- Will temporary and/or permanent drop-box service be provided by the exclusive hauler?
- What exclusive rights to collection of recyclable and organic materials (e.g., source separated recyclables, commingled recyclables, source separate greenwaste and/or food waste, mixed organics, wet waste, etc.) will be granted to haulers?
- What “exceptions” to exclusive rights will be appropriate such as the right of federal, state, and public schools to use a hauler they select and the right of individuals to self-haul materials?

If a non-exclusive franchise system is continued for some or all aspects of the commercial collection system, the City will need to identify changes to improve the system to more fully achieve the City’s goals and interests. These changes may include:

- Establishing requirements in the non-exclusive franchise agreements to:
  - Expand the types of recycling and organics collection programs required of the haulers;
  - Specify diversion level goals for the haulers and incentives and disincentives to encourage compliance;
  - Increase reporting obligations to gather data on customer participation levels, service volumes, and hauler compliance with diversion standards;
  - Establish more performance standards related to collection quality that can be effectively monitored; and,
  - Mandate use of alternative fuels for some or all of the collection fleet.
- Identifying and making available to haulers processing sites with capabilities of processing various types of materials (e.g., mixed organics, mixed waste, etc.).

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- Adopting new City policies focused on requiring more customer participation in diversion programs similar to the mandatory customer recycling programs of Portland and Seattle.
- Making recycling technical assistance readily available to businesses.

## **Exhibit**

# **Commercial Collection Strategies in Other Major Cities**

As part of this white paper effort, the City chose to survey five large cities that represented diverse methods of regulating commercial collection companies. The cities surveyed included: Austin, Texas; Portland, Oregon; San Francisco, California; Stockton, California; and, Seattle, Washington. The five cities illustrate the range of commercial systems available and types of differences among the systems. The survey objectives were to learn about the unique characteristics of their systems and the diversion results. This section presents a description of each City's commercial collection system highlighting exclusive and open market arrangements, key statistics about collection including the diversion level, and relevant policies.

### **Austin, TX**

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#### **Exclusive Hauling Arrangements**

Austin, Texas has a hybrid collection system that includes an exclusive commercial franchise for collection of solid waste and single-sort recyclables (separated cardboard and office paper) in the downtown area. The downtown franchise was established, after input from businesses and other stakeholders, to reduce truck traffic and clean up the alleyways and collection areas. The City periodically selects the franchise hauler through competitive bid processes. The term of the franchise agreement is one year plus up to four one-year extensions. Paper and cardboard collection are provided by the franchise hauler at no additional charge to the customer. The recyclables are hauled to the City's material recovery facility. City handles billing services.

The downtown service area was initially established in the mid 1980s to encompass the entertainment district. The area was expanded by approximately seven blocks to include the Congress Avenue area. The expansion was supported by the Downtown Austin Alliance because the exclusive franchise arrangements in the entertainment district had successfully resulted in clean alleys and quality service. When the service area was expanded, customer rates increased but the customers received expanded services.

#### **Open Market Arrangements**

Outside of the downtown area, 10 haulers service commercial customers in an open market environment that is regulated through a permit system.

#### **Commercial Statistics**

The downtown franchise area includes 400 customers including small and large businesses and mixed use properties. The City estimates that 30% of the customers participate in the recycling program resulting in a diversion rate of 14%. Note that only paper and cardboard collection services are provided to businesses.



**Relevant Policies****Mandatory Generator Recycling Requirements**

All multi-family complexes with 100 or more units and all businesses with 100 or more employees are required to recycle.

**Portland, OR**

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**Exclusive Hauling Arrangements**

The City of Portland has not granted any exclusive hauling rights to provide solid waste, recyclables, organics, or C&D collection services to the commercial sector.

**Open Market Arrangements**

Portland has 55 permitted haulers that are permitted to collect solid waste, recyclables and organics from commercial customers. The City also allows "Independent Recyclers" to collect recyclables and organics. The independent recyclers must register with the City to enable the tracking of quantities of recyclables and organics; however, the overall requirements for the independent recyclers are far less than for the permitted haulers. All haulers compete against each other to service commercial customers. Haulers set their own rates for collection services.

**Commercial Statistics**

The permitted haulers and independent recyclers service approximately 15,000 commercial customers and 3,100 multi-family complexes. The City reported a commercial diversion rate of 57.5%, which includes C&D diversion. This diversion rate reflects tonnage collected by permitted haulers and independent recyclers (393,720 tons of solid waste and 532,944 tons of recyclables, organics, and C&D).

**Relevant Policies****Diversion Goal**

The City has implemented a goal to divert 75% of its waste stream from landfills by 2015.

**Mandatory Commercial Generator Recycling Requirements**

While the City focuses its efforts on technical assistance and public education to increase commercial recycling, the City did institute a mandatory commercial recycling program in January 1996 targeting uncooperative businesses. Businesses are required to recycle 50% of the materials they generate. The mandatory program includes a financial penalty for noncompliance with a maximum of \$500 per incident, increasing for each subsequent incident. City regulations provide for an "assistance period" of 30 days, instead of allowing an immediate penalty for noncompliance.

**Bans on Disposal of Recyclables**

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While there are no materials that are banned from the waste stream, haulers are prohibited from using material recovery facilities for the processing of mixed waste.

Other

In August 2007, the Portland City Council directed staff to investigate commercial collection options that would not only improve diversion levels but also reduce noise, fuel use, and air pollution. These options could include financial incentives, rate setting, and/or a franchise approach.

## **San Francisco, CA**

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### **Exclusive Hauling Arrangements**

San Francisco has an exclusive permit system for collection services, under which only one company provides collection services throughout the city. Norcal Waste Systems, Inc. (dba Golden Gate Disposal & Recycling and Sunset Scavenger Company) serves 20,243 commercial customers under the permit provisions of an ordinance initially implemented in 1932. Norcal holds exclusive rights to collect solid waste, yard trimmings, food scraps and mixed organics from the commercial sector. Norcal offers both source-separated and commingled recycling services to its customers; however, the City is moving toward a completely commingled recycling system.

Norcal's food scrap program is targeted primarily toward the hospitality and restaurant sectors. Norcal has dedicated staff that deal exclusively with these sectors to expand existing organics collection. The City works closely with Norcal to promote organics collection and provides valuable resources through its outside technical assistance contract that supports these efforts by providing both initial and follow up training to customers and their employees. All organics are accepted in the program including meat scraps, vegetable scraps, yard waste, soiled paper and waxed cardboard.

In San Francisco, a commercial rate structure includes two components: the base rate and variable rate which is reduced by a recycling discount. The base rate, 5 percent of the bill, covers certain fixed costs. The variable rate, 95 percent of the commercial bill, is based on the service volume for refuse, recycling and composting collection. Under the structure, the variable rate is discounted in proportion to the percentage of recycling service volume up to 75 percent, while the fixed costs remain the same. By charging for collecting all three containers (garbage, recycling and compost) the uniform rate structure accounts for all costs and revenues associated with collecting and recycling waste materials. And, by discounting commercial bills as businesses recycle and compost more of their waste, the uniform structure provides a direct financial incentive for businesses to actively participate in San Francisco's blue and green cart programs.

### **Open Market Arrangements**

San Francisco has an open-competition system for the collection and diversion of C&D. C&D collectors/recyclers must be registered with San Francisco.

### **Commercial Statistics**

The City reported a commercial diversion rate of 44% based on information received from Norcal for the period July 1, 2006 through July 1, 2007. Materials included in the reported diversion rate include: commercial recyclables and organics collected by Norcal. This diversion percentage does not include recyclables or C&D collected by non-permitted haulers in the open market.

### **Relevant Policies**

#### Zero Waste

San Francisco adopted goals of 75% diversion by 2010 and Zero Waste by 2020.

#### Bans on Disposal of Non-Recyclable Food Service Ware

Since June 2007, food vendors and restaurants have been prohibited from using polystyrene foam and disposable food service ware. In place of these items, food vendors and restaurants are required to use compostable or recyclable take-out containers.

In November 2007, the City passed an ordinance prohibiting supermarkets that conduct more than \$2 million business annually from using non-compostable plastic checkout bags. Instead, all stores are required to provide only checkout bags that are made of recyclable paper or compostable plastic.

#### Mandatory Commercial Generator Recycling Requirements

The City has been exploring this issue for a number of years and anticipates moving it forward in the next calendar year. Although, the City has not finalized the structure of the mandatory commercial recycling, they anticipate some form of financial incentives for recycling and surcharges for non-participants. As of the date of this survey, the City had not received stakeholder input.

## **Seattle, WA**

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### **Exclusive Hauling Arrangements**

Seattle established two exclusive franchise areas served by two different haulers. One area covers approximately 70% of the city including the downtown. The other area covers approximately 30% of the city. Prior to 2001, four haulers were operating in the City but two of the haulers were bought by the other two larger haulers.

The franchise haulers service residential and commercial customers and provide temporary and permanent drop box services. Exclusive rights are granted to collect solid waste and C&D. The franchise haulers offer commercial organics collection services to businesses at prices 20% less

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than solid waste prices. The City offers food waste training to businesses and their employees through a contractor and provides a free six-month supply of biodegradable bags.

### **Open Market Arrangements**

In Seattle, recyclables are collected from businesses in an open market environment. There are approximately 100 recyclers competing in the commercial market, with four to five haulers who serve the majority of customers. The recyclers must obtain a "Recycling Business License" to collect in the City. The business license assists the City in tracking diversion. While the two exclusive franchise haulers compete with the other recyclers, the exclusive franchise haulers are required to provide small businesses with two 95-gallon recycling containers that are serviced every other week.

### **Commercial Statistics**

Solid waste and recycling services are provided to approximately 10,000 commercial accounts. The City estimated a 47% commercial diversion rate in 2005.

### **Relevant Policies**

#### Mandatory Commercial Generator Recycling/Ban on Disposal of Recyclables

Effective January 1, 2005, the City prohibited "significant amounts of recyclables" from disposal by commercial customers, where significant amounts are defined as 10% or more by volume of paper, cardboard, and greenwaste. During the first year, non-compliant customers received education notices. Commencing January 1, 2006, customers can be fined for non-compliance after receipt of two warning notices.

## **Stockton, CA**

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### **Exclusive Hauling Arrangements**

In 2004, the city of Stockton established a franchise system. The City entered into two exclusive franchise agreements that granted two haulers rights to collect solid waste from residents and commercial businesses throughout the City. The two companies compete against each other for solid waste customers. In addition to solid waste collection services, the two franchise haulers are also required to offer recyclables and organics collection services to commercial customers, but must compete against permitted recycling haulers. The hauler's commercial rates, which are regulated by the City, include 4 cubic yards of recycling and 90 gallons of green waste/food waste at no additional charge to the customers to encourage participation in the diversion programs. Customers can negotiate additional recycling service.

Prior to commencement of the two franchise agreements, the City had no control over commercial and industrial waste as materials were collected in an unregulated, open market. The commercial and industrial waste was 80% of the total City-wide generation. With the franchise agreements, the City was able to apply a 50% diversion requirement to the overall franchised collection materials (residential and commercial combined).

In addition to the two exclusive franchise haulers, one small hauler (with approximately 30 accounts) has a permit and short-term contract for solid waste collection, which was arranged to comply with the state's five-year noticing requirement related to implementation of exclusive hauling agreements. Another hauler has a permit and short-term contract for industrial waste collection.

### **Open Market Arrangements**

Recyclables and industrial waste materials are collected in an open market environment that is regulated with permits. In the city of Stockton, haulers can secure permits to collect recyclable materials. The permits allow for collection of source separated or mixed recyclable materials provided that the contamination level is less than 10% or the residue from the processing of the recyclables is less than 10%. Haulers can also secure an industrial waste permit that allows for collection of materials from industrial generators including C&D provided that 50% of the materials collected are diverted from disposal. The 50% diversion compliance is not measured on a load-by-load basis but rather monitored on a periodic basis (e.g., quarterly or semi-annually basis).

### **Commercial Statistics**

Approximately 5,000 commercial accounts are serviced. The City estimates that the current diversion level for commercial customers is 40% to 50%. This is an estimate only, but data following the first four quarters of implementation showed at least 25% commercial diversion solely from the tonnages collected through the franchised haulers cart and front-load service, but did not include any diversion by permitted recyclers or baled material. Data from 2006 shows up to 50% diversion from commercial accounts, including some baled material and occasional roll-off boxes.

The calculated diversion level for 2005 is 25%. For 2005, the tonnage collected included the following: 25,846 tons of recyclables, 2,216 tons of organics, and 83,986 tons of solid waste for a total of 112,048 tons excluding materials collected by permitted recyclers. The recyclables are likely to include some, but not all, C&D as C&D collected by the industrial permit haulers is not included in the recycling tonnage.

There has been a very large increase in recycling since the 2004 implementation of the new franchise agreements. All businesses received, at a minimum, cart service for recycling and green waste/food waste with the implementation of the franchise services. A limited number of businesses rejected the minimum recycling service due to space constraints or lack of will. Additionally, vague definitions or undocumented expectations regarding the green waste/food waste program has led to many barriers to full implementation from the franchised haulers as intended by the City. Due to uncertainties in the availability of composting facilities and operational constraints of such processing facilities, Stockton's commercial food waste program has stagnated and

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is currently being interpreted as a program that only collects food waste along with green waste and does not separately collect food waste from businesses.

**Relevant Policies**

Mandatory Commercial Generator Recycling

City code requires that generators separate recyclable material, green waste, and food waste from solid waste for collection. However, the code states that the hauler shall not refuse to collect solid waste from containers properly placed according to this article because it contains incidental amounts of recyclable material. This code provision is only monitored on a case by case basis and is sporadically enforced through periodic waste audits and technical assistance if a problem is noticed.