

2175 N. California Boulevard, Suite 990
Walnut Creek, California 94596
Telephone: 925/977-6950
Fax: 925/977-6955
www.hfh-consultants.com

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

April 13, 2009

Mr. Tom Padia
Source Reduction and Recycling Director
StopWaste.Org
1537 Webster Street
Oakland, CA 94612

**Subject: Survey of Mandatory Commercial Recycling and Nonexclusive Collection
Solid Waste Programs – Final Report, Revised**

Dear Mr. Padia:

The following report summarizes the Survey of Mandatory Commercial Recycling and Nonexclusive Collection Solid Waste Programs conducted in 2008 by HF&H Consultants, LLC (HF&H), in collaboration with Skumatz Economic Research Associates, Inc. (SERA). We appreciate the opportunity to conduct this project on behalf of the Alameda County Source Reduction and Recycling Board (Recycling Board).¹

Project Goals

HF&H and SERA staff surveyed municipal staff, solid waste haulers, third-party recycling service providers, and a variety of types of generators from eight jurisdictions (four from California, and four from other states) to address two distinct, but at times overlapping issues.² The purpose of the survey was to gather information, perspectives, and opinions regarding:

1. Mandatory Commercial Recycling Programs. The first goal was to develop additional information regarding mandatory commercial recycling programs that are in place, or in development. The survey provides information supplementing that provided by HF&H and SERA for the January 2008 Program Assessment (“Measure D Five Year Audit”) conducted by HF&H, with assistance from SERA and others. This portion of the survey was intended to assist Agency staff as it drafted the model mandatory recycling ordinance, and to assist member agencies in drafting and implementing their own ordinances.³ SERA also provided informal input to Agency staff regarding mandatory programs as the surveying was nearing completion. While this information was

¹ HF&H LLC and SERA, Inc wish to acknowledge the assistance of public agency staff, solid waste collectors, independent recyclers, and commercial businesses that participated in the survey. The project would not have been possible without them, and we thank them.

² See Attachment A for the jurisdictional profiles. The revised final report includes several participating public agency comments received after the original March 2009 print date for the final report.

³ SERA’s full report “Increasing Recycling in the Commercial Sector: Assessment of Mandatory Commercial Recycling Program and Exclusive Hauler Arrangements” will be available on the Agency’s website.

Mr. Tom Padia
April 13, 2009
Page 2 of 15

intended to inform the process of developing a model mandatory commercial recycling ordinance, it may also be of use as the Agency develops and implements the new landfill disposal ban.

2. Nonexclusive Commercial Solid Waste Collection and Commercial Diversion. The second goal was to explore the relationship of nonexclusive commercial solid waste collection with commercial diversion. This information will be of value to member agencies as they consider options for procuring solid waste, recycling, and organics collection and processing services. This task also builds on material developed for the Program Assessment.

The intent of the project was to profile mandatory programs and non-exclusive solid waste systems, with a focus on how they work in practice, and on how the systems were perceived by the surveyed parties. Key broad issues for each topic included relative effectiveness of programs in enhancing diversion, and public and private sector perspectives regarding programs.

As discussed with the Recycling Board, the focus of the project was based on anecdotal interview and survey information, utilizing a “case study” approach. The primary goal of the mandatory survey was to gather information. The sample survey is small and the survey results are not intended to have statistical validity. With regard to nonexclusive solid waste collection and recycling diversion, the results are augmented with the experience of both HF&H and SERA staff and derived from other projects regarding the various factors that separately and in combination, tend to encourage or hinder increased commercial diversion. The project did not, nor was it intended to, result in universally applicable conclusions regarding the advantages or disadvantages of non-exclusive solid waste collection with relation to diversion.

Summary of the Survey Process

The following summarizes the key steps of the survey process:

1. Selecting Survey Jurisdictions

The initial task was to identify eight participating jurisdictions and to obtain data from them. The process of selection began with about 30 jurisdictions from across the country, drawn from existing in-house data, and reflecting a broad range of program designs, population, and other demographic characteristics. Project staff put significant effort into narrowing the pool to eleven jurisdictions from which, in consultation with Agency staff, the final eight were selected. The goal was to select jurisdictions that best met the following ideal criteria. None of the jurisdictions met all of the criteria and several were difficult to meet at all.

1. Reflected the range of populations and commercial sector sizes of the member agencies.

Mr. Tom Padia
 April 13, 2009
 Page 3 of 15

2. Had both nonexclusive commercial solid waste collection and a commercial mandatory recycling ordinance.
3. Had diversion data for before and after implementation of nonexclusive solid waste collection and/or mandatory commercial recycling that provided for comparisons.
4. Commercial recycling data was reported, could be used to identify a diversion rate on a comparable basis, and was readily available for use in this project.
5. Construction and demolition recycling data was reported separately from commercial diversion, could be used to identify a diversion rate on a comparable basis, and was readily available for use in this project.
6. Public agency staff was interested in participating in the survey and was able to provide substantial assistance towards identifying and providing referrals to private sector parties to be interviewed for the survey.

The following table identifies the selected jurisdictions, organized alphabetically with California jurisdictions grouped first. Note that two jurisdictions (Charlotte/Mecklenburg County, North Carolina and Portland, Oregon) simultaneously had both mandatory and non-exclusive environments.

Table 1 Surveyed Jurisdictions

Jurisdiction	State	Population	Mandatory Program	Non-Exclusive MSW Collection
Chula Vista	California	211,000	X	
Long Beach	California	493,000		X
Pasadena	California	147,000		X
Torrance	California	149,000		X
Bonita Springs/ Lee County	Florida	615,000	X	
Charlotte/Mecklenburg County	North Carolina	827,000 (entire county)	X	X
Highland Park	New Jersey	14,000	X	
Portland	Oregon	540,000	X	X

2. Collecting And Compiling Jurisdiction Data

Prior to surveying solid waste collectors, recyclers, and generators, we collected detailed information and where possible, opinions from staff of the selected jurisdictions. Following were key challenges in this process:

Mr. Tom Padia
April 13, 2009
Page 4 of 15

- The ability and willingness of public agency staff to refer HF&H/SERA staff to MSW collectors, recyclers, and generators. One reason for this reluctance was that for non-exclusive systems, public agency staff often had a relatively low level of knowledge regarding private sector diversion activities and practices in their communities. A second reason was concern about appearing to favor or single out specific parties, whether collectors or generators.
- Time commitments of staff surveyed. Senior staff had been contacted to elicit cooperation regarding participation of their agency in the survey, but it was not clear that this commitment had been clearly conveyed to the more junior staff that participated directly in the surveys. Some public agency staff persons responded quickly and were willing to answer initial questions in a timely manner; others were less able to do so.
- Consistency of format for diversion data. Common problems in comparing jurisdictions include lack of availability of diversion data, inconsistency of definitions, and perhaps most importantly, very different starting points. For instance, it is far easier to increase commercial diversion from 20% to 40%, than to increase it from 40% to 60%.
- Lack of “before and after” data. Not surprisingly, there were few instances of “before and after” data, and those we did find were anecdotal in nature and of questionable comparative value. Changing systems, whether from non-mandatory to mandatory or from exclusive to non-exclusive (or vice versa), almost always entails a number of specific changes that are contributing factors. As with most social sciences, it is rarely, if ever possible, to control one variable in order to isolate its effect.

3. Developing Jurisdictional Profiles

HF&H developed a consistent format for summary profiles of each surveyed jurisdiction. The eight jurisdictions are profiled in Attachment A.

4. Developing Survey Questions

HF&H/SERA staff developed a survey instrument that was emailed to parties that had agreed to participate prior to conducting phone interviews. The surveys included questions that applied to all of the parties, as well as questions tailored to each type of party interviewed (e.g., public agency staff, solid waste collectors, independent recyclables collectors, and generators). A key challenge was balancing development of workable surveys that were not too long, with interest in obtaining detailed responses to relatively complex issues. The survey questions are contained in Attachment B.

The surveys addressed a broad category of issues with the primary goal of eliciting relatively nuanced responses from surveyed parties regarding:

1. For mandatory programs, the specifics of implementation of programs, including the roles of public education, exemptions, and enforcement.

Mr. Tom Padia
 April 13, 2009
 Page 5 of 15

2. For non-exclusive collection, the range of services provided to generators, including the type of collection (source-separated or commingled) and availability of ancillary services such as collection of recyclables from inside buildings, recycling clean-out services, container signage and directions, and staff training.

5. Surveying

The goal, to the extent possible, was to interview up to nine parties for each selected jurisdiction including:

- Municipal program staff.
- Representatives from two of the nonexclusive solid waste collectors.
- Representatives from two independent collectors of commercial recyclables.
- Representatives from up to four solid waste generators engaged in recycling, including ideally: one larger manufacturer, one larger institution such as a hospital, one retailer, and one larger property manager.

The project team completed a total of 62 surveys as summarized in Table 2. A number of these surveys addressed both solid waste and recyclables collection. Multiple public staff surveys indicate surveying at the local, county, and/or state level. Several jurisdictions have exclusive MSW and/or exclusive recycling collection and one collector was then interviewed regarding both materials.

Table 2 Surveys by Jurisdiction

Jurisdiction	State	Public Agency Staff	MSW Collectors	Recyclers	Generators	Total
Chula Vista	California	2	1		3	6
Long Beach	California	1	2		4	7
Pasadena	California	1	2		4	7
Torrance	California	1	2		4	7
Bonita Springs/Lee County	Florida	1	2	3	3	9
Charlotte/Mecklenburg County	North Carolina	3	2	3	3	11
Highland Park	New Jersey	3	1		3	7
Portland	Oregon	1	3	3	3	10
Totals	N/a	13	22		27	62

Mr. Tom Padia
April 13, 2009
Page 6 of 15

In general, the surveying went well and some parties were very generous with their time. The surveyors experienced several areas of difficulty related to the type of surveyed party and the system in place. These challenges included:

- Identifying third party recyclers separate from MSW collectors. Independent recyclers were generally difficult to identify and to contact. Our comments about the role and perspectives of independent recyclers are augmented by experience from other engagements.
- Obtaining generator participation. A number of generators were contacted to find ones interested in participating in the interviews. Their willingness to participate resulted in a self-selection of businesses that considered themselves recyclers. Those businesses that participated tended to be active recyclers and to have definite opinions about service issues.

6. Compiling the Results

HF&H/SERA staff compiled the results, which are discussed in the following section.

Summary Results

1. Overview

The results augment material from the Program Assessment.⁴ In addition, the results draw on a range of other client engagements conducted by both HF&H and SERA that provides a practical understanding for how various types of commercial programs function in a wide variety of settings.

2. Mandatory Programs Summary

Table 3 provides a summary of key information for each jurisdiction. There are relatively few mandatory programs in place in California and a number of these were profiled in the Program Assessment.

⁴ The Program Assessment and the related SERA report (with referenced sources) are available on the Agency's website. Regarding the Program Assessment, see Section 4 regarding mandatory commercial ordinances, and SERA report, and Sections 6.4 and 8 regarding non-exclusive solid waste collection. HF&H has provided Agency staff the detailed questions and responses for each jurisdiction under separate cover.

Mr. Tom Padia
 April 13, 2009
 Page 7 of 15

Table 3 Summary of Mandatory Programs

Jurisdiction System Commercial Diversion Rate ⁵	Diversion Mandates		Incentives		Exemptions	Education, Enforcement	Comments
	Collector	Generator	Collector	Generator			
Chula Vista, California Exclusive franchised solid waste and recyclables collector. 7.5%	Yes. Generators must be provided service.	No required diversion level. Recycling plans and tonnage reporting required.	Yes. Retain increased share of recycling revenue with higher diversion	Yes. Recycling rates are discounted from solid waste rates.	No.	Minimal to date, but increased focus now.	Successful in providing service, but no assurance it is used.
Bonita Springs/Lee County, Florida Exclusive franchised solid waste collection by district; open market recycling. 41%	No, not direct.	Yes. Generators must take service. Choice of minimum number of materials to recycle.	No.	Yes. Maximum rate for recyclables less than for solid waste.	Small generators. Extreme disparities in cost of recycling vs. not recycling.	Recycling plan forms, inspections and fines. Collectors also levy fines.	County staff offers technical assistance. Participation in recycling programs has increased from 39% to 90%. There has been an issue with existing enclosure requirements conflicting with the new ordinance. Independent recyclers perceive program as exclusionary.

⁵ The profiled cities use a variety of means to measure commercial diversion and these figures are not directly comparable.

Mr. Tom Padia
 April 13, 2009
 Page 8 of 15

Jurisdiction System Commercial Diversion Rate ⁵	Diversion Mandates		Incentives		Exemptions	Education, Enforcement	Comments
	Collector	Generator	Collector	Generator			
Mecklenburg County, Charlotte, North Carolina Open market for MSW and recyclables. 30% decrease in disposal.	No.	Yes. County measure - Requires separation of cardboard and paper. State measure - All businesses with on-premise alcohol permits must participate.	No.	No.	County measure - Businesses with less than 16 cubic yards per week of MSW service.	County measure - Education focus. State measure - Vigorous enforcement including non-renewal of licenses.	Considering lowering county program exemption level, setting reduced recycling rates.
Highland Park, New Jersey Primarily municipal collection of MSW and recyclables. 63% (includes residential)	N/a	Yes. 60% diversion goal, specified materials.	Yes. County surcharge on all tons disposed.	No.	Few if any. Interviewed generators are all relatively small businesses.	County enforces state and county measures. Reliance on extensive tonnage reporting by collectors and facilities.	County mandatory ordinance strengthens statewide requirements. Middlesex County has highest county diversion rate in state.

Mr. Tom Padia
 April 13, 2009
 Page 9 of 15

Jurisdiction System Commercial Diversion Rate ⁵	Diversion Mandates		Incentives		Exemptions	Education, Enforcement	Comments
	Collector	Generator	Collector	Generator			
Portland, Oregon Open market for MSW and recyclables. NA (due to the complexity of the calculation, City prefers not to publish a rate)	Yes. Must offer food scrap recycling to larger generators.	Yes. 75% diversion goal, increased recently from 60%. All paper and containers, food scraps for larger generators, use of best management practices.	No.	No.	Few if any.	Planned increase.	Requires two-sort system for recyclables. Also has a nonexclusive system. Considered a transition to exclusive franchises to increase diversion, but retained open market permit system.

Mr. Tom Padia
April 13, 2009
Page 10 of 15

Summary Observations

HF&H/SERA staff suggests the following best practices based on the mandatory program interviews and other projects, and tailored to conditions in Alameda County. See SERA's report for a full discussion of these practices.⁶

- **Ordinance Development/Planning:** It is important to involve a number of relevant stakeholders in the ordinance/program development. Without adequate input, there is often resentment and the program may not work optimally.
- **Processing Capacity:** Be familiar with available facility capacity for the processing of the materials that will be affected by the ordinance. If collectors are not already collecting recycling from a large proportion of the commercial sector, it may be difficult to quickly develop or add adequate processing capacity.
- **Space for Recycling:** A number of the public agency interviewees reported that adequate recycling container space was an issue for certain businesses. This was especially true if single stream collection is not available and multiple collection containers are necessary. Advance planning can help alleviate this problem. Additionally, it is important to ensure that any recycling enclosure requirement meshes with mandatory program specifications.
- **Menu of Recycling Options:** Flexibility of program design is important in the commercial sector, since the commercial waste stream varies greatly from business to business. Provide generators a menu of materials from which to choose those they will recycle. The menu can be coupled with a diversion goal, and/or a requirement to recycle the materials that are recycled in the greatest volumes.
- **Efficiency in Design:** Targeting specific sectors or exempting small generators can allow a community to retain the bulk of the diversion impact, but reduce administrative or enforcement burdens. With targeted programs, diversion and cost effectiveness can both be maximized.
- **Enforcement:** Enforcement is necessary for a successful program. Most of the ordinances give a grace period prior to strict enforcement, but all report that without enforcement the programs will not be successful.

⁶ See Footnote 3.

Mr. Tom Padia
April 13, 2009
Page 11 of 15

- **Reporting:** Reporting by collectors and facility operators is integral to success and helps make enforcement effective. Reporting should be as standardized and streamlined as possible.
- **Recycling Plans:** Require that short, succinct, recycling plans be filed by generators with either the collector or public agency.
- **Education/Outreach:** As with any new recycling or diversion program, education and outreach are integral. There seemed to be a consensus that a lead time of 3 to 6 months of education prior to program start-up is sufficient to allow for the necessary actors to learn about the program. Signs for tenants, bilingual information, and site visits by the responsible entity were all listed as effective means of education and outreach. Multi-resource audits that combine waste, energy, and water efficiency help increase leverage for diversion programs.

3. Key Observations - Nonexclusive Collection

Table 4 provides a summary of key information for each jurisdiction.

Mr. Tom Padia
 April 13, 2009
 Page 12 of 15

Table 4 Summary of Nonexclusive Programs

Jurisdiction, Diversion Rate ⁷	Type			Diversion Incentives		Comments
	Franchise	Permit/License	Open	Collector	Generator	
Long Beach, California 69% citywide; 31% for commercial sector		X		Yes. Payment for higher diversion.	No.	City provides technical assistance upon request. Interviewees report that technical assistance not provided.
Pasadena, California 58% citywide; comparable for commercial sector	X			Yes. Must divert 50% of collected material.	No.	City offers technical assistance.
Torrance, California 43% citywide (63% by regional measure)		X		Yes. Must divert 50% of collected material. Pay surcharge for tons disposed.	No.	City provides technical assistance.
Charlotte/Mecklenburg County, North Carolina 30% decrease in disposal.			X	See Table 3.	See Table 3.	State and county mandatory ordinances are key drivers for diversion.
Portland, Oregon 58% (citywide)		X		See Table 3.	See Table 3.	State and county mandatory ordinances are key drivers for diversion.

⁷See Footnote 5.

Mr. Tom Padia
April 13, 2009
Page 13 of 15

Summary Observations

1. Our results do not demonstrate a clear relationship between exclusive or nonexclusive solid waste collection arrangements and enhanced diversion. This result is not surprising given the small sample and the fact that municipal staff that oversees nonexclusive systems generally has less diversion information than those managing exclusive solid waste collection contracts.
2. The survey results do, however, indicate some of the ways in which such exclusive and nonexclusive systems can facilitate diversion. A key advantage noted from the interviews is that each community with exclusive arrangements cited higher participation and access to recycling; however, the performance in terms of recycling diversion is less clear and seems to depend on the quality (or presence) of incentives. A key factor for successful non-exclusive systems included use of collector and/or generator incentives and the addition of mandatory requirements for collectors and/or generators.

The following observations about each type of system indicate tendencies rather than rules, and each has exceptions. These observations extend beyond the project results, but are consistent with them. In general, nonexclusive systems operating in a strong competitive environment (with competing collection and processing options) probably provide a relatively wider range of diversion services for savvy generators, such as multiple options for collection (source-separated and various commingled) and collection of specialty materials. However, small- to medium-size businesses are generally more likely to receive diversion service in an exclusive environment in which availability of recycling is promoted, contractors are required to provide services to all customers, and contractor compliance can more easily be tracked.

It is not simple to clearly define or quantify the cost savings for generators of one system over the other. As noted above, there is very little comparative data, but factors to consider include:

1. Economic theory suggests that a robust, competitive nonexclusive system should result in low total generator costs on a system basis, presumably, for whatever level of required diversion. Since service provider diversion decisions in a nonexclusive system will be made on a cost basis, the average net cost per ton diverted will be lower. However, relatively lower economies of scale to some degree offset these advantages.
2. Some cities have found that a nonexclusive system results in a very wide range in the rates charged, with savvy larger generators that “shop the market” tending to pay relatively less and smaller and medium size generators paying relatively more. In

Mr. Tom Padia
April 13, 2009
Page 14 of 15

addition, service providers may only want to collect the highest value commodities from the largest customers.

Conversely, a well-negotiated exclusive arrangement provides equity (in that all business can have the offer of recycling service) and may provide a relatively low cost for recycling, particularly, if processing is part of an integrated structure and overhead costs are shared with collection services.

To summarize, the following are two lists of the key components of successful nonexclusive and exclusive systems. A well-designed and competitive nonexclusive system will tend to:

1. Provide more opportunities for not-for-profits and small community-based businesses to provide services.
2. Result in a broader range of collection services, including commingled, source-separated, etc.
3. Result in a broader range of processing services.
4. Allow generators to switch service providers in search of better service or pricing, or to use multiple service providers.
5. Result in provision of extra services, such as in-building collection (floor-to-floor or room-to-room), extra containers, employee trainings, signage, evaluation of the use of a baler vs. a compactor, clean-outs, special pick-ups, etc.
6. Result in options for diverting a broader range of specialty materials.
7. Reduce the potential conflict of interest for the MSW collector, which generally has little if any incentive to reduce a generator's bill by identifying MSW container/frequency right-sizing opportunities.

A well-designed exclusive system will tend to:

1. Provide a minimum standard for performance and a consistent outreach message.
2. Provide uniform minimum levels of diversion service for specific types of generators, such as small and medium-sized businesses.
3. Provide for easier monitoring of generator participation in diversion programs, and for easier identification of underserved portions of the business community.

Mr. Tom Padia
April 13, 2009
Page 15 of 15

4. Simplify municipal collection of customer and diversion data, of fees, and simplify compliance auditing.
5. Guarantee all customers access to recycling services under all economic conditions.
6. Minimize total vehicle miles on a system-wide basis, reducing road impacts and greenhouse gas emissions from collection activities.

As observed in the Program Assessment, the success or failure of specific nonexclusive and exclusive collection systems is far more a function of the design and administration of each system than of any inherent value of one approach over the other. All else being equal (were possible), a well-designed and managed exclusive system that addresses those factors that can limit generator options in an exclusive environment, may well result in more total diversion than a nonexclusive system.

From its work, SERA staff observe the important role of incentives for increasing diversion in a nonexclusive setting, including⁸:

- Collector incentives (or requirements) for haulers to offer recycling and increase diversion from generators.
- Generator incentives in the form of differential rates for recycling versus solid waste collection.

Thank you again for the opportunity to conduct this survey project. Please contact Peter Deibler at (925) 977-6968 or pdeibler@hfh-consultants.com, should you have any questions.

Very truly yours,
HF&H CONSULTANTS, LLC



Robert D. Hilton, CMC
President



Peter M. Deibler
Senior Project Manager

Attachments:

- A. Jurisdictional Profiles
- B. Survey Questions

⁸ See Footnote 3.

ATTACHMENT A
JURISDICTIONAL PROFILES

City of Chula Vista, California

Population:	211,000
Diversion:	2006: AB 939 Citywide diversion = 54% Commercial diversion = 7.5%
Commercial Program:	Mandatory ordinance, single exclusive collector.
Year Started:	1992

PROGRAM DESIGN

The City of Chula Vista began its mandatory commercial recycling program in 1992 and provides both collector and generator requirements. The exclusive MSW and recycling collector contract requires provision of recyclables collection for all commercial and industrial businesses. The program encourages high rates of participation (i.e., having a container), but not necessarily high rates of diversion. Generators are required to pay a fee for recycling set by the City as a percentage discount from the comparable MSW rate. The rate structure gives the collector an incentive to increase diversion for its customers. Some larger businesses can reduce their MSW bill by recycling. Small quantity generators may sign up for residential service to decrease trash bills. Generators must develop “in-house” recycling plans and annually submit recycling tonnage documents to the City. Commercial properties must also have adequate enclosure space for recycling. The City offers free waste audits and does extensive outreach.

If the City reaches or exceeds its State mandated AB 939 goal of 50% diversion, the collector receives 60% of the recycling revenues and the City receives 40%. If the City does not meet or exceed the 50% diversion goal the City receives 60% of the revenues while the collector receives 40%. California redemption (CRV) payments help fund City recycling programs. The revenue sharing incentive focuses on total diversion and does not distinguish between the residential and commercial sectors.

SURVEY RESULTS

City Staff

Program implementation has, in effect, occurred in two stages. First, City staff worked with property owners and managers to make them aware of the ordinance and to get bins and receptacles in place. Second, City staff is now working with businesses to increase use of the recycling containers that are in place. City staff believes that the economic incentives for the collector are more meaningful than the ordinance requirements. City staff is planning on conducting more aggressive audits and combining efforts by multiple departments to conduct multi-resource audits. City staff hopes to use multi-resource audits to increase recycling participation and to increase cost efficiency in conducting audits.

City staff appreciate that the program makes recycling available to virtually all businesses and that there are recycling containers in place at the vast majority of businesses. However, in the absence of a generator diversion mandate there is no means for ensuring participation. Currently, the City gives notices of violations to businesses that do not comply with the

ATTACHMENT A
JURISDICTIONAL PROFILES

planning and reporting requirements and works closely with them to get them into compliance. Given the opportunity, some City staff noted that they would add specific fines for violations of the ordinance.

Solid Waste Collectors and Recyclers

Allied Waste Services (Allied) was interviewed since it is the exclusive collector of both MSW and recyclables. Allied staff reports that nearly all of their accounts contract for recycling. A very small percentage of accounts have been granted exemptions due to space constraints. Allied staff worked with the City to develop the requirements and they note that technical assistance and waste audits are necessary for making the program successful. From collector's perspective, it saves them money when the City conducts audits and provides assistance, but that when the collector conducts an audit, the hauler reported that the information provided to generators is more consistent and typically results in cleaner streams.

The collector plays a minor role in enforcement. In opening a new account, Allied informs the customer of the requirement to subscribe to recycling service. If the business refuses, Allied reports them to the City. The collector likes this enforcement role because they are not then viewed as the "bad guy". Typically, collector staff reports that customers do not want to recycle, but are willing to do it because of the ordinance. Allied staff notes that the ordinance increases their reporting and adds to operating expenses, but that the additional revenues generated through sale of recyclables meets or exceeds these costs. Collector staff suggests a program focusing on the largest generators, stating that this would likely produce more total diverted tons.

Generators

Interviewed generators reported that they do not find the mandatory ordinance difficult to comply with. Although space was listed as a concern for some by the collector, the generators did not report that for them, space was an issue. Education for tenants and education for employees was reported to be integral to success, especially with the mall that was interviewed. The program was reported to increase the amount of time that businesses must think about recycling, but they did not report that it increased costs very much. The generators reported that the program was very effective. The advice from the generators to a jurisdiction thinking about implementing a program include to keep the program simple (e.g., single stream), work with the collector, businesses to help with education and outreach, and provide good signage on all the bins for tenants and employees. Following are summaries of each interview.

- Large Mall - The mall owner reports that they supply recycling services to all of the tenants. Tenants recycle conventional recyclables using single-stream collection, plastic film, and are beginning to collect food waste for composting. The mall owners received a waste audit from the City, and technical assistance to set up the recycling program. Overall, the mall owner perceives the program as increasing diversion without increasing costs significantly. The mall owner would like to see the addition of collection and reuse for wooden pallets. Many mall tenants do not speak English as a first language and the owners would like to add bi-lingual signage or photo signs.

ATTACHMENT A
JURISDICTIONAL PROFILES

- Dental Group - The dental group reported they recycle office paper, OCC, and syringes/sharps. The trash and recycling services are handled through the property management company, which contracts with a specialty service for trash and recycling services. Dental group staff reports that they did not receive technical assistance or waste audits in developing their recycling program. Dental group staff also perceived that recycling does not increase the costs of service, but did increase the amount of time they had to spend thinking about trash and recycling.
- Restaurant - Restaurant staff reported recycling conventional recyclables, but not food waste or organics. The restaurant did not receive waste audits or technical assistance in setting up the program. Restaurant staff perceive the program as very easy to do and somewhat effective in increasing diversion. Restaurant staff also perceives the program as increasing the cost of service.

ATTACHMENT A
JURISDICTIONAL PROFILES

City of Long Beach, California

City:	Long Beach, CA
Population:	493,000
Diversion:	2006: AB 939 citywide diversion (pending CIWMB approval) = 69% Commercial diversion (diversion = generation - disposal) = 31%
Commercial Program:	Non-exclusive permit system. City also provides collection services.

PROGRAM DESIGN

The City of Long Beach has 16 commercial permitted collectors. Although the City's diversion goal of 69% is above the state-mandated 50%, it does not place diversion requirements on generators. However, the City charges permitted collectors a recycling incentive charge based on a sliding scale based on their total diverted tonnage and gross receipts¹. The charge applies to collectors who do not recycle more than 46% of waste collected. Collectors may utilize third party recycler to meet the diversion requirement.

SURVEY RESULTS

City Staff

The City requires all collectors to provide monthly tonnage data for MSW, C&D, recyclables, commercial solid waste, and green waste, for gross receipts. Data is used to determine diversion rates, to ensure proper payment of administrative fees, and for determination of incentive payments for diversion of less than 46%. The City uses the monthly reports to monitor all collectors.

Solid Waste Collectors and Recyclers

Solid waste collectors have the incentive to provide recycling service in the form of a minimum diversion requirement. Both interviewed collectors offer single-stream and multi-stream recycling, however, the typical account is provided the former. One collector will compete to provide recycling service alone and owns and operates a recycling facility. The other collector offers recycling service only if his company also provides waste collection and has to pay a third party for processing of the material. In addition to typical commercial recyclables, one company also collects manure, wood, concrete, dirt, asphalt, sand, brick, foam, and food waste. This collector stated that they will create a unique program for a commercial customer as long as they can recover cost.

Generators

Interviewed generators include a medical center, a clothing manufacturer, a major aerospace manufacturer, and an international hotel chain. All the generators received recycling services from their waste collector. The one exception, the clothing manufacturer, does not have recycling service offered by its collector and employees take recyclables home. All companies

¹ Based on information from a survey of non-exclusive commercial hauling fees in Los Angeles cities conducted by HF&H in July 2008.

ATTACHMENT A JURISDICTIONAL PROFILES

seem satisfied with the service as provided, however, they actively solicit other vendors seeking better service and/or pricing. None have received technical assistance from collectors or the city.

- The medical center recycles all materials. Cans and bottles are donated for redemption, and all paper is shredded due to HIPAA regulations. They are not currently considering any changes or improvements.
- The clothing manufacturer employees take home cardboard, paper, bottles, and cans for recycling.
- The aerospace manufacturer seeks to promote environmental consciousness and strives to recycle as much material as possible. In addition to the typical commercial recyclables, they recycle scrap metal, steel, copper, various other metals and wood containers. The company has an internal salvage team that coordinates the collection and sale of commodities and seeks competitive vendors for these materials. In the future, they are interested in improving their current recycling plan as well as adding green waste.
- The hotel recycles all common commercial recyclables and cooking oil. The hotel is considering starting a food scrap recycling program, but their key challenge is finding a vendor to provide the service. Occasionally, they hold events where old electronics from hotel rooms are sold to the public. The hotel's corporate office requires each location to set up a "Team Earth" committee to adopt and implement more environmentally conscious practices. The committee goals include continuation of electronic waste recycling, starting a light bulb recycling program and a food waste recycling program.

ANALYSIS

With an open market system, and in the absence of generator diversion requirements, collectors may choose which generators they offer recycling to, and on what terms. However, collectors must make recycling attractive enough to generators to meet the 46% diversion requirement. All interviewed businesses reported they have not received technical assistance from their collector or the City. Thus, the City could provide more technical assistance to generators, and/or require collectors to do so with some degree of City monitoring.

ATTACHMENT A
JURISDICTIONAL PROFILES

City of Pasadena, California

City:	Pasadena, CA
Population:	147,000
Diversion:	2006: AB 939 citywide diversion (pending CIWMB approval) = 58% Commercial diversion is calculated by City staff and is similar to the citywide rate. Staff requested that the calculated figure not be published.
Commercial Program:	Non-exclusive franchise with private collectors. City also provides collection services.

PROGRAM DESIGN

The City of Pasadena has 30 commercial franchised collectors as well as providing municipal collection service. The City does not place any diversion mandates on generators. However, all collectors are required to recycle 50% of the waste collected in order to be in compliance with their franchise agreement. Collectors that do not meet the diversion requirement are assessed liquidated damages on a sliding scale based on their actual diversion rate. Collectors may utilize third party recyclers to meet the diversion requirement. In addition, failure to meet the diversion requirement could result in non-renewal of a collector's permit, at City discretion. In 2007, the City ceased awarding new commercial franchises².

The City requires all collectors to provide monthly tonnage data for MSW, C&D, recyclables, and green waste, for gross receipts. Data is used to estimate diversion rates and to ensure proper payment of administrative fees. The City does not set or regulate rates.

SURVEY RESULTS

City Staff

The City currently has few commercial customers, but hopes to expand its customer base.

Solid Waste Collectors and Recyclers

Solid waste collectors have the incentive to provide recycling service in the form of a minimum diversion requirement. All of the interviewed solid waste collectors also offer commingled recycling service. One collector owns and operates materials recovery and composting facilities, and offers various methods of recycling collection (e.g., single, dual, or three stream) to customers regardless of whether they also use the collector's solid waste services. This collector also provides collection of special materials such as wood. Municipal collection services are similar to those provided by the franchised collectors in that both solid waste and recycling services are offered. In some cases, customers are eligible to receive recycling service at no charge. Commercial customers receiving service from the City are provided recycling service at no additional charge. Of the franchised collectors, some provide recycling at no added charge, while others do charge.

² Based on information from a survey of non-exclusive commercial hauling fees in Los Angeles cities in July 2008.

ATTACHMENT A JURISDICTIONAL PROFILES

Generators

The interviewed generators include a manufacturer of paper products, a national engineering firm, a university, and a local store of a national retail chain. All of the generators had recycling collection arrangements with their solid waste collector. The generators did not appear to know that collectors must meet a diversion requirement; rather, they were recycling as a matter of corporate policy. All companies seem satisfied with the service being provided, however, they actively solicit other vendors seeking better service and/or pricing.

- The paper product manufacturing company recyclables and solid waste are co-collected and processed at a “dirty” MRF as mixed waste. The representative believes that their green waste is recycled by their landscaping company. The company would like to look into solar energy into the future.
- The national engineering firm also provides environmental consulting services and stays abreast of recycling initiatives. The company recycles all commodities that are accepted by their waste collector and their paper shredding company recycles the shredded paper. The company representative did not know whether the City or collector has ever provided technical assistance to increase recycling, but indicated interested if such services were offered.
- The university currently only recycles paper, but is considering adding green waste recycling. They would like to increase their recycling and indicated that they would be interested in receiving technical assistance.
- The retail store only recycles cardboard and has been contacted by the City for technical assistance. Recycling efforts are managed through their national corporate office.

ANALYSIS

With an open market system, and in the absence of generator diversion requirements, collectors may choose which generators they offer recycling to, and on what terms. However, collectors must make recycling attractive enough to generators to meet the 50% diversion requirement. The City is monitoring the performance of the collectors. However, the City could also provide more technical assistance to generators, and/or require collectors to do so with some degree of City monitoring. It was evident from the interviews that generators are receptive to receiving such assistance.

ATTACHMENT A
JURISDICTIONAL PROFILES

City of Torrance, California

City:	Torrance, CA
Population:	149,000
Diversion:	2006: AB 939 citywide diversion (pending CIWMB approval) = 43% 2006 diversion rate as part of Los Angeles Regional Agency (LARA) = 63%
Commercial Program:	Business licenses for private collectors.

PROGRAM DESIGN

The City of Torrance has 24 commercial collectors that must only obtain a business license to operate in the City. Collectors are required to submit quarterly reports on tonnages collected and diverted, and to meet a 50% diversion requirement. The City allows up to 10% of waste collected to be incinerated³. In addition, collectors must pay a surcharge of \$0.70 per ton disposed. The City audits reporting of tonnage and diversion, using comparisons of collector and landfill facility reported data, and analysis of reporting practices of individual collectors.

SURVEY RESULTS

City Staff

City staff indicates that the current system of business licenses lacks an adequate enforcement mechanism for ensuring diversion occurs. City staff is interested in adding diversion incentives for collectors and is considering adoption of a mandatory recycling ordinance for generators.

Solid Waste Collectors and Recyclers

Solid waste collectors have the incentive to provide recycling service in the form of a minimum diversion requirement and a surcharge for disposal. Both collectors interviewed provide recycling as well as solid waste collection. Both collectors accept all common recyclable materials such as cardboard and plastics in a commingled container. Additionally, they collect tires and wood pallets. Neither collector owns or operates a recycling facility; however, one collector is in the process of obtaining a permit for a facility. Although these collectors compete to provide collection service, they will not provide recycle collection to customers that do not also take solid waste collection service.

Generators

Interviewed generators include an electronics manufacturer, an internationally-known furniture company, a medical center, and an extended-stay hotel. All the generators interviewed had recycling services set up in their buildings or offices with their waste collector. All companies seem satisfied with the service being provided, however, they actively seek other vendors that will offer a combination of better service and pricing.

- The electronic manufacturer recycles most of the waste materials generated from their production line. These materials include a range of plastics and various scrap metals.

³ Based on information from a survey of non-exclusive commercial hauling fees in Los Angeles cities in July 2008.

ATTACHMENT A JURISDICTIONAL PROFILES

The company uses various recyclers to collect specialty materials that the solid waste collector does not take. The company has received technical assistance from the City as well as from the collector. They regularly seek new vendors that can provide increased service.

- The furniture company recycles all common recyclable material in addition to toners, compact and regular florescent light bulbs, wood, paints, and oil. The company spends considerable time and effort source-separated materials for collection, and company staff reports that they closely monitor each collector's performance.
- The medical center recyclables and solid waste are co-collected and processed at a "dirty" MRF as mixed waste. The landscaping company recycles green waste. Center staff is interested in having solar powered electricity for the center.
- The hotel recycles paper, cardboard, batteries, and e-waste. Waste management decisions are made at corporate headquarters. The manager was unaware of the relationship between the company and the collector. The general manager did recall that the City had contacted him to provide information and technical assistance on recycling, during which they discussed the addition of plastic and glass recycling. This particular hotel asks guests to be mindful of what they throw in the waste basket and requests that guests bring paper to the lobby for reuse or recycling.

ANALYSIS

With an open market system, and in the absence of generator diversion requirements, collectors may choose which generators they offer recycling to, and on what terms. However, collectors must make recycling attractive enough to generators to meet the 50% diversion requirement. Based on information provided by the City, the current system of business licenses lacks an adequate enforcement mechanism for ensuring diversion occurs. If collectors do not meet diversion requirements, their license can be revoked, but in practice, this is difficult. Of the interviewed generators, two have received diversion technical assistance from the City and one from its solid waste collector.

ATTACHMENT A
JURISDICTIONAL PROFILES

City of Bonita Springs and Unincorporated Lee County, Florida⁴

Population:	615,000
Commercial Diversion:	2006: 41% ⁵
Program:	Mandatory ordinance, exclusive franchised collection by district, all generators must contract for service, County sets maximum rates for recycling.
Year Started:	2008

PROGRAM DESIGN

Unincorporated Lee County (County) and Bonita Springs implemented a mandatory commercial recycling program between January and April 2008⁶. County staff researched mandatory programs throughout the country and modeled their program on one in Gainesville, Florida, with the addition of strong enforcement language. The county has a franchised system with exclusive districts for MSW and for the mandatory recycling program. The County sets a maximum rate of \$1.33 per cubic yard that franchised collectors may charge. The County owns a MRF (used primarily for processing of the residential stream and for some commercial processing) and a waste-to-energy facility.

The ordinance requires that all businesses, with a few exceptions, must contract with a registered collector for the collection of their recyclables. The ordinance allows exceptions for smaller generators, or for businesses for which there is extreme disparity between the cost of recycling and disposing of the same material. Other major elements of the ordinance include:

- All business must recycle a minimum of one recyclable material that is the primary material generated.⁷ The ordinance does not specify tonnage or diversion requirements.
- Enforcement tools include Recycling Plan Forms, inspections, and fines.
- All businesses must submit a two page Recycling Program Form (Form), and maintain a copy on-site.
- County staff offers waste audits and technical assistance to any business that requests it.

SURVEY RESULTS

County Staff

The County is active in implementing and enforcing the ordinance. Prior to the adoption of the ordinance only 39% of the 9,000 affected businesses were recycling. The program participation

⁴ As of the print date, Lee County staff had not provided review comments.

⁵ The reported tonnage is for commercial and institutional and is collected from recovered material dealers, Landfills, and transfer stations. The reported diversion rate, however is for the entire county. 2007 and 2008 diversion figures are not yet available, but between 2006 and 2008 recycling participation increased from 30% to 90%.

⁶ The ordinance also covers construction and demolition materials, as well multi-family units.

⁷ The ordinance defines Recyclable Materials to include: fiber products (including at a minimum mixed paper, ONP, OCC, and paperboard), co-mingled containers (include at a minimum aluminum cans, plastic 1-7, tin/steel, glass), ferrous or non-ferrous metal, and wood.

ATTACHMENT A JURISDICTIONAL PROFILES

rate has increased to about 90%, with a County goal of 100% participation. County staff reports that the program is very effective and predicts it will greatly increase diversion.

When the County conducts inspections they are able to easily view the Form and determine what recycling, if any, the business is doing. The County is aggressively conducting inspections, completing as many as 25 inspections or audits per day. The County has designed an innovative and strong set of fines. The franchised collectors are also engaged in enforcement and may assess violators a monthly Advanced Disposal Fee (ADF), remitted to the County, for failure to meet ordinance requirements. Fine range from \$100 to \$500 per month based on the solid waste generation category for each type of the business. Should a business fail to pay the ADF portion of their bill, the collector will cease collecting MSW. For each day without service, such a business may be fined \$300. At the time of the interview no fines had been assessed.

County staff plans to work with the collectors to adjust the maximum recycling rate, which collectors believe is too low to cover costs.

Solid Waste Collectors

The County has franchises with five exclusive collectors. Both of the solid waste collectors interviewed all also collect recyclables. Collectors can negotiate recycling collection prices outside of the franchised areas, but the maximum rate of \$1.33 per cubic yard is generally charged within the franchised areas.

Collectors report that they are able to supply the required recycling services and are willing to do so. Collectors reported that:

- Program start-up under the new ordinance required as much as 6 to 8 months for ordering equipment and to re-route to accommodate the added recycling.
- County staff provided adequate time and provided helpful assistance with outreach.
- The program appears to be quite effective and predict high levels of participation.
- Generators generally seem to accept the mandate, with many embracing the program.

One concern voiced by collectors was that enclosure requirements should be specified prior to the adoption of a mandatory program. The County has strict enclosure requirements for MSW and recycling containers, and result is a sort of Catch-22, in which generators can be fined if they do not recycle, but may also be in violation if they recycle without approved enclosures.

Collector concerns with the ordinance largely stem from the perceived lack of a stakeholder process during development of the ordinance. A key concern is that the set maximum rate for recycling does not completely cover the increased costs. Collectors would also like to have an incentive for increased diversion that could help offset increased costs. One collector suggested use of account rebates for large generators achieving high diversion to accelerate the program.

Independent Recyclers

Three independent recyclers were also interviewed. Unlike solid waste collectors, independent recyclers are not pleased with the ordinance. The recyclers, like the collectors, reported that they

ATTACHMENT A
JURISDICTIONAL PROFILES

thought the program was effective, was increasing recycling, and reported that it did increase their number of accounts. But like the collectors, the recyclers would have liked to have been involved in developing the ordinance. By setting rates and creating franchised areas, the County is limiting the competition in the market place and making it more difficult for independent recyclers to operate. When the program went into place, it coincided with a renewal of the collector franchise agreements. Solid waste collectors were able to adjust MSW collection rates to make up for the increased cost of recycling collection at \$1.33 per cubic yard – an option not available to the independent recyclers. While independent recyclers may charge what they wish, they cannot in practice exceed the \$1.33 per cubic yard rate. Overall, while recyclers support the idea of a mandatory ordinance, they oppose rate setting and franchising.

One recycler serving both Lee and adjacent Collier County (also with a mandatory ordinance) reported that she has seen her accounts grow much quicker in Collier County due to their less stringent fines and enforcement. She reported that businesses in Collier County were quicker to embrace their ordinance because it was less focused on enforcement.

Generators

The interviewed generators all reported awareness of the mandatory program, that they are recycling, and that their costs have increased slightly. The generators perceived the mandatory program as effective overall in increasing diversion. Generators felt they had adequate notice about the mandatory program before it was implemented, all found it easy to comply with, and none had any issues with enforcement. However, at the time of the interviews the County had not begun assessing significant fines. Although the County reports that compliance and participation tracking is integral to the program, none of the businesses reported knowing whether or not their compliance is tracked. Following are summaries of each interview.

- Bicycle Store- The bicycle store reported recycling plastic and cardboard, the principal materials they generate. They are also recycling metal. Cardboard is recycled through a contracted hauler while they self haul the plastic and metals. The shop received help setting up the recycling program from their collector, and reports that the program has helped to increase diversion.
- Accounting Office - The accounting firm reported that they recycle plastic, cardboard, paper and aluminum. When the program was started, the firm was instructed by the property manager on the steps necessary to be in compliance with the program. They did not work directly with a collector to set up the recycling program and did not receive assistance from the County. Like the other generators, the firm reports that they now recycle more and that their solid waste costs have increased slightly.
- Garden Center – OCC was only material the garden center reported recycling.

ATTACHMENT A
JURISDICTIONAL PROFILES

Borough of Highland Park and Middlesex County, New Jersey

Population:	14,000
Diversions:	2007: Borough-wide 63% ⁸
Program:	Statewide mandatory recycling implemented at the county and borough levels, and an additional county ordinance. The Borough is the primary collector of commercial MSW and recyclables.
Year Started:	Statewide 1987, County and Borough 1994

PROGRAM DESIGN

Commercial recycling requirements are mandated by the state, and implemented at the county and city levels. In 1987, the State of New Jersey passed the Statewide Mandatory Source Separation and Recycling Act. The comprehensive legislation requires that all residents, businesses, and institutions recycle specified materials and establishes diversion goals. Key aspects of the legislation at the county and borough level include:

- Counties must designate a recycling coordinator
- Counties must develop a solid waste management plan
- Municipalities must designate a recycling coordinator
- Municipalities must develop recycling plans for new development
- Municipalities must conduct annual tonnage reporting

The State requires that counties not mandate the collection of a recyclable material unless they can demonstrate availability of a long-term market. The State mandate has helped to build strong markets in the area including for materials such as plastic film.

In addition, Middlesex County has a mandatory commercial program. The County is proud of having the highest diversion rate in the State (64% in 2007). Municipalities located within the County may opt to be part of a County-wide contract for collection of MSW and recycling. Of 25 cities in the County, 16 use the County contract for collection of recyclables and nine cities provide for recycling collection. Highland Park has chosen to provide service on its own. The County plan developed pursuant to the state law designates additional recyclables including non-traditional materials such as plastic film (for commercial establishments with over 25 employees), sets a recycling goal of 60%, puts forth measurement techniques, sets a waste management fee on disposed tons of \$5.47/ton, and designates a number of responsibilities for the municipalities in the County. The Borough receives the benefit of County enforcement and access to a grant program.

Generators, collectors, and landfill operators are all subject to enforcement. Cities may choose to do their own enforcement, or to have County staff enforce collector and generator requirements. Highland Park chose to have the County conduct enforcement. The County has a recycling

⁸ Includes both residential and commercial tonnage. The Borough does not distinguish between the two sectors in their reporting.

ATTACHMENT A JURISDICTIONAL PROFILES

inspector that conducts inspections at businesses, schools, and landfills. The County strictly enforces the mandatory collector reporting. If a collector fails to report tonnage, or completes the report incorrectly, the County revokes the collector's permit to deposit loads at the County landfill for 60-90 days. The collector can still operate, but they must travel out of the County to dispose of their loads. The County conducts inspections for over 10,000 commercial generators, with an average of one-fifth inspected each year. Notices of violation are issued to businesses without adequate recycling programs. In addition, there is a County-wide landfill ban of the mandated recycling materials that is enforced by the County.

SURVEY RESULTS

County and Borough Staff

County and Borough staff are pleased with the mandatory ordinances. Staff at both the County and municipal level report that the mandatory ordinance and the solid waste management plan (SWMP) have been very effective in increasing recycling and diversion. The Borough provides tonnage reporting to the State. The County also submits their own reporting to the State using data submitted by the individual municipalities.. Both recommend that ordinances include clear and specific language for reporting by collectors, generators ,and landfills to reduce the work involved in reconciling tonnages. The mandatory programs have increased the amount of competition among recycling processors and the recycling market has been steadily growing in the area. With regard to enforcement, County staff was unsure of the number of notices issued but they reported that for every 10 notices, 3-4 penalties are assessed. The most common excuse is lack of awareness of the ordinance.

Solid Waste Collectors and Recyclers

The Borough collects MSW and recycling from over 95% of businesses, and was the only interviewed collector and recycler. Commercial entities are included in the residential service routes and the collection costs are paid for through property taxes. Most businesses are relatively small and are in mixed-use buildings. Businesses that opt to use a private collector still pay for municipal collection through their taxes. The Borough does not offer roll-off service. The Borough collects MSW twice a week and recycling every other week. The Borough is planning to decrease garbage collection to once a week.

The Borough used to participate in the County collection contract, but chose to switch to municipal collection for a number of reasons, the most significant of which was economic. The original contract with the County was subsidized through tipping fees, but when the County decided to remove subsidies, the contract price almost doubled. In addition, the Borough was interested in controlling the MSW and recycling system, and in generating local jobs.

At the County level, the ordinance does seem to negatively affect the smallest collectors. It is our perception, and staff indirectly noted, that the mandatory program makes it harder for the smaller collectors to compete and seems to favor the large national companies.

Generators

The generators of Highland Park were quite satisfied with the recycling service provided by the Borough. They feel that the mandatory recycling program is at least somewhat effective. The

ATTACHMENT A
JURISDICTIONAL PROFILES

majority reported that their businesses now think more about recycling and recycle more overall than they did previously. Most of the businesses said that they had adequate notice about the program and few received technical assistance in setting up recycling collection. Following are summaries of each interview.

- Nail Salon - The nail salon recycles OCC, plastic, newspaper, magazines, and paper. Company staff reports that when the City first rolled out the program they had problems arranging to attend the program implementation meetings, and thus did not initially know much about it. However, Borough staff provided on-site technical assistance to set up collection. Company staff finds the program easy to comply with and has not had any enforcement issues. Company staff reports that they would be interested in seeing results regarding how well other businesses are recycling, and what overall commercial diversion rates.
- Floral Design Shop - The floral shop reported recycling glass, plastic, paper, and cardboard. Like the nail salon, the flower shop reports that they found the program easy to comply with. The program is helping to increase diversion, but did not increase costs. While stating that they do not have any issues with the program, they did note having received notice for disposing of a recyclable item in the trash.
- Pharmacy - The pharmacy reported recycling glass, plastic, aluminum, and OCC. They are satisfied with the program and have no suggestions for changes or improvements.

ATTACHMENT A
JURISDICTIONAL PROFILES

Mecklenburg County and City of Charlotte, North Carolina

Population:	827,000
Diversion:	30% decrease from base year disposal levels ⁹ . Diversion measured as per capita reduction in disposal from base year
Commercial Diversion:	Diversion measured as per capita reduction in disposal from base year. ¹⁰
Program:	Two ordinances targeting OCC, and paper and bottles. Multiple collectors operate in an open market.
Years Started:	Source separation ordinance 2002, Alcohol Beverage Container 2008

PROGRAM DESIGN

The County enforces two regulations affecting solid waste management for businesses. One measure is a County source separation ordinance (SSO), and the other is the state-wide Alcohol Beverage Container (ABC) measure.

The County has 28 permitted waste collectors and an unknown number of independent recycling collectors operating in an open competition system. In 2002, as part of an effort to reach a per-capita diversion goal of 23% by 2010, the County passed a mandatory commercial source separation ordinance that requires businesses that generate 16 or more cubic yards of waste per week to separate corrugated cardboard and office paper from their garbage. Businesses that are out of compliance with the ordinance may be notified, fined and/or provided technical assistance for establishing an appropriate source separation and recycling program. One full-time compliance inspector monitors commercial compliance through on-site visits. Businesses exempt from the ordinance or for which the SSO does not apply may opt to establish free communal OCC drop-off locations, and the County has established these commercial drop-offs in over 50 locations.

The State ABC “beverage container bill” took effect in 2007 and requires all businesses holding on-premise alcohol permits (approximately 8000 businesses) to separate and recycle all discarded recyclable beverage containers. Businesses that are out of compliance will be unable to renew their annual permit.

SURVEY RESULTS

County and City Staff

Source Separation Ordinance: Directly following implementation of the SSO, the County saw an increase in diversion rates, but the rate of increased diversion has slowed substantially. To

⁹ Mecklenburg County set a base year landfill disposal rate for the fiscal year of 1998/99 and computes diversion using that base line year. The base year tonnage was 641,072 and the 2004/2005 (the most recent data available) tonnage was 548,388. The County then looks at the per capita waste generation based on the annual tonnage and calculates the decrease (or increase). The per capita commercial waste generation decreased from 1.04 tons 1998/99 to .73 tons 2004/2005, a 30% decrease.

¹⁰ See footnote 1.

ATTACHMENT A JURISDICTIONAL PROFILES

reinvigorate the program, the County is considering setting collecting rates, lowering the relatively high threshold level for customer participation, and increasing collector incentives to divert materials. County staff would like to see program modifications that would better address small generator needs.

As of mid-2008, the County had inspected more than 2,300 businesses, conducted over 1,200 follow-up inspections, and had levied about 350 notices of violation including 50 1st Notices of Violation. While the SSO ordinance allows the County to collect penalties for non-compliance, it has primarily used notices to increase program awareness rather than assess fines. Enforcement has been complicated by the difficulty in determining individual business' weekly waste generation due to lack of information on the frequency of collection.

Alcohol Beverage Container Law: The state measure currently has an 85% compliance rate and is expected to produce over 30,000 tons of recyclable commodities in 2009. The measure has helped drive domestic growth in the recyclables collecting and processing industries. Mecklenburg County is working with the State to increase commercial awareness of the bill and is optimistic about its potential. Response to the measure has largely been positive and the most common complaint is from participating businesses questioning why other businesses and sectors do not have to recycle.

In contrast to the SSO ordinance, the County plans to fully utilize the ABC bill's punitive measures for non-compliance. The County will rely on State alcohol enforcement officers, which conduct on-site inspections for alcohol permit compliance and intends to suspend or to not renew alcohol permits for businesses that are out of compliance.

Solid Waste Collectors and Recyclers

The two interviewed solid waste collectors report that a substantial obstacle to compliance with the SSO ordinance is the limited space that most commercial generators have for the several required collection bins. They predict that the ABC bill will greatly increase commercial recycling, but do not have such hopes for the SSO ordinance. Some collectors believe that the SSO ordinance is viewed as an opportunity for businesses to save money by recycling OCC and paper rather than as a driver to increase diversion.

Mecklenburg County solid waste collectors were not involved in the development of the ABC measure, but report that they and their customers are willing to participate in the program. They believe that the measure's success is due in part to the fact that they have access to a materials recovery facility that processes single stream recyclables, thus simplifying recycling for businesses.

The three interviewed independent recyclers operating in Mecklenburg County are very supportive of mandatory recycling, and particularly the ABC bill. The need for more recycling collection and processing has spurred the development of local business in a market that was previously dominated by larger companies.

ATTACHMENT A
JURISDICTIONAL PROFILES

Generators

The three interviewed generators were unaware of the SSO ordinance or thought that compliance was simply voluntary. The generators felt their diversion rates stayed about the same and that the programs had little effect on their recycling rates. Although the County, the collectors, and independent recyclers all provide waste audits and/or other technical assistance, none of the interviewed generators had requested or received audits or other assistance.

- Restaurant - This restaurant reported that they were recycling glass, plastics, cardboard and aluminum. However, they also reported that they are unaware of any regulations mandating that they recycle. They reported that their costs were not negatively impacted through recycling. The interviewee said he would like to know for sure what happens to their recycled items and would like to know that they are not mixed up with the trash. The restaurant manager reported that they had to actively seek a collector for their recyclables. The restaurant manager also noted that some of the restaurants in the County believed that solid waste costs would increase as a result of the program and had fought against a mandatory program.
- Bakery - The bakery reported recycling OCC, ONP, and other paper. Bakery staff felt that the ordinances could increase their operating costs, but stated that recycling is important to them. Bakery staff reported that overall they were dissatisfied with their recycling service because it did not collect a wide enough range of materials.
- Hotel - Hotel staff reported recycling OCC, paper, aluminum, and plastic. They reported recycling prior to the mandatory programs, and view recycling as a way to save money. They do not contract with a hauler to handle recycling, but instead self-haul their recyclables to a drop-off facility.

City of Portland, Oregon

Population:	540,000
Diversion:	2006: 62% Citywide
Commercial Diversion:	2006: NA ¹¹
Program:	Open market permit system with nearly 60 MSW collectors and over 20 independent recyclers. MSW collectors must offer recycling and food scraps collection. Businesses must divert 75%.
Year Started:	Started in 1987, with modifications over time, most recently in 2008.

PROGRAM DESIGN

In the late 1980s, the City of Portland passed an ordinance requiring solid waste collectors to make recyclables collection available to all businesses. In 1996, the City imposed a mandatory 60% commercial diversion rate, but limited enforcement. As of fall 2008, all of the 25,000 businesses (comprising 76% of the overall waste stream) are required to divert 75% of their solid waste to recycling programs. As an incentive to collectors and generators to maximize diversion, the City imposed a per-ton fee on solid waste, but not recyclables, and established fines for non-compliance.

The City recently proposed to convert the open permit system, with approximately 50 collectors, to a franchise system with a limited number of collectors. Following an extensive outreach process, the City in mid-2008 decided to retain the permit system while strengthening the mandatory diversion aspects of the program, including requiring provision of food scrap collection for larger generators and adding incentives and increased monitoring and enforcement. The City considered setting collection rates, but chose to not do so. The success of this strategy will be evaluated over the next two years with a report to the City Council in 2011. Additional regulation may be considered at that time.

SURVEY RESULTS

City Staff

The City is becoming more active in managing the commercial solid waste system, boosting its team of commercial recycling specialists and hosting a series of stakeholder meetings to increase communication between the City, generators, collectors, processors, and related trade groups. The City recently considered developing franchises for the commercial system that would function similarly to their current residential program. The City found that rates paid by commercial generators vary significantly for similar levels of service, and that small commercial generators appear to pay relatively more, and large generators relatively less than similar businesses might pay in other jurisdictions. The City's increased mandatory diversion rate is coupled with increased monitoring, education and outreach, and with new programs such as

¹¹ The rate is comparable to the City-wide rate. Due to the complexity of the calculation method, the City prefers to not provide a separate commercial diversion rate.

ATTACHMENT A

JURISDICTIONAL PROFILES

mandatory commercial food scraps collection. The City is in the process of tightening enforcement of solid waste ordinance provisions though this approach will be phased in after providing greater outreach and assistance to businesses trying to meet the new mandates.

Solid Waste Collectors and Recyclers

There are currently 58 collectors serving Portland's commercial customers. The three collectors interviewed all reported varied opinions and experiences regarding customer participation levels and cost effectiveness. One collector reported that only a few generators take recycling and that it is only financially attractive if they have at least 10 cubic yards of weekly solid waste service. Another reported that nearly all of their customers are recycling at least some materials.

The collectors also expressed differing views on franchising and rate setting. A common thread among collectors interviewed was an agreement that increased collector incentives for collecting recyclables would be helpful. Overall, the collectors seem to be positive about the new focus on commercial recycling. The City has and continues to work closely with the collectors to determine the best way to increase diversion and for the most part, the collectors view the shift as a business opportunity. However, the collectors perceived that elected officials passed the mandated diversion rates without input from collectors and without first determining the feasibility for each business of meeting the 75% goal. In addition, the officials failed to recognize all of the hard work and strides the collectors had already made toward increasing diversion.

In addition, we interviewed three specialty material recyclers that divert styrofoam, paper, and salvage materials. In general, the independent recycling collectors were strongly opposed to franchising and rate setting, stating that mandatory recycling programs will continue to be productive as long as regulation stays minimal and competition drives the market.

Generators

All of the interviewed generators were contacts provided by the City and were actively involved as stakeholders in the development of the ordinance. The interviewed generators generally support the mandatory program as long as their specific industry had the opportunity to provide input during ordinance development. The businesses all have recycling and diversion efforts in place, and overall were supportive of the program. However, several businesses reported frustration with the new mandatory diversion level, feeling that it does not account for the diversion efforts they have already made. Successful source reduction efforts may actually reduce overall calculated diversion rate, since the ordinance does not provide a means for accounting for these efforts. The generators were pleased with the recent increased level of involvement the City has taken in terms of program outreach and believe that increased public and employee education will be a major factor in increasing diversion rates in the future. Key suggestions for increasing diversion included education for employees and tenants, good signage, and planning for adequate space for containers. The businesses reported that there has been little enforcement to date from the City and that they self-report their diversion.

- Property Management Company - The company reported that they originally looked at recycling as a way to reduce costs and now they, like most businesses in the City, see recycling and diversion as just a normal part of doing businesses. Their properties all

ATTACHMENT A
JURISDICTIONAL PROFILES

recycle conventional recyclables, as well as yard waste and food waste at some locations. They received technical assistance from both collectors and from the City in setting up their programs and feel that the programs are successful. Space for recycling is an issue at some of their properties and they feel that the new 75% diversion goal for the City's businesses may be very difficult to obtain.

- Property Management Company - Like the other property management company, this company reported recycling all of the conventional recyclables, but with the addition of e-waste. They also reported recycling yard waste at some of their properties. The company felt that container space availability has not been a significant issue. Company staff reported doing some self-hauling of certain recyclable materials. The company uses signs and door hangers to make sure tenants know about the program. The company's biggest challenge has been educating tenants and reducing contamination. They recommend engaging property owners/landlords/associations before any mandatory program is established.
- Restaurant - The restaurant reported recycling glass, paper, OCC, aluminum, and plastic. Restaurant staff expressed some skepticism about the approaching mandatory food scrap program, especially when it came to the added costs of the program and the possibility of odors.

**ATTACHMENT B
SURVEY QUESTIONS**

Non-Exclusive Systems	Mandatory Programs	Comments
1. Program Staff		
1. Quantitative Data		
<p>a. Please provide 2006 diversion and disposal data for: - Commercial recycling - C&D</p> <p>b. Please provide 2007 diversion and disposal data for the above, as available.</p> <p>c. Please describe your method for collecting disposal and diversion tonnages, and for calculating diversion rates for 2006.</p>	<p>a. Please provide 2006 diversion and disposal data for: - Commercial recycling - C&D</p> <p>b. Please provide 2007 diversion and disposal data for the above, as available.</p> <p>c. Please describe your method for collecting disposal and diversion tonnages, and for calculating diversion rates for 2006.</p>	<p>2006 will be the base year for diversion comparison.</p>
2. Referrals for Survey		
<p>We need referrals (business name, contact, email and phone number) for:</p> <p>a. Solid waste collectors (a minimum of 2)</p> <p>b. Independent Recyclers (that do not provide MSW collection services; a minimum of 2)</p> <p>c. Generators (a minimum of 4, including ideally one each of the following) - manufacturer - retail - institutional (hospitals, universities, government agencies, prisons, etc) - property manager (business park, other multi-tenant commercial)</p>	<p>We need referrals (business name, contact, email and phone number) for:</p> <p>a. Solid waste collector(s)</p> <p>b. Independent Recyclers (that do not provide MSW collection services; a minimum of 2)</p> <p>c. Generators (a minimum of 4, including ideally one each of the following) - manufacturer - retail - institutional (hospitals, universities, government agencies, prisons, etc) - property manager (business park, other multi-tenant commercial)</p>	<p>For referrals:</p> <p>1. We are seeking generators that are known to have diversion programs in-place and have identifiable contacts that have the knowledge, authority, and willingness to discuss programs.</p> <p>2. Surveyors will request at least one more than the minimum shown for each type of call, but will ask that the minimum be provided first so calling can begin.</p>

**ATTACHMENT B
SURVEY QUESTIONS**

Non-Exclusive Systems	Mandatory Programs	Comments
<p>3. Commercial System Structure</p> <p>a. For solid waste collection, do you use permits, contracts, or other? How many do you issue?</p> <p>b. For recycling, do you use permits, contracts, or unregulated open-market? If permits or contract, how many do you issue?</p> <p>c. Do you set customer rates for solid waste services?</p> <p>d. Do you set customer rates for recycling and/or organics (compostable materials) services?</p> <p>e. Is there a direct public agency role in collection, processing or disposal?</p> <p>f. Do you consider your regulatory approach to be active, moderately active, or “hands-off”?</p>	<p>3. Commercial System Structure</p> <p>Is service exclusive or non-exclusive for solid waste and for recycling? If exclusive for either service, please respond to Items d.-g for that service(s). If non-exclusive for either service, please respond to all of the following for that service(s).</p> <p>a. For solid waste collection, do you use permits, contracts, or other? How many do you issue?</p> <p>b. For recycling, do you use permits, contracts, or unregulated open-market? If permits or contract, how many do you issue?</p> <p>c. Do you set customer rates for solid waste services?</p> <p>d. Do you set customer rates for recycling and/or organics (compostable materials) services?</p> <p>e. Is there a direct public agency role in collection, processing or disposal?</p> <p>f. Do you consider your regulatory approach to be active, moderately active, or “hands-off”?</p>	

**ATTACHMENT B
SURVEY QUESTIONS**

Non-Exclusive Systems	Mandatory Programs	Comments
<p>4. N/A (leave blank)</p>	<p>4. Mandatory Program Design and Structure</p> <p>a. When did the mandatory program take effect? Is it fully implemented at this point? Please describe any size cut-offs (e.g., doesn't apply below a certain size business or amount of MSW generation) and any opt-outs (e.g. space limitations, etc).</p> <p>b. What materials are covered by the program?</p> <p>c. Please describe the role of the city in developing, implementing, monitoring and enforcing the mandatory program, including staffing level devoted to each activity.</p> <p>d. Please describe the role of the hauler(s) in developing, implementing, monitoring and enforcing the mandatory program, including staffing level devoted to each activity.</p> <p>e. Does the hauler(s) have contract or permit incentives or disincentives to manage and/or enforce the mandatory program? If yes, please describe.</p>	

**ATTACHMENT B
SURVEY QUESTIONS**

<p>5. Qualitative Questions</p> <p>a. What are your diversion goals?</p> <p>b. What is the number of public staff FTE's involved directly in the management of the commercial solid waste and recycling system?</p> <p>c. Do agency staff or consultants conduct generator audits? If yes, what is the outreach strategy for identifying them? How many audits per year? Please describe.</p> <p>d. Do you provide other generator technical assistance? If yes, describe.</p> <p>e. Do you track contractor/permittee compliance? Please describe briefly.</p> <p>f. Overall satisfaction with results (1 to 5 with 1 as low, 3 as medium and 5 as high)? What two areas would you most like to improve?</p>	<p>5. Qualitative Questions</p> <p>a. What are your diversion goals?</p> <p>b. What is the number of public staff FTE's involved directly in the management of the commercial solid waste and recycling system?</p> <p>c. Do agency staff or consultants conduct generator audits? If yes, what is the outreach strategy for identifying them? How many audits per year? Please describe.</p> <p>d. Do you provide other generator technical assistance? If yes, describe.</p> <p>e. Do you track contractor/permittee compliance? Please describe briefly.</p> <p>f. Overall satisfaction with results (1 to 5 with 1 as low, 3 as medium and 5 as high)? What two areas would you most like to improve?</p>	
--	--	--

**ATTACHMENT B
SURVEY QUESTIONS**

Non-Exclusive	Mandatory	Comments
2. Solid Waste Collectors		
1. Recycling Collection		
<p>Do you provide recycling collection for businesses? If yes,</p> <p>a. What source-separated materials do you collect?</p> <p>b. Is collection single-stream (for commingled fiber and containers)?</p> <p>c. Other method?</p> <p>d. Do you collect specialty or nonstandard materials for recycling (e.g., wood film plastic, C&D material, or other)?</p> <p>e. Do you own and operate a processing facility?</p>	<p>Do you provide recycling collection for businesses? If yes,</p> <p>a. What source-separated materials do you collect?</p> <p>b. Is collection single-stream (for commingled fiber and containers)?</p> <p>c. Other method?</p> <p>d. Do you collect specialty or nonstandard materials for recycling (e.g., wood film plastic, C&D material, or other)?</p> <p>e. Do you own and operate a processing facility?</p>	
2. Organics Collection		
<p>Do you provide organics (compostables) collection to businesses? If yes,</p> <p>a. What materials do you collect?</p> <p>b. Do you own and operate a processing facility? If yes, what is the approximate distance from a central point of the collection area to the facility? Do you transfer material, and if yes, how approximately far?</p>	<p>Do you provide organics (compostables) collection to businesses? If yes,</p> <p>a. What materials do you collect?</p> <p>b. Do you own and operate a processing facility? If yes, what is the approximate distance from a central point of the collection area to the facility? Do you transfer material, and if yes, how approximately far?</p>	

**ATTACHMENT B
SURVEY QUESTIONS**

Non-Exclusive	Mandatory	Comments
<p>3. Diversion Requirements</p> <p>Does your permit or contract include any diversion requirements?</p> <p>a. Requirement to offer recycling or organics collection?</p> <p>b. A requirement or goal to divert a percentage of the total volume of material you collect?</p> <p>c. Other?</p> <p>4. Competition</p> <p>a. Do you actively compete to provide recycling services?</p> <p>b. Do you actively compete to provide organics services?</p> <p>c. Would you provide standalone recycling/organics diversion services if you were not also permitted to collect MSW?</p> <p>5. Special Services</p> <p>a. Do you provide special services such as in-facility collection, technical assistance, facility clean-outs, data destruction, or other? Please describe.</p>	<p>3. Diversion Requirements</p> <p>Does your permit or contract include any diversion requirements?</p> <p>a. Requirement to offer recycling or organics collection?</p> <p>b. A requirement or goal to divert a percentage of the total volume of material you collect?</p> <p>c. Other?</p> <p>4. Competition</p> <p>a. Do you actively compete to provide recycling services?</p> <p>b. Do you actively compete to provide organics services?</p> <p>c. Would you provide standalone recycling/organics diversion services if you were not also permitted to collect MSW?</p> <p>5. Special Services</p> <p>a. Do you provide special services such as in-facility collection, technical assistance, facility clean-outs, data destruction, or other? Please describe.</p>	

**ATTACHMENT B
SURVEY QUESTIONS**

Non-Exclusive	Mandatory	Comments
<p>6. N/A (leave blank)</p>	<p>6. Mandatory Requirements</p> <p>a. Please describe your role in developing, implementing, monitoring and enforcing the mandatory program.</p> <p>b. Do you have contract or permit incentives or disincentives to manage and/or enforce the mandatory program? If yes, please describe.</p> <p>c. In your opinion, how effective is the program (1 to 5 with 1 as low, 3 as medium and 5 as high)? What two areas would you most like to change or improve?</p>	
<p>7. Other Comments?</p> <p>Do you operate under both exclusive and non-exclusive arrangements? If yes,</p> <p>a. Do you have any comments on how non-exclusive arrangements affect diversion and the cost of service to the customer?</p>	<p>7. Other Comments?</p> <p>Do you operate under both exclusive and non-exclusive arrangements? If yes,</p> <p>a. Do you have any comments on how non-exclusive arrangements affect diversion and the cost of service to the customer?</p>	

**ATTACHMENT B
SURVEY QUESTIONS**

Non-Exclusive	Mandatory	Comments
3. Recyclables Collectors		
1. Recycling Collection		
<p>a. What materials do you collect?</p> <p>b. Do you collect specialty or nonstandard materials for recycling?</p> <p>c. Do you own and/or operate a processing facility?</p>	<p>a. What materials do you collect?</p> <p>b. Do you collect specialty or nonstandard materials for recycling?</p> <p>c. Do you own and/or operate a processing facility?</p>	
2. Diversion Requirements		
<p>a. Does your permit or contract include any diversion requirements, such as a requirement or goal to divert a percentage of the total volume of material you collect?</p>	<p>a. Does your permit or contract include any diversion requirements, such as a requirement or goal to divert a percentage of the total volume of material you collect?</p>	
3. Competition		
<p>a. Do you compete to provide recycling services? With the contracted collector(s)? With other recyclers?</p> <p>b. How active is the competition (1 to 5 with 1 as low, 3 as medium and 5 as high)?</p> <p>c. Why do customers choose your services rather than the recycling services of their MSW collector?</p>	<p>a. Do you compete to provide recycling services? With the contracted collector(s)? With other recyclers?</p> <p>b. How active is the competition (1 to 5 with 1 as low, 3 as medium and 5 as high)?</p> <p>c. Why do customers choose your services rather than the recycling services of their MSW collector?</p>	
4. Special Services		
<p>a. Do you provide special services such as in-facility collection, technical assistance, facility clean-outs, or other? Please describe.</p>	<p>a. Do you provide special services such as in-facility collection, technical assistance, facility clean-outs, or other? Please describe.</p>	

**ATTACHMENT B
SURVEY QUESTIONS**

Non-Exclusive	Mandatory	Comments
<p>5. N/A (leave blank)</p>	<p>5. Mandatory Requirements</p> <p>a. What effect does the mandatory program have on your business? Have you added or lost customers/volume since the ordinance took effect? By approximately how much?</p> <p>c. In your opinion, how effective is the mandatory program (1 to 5 with 1 as low, 3 as medium and 5 as high)? What two areas would you most like to change or improve?</p>	
<p>6. Other Comments?</p> <p>Do you operate under both exclusive and non-exclusive arrangements? If yes,</p> <p>a. Do you have any comments on how non-exclusive arrangements affect diversion and the cost of service to the customer?</p>	<p>6. Other Comments?</p> <p>Do you operate under both exclusive and non-exclusive arrangements? If yes,</p> <p>a. Do you have any comments on how non-exclusive arrangements affect diversion and the cost of service to the customer?</p>	

**ATTACHMENT B
SURVEY QUESTIONS**

Non-Exclusive	Mandatory	Comments
4. Generators		
1. Recycling Services		
<p>Do you contract for recycling collection services? If yes,</p> <p>a. What materials are collected?</p> <p>b. Do you receive service from the garbage collector? From one or more independent recycling contractor(s)?</p> <p>c. What is the net charge you pay/ monies you are paid?</p>	<p>Do you contract for recycling collection services? If yes,</p> <p>a. What materials are collected?</p> <p>b. Do you receive service from the garbage collector? From one or more independent recycling contractor(s)?</p> <p>c. What is the net charge you pay/ monies you are paid?</p>	
2. Organics Services		
<p>Do you have organic materials collected? If yes,</p> <p>a. What materials are collected? Yard trimmings? Food scraps? Other?</p> <p>b. Do you receive service from the garbage collector? From an independent recyclers(s)?</p> <p>c. What is the net charge you pay/ monies you are paid?</p>	<p>Do you have organic materials collected? If yes,</p> <p>a. What materials are collected? Yard trimmings? Food scraps? Other?</p> <p>b. Do you receive service from the garbage collector? From an independent recyclers(s)?</p> <p>c. What is the net charge you pay/ monies you are paid?</p>	
3. Special Services		
<p>a. Do you receive any technical assistance service from the garbage contractor? From the city? If either, please describe.</p> <p>b. Do you receive special services such as in-facility collection, technical assistance, facility clean-outs, or other? Please describe.</p>	<p>a. Do you receive any technical assistance service from the garbage contractor? From the city? If either, please describe.</p> <p>b. Do you receive special services such as in-facility collection, technical assistance, facility clean-outs, or other? Please describe.</p>	

**ATTACHMENT B
SURVEY QUESTIONS**

Non-Exclusive	Mandatory	Comments
<p>4. N/A (leave blank)</p>	<p>4. Mandatory Requirements</p> <p>a. How do the mandatory requirements affect you? Did you have adequate notice prior to their taking effect to make any adjustments?</p> <p>b. Have they been difficult to comply with? If yes, in what ways?</p> <p>c. Do you track your compliance? Does the garbage collector?</p> <p>d. Have you had any enforcement issues with either your collector or with the city?</p>	
<p>5. Other Comments?</p> <p>a. Do you actively seek vendors for your material? If yes, please describe the process (seek bids, etc). To what extent to you select based on price? Based on special services? Based on other factors?</p> <p>b. If you have had service from multiple vendors (including the MSW collector) who has provided the best service?</p> <p>c. How would you rate the overall service you receive (1 to 5 with 1 as low, 3 as medium and 5 as high)? What are the two areas of service you would most like to see improved?</p>	<p>5. Other Comments?</p> <p>a. Do you actively seek vendors for your material? If yes, please describe the process (seek bids, etc). To what extent to you select based on price? Based on special services? Based on other factors?</p> <p>b. If you have had service from multiple vendors (including the MSW collector) who has provided the best service?</p> <p>c. How would you rate the overall service you receive (1 to 5 with 1 as low, 3 as medium and 5 as high)? What are the two areas of service you would most like to see improved?</p>	