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METRO

Agenda

MEETING: METRO COUNCIL WORK SESSION
DATE: November 13, 2007
DAY: Tuesday
TIME: 2:00 PM
PLACE: Metro Council Chamber

CALL TO ORDER AND ROLL CALL

2:00 PM	**1.**	**DISCUSSION OF AGENDA FOR COUNCIL REGULAR MEETING, NOVEMBER 15, 2007/ADMINISTRATIVE/CHIEF OPERATING OFFICER COMMUNICATIONS**	
2:15 PM	**2.**	**BUSINESS RECYCLING OPTIONS**	Hoglund
3:00 PM	**3.**	**BREAK**	
3:05 PM	**4.**	**PORT OF PORTLAND MASTER PLAN**	Cotugno
3:25 PM	**5.**	**COUNCIL BRIEFINGS/COMMUNICATION**	

ADJOURN

Agenda Item Number 2.0

BUSINESS RECYCLING OPTIONS

Metro Council Work Session
Tuesday, November 13, 2007
Metro Council Chamber

METRO COUNCIL

Work Session Worksheet

Presentation Date: November 13, 2007 Time: Length: 30 minutes

Presentation Title: Program Options for Increasing Business Recycling

Department: Solid Waste and Recycling Department

Presenters: Mike Hoglund, Heidi Rahn, Marta McGuire

ISSUE & BACKGROUND

Businesses in this region have easy access to an effective recycling system. This system includes recycling services with garbage collection, free education and technical assistance, plenty of processing capacity for business recyclables, and stable material markets. While many businesses are participating in the recycling system, at least 14 percent do not recycle or only recycle cardboard.

Achieving the state-mandated waste reduction goal for this region is dependent on significant increases in business recycling. In order to reach the 64 percent waste reduction goal, businesses must recycle an additional 80,000 tons of paper and containers. Metro Council recognized this impediment, and directed staff to develop business recycling program options for consideration.

At a work session on July 3, 2007, staff presented two approaches for Metro Council consideration:

Option #1: Mandatory Business Recycling- This program would require all local jurisdictions in the region to implement mandatory business recycling for paper and containers, as the City of Portland has done. (The draft Regional Solid Waste Management Plan identifies mandatory recycling as a "Plan program," being the most likely to provide the new recovery needed from the business sector to achieve the region's waste reduction goal.)

Option #2: Business Recycling Standard- This program would set a 90 percent standard for paper and container recycling from the business sector, applicable to each of the region's jurisdictions responsible for solid waste planning. These local governments would be responsible for developing new or enhanced programs to achieve a higher level of recovery. Accountability for to the target would be the responsibility of the local governments and a report or program results would be presented annually to the Metro Council and SWAC.

These two approaches were detailed in the white paper on business recycling options provided to councilors for the July work session. Council members requested further information on the program goals, costs and benefits. This additional information and analysis was sent to Council members on November 5th, and is also attached to this worksheet (see Attachment 1). The updated white paper on business recycling options is available upon request.

OPTIONS AVAILABLE

Direct staff to proceed with drafting legislation for the preferred option.

Postpone identifying a preferred option in favor of directing staff to address additional questions or concerns.

IMPLICATIONS AND SUGGESTIONS

Council's determination of a preferred option will lead to development of a draft ordinance. This ordinance will be reviewed by the Solid Waste Advisory Committee and MPAC prior to coming before Council for formal consideration.

QUESTION(S) PRESENTED FOR CONSIDERATION
Which business recycling program option should staff develop into legislation?

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION _X_Yes __No
DRAFT IS ATTACHED ___Yes __X_No

SCHEDULE FOR WORK SESSION

Department Director/Head Approval _______________
Chief Operating Officer Approval ___________________

MEMORANDUM

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
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METRO

DATE: November 2, 2007

TO: Metro Councilors

FROM: Michael Hoglund, SWR Director

SUBJECT: Options for Increasing Business Recycling

Enclosed for your review is background material prior to a Council work session on Business Recycling Options November 13, 2007. This material addresses key questions asked by Council and by MPAC.

At the July 3, 2007 Metro Council work session on Options for Increasing Business Recycling, Council members requested further information on the goals, costs and benefits of the two proposed programs. Attached is the additional analysis and case studies prepared by Solid Waste & Recycling Department staff. This memorandum reviews the program options and summarizes the key findings of the new analysis for Council review.

Achieving the state-mandated waste reduction goal for this region is dependent on new programs to increase business recycling. In order to reach the 64 percent waste reduction goal, businesses must recycle an additional 80,000 tons of business paper and containers. Metro Council recognized this impediment, and directed staff to develop program options for consideration. In July, staff presented two approaches for Metro Council consideration:

- **Option #1: Mandatory Business Recycling Program-** This program would require all local jurisdictions in the region to implement mandatory business recycling. This would require businesses to recycle only paper and containers.
  Recovery projection: 80,000 tons of paper and containers

- **Option #2: Voluntary Business Recycling Standards-** This program would set a 90 percent standard for paper and container recycling from the business sector, applicable to each of the region's jurisdictions responsible for solid waste collection. Local governments would be responsible for developing new or enhanced programs to achieve a higher level of recovery. Each local government would be individually accountable to meet the target, similar to land-use planning requirements. *Recovery projection: 35,000 tons-80,000 tons of paper and containers*

Although the program options have common goals, the costs, benefits, and local government implications vary greatly between the two programs. The key points of the new analysis highlight the shared goals and major differences and are detailed below.

Business Recycling Program Options Goals
Both of the proposed programs aim to achieve the regional waste reduction goal, while addressing Metro Council's goals and objectives, and the prioritized values of the Metro Policy Advisory Committee and the Solid Waste Advisory Committee. Specific goals and objectives include:

1. Meet the regional solid waste reduction goal of 64 percent by 2009.
2. Achieve a 90 percent recycling rate for paper and containers (80,000 additional tons).
3. Reduce energy consumption and reliance on virgin materials.
4. Supply quality products to recycling markets.
5. Align with Metro Council's Objective 2.3: The region's waste stream is reduced, recovered and returned to productive use, and the remainder has a minimal impact on the environment.
6. Address current business recycling obstacles including lack of entry to businesses by recycling specialists, lack of information on who is not recycling, and inconsistent standards throughout the region.
7. Address stakeholder values beyond cost and tons recovered, including environmental benefits, ease of implementation and consistency with the waste reduction hierarchy.

Business Recycling Program Options Cost
The cost analysis examines the financial impacts of recycling (universal and specific), affected parties and comparison with other programs. Table 1 summarizes the costs projected for an 80,000-ton per year diversion of garbage to recycling due to implementation of mandatory business recycling. Universal costs are dependent solely on the number of tons diverted to recycling and would occur *regardless of how the tons were diverted from the waste stream*. Program-specific costs would be unique to this specific program and include program management, enforcement and collection services costs.

Table. 1. Annual Program Cost Summary

Universal costs:	($5,070,000)
Program-specific costs:	$8,919,000
Total	$3,849,000

Cost changes associated with different tonnage diversion would vary proportionally. For example, if the Voluntary Business Recycling Standards approach achieved 35,000 tons of new recovery, then the above totals would be reduced by about half. See Attachment A for complete cost analysis.

Effects on the Business Garbage Bill
Translating these costs to the effects on the garbage bill indicates that most businesses could expect a service charge increase of less than two percent, mainly due to the increase in per-ton charges for disposal. Local business case studies that evaluate the service charge impacts under the proposed programs are highlighted in Attachment B. It is important to note that while some businesses may see a slight service cost increase, others may see disposal costs decrease as they recycle more.

Cost Comparison of Business Recycling Options with Other Programs
The proposed business recycling options maintains a lower cost per ton when compared to several existing waste reduction programs as detailed in Table 2.

Table 2. Annual Program Cost Impact Comparison

	Tons Recovered	Equivalent cost per ton recovered
Existing Programs		
Bottle Bill	35,000	*$34*
Commercial Organics	12,000	*$48*
RSF Credits	30,000	*$52*
Prospective Programs		
Increased Biz Recycling	80,000	*$36*
EDWRP	42,250	*$89*

Local Government Impact
Designated solid waste planning agencies, which are responsible for local waste reduction planning and education, have been a major stakeholder in the identification and evaluation of program options since discussions began in 2003. Planning agency staff are aware of the resources that would be involved in implementing either of the business recycling program options. Attachment D outlines local government responsibility for solid waste programs and role in new programs.

Mandatory Business Recycling requires a one-time demand on local government staff and elected officials to adopt the ordinance versus Voluntary Business Recycling Standards, which requires on-going program management and evaluation. Under both options, Recycle at Work services would continue to be provided to the business community by those jurisdictions currently receiving direct program funding from Metro.

Under both program options, local governments estimate they will need additional resources. On average, local governments that currently receive Recycle at Work funding estimated a cumulative need for an additional $400,000 (4 FTE and additional program tools) to implement either program, while recovery results are expected to vary greatly between the two options. See Attachment C for detailed local government impact summary.

Business Recycling Program Options Benefits
As a result of increased business recycling, additional benefits, not counted in economic costs and benefits, accrue to the environment. Metro staff estimates the net environmental benefits of the mandatory business recycling program to be $10.22 million for 80,000 tons of new recovery collected annually. The Business Recycling Standards program is projected to achieve approximately $5 million for 35,000 tons (see Attachment A). The largest factor contributing to the environmental benefits is the reduction of 218,000 tons of greenhouse gas emissions (valued at $36 per ton of carbon dioxide equivalent). Many of the environmental benefits would be shared beyond Metro's jurisdictional boundary and extend to communities where recycled commodities are re-manufactured into products.

Next Steps
At the November 13th Council Work Session, staff will provide an overview of this information and the worksheet will identify the key questions for Council consideration. Council will be asked to provide direction on which program option to develop for formal consideration.

Attachment A
Cost Impact Analysis Excerpted from
White Paper on Options for Increasing Business Recycling
Updated: September 25, 2007

Discussion of Costs

The costs associated with the proposed new business recycling program options will be discussed in three parts:

1. *Financial Impacts of Recycling (Universal vs. Specific).* An explanation of general concepts to distinguish between impacts that are universal to any recycling program and those impacts that arise due to specific program implementation details;
2. *Affected Parties (Targeted Generators vs. Other Generators).* A description of costs that impact the targeted generators and costs that affect others in the system;
3. *Comparison with Other Programs.* A comparison of the business recycling costs and outcomes to a selection of other existing and future waste reduction programs. Net economic benefits as well as net environmental benefits are addressed in this section.

Cost figures in the discussion that follows are couched in terms of the *change* in cost relative to the status quo. For example, as always, doing nothing different is always an option. By definition, the *change* in cost of doing nothing is zero. The cost of the two business program options (standards vs. mandatory) are presented in terms of the change in costs relative to doing nothing. In this case, cost impacts are highly dependent on the number of tons recovered. Throughout, the analysis is based on the goal of 80,000 new tons of recovery from businesses; fewer tons recovered would mean lower total cost impact, roughly proportional to the number of tons recovered.

Financial Impacts of Recycling: Universal vs. Specific

The financial impacts of recycling can be grouped into two categories: 1. Universal impacts that arise anytime garbage is diverted to recycling; and 2. Specific impacts that arise in response to the program at hand. Regarding universal costs, any waste diverted to recycling will avoid the costs associated with disposal and could generate revenue as a valuable market commodity. These effects are universal and independent of the specific program or action that caused the recycling to occur. Program-specific impacts, on the other hand, can be attributed to a particular program. Examples of program-specific impacts are the public cost of enforcing new requirements, program oversight, and changes in collection service for the targeted generators.

One source of program-specific costs bears special discussion, costs that are fully internalized by the generator. Unlike avoided disposal costs and recyclable material sales, whose magnitudes can be relatively well known, internalized costs are problematic to quantify.

Take the bottle bill as one well-known program that has both associated market costs that are relatively easy to quantify as well as internalized generator costs that are difficult to know. Easy-to-estimate market costs include avoided disposal costs (tons x tip fee) and material sales (tons x sales price). Sources of hard-to-quantify costs include, for example, the value of the consumer's time and transportation resources to sort out bottles at home and (usually) drive them back to the grocery store for deposit redemption. Additionally, floor space almost always has a value, or opportunity cost. Most homeowners reserve space in the kitchen and/or garage for container storage, at perhaps a seemingly small cost; however, across all homeowners in the region, the total value of that floor space is significant. And, while not a generator consideration per se, grocers provide business floor space for empty bottle storage and redemption machines.

More commonly than not, it becomes impractical to try to place a dollar value on these non-point-sources of cost. Nevertheless, internalized generator costs are real and can be substantial. In the case of business standards or requirements, there certainly will be internalized generator costs, ranging from making office space changes, to appointing a corporate recycling coordinator, to making capital and staff-time investments in reconfiguring recycling areas and internal business practices. The next section quantifies market cost effects and attempts to characterize the internalized cost effects of proposed business recycling options.

Affected Parties: Targeted Generators vs. Other Generators

This section addresses the *economic* costs that would be borne by waste generators within the region as a result of implementing the Business Recycling Program. "Economic costs" refer to money payments for goods and services such as collection of recyclables and disposal of waste. "Economic costs" do not capture external (environmental) benefits of the program, such as improvements in health due to reduced air emissions. Environmental benefits are addressed in a later section.

For analytical purposes, economic effects on two groups are examined: the businesses targeted by these program options, and all other regional generators—single family, multi-family, construction/demolition projects, *etc*.—that are not targeted by this program.

Unless specifically noted in the text that follows, all cost and tonnage figures are region-wide totals.

Business Generators

The change in the cost to business participants stems from three basic sources: (1) internal implementation and management (see discussion above), (2) changes in garbage and recycling services provided by haulers, and (3) changes in the per-ton cost of disposal due to diversion of 80,000 tons to source-separated recycling. The latter also includes changes in Metro's rates to recover Metro's new costs associated with these business recycling program options.

- *Internal Implementation and Management Costs*. As discussed above, internalized costs are generally difficult to quantify. Metro staff estimates that businesses that need to make improvements to their internal recycling systems in response to a new program may spend a minimum of $1 million (in aggregate) annually for those improvements. This conservative estimate is based on anecdotal reports from a few businesses that currently have recycling procedures in place. Some other businesses who have not yet fully developed their recycling processes believe that $1 million per year may be too low, perhaps by an order of magnitude. Changes in internal business costs would need to be internalized. Within estimation error, this cost is not expected to vary significantly under the business standards vs. the mandatory program.
- *Collection Costs.* Assuming that the targeted businesses set aside an extra 80,000 tons of new recyclables, their cost for collecting recyclables will increase by about $7.4 million per year, as more collection time will be required to pick up the additional recyclables. At the same time, collection costs for garbage will decrease slightly, perhaps by as much as $1.2 million, for those 15% or so of businesses that can reduce the frequency of their garbage service due to better recycling. Overall, the net $6.2 million annual collection cost increase will be largely offset by about $6.7 million in avoided disposal costs ($4.7 million in tip fees) and revenue ($2 million) from sales of additional recyclables. The small ($530,000) net decrease over the status-quo cost of providing collection services represents only a fraction of a percent change in total solid waste service costs (out of perhaps $150 million per year), and almost certainly would not of itself warrant a rate adjustment by local governments. Hence, not counting fiscal impacts of tonnage diversion discussed in the next bullet, Metro staff estimates that all businesses combined would pay about the same, on average, for

collection with or without a new business recycling program.[1] Disposal costs, on the other hand, are almost certain to rise, as discussed next.

- *Disposal Costs.* The per-ton cost of disposal (tip fee) is projected to rise for two reasons: (i) the diversion of waste from disposal facilities will both raise Metro's contract rate at Columbia Ridge landfill by approximately 90¢ per ton and leave less tonnage from which to recover fixed costs, with a 35¢ per ton effect at the transfer stations and 85¢ on the Regional System Fee; and (ii) staff assumes that Metro's cost of these business recycling program options—including revenue sharing to pay for the cost of program elements implemented by local governments—will be recovered by an increase in the Regional System Fee of 46¢. If these changes are recovered through Metro's standard rate model, they mean a $1.25 increase in the tonnage charge component of the tip fee (90¢+35¢), and a $1.31 increase in the Regional System Fee (85¢+46¢). In addition, private facilities will have similar cost effects and, if past is precedent, will match Metro's prices, making these disposal increases a region-wide event. Due to these changes, totaling $2.56/ton, participants in a new business recycling program will see a $1.84 million increase in the cost of disposing of waste that continues to be landfilled.

The following table summarizes the cost effects described above.

TABLE 1. Total change in costs for business recycling program participants

Cost Component	Net Cost
Internal management	$1,000,000*
Collection	(530,000)**
Disposal	1,843,000
Total	$ 2,313,000

* See discussion above regarding uncertainty in internalized costs
** Collection services net of material sales revenue & avoided disposal cost on recycled materials.

- *Effect on Garbage Bill.* A number of factors influence how these net cost increases would impact a specific business's bill from its garbage hauler. Individual businesses will experience different impacts because business size varies, as do waste generation characteristics, solid waste service levels and service providers (hauler). In addition, rate-setting processes are not uniform among jurisdictions in the region. With those caveats, Metro staff believes that most businesses should expect a rate increase of less than 2% given the cost assumptions above, mainly due to the increase in per-ton charges for disposal. Those few businesses that significantly reduce their need for disposal may even enjoy an overall decrease in their bill for solid waste services; however, other businesses that, because of space limitations or the characteristics of their waste, cannot reduce their need for disposal (e.g., restaurants) may experience an increase higher than 2%. See Attachment B for case study examples of how individual businesses could be impacted.

Other Generators (Single Family, Multi-Family, Construction, etc.)

As indicated in the "Disposal Costs" bullet above, tip fees could rise throughout the region by approximately $2.56 per ton. All waste generators would be affected by this change in disposal costs, including generators

[1] These figures do not reflect any increase in hauler-provided education for customers, which could be significant during the early phase of implementation.

who do not participate in a business recycling program. Metro staff estimates that increased disposal costs for these generators would run approximately $1.54 million per year.

Cost Comparison of Business Recycling with Other Programs

In order to make the numbers in the previous section useful for decision-making, the costs of business recycling program options can be compared with the cost and performance of other programs. The following table shows a comparison of key costs and statistics for the prospective Business Recycling and Enhanced Dry Waste Recovery ("EDWRP") programs versus several existing waste reduction programs, including the well-known Bottle Bill program, and Metro's Regional System Fee Credit Program, and Food Waste Composting Program.

TABLE 2. Comparison of program-related cost impacts for several waste reduction initiatives.

		Cost Changes due to…			
	Tons Recovered	Tonnage Diversion *	Govt. Oversight & Enforcement **	Service Changes***	Equivalent cost per ton recovered
		costs shared among all generators		*costs borne by target generators*	
Existing Programs					
Bottle Bill	35,000	$1,205,000	$0	unknown	*$34*
Commercial Organics	12,000	$438,000	$140,000	unknown	*$48*
RSF Credits	30,000	$1,558,000	$10,000	$0	*$52*
Prospective Programs					
Enhanced Biz Recycling	80,000	$2,772,000	$607,000	($530,000)	*$36*
EDWRP	42,250	$1,358,000	$0	$2,407,000	*$89*

* The per-ton cost of disposal rises as fixed costs are recovered from fewer disposed tons and as Metro's contract disposal price increases with diminishing tonnage. Tonnage diversion alone accounts for about $35/ton recovered, regardless of the of the waste reduction program specifics (except for RSF credits, which historically have cost more--$52/ton recovered--due to the operating subsidy).

** Government costs include locally- & regionally-administered education and outreach, enforcement, coordination, and associated overhead. The magnitude of these ongoing government costs is less well-known, typically representing amalgamation of many fractional FTE. Some local governments also may choose to supplement this, e.g., through franchise fees, to support their businesses' recycling.

*** This column includes costs related to changes in collection services, but does not include systems improvements costs (internalized), whose estimation is highly uncertain, as they are dependent on generators' behavior, local governments' rate setting, and haulers' operational choices.

A note on internalized costs

Table 2 includes no estimate of internalized costs caused by the respective programs, as quantitative estimates are so uncertain as to be marginally useful for decision-making. That said, Table 3 tries to characterize the order of magnitude of the various internal systems costs for each program.

TABLE 3. Annual internalized cost estimates for the programs shown in Table 2.

Program Name	Sources of Internalized Generator Costs	Order of Magnitude
Bottle Bill	Homeowner space, time	$1 to $10 million
Commercial Organics	Restaurant or grocer space, time	$0 to $100,000
RSF Credits	None. Disposal-oriented program.	$0
Enhanced Biz Recycling	Space improvements, staff time	$1 to $10 million
EDWRP	None. Disposal-oriented program.	$0

Benefits of Business Recycling Program Options

Economic Benefits

Avoided disposal costs and sales of recyclable materials would be the main direct economic benefits accruing to businesses participating in the Business Recycling Program. With more recyclables being separated out by business generators, less waste will go to a landfill, reducing landfilling cost. In addition, recyclables have a value to recyclers, so any increase in source separation should generate a revenue opportunity for the solid waste system. As indicated in the second bullet, "Collection Costs," above, these savings are included as revenue offsets to the direct collection costs calculations described in the previous section. It is by this mechanism that sales revenue becomes an economic benefit accruing to businesses.

Environmental Benefits

Additional benefits, not counted in economic costs and benefits, accrue to the environment. Recycling reduces the need for raw material extraction, processing, and transport, thus reducing air emissions and resource usage. These types of benefits are for the public at large and some will accrue beyond the Metro boundary. The following table shows the results of the monetized environmental benefits if 80,000 tons are recovered.

Table 4. Monetized Environmental Benefits by Material for 80,000 tons

Recyclables	2005 Tons	Unit Value	Total Value
Newspaper	6,135	$163	$1,002,234
Mixed waste paper	28,275	$129	$3,648,579
Cardboard/kraft paper	26,201	$141	$3,683,992
High-grade paper	4,876	$100	$486,039
Glass containers	5,405	$19	$101,020
Steel cans	2,346	$50	$118,176
Aluminum cans and foil	1,123	$621	$697,804
Plastic bottles and tubs	5,639	$86	$484,325
Total	**80,000**	**$128**	**$10,222,169**

Source: TRACI, Decision Support Tool, Environmental Protection Agency, 2007.

The largest factor contributing to the environmental benefits is the reduction of 218,000 tons of greenhouse gas emissions (valued at $36 per ton of carbon dioxide equivalent for a total savings of $7.8 million). Additional upstream benefits from using recycled versus virgin materials in the manufacturing process include reduced acidification (sulfur dioxide), eutrophication (nitrogen), and ecological toxicity (chemicals) at an economic value of $1.3 million. Pollution prevention has a positive impact on human health, which is measured via disability-adjusted life years (DALYs). DALYs account for years of life lost and years lived with disability, adjusted for the severity of the associated unfavorable health conditions. We measured the economic value of improvements in human health to be over $1 million.

Overall, the reduced need to extract natural resources results in saving nearly 1.2 million trees, air emissions equivalent to taking 42,000 cars off the road, and enough energy to power 15,000 homes for one year.

Business Recycling Program Options - Cost and Benefit Summary

The analysis has outlined the net economic costs that would accrue to generators within the region for 80,000 tons of new business recycling:

- Business Participants: $2.313 million per year (including $1 million internalized cost)
- Other Generators: $1.536 million per year
- Total $3.849 million per year

Cost changes associated with different tonnage diversion would vary roughly proportionally. For example, if the Business Standards option achieved only 35,000 tons of new recovery, then the above totals would be reduced by about half.

In addition, Metro staff has estimated the net environmental benefits of the program to be $10.22 million for 80,000 tons of new recovery, or less than $5 million for 35,000 tons. The environmental benefits would be shared over a wide geographic area that extends beyond Metro's jurisdictional boundary.

Table 5 below summarizes the costs projected for an 80,000-ton diversion of garbage to recycling due to implementation of the mandatory business recycling option. Note that only the figures in the right half of the diagram (labeled "Program-specific") would be unique to this specific program. All the cost changes in the "Universal" left half are dependent solely on the number of tons diverted to recycling and would occur *regardless of how the tons were diverted from the waste stream*.

Table 5. Cost changes unique to the proposed business recycling program (specific), and changes that would occur due to any diversion of tonnage to recycling (universal).

	Universal		Program-specific		
	per-ton	total	per-ton	total	
Internal management	-	-	$12.50	$1,000,000	
Solid waste service					$472,300
Avoided coll., tfr., transp. disp.	($60.00)	($4,800,000)	-	-	*businesses pay*
Avoided govt. fees	($14.00)	($1,120,000)			
Sales of recyclables	($24.00)	($1,920,000)	-	-	
Collection service	-	-	$91.40	$7,312,300	
Tip Fee impacts					
Regional programs	$0.85	$1,120,000	-	-	
Fixed costs (e.g., scalehouse)	$0.35	$462,000	-	-	
Contract payments	$0.90	$1,188,000			$3,376,700
					all generators pay
Program oversight	-	-	$0.33	$441,300	
Enforcement	-	-	$0.13	$165,400	
TOTAL		*($5,070,000)*	+	*$8,919,000*	= $3,849,000

Note: Whereas Table 5 is based on an 80,000-ton diversion, for a business program that achieves only 35,000 tons of diversion, e.g., the standards approach, per-ton amounts would remain roughly the same, and the dollar totals would be cut by about half.

Attachment B
Recycle at Work Business Case Studies

Adopting one of the proposed programs to increase business recycling is projected to result in less than a two percent increase on the average garbage and recycling service bill. To understand how businesses of various sizes with different levels of garbage and recycling services will be affected, staff looked at recent recycling improvements at specific businesses that have received Recycle at Work assistance, the price of those changes, and the projected increase in the monthly service bill with the passage of a new program. Costs vary by service frequency, location, and material quantity.

Small Business - New Recycling	
Business Type	Community Park
Employees	2
Location	Unincorporated Washington County
Previous Garbage Service	1-3 yard garbage container serviced once a week
Previous Recycling Service	None
Previous Monthly Price of Service	$160.96
Change in Service	*Added 1-3 yard recycling container serviced once a week*
New Materials Recycled	Paper, cardboard, containers
New Monthly Price of Service	$160.96
Price Change to Increase Recycling	**$0**
Projected Monthly Price Increase with proposed Business Recycling Program (<2% due to increased disposal costs)	**$3**

Small Business - Enhanced Recycling	
Business Type	Frame Shop
Employees	5
Location	Beaverton
Previous Garbage Service	1 yd garbage container
Previous Recycling Service	90 gallon recycling cart
Previous Monthly Price of Service	$83.36
Change in Service	*Switched garbage and recycling container sizes to 1 yd recycling and 90 gallon garbage*
New Materials Recycled	Increased capture of recyclables
New Monthly Price of Service	$36.00
Price Change	**($47)**
Projected Monthly Price Increase with proposed Business Recycling Program (<2% due to increased disposal costs)	**$0.49**

Medium Business - New Recycling	
Business Type	Restaurant
Employees	20+
Location	Beaverton
Previous Garbage Service	4 yd garbage serviced 4 times/week
Previous Recycling Service	None
Previous Monthly Price of Service	$520
Change in Service	*Added commingling container, reduced garbage service to 2 times/week*
New Materials Recycled	Paper, cardboard, containers, and glass
New Monthly Price of Service	$270
Price Change	**($250)**
Projected Monthly Price Increase with proposed Business Recycling Program (<2% due to increased disposal costs)	**$5**

Medium Business - Enhanced Recycling	
Business Type	Athletic Club
Employees	40
Location	Sandy
Previous Garbage Service	4 yd garbage serviced 1 time/week
Previous Recycling Service	1 90 gallon cart
Projected Monthly Price Increase	$266
Change in Service	*Added 2 90-gallon carts for commingling, 1 35-gallon for glass; Reduce garbage container size to 3 yd*
New Materials Recycled	Paper, cardboard, containers, and glass
New Monthly Price of Service	$206
Price Change	**($60)**
Projected Monthly Price Increase with proposed Business Recycling Program (<2% due to increased disposal costs)	**$3.33**

Large Business - New Recycling	
Business Type	Large businesses usually recycle at least cardboard, thus we do not have a case to share at this time.

Large Business - Enhanced Recycling	
Business Type	Suburban Lifestyle Shopping Center
Employees	88 tenants, 2000 employees
Location	Tualatin/Tigard
Previous Garbage Service	2 Trash compactors pickup 3 times/week
Previous Recycling Service	1 Cardboard-only compactor pickup 3 times/week
Previous Monthly Price of Service	~$12,000
Change in Service	*Added 14 32-gallon glass totes (4 of which are being serviced 2x week) and commingled materials to compactor*
New Materials Recycled	Paper, containers, and glass
New Monthly Price of Service	Varies based on tonnage - no additional service fees
Price Change	**Unknown, likely decrease**
Projected Monthly Price Increase with proposed Business Recycling Program (<2% due to increased disposal costs)	**$223**

Notes

Recycling services are included in garbage service rates. In some jurisdictions, businesses may have to pay for recycling separately from garbage due to service levels (e.g. compactor or drop box service).

Although the Recycle at Work technical assistance program has been successful in initiating change at interested businesses, challenges still exist with businesses that will not allow recycling specialists "in the door."

Business Case Studies
Perceived Barriers to Recycling

Business Type	Testing Lab
Location	Hillsboro
Perceived Barriers to Recycling	Hauler resistance
Issue	The business explained that the hauler for their business site initially refused to provide them with recycling services. Employees demanded recycling, but it was a challenge to get service.
Business	Multi-Tenant Commercial Property
Location	Forest Grove
Perceived Barriers to Recycling	Cost
Issue	Multi-tenant property managers would like to add recycling to their hauling services, but are deterred by the additional cost for each recycling container. The solid waste hauling rates currently do not include recycling services, thus businesses must pay an additional fee for each recycling container they want to add.
Business	Property Management Co.
Location	Unincorporated Washington County
Perceived Barriers to Recycling	Lack of information, time
Issue	Tenants have requested recycling services, but have met resistance from the property manager. The hauler provided the property manager with unclear information regarding recycling services, rate of service, and the type of material that can be recycled, thus the property manager was unwilling to commit time to initiating change.
Business	Retail Pharmacy
Location	Regional
Perceived Barriers to Recycling	Corporate direction, cost, lack of information
Issue	A third party contractor manages the pharmacy's waste contracts. The contractor has direction from the corporate office of the retail pharmacy not to initiative costly changes and is likely unaware that recycling services are included with the garbage rates in the Metro region. Pharmacy local management has expressed frustration with the lack of recycling services, but defers all changes to their contractor. A letter was sent to the contractor from the Recycle at Work Program Coordinator explaining the rate structure and encouraging recycling at regional stores.
Business	Property Management Co.
Location	Portland, regional
Perceived Barriers to Recycling	Convenience, cost
Issue	A large property management firm hauls their own garbage and contracts out their recycling services. Because they are not paying garbage hauling rates, recycling services are not included and they must pay for additional recycling containers. They did not want to pay for this service and thus, were not recycling. The City of Portland sent an enforcement letter to the firm regarding the City's mandatory recycling requirement. The property management company has since initiated paper recycling, but continues to be unwilling to add bottle and can recycling.

Attachment C
Local Government Impact

Below is a summary on the impact of the proposed program options on local governments. The summary responds to the following questions:

1. Who will conduct the additional work?
2. Are the local governments are ready to implement a new program?
3. What is the cost to local governments?

Local Government Responsibility
Under Option 1, Mandatory Business Recycling, all local cities and counties acting as a solid waste authority would be responsible for adopting legislation requiring businesses to recycle paper and containers. Metro would provide the model ordinance language, while local jurisdictions would each be responsible for adopting the requirements.

Under Option 2, Voluntary Business Recycling Standards, these same jurisdictions would be required to develop and implement new programs to meet a 90 percent recycling rate for paper and containers. It is likely that many of the cities in Clackamas and Washington Counties would defer the program development and reporting to their county, the designated waste reduction planning agency, but they have a role in local implementation.

Mandatory Business Recycling requires a one-time demand on local government staff and elected officials to adopt the ordinance versus Voluntary Business Recycling Standards, which requires on-going program management and evaluation. Under both options, Recycle at Work services would continue to be provided to the business community by those jurisdictions currently receiving direct program funding from Metro.

Attachment D outlines local government authority, responsibility for solid waste programs and role in new programs.

Local Government Readiness
Local governments have been a major stakeholder in the planning and identification of program options since discussions began in 2003. Their staff input has been critical to program development. While awareness does not always equal readiness, local government staff are aware of the resources that would be involved in implementing either of the business recycling program options. Metro staff would assist with ordinance adoption, enforcement needs, targeted outreach, and Recycle at Work resources and services to support local governments.

If Metro adopts a Mandatory Business Recycling ordinance:

- Local staff would be provided with a model ordinance for implementing the mandatory program.
- Local jurisdictions would need to adjust their administrative rules.
- Enforcement staff would either be provided by Metro, under the terms of an IGA, or local Code enforcement staff would be utilized to inspect business compliance at the local government level.
- Local Recycle at Work outreach and assistance to businesses that need help setting up or improving their recycling programs would intensify with local passage of mandatory business recycling, and additional staff may be needed for a time, in order to respond to that increased demand for assistance.

If Metro adopts the Voluntary Business Recycling Standards program:

- More planning, plan reviews and program coordination between both Metro and local governments would result.

-
- Counties would coordinate with their cities and franchisees to develop implementation plans and create consistent commercial recycling service standards.
- Larger cities like Portland, Gresham and Beaverton would establish their own plans and submit them directly to Metro.
- Additional Metro resources would be needed to coordinate program review and approval, fund distribution, and annual waste characterization studies to assess performance.

Local Government Costs

To implement a new business recycling program, local governments estimate they will need additional resources. Under Option 1, Mandatory Business Recycling, local governments expect to spend most of their time up front assisting their councils and commissions in passing the new ordinance. Staff would also be needed at a few jurisdictions to respond to increased demand for Recycle at Work assistance. Those jurisdictions that provided estimates suggested an additional $356,000-$456,000 would be sufficient to implement Mandatory Business Recycling requirements.

Most jurisdictions were uncertain what practices they would implement under Option 2, Voluntary Business Recycling Standards, and thus they found it challenging to accurately identify additional funds needed. Overall, an estimated $329,000-$484,000 was requested for additional staff to develop, implement, and evaluate Business Recycling Standards programs.

On average, local governments estimated a cumulative need for $400,000 (4 FTE) to implement either program, while recovery results are expected to vary greatly between the two options.

Attachment D
Local Government Program Authority and Funding Overview

Attachment D- Local Government Program Authority and Funding Overview

					Option 1: Mandatory Business Recycling			Option 2: Business Recycling Standards				
Jurisdiction	**Solid Waste Authority**	**Designated Waste Reduction Planning Agency**	**Direct Funding**	**Pass thru Allocation**	**Adopt legislation**	**Likely to defer enforcement to Metro**	**Maintain current Recycle at Work services**	**Maintain current Recycle at Work services**	**Develop new programs**	**Implement Program**	**Year 1 progress report**	**Year 2 progress report**
Clackamas County	X	Clackamas County	X		X	Yes	X	X	X	X	X	X
Unincorporated Clackamas County*		Clackamas County		X	X	Yes			X	X	X	X
Barlow*	X	Clackamas County		X	X	Yes			X	X	X	X
Rivergrove*	X	Clackamas County		X	X	Yes			X	X	X	X
Johnson City*	X	Clackamas County		X	X	Yes			X	X	X	X
Damascus*	X	Clackamas County		X	X	Yes			X	X	X	X
Gladstone*	X	Clackamas County		X	X	Yes			X	X	X	X
Happy Valley*	X	Clackamas County		X	X	Yes			X	X	X	X
Lake Oswego*	X	Clackamas County		X	X	Yes			X	X	X	X
Milwaukie*	X	Clackamas County		X	X	Yes			X	X	X	X
Estacada*	X	Clackamas County		X	X	Yes			X	X	X	X
Molalla*	X	Clackamas County		X	X	Yes			X	X	X	X
Oregon City*	X	Clackamas County		X	X	Yes			X	X	X	X
Sandy*	X	Clackamas County		X	X	Yes			X	X	X	X
West Linn*	X	Clackamas County		X	X	Yes			X	X	X	X
Canby*	X	Clackamas County		X	X	Yes			X	X	X	X
Wilsonville*	X	Clackamas County		X	X	Yes			X	X	X	X
Multnomah County*	X	Portland		X	X	Yes			X	X	X	X
Unicorprated Multnomah County*		Multnomah County			X	Yes			X	X	X	X
Gresham	X	Gresham	X		X	Yes	X	X	X	X	X	X
Wood Village*	X	Gresham		X	X	Yes			X	X	X	X
Fairview	X	Fairview	X		X	Yes	X	X	X	X	X	X
Troutdale	X	Troutdale	X		X	Yes	X	X	X	X	X	X
Portland	X	Portland	X		X	No	X	X	X	X	X	X
Beaverton	X	Beaverton	X		X	Yes	X	X	X	X	X	X
Washington County	X	Washington County	X		X	Yes	X	X	X	X	X	X
Unincorporated Washington County*		Washington County		X	X	Yes			X	X	X	X
Hillsboro*	X	Washington County		X	X	Yes			X	X	X	X
Tigard*	X	Washington County		X	X	Yes			X	X	X	X
Tualatin*	X	Washington County		X	X	Yes			X	X	X	X
Forest Grove*	X	Washington County		X	X	Yes			X	X	X	X
Banks*	X	Washington County		X	X	Yes			X	X	X	X
Cornelius*	X	Washington County		X	X	Yes			X	X	X	X
King City*	X	Washington County		X	X	Yes			X	X	X	X
North Plains*	X	Washington County		X	X	Yes			X	X	X	X
Sherwood*	X	Washington County		X	X	Yes			X	X	X	X
Durham*	X	Washington County		X	X	Yes			X	X	X	X
Gaston	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Maywood Park	X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Defintions and notes:

Jurisdiction Listing- All jurisdictions listed are in the regional wasteshed. Juridictions in bold are within the Metro region boundary.

Solid Waste Authority: Local government responsible for designing and administering waste reduction programs; regulating and managing solid waste and recycling collection services within their jurisdictional boundaries; and reviewing collection rates and services standards.

Designated Waste Reduction Planning Agency: Local government responsible for designing and implementing the waste reduction programs including Recycle at Work Services. Cities may designate the county agency to implement a program on their behalf.

Direct Funding: Receive direct funding from Metro to implement waste reduction programs.

Pass thru Allocation: Local government is eligible for direct funding from Metro, but designates funding to county to implement waste reduction programs on their behalf.

***** *Under Option 2, the jurisdiction may choose to have their designated waste reduction planning agency develop and implement the new program plan and reporting on their behalf.*

Agenda Item Number 4.0

PORT OF PORTLAND MASTER PLAN

Metro Council Work Session
Tuesday, November 13, 2007
Metro Council Chamber

METRO COUNCIL

Work Session Worksheet

Presentation Date: November 13, 2007 Time: ______________ Length: 15 minutes

Presentation Title: PDX Master Plan Update

Department: Planning

Presenters: Andy Cotugno

ISSUE & BACKGROUND

The Port of Portland and the City of Portland have initiated a process to update the Master Plan for Portland International Airport. The product of the effort is intended to meet the dual objective of meeting the requirements for an amendment to the City of Portland Comprehensive Plan and implementing ordinances and the requirements of the Federal Aviation Administration (FAA) for a plan the defines operating practices and capital improvements.

The City of Portland Comprehensive Plan amendment is subject to approval through the Portland Planning Commission and Portland City Council. It is intended to create an airport zoning designation that establishes the allowed uses for the designated area. This would be a departure from past practices that has the airport permitted through a conditional use process with a requirement for periodic re-approval of their conditional use permit.

The FAA process is subject to approval of the Port of Portland Board of Directors and the FAA Regional office in Seattle. The FAA approved Master Plan is a prerequisite for FAA's regulation of the airport operations and FAA approval of grants and use of PDX collected landing fees, concession and parking revenues and passenger fees for capital improvements.

The City of Portland and Port of Portland have appointed a Public Advisory Group (PAG) comprised of 30 members from public agencies, industry representatives and surrounding neighborhoods (in both Oregon and Washington). In chartering the group, the project managers have stressed the importance of members participating on behalf of their organization rather than as individuals. The appointment from Metro is Andy Cotugno with Robin McArthur as alternate.

Issues relating to issues that relate to Metro could include:

- Consistency with designated growth areas in the 2040 Growth Concept
- Consistency with surface transportation access defined in the Regional Transportation Plan
- Consistency with natural resource protection plans defined in Title 13 Nature in Neighborhoods (particularly related to water quality impact on the Columbia Slough)

OPTIONS AVAILABLE

Provide staff with guidance on issues to communicate from Metro to the City of Portland and Port of Portland.

Receive progress reports from staff on issues.

Consider a comment position/endorsement of the final plan at the end of the process.

IMPLICATIONS AND SUGGESTIONS

Some form of communication between staff and Council is needed to ensure the participation on the Public Advisory Group reflects the position of the organization.

QUESTION(S) PRESENTED FOR CONSIDERATION

Are there aspects of Metro's adopted plans that should be emphasized?

Are there other issues beyond Metro's plans that should be raised?

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION __Yes X No
DRAFT IS ATTACHED ___Yes ___No