



METRO

Agenda

MEETING: METRO COUNCIL WORK SESSION
DATE: July 3, 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, JULY 5, 2007/ADMINISTRATIVE/CHIEF OPERATING OFFICER COMMUNICATIONS | |
| 2:15 PM | 2. | TRANSIT SERVICE DISCUSSION | Mendoza |
| 3:15 PM | 3. | BREAK | |
| 3:20 PM | 4. | PROGRAM OPTIONS FOR INCREASING BUSINESS RECYCLING | Hoglund |
| 3:50 PM | 5. | COUNCIL BRIEFINGS/COMMUNICATION | |

ADJOURN

METRO COUNCIL

Work Session Worksheet

Presentation Date: 7-03-07 Time: 2pm Length: 30 mins

Presentation Title: Transit Service Discussion

Department: Planning

Presenters: Phil Selinger (TriMet), Tony Mendoza

Attendees: Ross Roberts, Richard Brandman, Andy Cotugno, Tom Kloster, Ken Zatarain (TriMet)

ISSUE & BACKGROUND

President Bragdon has requested a discussion with staff about transit operations.

Questions raised include:

- How to serve future major population corridors that do not have, nor are planned to have rail?
- What's TriMet's experience been with Frequent Service?
- TriMet Streamline improvements – how have they performed?
- What is the impact of various improvements to ridership (e.g., amenities, speed, cleanliness)?
- What is the link of land use to bus service? What has our experience been?
- What are the current measures of transit service success? What could they be? What should they be?
- How can different services provide service to different areas (e.g., demand responsive)?
- What can we learn from other areas that have enhanced bus service?

OPTIONS AVAILABLE

This is a discussion item to address questions about transit operations raised by President Bragdon.

IMPLICATIONS AND SUGGESTIONS

This meeting is intended to be a discussion. A presentation of transit performance will be prepared to help facilitate the conversation.

QUESTION(S) PRESENTED FOR CONSIDERATION

Discussion will advance understanding of bus and rail operations and performance.

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION __Yes _No
DRAFT IS ATTACHED ___Yes ___No

SCHEDULE FOR WORK SESSION

Department Director/Head Approval _____

Chief Operating Officer Approval _____

Metro Council Discussion on Transit Service Outline

1) TriMet's Transit Investment Plan

- a) Lays out TriMet's strategies and programs to meet regional transportation and livability goals through focused investments in service, capital projects and customer information.
- b) Rolling five-year plan, updated annually, first adopted by the TriMet Board in June 2002.
- c) Relies on long-term goals and strategies developed in the 2040 Concept Plan and the Regional Transportation Plan (RTP).
- d) Reinforces access to Regional Centers, Town Centers and key corridors and shows how TriMet will implement the transit portion of the RTP over the next five years.
- e) Within available financial resources, TriMet and partners balance needs to guide where, when and how to invest transit-related dollars.

2) TIP Priorities

- a) Build the Total Transit System
 - i) Enhance customer information, stop amenities provide for passenger comfort
 - ii) Provide frequent, reliable service
 - iii) Promote convenient access by walking, cycling or driving.
 - iv) Provide for safety and security.
- b) Expand high capacity transit
 - i) Operate at speeds and with a ride quality that make transit competitive with the automobile for many trip destinations
 - ii) Provide reliable service by avoiding traffic congestion
 - iii) Make the most cost-efficient use of vehicles and operators
 - iv) Focus development by demonstrating a long-term commitment to quality transit service
 - v) Use clean power systems that improve air quality in the corridor
 - vi) Invest in MAX Light Rail, Commuter Rail and Streetcar service along key corridors to connect Regional Centers.
- c) Expand Frequent Service
 - i) Add routes to TriMet's network of bus lines than run every 15 minutes or better, every day.
 - ii) Develop a network of high capacity and frequent lines that allow most trips to be made with a single transfer.
 - iii) Reinforce transit-oriented land uses along designated Main Streets, arterials and corridors.
 - iv) Provide a brand that calls attention to this service and attracts ridership as an alternative to automobile travel.
- d) Improve local service
 - i) Work with local jurisdictions to improve transit service in specific local areas.
 - ii) Successful local service requires:
 - (1) Land use patterns and densities that encourage and generate transit usage
 - (2) Safe, direct and convenient pedestrian and bicycle access, within communities and to transit stops
 - (3) Running buses frequently throughout the day
 - (4) Marketing and customer information

3) Rider Preference

- a) Customer preference survey
 - i) Frequency
 - ii) Reliability
 - iii) Security
 - iv) Cleanliness
 - v) Customer service
- b) Other considerations
 - i) Stop spacing
 - ii) Vehicles
 - iii) Express routes (speed)

4) Frequent Service

- a) Elements
 - i) 15-minute service (most of the day), 7 days a week
 - ii) Reliability (signal priority, curb extensions, jump lanes, etc.)
 - iii) Branding (easy identification or services)
 - iv) Amenities (shelters, lighting, benches, trash receptacles)
 - v) Customer information (Transit Tracker and schedules-at-stops)
- b) Frequent Service Criteria
 - i) Regional technical committee developed criteria
 - ii) 7 factors from productivity, street character, density, 2040 designation, employment and connectivity are considered.

Criterion	Description	Weight
Ridership productivity	Projected short-term ridership productivity, population/employment density, major attractions	40
Transit/pedestrian friendly streets	Sidewalk coverage, signalized crosswalks, planned improvements	20
Density of transit dependant population and activities	Areas with high proportion of low income residents, seniors, or persons with disabilities	10
RTP Designation	Frequent or rapid bus designation in RTP	10
Relationship to major transportation developments	Connection to existing or proposed high capacity transit	10
Land use connectivity	Number of 2040 Centers served	10
Transportation demand management	Number of ECO compliant companies	5
Total Possible Score		105

- c) Roll-out
 - i) From 4 to 16 lines between 1999 and 2006
 - ii) Goal is to serve 65% of bus ridership with 22 Frequent Service lines
 - iii) Ridership increases on Line 57 were 20% weekday, 39% Sundays

5) Measuring Success

- a) Ridership – Frequent Bus, MAX, Other Bus, System
 - i) By stop
 - ii) By park & ride
 - iii) Mode share
- b) Productivity
 - i) Riders per service hour
 - ii) Cost per boarding ride
- c) Service quality – Operational
 - i) On-time performance
 - ii) Transit Signal Priority evaluation
 - iii) Roadcalls, missed pullouts, attendance, etc.
 - iv) Complaints
- d) Service Quality – Systematic
 - i) Mode share
 - ii) Travel time
 - iii) Number of transfers
 - iv) Average wait time
- e) Land Use Measures
 - i) Land use synergy (TOD development impact)
 - ii) Title VI measures – jobs and destination accessibility, etc.
 - iii) Employer access
 - iv) Service coverage (total, 1/4 –mile, 1/2-mile, etc)
 - v) Transit Orientation Index

6) Opportunities

- a) Remaining HCT Corridors or Extensions (e.g. 99W / 99E)
- b) Cross-region services
- c) High growth areas
- d) Green fields
- e) Infill / redevelopment
- f) Innovative use of technologies (streetcar, tram, BRT)

7) Challenges

- a) Pedestrian access
- b) Industrial development
- c) Elderly and disabled services demands
- d) Rising costs

METRO COUNCIL

Work Session Worksheet

Presentation Date: July 3, 2007

Time: 3:20 PM

Length: 30 minutes

Presentation Title: Program Options for Increasing Business Recycling

Department: Solid Waste and Recycling Department

Presenters: Mike Hogle, Marta McGuire and Heidi Rahn

ISSUE & BACKGROUND

Achieving the state-mandated waste reduction goal for this region requires new programs targeting commercially-generated waste. To that end, Metro Council directed staff to develop business recycling program options for Council consideration.

Businesses in the Metro region have easy access to recycling services with their garbage collection, as well as free recycling education and technical assistance, plenty of processing capacity for business recyclables, and stable material markets. While many businesses are participating in the recycling system, it's estimated that 14 percent do not recycle or only recycle cardboard. As a result, more than 114,000 tons of recyclable resources (paper and containers) from this sector are disposed annually.

To explore some options for increasing business recycling, staff convened work groups and conducted stakeholder outreach from 2003 to 2007. More than 1,000 people provided input on the proposed program options.

As a result of previous Council discussions, public outreach, research, and analysis, staff has developed two options for Metro to consider that should significantly boost business recycling. (See attached white paper.)

OPTIONS AVAILABLE

Option 1: Mandatory Business Recycling Program - This program would require all local jurisdictions in the region to implement mandatory business recycling, as recommended by the Regional Solid Waste Management Plan Contingency Plan Work Group. Metro Council may adopt the requirements, or petition the Environmental Quality Commission for action. Under ORS 459A.065, the EQC could mandate business recycling in the tri-county watershed if findings conclude requirements are necessary to meet the regional goal.

Option 2: Business Recycling Standards Program - 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. Local governments would be responsible for developing new or enhanced programs to achieve this level of recovery. Each local government would be individually accountable for the target, and reporting progress on an annual basis.

Figure 1.

	Program Option1: Mandatory Recycling	Program Option 2: Business Recycling Standard
Program Goal	Achieve a 90% recycling rate for paper and containers to recover an additional 80,000 tons.	Same as Option 1.
Target Generators	Small, medium and large businesses, institutions and public agencies. (Approximately 56,000 businesses in the region fall into this category.)	Same as Option 1.
Target Materials	Cardboard, paper and mixed containers (glass, plastic bottles and steel and aluminum cans).	Same as Option 1.
Main Program Components	<ul style="list-style-type: none"> ▪ Require businesses to separate paper and containers for recycling. ▪ No more than 10% of recyclable materials in garbage. ▪ Education, technical assistance and tagging to precede enforcement. ▪ Random business inspections to determine compliance. ▪ Violations subject to recycling specialist referral. ▪ 90-day assistance period with up to \$500 penalty ▪ \$100,000 to support increased education and expand Recycle at Work program. ▪ Requirement take effect July 1, 2008. ▪ Annual evaluation. 	<ul style="list-style-type: none"> ▪ 90 percent recycling target set for business paper and container recycling, applicable to the region's jurisdictions. ▪ Baseline evaluation data to determine additional recovery needed by jurisdiction. ▪ Metro provides list of Best Management Practices to local governments. ▪ Local governments submit program plans for increased efforts and annual reports on progress. ▪ \$100,000 to support new or enhanced programs. ▪ New programs begin January 1, 2008 ▪ Annual evaluation. ▪ Formal reporting to SWAC, MPAC and Metro Council after second year for local governments that do not make sufficient progress.
Adoption	Metro adopts ordinance to require local jurisdictions to adopt recycling requirements. Alternatively, Metro petitions Environmental Quality Commission to make findings to mandate business recycling.	Metro adopts ordinance to set recycling target for the business sector applicable to the region's jurisdictions responsible for solid waste planning.

IMPLICATIONS AND SUGGESTIONS

Current programs are not achieving the needed results. The regional Recycle at Work program, a partnership with local governments that Metro began in 2000, emphasizes education and technical assistance for businesses. Despite the free services provided by Recycle at Work, some businesses still choose not to recycle or utilize the technical assistance services. New programs are needed to address this barrier and increase business recycling.

Both the proposed programs are expected to reduce disposal of business-generated recyclables and increase the delivery of the Recycle at Work services.

A mandatory approach:

- was recommended by a Council-authorized stakeholder work group.
- would create a consistent standard for recycling collection across the region.
- has support from both households and businesses.
- would perform better than a voluntary approach, based on programs around the country.

A voluntary business recycling standards approach:

- would be supported by most local jurisdictions, with the possible exception of the City of Portland.
- would provide program flexibility on strategies to meet the targets within each community.

Figure 2. Program Comparison

	Program Option 1: Mandatory Recycling	Program Option2: Business Recycling Standard
New Recovery	80,000 tons	35,000 tons to 80,000 tons
Impact on Business Recycling Performance	<ul style="list-style-type: none"> • Likely to achieve 95% capture rate • 13% increase over current level 	<ul style="list-style-type: none"> • At a minimum, would achieve 88% capture rate • 6% increase over current level
Timeframe for Achieving Goal	July 1, 2008 to June 30, 2010	January 1, 2008 to June 30, 2010
Risk for Achieving Goal	Low (Low given success demonstrated by other cities)	High to Medium (High given local variability, Medium given history with education being only program to date)
Business Incentives	<ul style="list-style-type: none"> • Potential for reduced overall collection cost • Potential for recyclables sale revenue 	<ul style="list-style-type: none"> • Potential for reduced overall collection cost • Potential for recyclables sale revenue • Additional incentives depending on local program
Increased Education	<ul style="list-style-type: none"> • Additional \$100,000 to expand Recycle at Work program 	<ul style="list-style-type: none"> • Contingent on local programs • \$100,000 available for local programs
Environmental Benefits	<ul style="list-style-type: none"> • 71 metric tons of carbon equivalent savings. • +1.7 trillion BTUs of energy savings – enough to power nearly 17,000 homes for one year. • Green house gas reductions equivalent to nearly 54,000 cars driving one year • Save equivalent of 1.4 million trees a year, almost 1.4 Forest Parks. 	<ul style="list-style-type: none"> • 30 metric tons of carbon equivalent savings • 715 billion BTUs of energy – savings enough to power nearly 7,000 homes for one year. • Greenhouse gas reductions equivalent to 23,000 cars driving one year • Save equivalent 600,000 trees a year, or just over half of the trees in Forest Park.
System Cost	<ul style="list-style-type: none"> • No net cost increase (\$1.8 million savings) 	<ul style="list-style-type: none"> • No net cost increase (Minimum \$1.7 million savings)
Impact on Local Markets	<ul style="list-style-type: none"> • Stable markets and sufficient processing capacity 	<ul style="list-style-type: none"> • Stable markets and sufficient processing capacity
Ease of Implementation	<ul style="list-style-type: none"> • Possible resistance to regulatory approach • Recommended by stakeholder work group • Public surveys indicate support for program 	<ul style="list-style-type: none"> • Additional administration for local program development and implementation • Potential lack of resources or resource focus in each jurisdiction

QUESTION(S) PRESENTED FOR CONSIDERATION

1. Does Council need additional information in order to express a preference among the options identified?
2. Should staff take one or both options to MPAC?
3. Following MPAC, should staff proceed with developing legislation for formal consideration on a business recycling program?

**LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION X Yes ___ No
DRAFT IS ATTACHED ___ Yes X No**

SCHEDULE FOR WORK SESSION

Chief Operating Officer Approval _____

Options for Increasing Business Recycling

June 2007

Prepared by: Marta McGuire and Heidi Rahn
Metro Waste Reduction & Outreach Division

SUMMARY

Strong collaboration among Metro, local governments and service providers has ensured an array of programs and services are available to encourage business recycling. Too many businesses, however, are under performing or not utilizing current services at all. Without a significant increase in business recycling, the region will be unable to meet the state-mandated 64 percent waste reduction goal.

Metro Council recognizes this impediment in 2003, and directed staff to develop program options to increase business recycling. Two approaches Metro could take to achieve this significant boost in business recycling are: 1) require all local jurisdictions in the region to implement mandatory business recycling, as Portland has done; or 2) set a 90 percent standard for paper and container recycling from the business sector, and each of the region's jurisdictions responsible for solid waste collection would determine how to achieve the target.

INTRODUCTION

This paper describes the region's current business recycling system, and details two proposals to increase business performance and participation in recycling programs. Information contained in these pages should assist interested parties and policymakers in understanding the problem, the proposed program options, and the potential implications of the approaches.

PROBLEM STATEMENT

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. As a result, more than 114,000 tons of recyclable resources (paper and containers) from this sector are disposed annually.

The regional Recycle at Work program, which Metro began in partnership with local governments in 2000, provides a wide range of free resources and technical assistance to help businesses with recycling. Despite the services provided by Recycle at Work, some businesses still choose not to recycle or utilize the services. Lack of business entry for Recycle at Work specialists and information on businesses needing help with recycling are the major barriers to the delivery of Recycle at Work services. New programs are needed to overcome these barriers and improve business recycling efforts.

To help reach the state-mandated 64 percent regional waste reduction goal, businesses must recycle an additional 80,000 tons of paper and containers. This requires a 90 percent recycling rate for paper and containers, rather than the 76 paper recycling rate and 42 percent container recycling rate that exists today (see Appendix A).

SUMMARY OF PROGRAM OPTIONS

To explore options for increasing business recycling, Metro convened work groups and conducted stakeholder outreach from 2003 to 2007. More than 1,000 people provided input on the proposed program options. Appendix B highlights the outreach activities conducted and associated reports developed to date.

Because Metro is accountable for the waste reduction goal, Metro Council will consider new policy direction to increase business recycling levels in the region. Two approaches Metro could take to achieve this significant boost in business recycling are:

Option #1: Mandatory Business Recycling Program- This program would require all local jurisdictions in the region to implement mandatory business recycling, as recommended by the Regional Solid Waste Management Plan Contingency Plan Work Group. Metro Council may adopt the requirements, or under ORS 459A.065, Metro Council may request Environmental Quality Commission (EQC) action to determine if a mandatory business recycling program is necessary to meet the regional goal. Based on findings, EQC could mandate the program in the tri-county watershed.

Option #2: 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 for to the target, similar to land-use planning requirements.

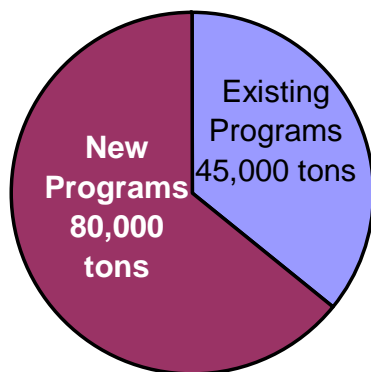
Both the proposed programs address the need to increase the capture of recyclables and increase the delivery of the Recycle at Work services.

CURRENT BUSINESS RECYCLING

Business Recovery

Existing business recycling programs are expected to yield 45,000 tons by 2009. In order to achieve the 64 percent waste reduction goal, the region must recycle an additional 80,000 tons. To capture this additional tonnage, a 90 percent recycling rate for business-generated paper and containers is needed.

Figure 1. Business Recovery Projected for 2009



Current recovery rates vary for business-generated paper and containers. Overall, the average recovery rate is 76 percent for recyclable paper and 42 percent for recyclable containers (see Appendix A). Cardboard and Kraft paper were recovered at a rate of 87 percent in 2005, while mixed waste paper was recovered at a rate of 27 percent (see Figure 2). Businesses in the region are recovering between 19 and 58 percent of recyclable containers generated; aluminum cans and foil are recovered at the lowest rate. (See Figure 3.)

Figure 2. Business Paper Recovery and Disposal

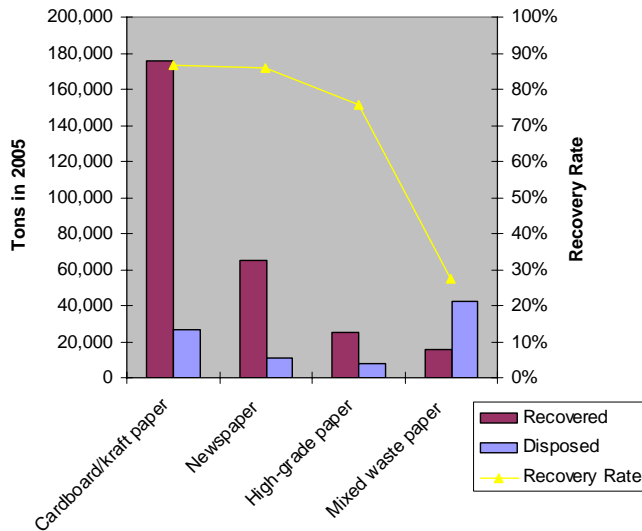
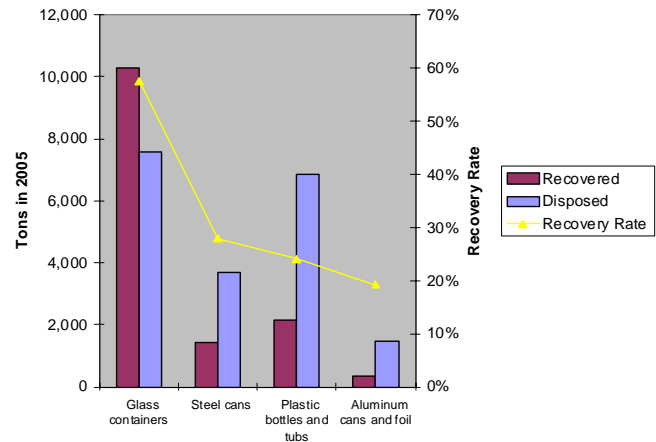


Figure 3. Business Container Recovery and Disposal



Source: Oregon Department of Environmental Quality, 2005 Recovery Survey, Oregon Department of Environmental Quality, 2005 Waste Composition Study, Metro program analysis (unpublished), 2007.

Current Programs

The region’s business recycling program includes recycling services with garbage collection, free education and technical assistance, plenty of processing capacity for business recyclables, and stable material markets. However, many businesses are under performing and not utilizing current services. There are a number of perceived barriers to recycling by the business community including:

- Time
- Cost
- Lack of knowledge
- Convenience
- Employee communication
- Space
- Corporate norms and policies

In many instances, people are busy and recycling may not be a priority given time constraints at work. Some businesses are concerned that there will be increased costs associated with recycling. In franchised jurisdictions, recycling is included in the rates. With recycling, businesses have the potential to reduce overall collection cost with increased recycling and also have the potential for recyclables sale revenue. The lack of information on what is recyclable or how to train employees

can also prevent a business from recycling as much as they can. Additionally, if it is not convenient to recycle, employees will often not take time out to make it happen. Businesses may also perceive they have container space constraints in their building that will prevent them from starting a program. Finally, businesses are not aware of how to best communicate recycling practices with their employees, janitorial staff, or property manager, which can be a perceived barrier to making a change.

Recycle at Work is a collaborative effort between Metro and local governments and was designed to address specific barriers to recycling by providing the following resources:

- Assisting with program set up through free on-site technical assistance catered to the specific business' needs.
- Ensuring recycling bins are in convenient location.
- Identifying solutions to space constraints.
- Assisting with communication to employees including training, signage, and prompts to improve recycling knowledge and reminders.
- Assisting businesses in understanding the garbage and recycling bill, services available, and how to communicate with the hauler.
- Providing free deskside and central area recycling collection containers
- Communicating with haulers, janitorial staff, property managers, and decision-makers.
- Providing tools to assist with waste reduction and sustainable purchasing efforts.
- Providing on-going accessibility to a recycling specialist.

The program began in 2000 and more than 10.0 FTE serve as recycling specialists and provide the Recycle at Work services to the business community. More than 1,000 businesses receive on site technical assistance from recycling specialists annually. More than 30,000 deskside recycling containers have been distributed since 2003. Annual outreach campaigns target specific business sectors with key messages and strategies to increase recycling participation.

Partnerships with business trade organizations, business media, and sustainability groups are strategic components of the program's marketing plan. Recognition of business efforts takes place on a local level and has been an effective tool for recruitment in specific jurisdictions. Partners, award recipients, and other businesses that participate in the Recycle at Work program have given high scores to the quality of assistance received. Participants have also increased their recycling at much greater rates than businesses that have not utilized the program's resources.¹

Despite the free services provided by Recycle at Work, some businesses still choose not to recycle or utilize the services. The primary barriers to the delivery of Recycle at Work services are lack of business entry for recycling specialists and information on businesses needing assistance improving their recycling efforts. New programs are needed to address these barriers and increase the effectiveness of Recycle at Work services.

¹ Portland State University Community Environmental Services, Metro Recycle at Work Campaign and Assistance Survey, prepared for Metro, May 2007.

PROPOSED PROGRAMS

Metro Council directed staff to develop program options for increased business recycling. With technical analysis and input gathered from stakeholders, two approaches are being proposed for consideration: 1) require all local jurisdictions in the region to implement mandatory business recycling, as Portland has done; or 2) 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. See Appendix C for program development background. The proposed programs are outlined in the following pages.

Program Option 1: Mandatory Business Recycling

Program goal: Achieve a 90 percent recycling rate for paper and containers from businesses to help reach the region's 64 percent waste reduction goal.

Target generators: Small, medium and large businesses, institutions and public agencies. Approximately 56,000 businesses in the region fall into this category.

Target materials: Cardboard, mixed paper, and mixed containers (glass, plastic bottles, aluminum cans).

Program description: Businesses in the region would be required to separate paper and containers for recycling. No more than 10 percent of recyclable materials would be allowed in garbage. Random business inspections would be conducted to encourage participation, and violators would be referred to a recycling specialist. Education, technical assistance, and warnings would precede the enforcement. Implementation of the requirements would be supported by \$100,000 for increased education and resources. Fines would be used as a last resort.

Enforcement measures: Local government enforcement staff or a Metro staff (under terms of an intergovernmental governmental agreement) would conduct random business inspections. Any business disposing of a "significant amounts" of recyclable materials, defined as 10 percent by volume determined by visual inspection, would be subject to the following:

1. A warning by the enforcement officer and referral to a regional recycling specialist. The business in violation will receive a visit by a recycling specialist to provide education and assistance for setting up a recycling program. The recycling specialist will follow up with the business to ensure that a recycling program for paper and containers is implemented.
2. If a recycling program for paper and containers is not implemented within 90 days of the original inspection, a fine of up \$500 will be issued by the enforcement officer for noncompliance.

Enforcement staff would complete random business inspections, issue warnings and penalties. Two enforcement staff positions would complete approximately 8,400 inspections per year².

² City of Seattle Recycling Program, Seattle Public Utilities, 2007.

Adoption process:

Option 1: Metro would adopt an ordinance to require local jurisdictions to adopt business recycling requirements. Metro would develop a model ordinance outlining requirements for business recycling. Each jurisdiction in the Metro region would use the model to adopt business recycling requirements.

Option 2: Under Oregon Revised Statute 459A.065, Metro Council could request Environmental Quality Commission (EQC) action to determine if a mandatory business recycling program is necessary to meet the regional waste reduction goal. Based on findings, EQC could mandate the program in the tri-county watershed.

Regional compliance: Local governments that do not adopt business recycling requirements would not receive per capita and Recycle at Work program funding.

Evaluation: To determine progress towards the 90 percent target, Metro would conduct annual evaluations and analyze waste composition and disposal data.

Implementation timeline:

- FY 2006-2007: Baseline evaluation completed.
- FY 2007-2008: Metro and local governments adopt requirements.
- FY 2008-2009: Requirements take effect July 1, 2008. Outreach campaign and expanded Recycle at Work efforts to support roll-out. Enforcement staff hired.
- FY 2009-2010: Evaluate program effectiveness and determine if program revisions are needed.

Program Option 2: Business Recycling Standards

Program description: Metro would set a 90 percent standard for business paper and container recycling applicable to each of the region's jurisdictions responsible for solid waste collection. Data from a baseline evaluation of the business waste stream would determine how much additional recovery is needed in each jurisdiction to reach the 90 percent target. Local governments would develop new or enhanced business recycling programs to achieve the target rate. Metro would provide a list of best practices as options for new programs, and \$100,000 would be distributed among local governments to assist with program implementation. Local programs would be reviewed annually to determine progress and assess whether additional action is needed.

Targeted materials: Cardboard, paper and mixed containers (glass, plastic bottles and steel and aluminum cans).

Targeted generators: Small, medium and large businesses, institutions and public agencies. Approximately 56,000 businesses in the region fall into this category.

Baseline evaluation: A business waste study was conducted by Metro in Spring 2007 to determine the amount of paper and containers that remain in the business waste stream. The study set a baseline for current disposal rates for these materials by jurisdiction. Local

governments would use this data to determine the needed reduction to meet a 90 percent recycling rate and help ascertain their level of effort.

Best management practices: Local jurisdictions would identify best management practices for increasing business paper and container recovery (see Appendix D). The practices selected would be further defined in the program application submitted to Metro.

Adoption process: Metro would adopt an ordinance that sets a 90 percent standard for business paper and container recycling applicable to the region's jurisdictions. The ordinance would require local governments to develop new or enhanced programs to achieve this target and establish an annual program review process.

Local governments would submit a program plan to Metro that demonstrates how their program would generate the needed level of recovery. The plan would contain a description of the proposed program and implementation strategy that would include, as appropriate, the following:

- A clear project purpose and goal statement.
- The specific business best management practices to be implemented.
- Baseline information on current recovery rates and services.
- A clear description of intended results (effectiveness).
- Technical feasibility.
- Economic feasibility.
- Funding request.

Regional compliance: Local governments that do not submit and implement program plans would not receive per capita and Recycle at Work program funding.

Evaluation: Metro would conduct annual evaluations, using business waste composition data, to determine progress toward the 90 percent target. The evaluation results and local program plans would be reviewed annually. At the conclusion of the second year of the program, any jurisdiction that has not made significant progress toward meeting the 90 percent standard would undergo a formal review process, reporting on their program efforts and results to Metro's Chief Operating Officer, Metro Council and the Metro Policy Advisory Committee. Metro Council would determine whether there has been good faith effort and substantial compliance or whether additional action is needed.

Implementation Timeline:

- FY 2006-2007: Baseline evaluation completed.
- FY 2007-2008: Metro adopts standards. Local governments develop and implement new programs. Metro provides financial and technical assistance for program implementation.
- FY 2008-2009: Evaluate program effectiveness.
- FY 2009-2010: Evaluate program effectiveness, and for any jurisdiction not making significant progress in meeting the standard, conduct a formal review process.

ANALYSIS OF POTENTIAL PROGRAM IMPACTS

This section reviews the estimated impacts on business recovery levels, operations, local markets, program costs and environmental benefits resulting from the implementation of proposed programs.

Table 1. Key Outcomes from Proposed Programs

Anticipated Outcome	Program #1: Mandatory Recycling	Program #2: Business Recycling Standards
New Recovery	<ul style="list-style-type: none"> • 80,000 tons 	<ul style="list-style-type: none"> • 35,000 to 80,000 tons
Generator Impact	<ul style="list-style-type: none"> • Minimal impact on day-to-day business operations. • Potential for recyclables sales revenue. • Business savings with smaller garbage container size. 	<ul style="list-style-type: none"> • Minimal impact on day-to-day business operations. • Potential for recyclables sales revenue. • Business savings with smaller garbage container size.
System Cost	<ul style="list-style-type: none"> • No net cost increase (\$1.8 million savings). 	<ul style="list-style-type: none"> • No net cost increase (\$1.7 to \$1.8 million savings).
Environmental Benefits	<ul style="list-style-type: none"> • 71 metric tons of carbon equivalent savings. • +1.7 trillion BTUs of energy savings – enough to power nearly 17,000 homes for one year. • Greenhouse gas emissions reductions equivalent to nearly 54,000 cars driving one year • Save the equivalent of nearly 1.4 million trees a year, almost 1.4 Forest Parks. 	<ul style="list-style-type: none"> • 30 metric tons of carbon equivalent savings. • 715 billion BTUs of energy savings– enough to power nearly 7,000 homes for one year. • Greenhouse gas emissions reductions equivalent to 23,000 cars driving one year • Save the equivalent 600,000 trees a year, or just over half of the trees in Forest Park.
Local Markets	<ul style="list-style-type: none"> • Market demand for paper and containers • Sufficient processing capacity 	<ul style="list-style-type: none"> • Market demand for paper and containers • Sufficient processing capacity

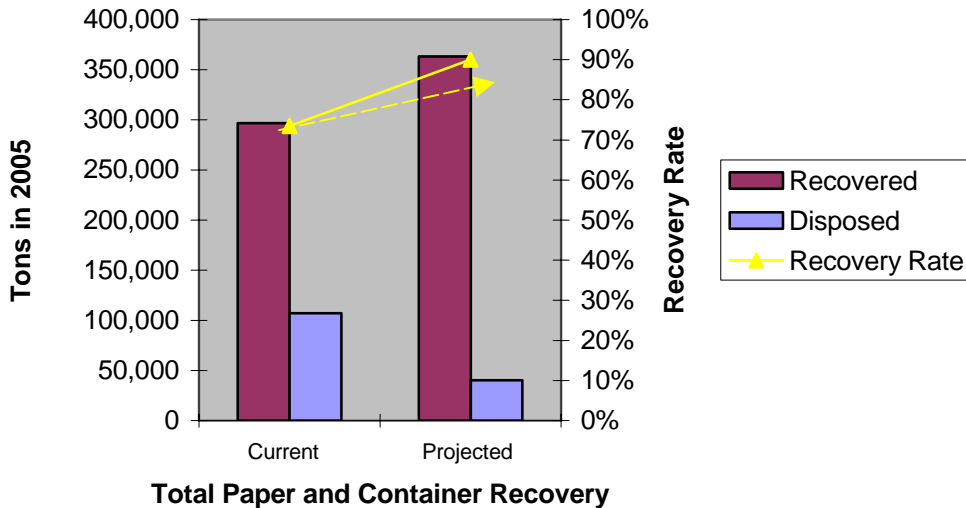
Recovery Potential

The projected recovery as a result of the proposed programs is identified in Figure 4.

The current recovery rate for business-generated paper and containers is 77 percent. The mandatory recycling program is projected to achieve a 90 percent recycling rate for paper and containers,

capturing an additional 80,000 tons. This projected recovery is based on capture rates from municipalities that have achieved 90 percent recycling rate as a result of mandatory programs.³

Figure 4. Projected Business Paper and Container Recovery



Source: Oregon Department of Environmental Quality, 2002 Recovery Survey, Oregon Department of Environmental Quality, 2002 Waste Composition Study, Metro program analysis (unpublished), 2005.

Under the business standards program, local governments would have a range of options to choose from for developing new or enhanced programs to achieve the 90 percent target. It is difficult to project the potential recovery because it is unknown what new or enhanced program local governments would implement. At a minimum, the new or enhanced local programs would recover an additional 35,000 tons by 2009, achieving an 81percent recycling rate (see Figure 4; Recovery Rate dashed line).

Generator Impacts

The City of Portland’s experience with mandatory business recycling requirements, adopted in 1996, indicates that increased business recycling would have a minimal impact on day-to-day business operations. The impact would range, based on a business’ current operation and recycling program. For most businesses, the program would require employees to recycle additional items in current recycling containers. For other businesses, the program may require businesses to change their level of garbage service and acquire additional recycling containers.

Generator garbage rates should not be impacted significantly. Franchised garbage rates include recycling services and are structured to encourage recycling, with different levels of services based on container size. Businesses that recycle more could save money by reducing garbage container size or collection frequency. Businesses may also get paid for recycling paper, depending on the quantity and quality of the material to be recycled.

³ Moore & Associates, Inc., Impact of Mandatory Recycling Ordinances and Disposal Bans on Commercial Fiber Recycling, prepared for Metro, April 2003.

Local Markets

Given the strength of domestic and international demand and the range of marketing options, the long-term indicators for successful marketing of business-generated paper and containers are positive.

Paper

There are six paper mills located in Oregon that have the combined capacity to produce 10.5 million pounds of recycled-content newsprint, corrugated cardboard, and toilet and facial tissue a day. The paper mills in Oregon can use more paper from the Portland metropolitan region to produce new products. The newspaper, corrugated cardboard, magazines and office paper collected for recycling in the Metro region provide less than 11 percent of their total paper mill requirements; the rest of the paper must be shipped in from outside the region.⁴

Recent energy upgrades at local recycling plants and paper mills are reducing energy costs, increasing capacity for paper recycling, and improving product quality. The Energy Trust of Oregon, Inc., is providing financial incentives through its Production Efficiency program to SP Newsprint and Blue Heron Paper Company. Energy costs at SP Newsprint will be reduced by \$2.7 million annually, while energy consumption will go down 55 million kilowatt hours. An additional 90 tons of recycled pulp will be produced each day by SP Newsprint, increasing its demand for local paper.⁵

Blue Heron plans to increase its paper recycling capacity by 100 tons per day with the upgrades. In addition, over 100 million-kilowatt hours of electricity will be saved each year along with 63,744 tons of greenhouse gases.⁶

These projects are in line with Metro Council's goals for environmental health and economic vitality. The upgrades improve the global competitiveness of the local mills as they are able to provide more job security and job growth opportunities. They also reduce waste and emissions, while increasing the demand for recyclable paper in the Portland metropolitan region.

Plastics

There is a demand of 5.5 million pounds per month in total for mixed rigid plastic and commingled bottles and containers from buyers that purchase material from Oregon.⁷ The business sector in the Metro region generated 9,000 tons of plastic containers in 2005, while recycling only 24 percent (see Appendix A).

Glass

Approximately 64,000 tons of glass are purchased annually in Oregon, but the capacity exists to purchase more.⁸ Oregon's main glass recycling facility, the Owens-Brockway plant in Portland, manufactures new glass products using local materials. Excess or unsorted glass is shipped to glass

⁴ Andover International Associates, Market Opportunities for Additional Tonnage of Scrap Paper from Businesses in the Metro Region, June 2003.

⁵ Energy Trust of Oregon, Inc., SP Newsprint reaps multiple benefits from energy upgrade, June 7, 2006.

⁶ Energy Trust of Oregon, Inc., Blue Heron Paper creates jobs, builds competitiveness by saving energy, Feb. 4, 2005.

⁷ Moore & Associates, Inc., Feasibility of Adding Plastic Containers and Film to Curbside Recycling, prepared for Metro, November 2005.

⁸ Hammond, Steve, Owens Illinois Glass Market Report, Association of Oregon Recyclers, April 2006.

plants in California and other states.⁹ Plants in Seattle and in California have the potential to use additional container glass from Oregon. Recycled glass products include bottles, containers, fiberglass insulation, aggregate substitute, reflective highway paint and sandblasting material.

Metals

Global demand for recycled metals continues to increase. The Steel Recycling Institute notes that the recycling rate for steel increased to 75.7 percent in the United States in 2005; the highest rate for any material. This reflects a five-percentage point increase in the recycling rate and the highest rate ever recorded in the United States. Seventy six million tons of domestic steel scrap was charged into furnaces, both in the United States and abroad, to make new steel products.¹⁰

Schnitzer Steel's Oregon operation receives scrap metal from sources located throughout the Pacific Northwest. It recently purchased a shredder that will nearly double the operation's metal shredding capacity, currently 250,000 tons per year, to approximately 480,000 tons per year.

System Cost

Increasing business recycling and reducing disposal at businesses would cause both increases and decreases in the overall “system cost” of providing solid waste services. Avoided disposal costs and sales of recyclable materials would be the main direct fiscal benefits of increasing business participation in recycling. Increases in costs to the system would stem mainly from collection services provided to pick up new recycling. To a lesser degree, in-house recycling efforts, and government program costs, such as for enforcement, evaluation, and coordination and oversight would also introduce new costs.

The main drivers influencing the changes in system cost are as follows:

Costs: If more recyclables are set aside by business generators, then collection companies will have to increase their effort to collect recyclables. At the same time, few businesses will reduce their garbage service. Hence, the total cost of providing collection services will increase. Increased costs will depend primarily on the number of additional collection stops required to pick up those new recyclables.

Savings: 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. Hence, the amount of new recycling determines system savings.

Just as the two proposed approaches—Mandatory vs. the Business Recycling Standards—would achieve different recycling results, the two approaches would cause impacts of different magnitudes on system costs. The mandatory approach, assumed to increase recycling by 80,000 tons per year, is projected to save up to around \$1.8 million annually in 2009 system costs. The business standards program projects only 35,000 tons of new recycling, which would reduce annual system costs by around \$1.7 million; however, if all the jurisdictions met the 90 percent standard and recycled 80,000 additional tons per year, then the annual system savings would be similar to those under a mandatory program.

⁹ Oregon Department of Environmental Quality, Container Glass Recycling, 1998.
<http://www.deq.state.or.us/wmc/solwaste/glass.html>

¹⁰ Steel Recycling Institute, Steel Recycling in the U.S. Continues its Record Pace in 2005, April 25, 2006.
<http://www.recycle-steel.org/PDFs/2005Release.pdf>

Table 2 summarizes the projected changes in system cost of the mandatory and business recycling standards programs. The increased collection costs include operations and container purchases for new participants. Material sales are calculated at \$26 per ton (80,000 tons for mandatory and 35,000 tons for business recycling standards program). Other costs include program evaluation, enforcement and in-house generators' costs. The system cost calculation does not include changes in hauler profit, adjustments in off-route time and unutilized capacity in containers and truck.

Table 2. Increased Business Recycling Projected Annual System Cost Changes

(\$ millions / yr. in 2009)

Mandatory Recycling		Business Recycling Standards	
Reduced costs from not landfilling	(\$3.6)	Reduced costs from not landfilling	(\$1.6)
Increased collection costs*	\$3.0	Increased collection costs*	\$0.5
Sales of recyclables**	(\$2.1)	Sales of recyclables**	(\$0.9)
Other increased costs***	<u>\$0.9</u>	Other increased costs***	<u>\$0.3</u>
<i>Net change in system cost</i>	<i>(\$1.8)</i>	<i>Net change in system cost</i>	<i>(\$1.7)</i>

Environmental Benefits

The environmental benefits calculator produced by the National Recycling Coalition in coordination with the Environmental Protection Agency and ICF Consulting was used to quantify the environment benefits of the proposed program, based on the tonnages of materials recycled. The calculator is based on per-ton figures for energy use and emissions estimated in several recent lifecycle analysis studies. Environmental benefits were calculated for trees saved, improved air quality and energy savings and are detailed below.

Trees Saved. Achieving a 90 percent recycling rate for paper has the potential to recover more than 60,000 tons of paper, which would save the equivalent of nearly 1.4 million trees. If the lower tonnage scenario for business recycling is assumed (35,000 tons recovered), the program would recover more than 26,000 tons of paper, which would save the equivalent of nearly 600,000 trees.

Air emissions. Recycling 60,000 tons of paper reduces air emissions equivalent to that produced by nearly 54,000 cars driving one year. Recycling 26,000 tons of paper reduces air emissions equivalent to more than 22,000 cars driving in one year. However, the airshed that benefits from these reduced emissions is not entirely coincident with the Metro region, but rather with the location of the paper mills, which are spread throughout the Pacific Northwest and overseas.

Energy Savings. Achieving a 90 percent recycling rate for paper and containers would save more than 1.7 trillion British Thermal Units (BTU's) of energy, enough to power nearly 17,000 homes for one year. If the lower tonnage scenario for the business program is assumed, the program would save more than 715 billion BTU's of energy, enough to power nearly 7,000 homes for one year.

CONCLUSION

Achieving the state-mandated waste reduction goal for this region requires new programs targeting commercially-generated waste. This proposal outlined two approaches for achieving higher levels of business recycling. There are many common elements and distinctions between the two programs detailed below.

Elements Common to Both Programs:

- Target materials
- Target generators
- \$100,000 in program funding
- Increased efficiency of Recycle at Work program
- Evaluated annually

Key Distinctions of Mandatory Program:

- Most likely to achieve higher level of recovery, system cost savings and environmental benefits
- Precedent for achieving 90 percent recycling rate through requirements
- Follows programs developed by City of Portland and City of Seattle
- Creates uniform standards for recycling collection across Metro region
- Staffing for enforcement program
- Requires legislation to be adopted by Metro and local governments
- Less flexible in local approach
- Recommended by Regional Solid Waste Management Plan Contingency Plan Work Group stakeholder work group

Both the proposed programs address the need to increase the participation and the capture of recyclables in regional programs. A mandatory approach was recommended by a stakeholder work group and creates a consistent standard for recycling collection across the region. Public surveys have indicated support for business recycling requirements from both households and businesses. Mandatory business recycling programs around the nation perform better than voluntary programs. The implementation of a regional mandatory program is anticipated to recover an additional 80,000 tons of paper and containers.

Local government partners, with the exception of City of Portland, favor the Business Recycling Standards program. This approach would provide flexibility among the jurisdictions to meet the targets by using programs that would work best in the various communities. However, it is difficult to determine if a much higher level of recovery can be achieved with this approach. The Business Standards program is expected to achieve a minimum of 35,000 tons of paper and containers.

TIMELINE/NEXT STEPS

April to June 2007

Solid Waste Advisory Committee Review

Outcome: Analyze program options and make recommendation to Metro Council.

July 2007

Metro Council Review and Direction (work session scheduled for 7/3/07)

Outcome: Analyze program options. Review SWAC recommendation and determine direction for formal program development.

July 2007

Metro Policy Advisory Committee Review (scheduled for 7/25/07)

Outcome: Review proposed program and make recommendation to Metro Council.

APPENDIX A

Projected Material Generation and Recovery

5.21.07

Table 1 – Required (or Minimum) Material Recycling for Businesses

Program description: Local jurisdictions adopt ordinances that set minimum standards for business recycling. Standards will require the recycling of newspaper, cardboard, mixed office paper and mixed containers.

Target materials: Newspaper, cardboard, mixed office paper (mixed and high grade papers) and mixed containers (glass containers, plastic bottles, steel and aluminum cans).

Target generators: Commercial including small, medium and large businesses, institutions and public agencies.

Outcome: The recovery rate of recyclable paper and containers from businesses will increase from 73% to 90%.

Assumptions:

- (1) All businesses (100%) will have paper and container recycling collection programs.
- (2) The increased effort from current recycling businesses and the new recycling business efforts will capture 57% of the recyclable paper and 80% of the mixed containers that were disposed in the baseline year (2002).
- (3) The program will have both active assistance and enforcement components.
- (4) Does not account for the recovery from or disposal of dry business waste that currently goes to the special waste landfills and dirty MRFs.

Material	2005 Generation	2005 Recovery	2005 Disposal	2005 Recovery Rate (1)	Capture Rate from Disposed (2)	Added Recovery due to Program	Generation	Projected Recovery with New Program	Revised Disposal	New Program Recovery Rate	2009 Goal	2009 Likely
											80,000	35,000
Recyclable Paper (3)												
Newspaper	76,119	65,447	10,671	86%	58.3%	6,225	76,119	71,672	4,447	94%	7,465	3,266
Mixed waste paper (4)	57,984	15,889	42,095	27%	58.3%	24,554	57,984	40,443	17,541	70%	29,447	12,883
Cardboard/kraft paper	202,550	175,881	26,668	87%	58.3%	15,566	202,550	191,437	11,113	95%	18,655	8,162
High-grade paper	33,220	25,190	8,030	76%	58.3%	4,684	33,220	29,874	3,346	90%	5,617	2,458
Total Paper	369,872	282,407	87,465	76%	58.33%	51,018	369,872	333,426	36,447	90.1%	61,184	26,768
Containers												
Glass containers	17,895	10,302	7,593	58%	80.0%	6,074	17,895	16,377	1,519	92%	7,285	3,187
Steel cans (5)	5,120	1,431	3,689	28%	80.0%	2,951	5,120	4,383	738	86%	3,539	1,548
Aluminum cans and foil	1,849	356	1,492	19%	80.0%	1,194	1,849	1,550	298	84%	1,432	626
Plastic bottles and tubs (6)	9,008	2,170	6,838	24%	80.0%	5,470	9,008	7,640	1,368	85%	6,560	2,870
Total Containers	33,872	14,260	19,612	42%	80.0%	15,690	33,872	29,950	3,922	88.4%	18,816	8,232
Total Paper and Containers	403,745	296,667	107,077	73%	62.3%	66,708	403,745	363,375	40,369	90.00%	80,000	35,000

Notes

1. Recovery Rate is defined as Recovery/Generation.
2. Capture Rate is the percentage of disposed tons that the new program will recover.
3. Recovery tonnage for specific recyclable paper grades is not accurate because they include other papers.
For example, both Newspapers and Cardboard include 20% or more of high-grade and mixed papers.
4. Mixed waste paper includes magazines.
5. Steel and aluminum can recovery was reported separately by the Oregon Department of Environmental Quality in 2005.
6. Tubs are included with bottles.

APPENDIX B

Business Recycling Policy Development

Progress to Date:

- **Regional Solid Waste Management Plan (RSWMP) Contingency Plan Work Group**
August- December 2003
A stakeholder work group was convened to evaluate strategies to increase progress toward the regional recovery goal.
- **RSWMP Contingency Plan Report**
December 2003
A summary report was prepared on the work group's recommended Contingency Plan, which comprised four strategies to increase recovery in the construction and demolition, business and organics sectors.
- **Local Government Outreach and Summary Report**
February 2004
Individual meetings were held with eight jurisdictions in the Metro region to discuss the Contingency Plan and next steps. A report summarizing the feedback that was gathered and recommended next steps was released following the meetings.
- **Metro Policy Advisory Committee**
March 2004
Metro staff presented the Contingency Plan to the Metro Policy Advisory Committee (MPAC) for consideration on March 10, 2004. MPAC supported the next steps outlined by Metro staff to further develop select contingency strategies, including mandatory business recycling and C&D processing requirements.
- **Council Liaison Briefing**
May 2004
Staff met with Council Liaisons Park and Monroe to gather feedback on the Contingency Plan. The councilors recommended staff conduct additional outreach and analysis on Contingency Strategy #3 (mandatory business recycling) and combine the evaluation of Contingency Strategies #1 and #2 (C&D and dry waste processing requirements).
- **RSWMP Contingency Plan Resolution**
May 2004
Metro Council adopted a resolution to formally acknowledge the RSWMP Contingency Plan and direct staff to conduct additional outreach and analysis on select contingency strategies.
- **“Let’s Talk Recycling” Business Outreach**
August-November 2004
In coordination with local governments, Metro hosted two breakfast forums and made several presentations to solicit input on options to increase business recycling including mandatory requirements at business chamber meetings.

- **“Let’s Talk Recycling” Summary Report**
January 2005
 The summary report was prepared and released detailing the feedback collected from more than 70 business representatives on mandatory recycling and alternative approaches to increasing business recycling.
- **RSWMP Public Involvement Summary Report**
January 2005
 The summary report was prepared and distributed on the public input collected from the “Let’s Talk Trash” series of public meetings conducted in support of the Regional Solid Waste Management Plan Update.
- **Business Recycling Budget Amendment**
April 2005
 In response to feedback gathered at the “Let’s Talk Recycling” forums for increased education, the FY 05-06 Waste Reduction budget was increased by \$200,000 for the business assistance program.
- **Waste Reduction Program Comparison**
January 2005-December 2005
 Staff were directed to conduct an alternative analysis to compare the projected performance of select program options using a uniform set of evaluation criteria. Programs evaluated included the strategies identified by the Contingency Plan Work Group and from public involvement activities. Based on the results of the analysis, Metro Council directed staff to develop two of the proposed programs: 1) a mandatory dry waste recovery program and 2) minimum standards for business recycling.
- **Waste Reduction Program Cost Work Group**
December 2005
 To develop the cost component of the Waste Reduction Program Comparison, Metro convened a group of key external stakeholders, chosen by Metro for their specific expertise in the solid waste industry. The group identified and estimated the costs associated with five potential new regional waste reduction programs.
- **Interim Waste Reduction Plan Public Comment Report**
June 2006
 During Spring 2006, Metro invited public comment on the draft Waste Reduction Plan through an online survey. More than 400 people provided input on the Plan, either through the online survey or in writing. The survey asked respondents to show their level of support for various strategies related to solid waste management. A summary report was prepared and distributed at the conclusion of the survey.

APPENDIX C PROGRAM DEVELOPMENT BACKGROUND

As the entity responsible for achieving state-mandated waste reduction goals in the tri-county region, Metro works with its local government partners to accomplish these goals. In 2003, the Contingency Plan Work Group found that the tri-county watershed would be unlikely to meet its recovery goal without increased recovery efforts in the business sector. Existing programs would only recover 36 percent of the tons needed to meet the business recovery goal.

To explore options for increased business recycling under the guidance of the Regional Solid Waste Management Plan, Metro formed the Contingency Plan Work Group in 2003. This group, comprising local governments, businesses, construction industry representatives, haulers, dry waste recovery facilities and landfill operators, reviewed several program options for increasing recycling. The group determined that requiring businesses to recycle would be the option most likely to help the region attain its recovery goal for the business sector.

Based on the work group's recommendation, additional input was solicited on the proposed program from governments and businesses. Outreach included business breakfast forums, business association presentations, special meetings, and online surveys. Overall, stakeholders agreed that business recycling efforts could be improved.

A 2006 public survey of more than 400 residents revealed that more than 90 percent of the respondents felt businesses should be required to recycle to help meet the regional waste reduction goal.¹¹ However, some respondents viewed a regulatory approach as a contingency strategy if and when incentives and education failed to increase participation and recovery levels. When Metro surveyed the business community in February 2007, over 700 businesses provided input on the effectiveness of various strategies to increase recycling. Over 70 percent of businesses thought a standardized collection system throughout the region and increased education and assistance would be most effective, while 49 percent thought recycling requirements would be effective.¹²

Support for business requirements at the local government level varied. Instead of recycling requirements, staff recommended that jurisdictions individually be held to recovery goals. This approach would provide flexibility among the jurisdictions to meet the targets by using programs that each felt would work best within its community.

¹¹ Cogan Owens Cogan, Interim Waste Reduction Plan Public Comment Report prepared for Metro, June 2006.

¹² Portland State University Community Environmental Services, Metro Recycle at Work Campaign and Assistance Survey, prepared for Metro, May 2007.

APPENDIX D

Proposed Best Management Practices for Business Recycling

Awareness

1. New businesses are identified from business licenses or business list (in accordance with Recycle at Work Intergovernmental Agreement).
2. Haulers provide list of accounts to local government and indicate businesses that are:
 - a) Not recycling anything with the hauler;
 - b) Not set up for a targeted material (i.e., do not have a container for glass).
3. Survey of business awareness of recycling services, practices, and assistance.
4. Increase baseline level of direct mail contact with businesses.

Service

1. Adopt comprehensive and uniform recycling service levels and material preparation for all business customers. Include commingling.
2. Provide deskside boxes to all businesses that want them through door-to-door.
3. Provide other central collection containers and stickers.

Financial incentive

1. Summarize current rates for different garbage levels in jurisdiction. Increase the charge on higher levels of garbage generation to provide greater incentive to recycle.
2. Tie franchise fee to hauler recycling rate or number of customers that are recycling with them.

Mandatory

1. Adopt and enforce mandatory recycling.
2. Enforce existing mandatory recycling rules.

Innovation

1. Innovative practice that local government believes will achieve goals.