



METRO

Agenda

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Meeting: **METRO COUNCIL**
Date: **December 27, 1990**
Day: **Thursday**
Time: **5:30 p.m.**
Place: **Metro Council Chambers**

Approx.
Time*

Presented By

5:30 p.m. **CALL TO ORDER/ROLL CALL**

1. **INTRODUCTIONS**
2. **CITIZEN COMMUNICATIONS TO COUNCIL ON NON-AGENDA ITEMS**
3. **EXECUTIVE OFFICER COMMUNICATIONS**

(10 min.) 3.1 **Status Report on Metro East Construction** Martin
(No Action Requested: Information Only)

(10 min.) 3.2 **Status Report on Labor Claims Filed with** Saling/
Shapiro
State Bureau of Labor & Industries
(Informational Report)

5:50 4. **CONSENT AGENDA**
(5 min.)

REFERRED FROM THE FINANCE COMMITTEE

4.1 **Resolution No. 90-1362, Designating the Manager of**
Financial Services as Budget Officer of the District
(Action Requested: Motion to Adopt the Resolution)

4.2 **Resolution No. 90-1377, For the Purpose of Approving an**
Intergovernmental Agreement with the Special District
Associations of Oregon (SDAO) to Provide Legislative
Service to the Metropolitan Service District (Action
Requested: Motion to Adopt the Resolution)

REFERRED FROM THE INTERGOVERNMENTAL RELATIONS COMMITTEE

4.3 **Resolution No. 90-1344, Establishing a Technical Advisory**
Committee to Assist the Metro Council in Coordinating the
Metropolitan Greenspaces Program (Action Requested:
Motion to Adopt the Resolution)

4.4 **Resolution No. 90-1363, Amending the Transportation**
Improvement Program for Light Rail Procurement, Transit
Mall Extension and bus Purchases (Action Requested:
Motion to Adopt the Resolution)

* All times listed on this agenda are approximate. Items may not be considered in the exact order listed.

4.5 Resolution No. 90-1369, Authorizing Supplemental Federal-Aid Urban Funds for LRT Compatibility of the Hawthorne Bridge (Action Requested: Motion to Adopt the Resolution)

REFERRED FROM THE SOLID WASTE COMMITTEE

4.6 Resolution No. 90-1360, For the Purpose of Adopting program Activities for Year Two of the annual Waste Reduction Program for Local Government (Action Requested: Motion to Adopt the Resolution)

5. ORDINANCES, FIRST READINGS

5:55 (5 min.) 5.1 Ordinance No. 91-377, For the Purpose of Amending Ordinance No. 88-268B Adopting the Regional Solid Waste Management Plan to Incorporate the Yard Debris Plan (Referred to Solid Waste Committee)

6. RESOLUTIONS

REFERRED FROM THE FINANCE COMMITTEE

6:05 (15 min.) 6.1 Resolution No. 90-1365, Accepting the FY 1990 Comprehensive Annual Financial Report (Audit) and Schedule of Federal Financial Assistance (Action Requested: Motion to Audit the Resolution) Van Bergen

REFERRED FROM THE SOLID WASTE COMMITTEE

6:20 (20 min.) 6.2 Resolution No. 90-1337, For the Purpose of Establishing Economic Incentives that Encourage Greater Waste Reduction and Recycling (Action Requested: Motion to Adopt the Resolution) DeJardin

6:40 7. COUNCILOR COMMUNICATIONS & COMMITTEE REPORTS

(5 min.) 7.1 Report on Regional Facilities Study Knowles

(5 min.) 7.2 Report on Metro ERC Resolutions 100-104 Knowles

6:50 ADJOURN

Agenda Item No. 4.1
Meeting Date: December 27, 1990

Resolution No. 90-1362

FINANCE COMMITTEE REPORT

RESOLUTION NO. 90-1362 DESIGNATING THE MANAGER OF FINANCIAL SERVICES AS BUDGET OFFICER OF THE DISTRICT

Date: December 21, 1990 Presented by: Councilor Van Bergen

Committee Recommendation: At its December 20, 1990 meeting the Committee voted unanimously to recommend Council adoption of Resolution 90-1362. All Committee members were present and voting.

Committee Discussion/Issues: Jennifer Sims, Manager of Financial Services presented the staff report. She indicated that the Local Government Budget Law requires the governing body of each municipal corporation to designate a person as Budget Officer. The District has not officially complied with this provision to date. In response to a Committee question regarding job description, she indicated that such designation would not increase the responsibilities of her current position since she has been serving in the capacity of budget officer for several years.

GVB:DEC:lar
A:LEGIS\90-1362.RPT

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF DESIGNATING) RESOLUTION NO. 90-1362
THE MANAGER OF FINANCIAL SERVICES)
AS BUDGET OFFICER OF THE) INTRODUCED BY RENA CUSMA
METROPOLITAN SERVICE DISTRICT) EXECUTIVE OFFICER

WHEREAS; ORS specifies
ORS 294.331 Budget Officer: The governing body of each
municipal corporation shall, unless otherwise provided
by county or city charter, designate one person to
serve as budget officer. The budget officer, or the
person or department designated by charter and acting
as budget officer, shall prepare or supervise the
preparation of the budget document. The budget officer
shall act under the direction of the executive officer
of the municipal corporation, or where no executive
officer exists, under the direction of the governing
body.

and;

WHEREAS; The Manager of Financial Services, Jennifer
Sims, supervises the Finance Section which prepares the Metro
budget, and;

WHEREAS; The Manager of Financial Services, Jennifer
Sims has had the experience and responsibility of Metro budget
preparation for the last eleven years; now, therefore,

BE IT RESOLVED,

That the Manager of Financial Services, Jennifer Sims
is hereby designated the budget officer for Metro.

ADOPTED by the Council of the Metropolitan Service
District this _____ day of _____, 1990.

Tanya Collier, Presiding Officer

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 90-1362 FOR THE PURPOSE OF
DESIGNATING THE MANAGER OF FINANCIAL SERVICES AS BUDGET
OFFICER OF THE METROPOLITAN SERVICE DISTRICT

Date: November 19, 1990

Presented by: Dick Engstrom

FACTUAL BACKGROUND AND ANALYSIS

Current budget law requires that Metro designate a budget officer who shall prepare or supervise the preparation of the budget document.

ORS 294.331 Budget Officer. The governing body of each municipal corporation shall, unless otherwise provided by county or city charter, designate one person to serve as budget officer. The budget officer, or the person or department designated by charter and acting as budget officer, shall prepare or supervise the preparation of the budget document. The budget officer shall act under the direction of the executive officer of the municipal corporation, or where no executive officer exists, under the direction of the governing body.

The Finance Section of the Financial Services Division schedules the budget process, reviews the data provided by all Metro departments for conformance to budget law and financial consistency, consolidates the information, and has the budget published at each appropriate stage of completion.

Jennifer Sims is the Manager of the Financial Services Division and has been responsible for supervising the preparation of the budget for eleven years. Both her position and experience make Jennifer Sims a logical choice for Budget Officer.

EXECUTIVE OFFICER RECOMMENDS

The Executive Officer recommends that the Manager of Financial Services, Jennifer Sims, be designated Budget Officer.

Agenda Item No. 4.2
Meeting Date: December 27, 1990

Resolution No. 90-1377

SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 90-1337, FOR THE PURPOSE
OF ESTABLISHING ECONOMIC INCENTIVES THAT ENCOURAGE GREATER
WASTE REDUCTION AND RECYCLING

Date: December 20, 1990

Presented by: Councilor Saucy

Committee Recommendation: At the December 18, 1990 meeting, the Committee voted unanimously to recommend Council adoption of Resolution No. 90-1337. Voting in favor were: Councilors Buchanan, Collier, DeJardin, Saucy and Wyers.

Committee Issues/Discussion: The Resolution was before the Committee for the second time, after the full Council at the request of Councilor Wyers referred it back to the Committee for more in-depth discussion.

Debbie Gorham, Waste Reduction Manager, presented an overview of the impact of market forces on recycling, and summarized arguments against subsidizing recycling of old corrugated cardboard through hauler rebates and recycling mixed paper through processor rebates.

Councilor Wyers asked whether staff had reviewed incentives elsewhere in the country before making its recommendations. Ms. Gorham said staff had obtained some information at the time it surveyed other localities about credits for nonprofit charitable rehabilitation organizations, and had conducted a small literature search.

In response to Councilor Wyers' questions about the process used to develop the recommendations, Ms. Gorham described a series of meetings with the recycling community, the haulers, and the industry.

Eleven citizens spoke at the public hearing. Eight citizens said they supported an amendment which Councilor Wyers had introduced when the Resolution was before the Council on November 29, 1990. The proposed amendment provided that by February 15, 1991, Waste Reduction staff shall develop specific proposals for economic incentives to encourage: 1. processors who recycle 50 to 79 percent high-grade paper loads; 2. haulers to collect cardboard from commercial customers; and 3. the private sector to accept and market reusable building materials. Three of these citizens focused on the need to encourage recycling of building materials; two citizens focused on recycling of cardboard. One citizen specifically favored rebates as an incentive, and said there should be more analysis of available options. One citizen said that although a high tipping fee serves as an incentive, it is not enough, and said that Metro's role should be to develop economic incentives to promote behavioral changes.

SOLID WASTE COMMITTEE REPORT
Resolution No. 90-1337
Page Two

Three citizens favored Resolution No. 90-1337 as proposed. These citizens said that the high tipping fee is the most effective waste reduction incentive, that strong standards for commercial recycling are needed, and stressed the need for market development. Other ideas mentioned which do not involve a direct payment included providing containers, and changing design review criteria for facilities. One citizen voiced a concern that haulers are environmentalists, yet are not perceived this way, and also expressed concerns about the process for considering the proposed amendment.

Bob Martin, Solid Waste Director, said Solid Waste Department staff has consulted the community and tried to reflect opinions expressed. Staff has traveled throughout the country, and has been consulted by others. He said he believes there is a consensus of understanding about the role of incentives, both in this community and worldwide, and he believes the issue has been thoroughly studied. Additional study would be timeconsuming, and funds have not been budgeted.

Councilor Wyers moved adoption of a revised amendment, which called for deleting from the Resolution paragraph 2.D. which provides that by July 1, 1991, the post-collection recycling incentive shall be eliminated. The amendment also provided that by February 15, 1991, Waste Reduction staff shall: a. conduct a survey to ascertain economic incentives which have been implemented elsewhere in the nation for the purpose of encouraging processors to recycle 50 to 79 percent high-grade paper loads, haulers to collect cardboard from commercial customers, and businesses to accept and market reusable building materials; b. provide a written report to the Solid Waste Committee summarizing the information obtained; c. based on survey results and other relevant information, including information from affected parties, provide a written outline to the Solid Waste Committee of steps which Metro could take to implement similar incentive programs. The proposed amendment also provided that number 3 of attachment A to the resolution be replaced with language stating that a disposal rate based on container volume for other than a single 32-gallon can, shall be at least as high as the rate per gallon for a single 32-gallon can.

Councilor Wyers expressed her view that the impact of the resolution is a step backward for economic incentives. She reviewed the ten proposals incorporated in the Waste Reduction staff study, and noted that in her view almost all of the incentives are diminished, with one abolished. One new incentive is vaguely worded, and one current incentive has been retained.

SOLID WASTE COMMITTEE REPORT
Resolution No. 90-1337
Page 3

Mr. Martin disagreed with Councilor Wyers' characterization, stating he believes Resolution No. 90-1337 strengthens the incentives.

Councilor Buchanan indicated that he was confused by the various arguments presented, and asked whether action should be postponed to give Mr. Martin more time to respond. Councilor Buchanan moved to table the motion to adopt the resolution; the motion to table failed by a vote of 1 - 4.

Councilor Wyers moved adoption of her proposed amendment. The motion failed by a vote of 2 - 3.

The Committee then voted unanimously to recommend adoption of Resolution No. 90-1337.

AMENDMENT PROPOSED BY STAFF: Prior to the Solid Waste Committee meeting, Ms. Gorham provided Committee members with revised copies of Resolution No. 90-1337, incorporating two changes to Paragraph 2.C. The changes would delete the word "franchised", and insert the words "on an annual basis", so that the paragraph would read: "By July 1, 1991, high grade material recovery centers must market 30% of their delivery tonnage on an annual basis in order to be eligible for the User Fee Waiver".

If the Council wishes to adopt these changes proposed by Solid Waste Department staff, Council staff recommends incorporating the changes into the Resolution by motion.

FINANCE COMMITTEE REPORT

RESOLUTION NO. 90-1377, FOR THE PURPOSE OF APPROVING AN INTERGOVERNMENTAL AGREEMENT WITH THE SPECIAL DISTRICT ASSOCIATIONS OF OREGON (SDAO) TO PROVIDE LEGISLATIVE SERVICE TO THE METROPOLITAN SERVICE DISTRICT

Date: December 21, 1990

Presented by: Councilor Van Bergen

COMMITTEE RECOMMENDATION:

At the December 20, 1990 meeting the Committee voted unanimously to recommend Council approval of Resolution No. 90-1377. Committee members voting aye were Councilors Collier, Gardner, Van Bergen and Wyers. Councilors Devlin was excused.

COMMITTEE DISCUSSION/ISSUES:

Deputy Executive Officer Dick Engstrom, presented the staff report. Mr. Engstrom said that a recruitment process was undertaken for the position of Governmental Relations Manager due to the resignation of Greg McMurdo. Two finalists were interviewed by the Executive Officer and two Metro Councilors. Because of the nearness of the upcoming legislative session, it was then agreed that the agency would better be served by contracting for lobbying services. Therefore, the Executive Director was recommending entering into an intergovernmental agreement with the Special District Associations of Oregon (SDAO). SDAO has a contract with Western Advocates, Incorporated for lobbying services on behalf of its members. A member of Metro's Legislative Task Force would be appointed to serve as Metro's representative on SDAO's legislative committee.

Metro's Legislative Task Force would have primary responsibility for guiding Metro's legislative package and protecting the interests of the agency. Mr. Engstrom said that there was adequate money in the Executive Management budget to fund the contract due to salary savings from the vacancy. He said that the agreement would terminate June 30, 1991 or the legislative session closure, whichever was the latter. Councilor Collier asked what would happen if the session went longer than June 30. Mr. Engstrom said that Executive Management would address the contract in their budget request. He indicated that the Legislative Task Force had met and has recommended approval of the intergovernmental agreement (see Exhibit A attached).

Councilor Wyers asked why the decision was made to switch from a person to an agency. Councilor Collier said that while there were applicants that had experience with the Legislature and there were applicants that were familiar with Metro, there were no applicants that were well versed with both. Councilor Gardner asked if the recruitment for the Government Relations Manager would be suspended until the conclusion of the session. Mr.

Finance Committee Report
Resolution No. 90-1377
Page 2

Engstrom said that it would. Councilor Wyers asked if Metro would still be employing a legislative aide. Mr. Engstrom said that we would. There were no other issues raised.

DEC:gpwb

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LEGISLATIVE COMMITTEE REPORT

RESOLUTION NO. 90-1377, APPROVING AN INTERGOVERNMENTAL AGREEMENT WITH THE SPECIAL DISTRICTS ASSOCIATION OF OREGON (SDAO) TO PROVIDE LEGISLATIVE SERVICES TO THE METROPOLITAN SERVICE DISTRICT

Date: December 18, 1990

Presented by: Councilor Collier

COMMITTEE RECOMMENDATION: The Legislative Committee unanimously recommended approval of Resolution No. 90-1377, based on the staff report, draft intergovernmental agreement and scope of work. (The Resolution itself was not available at the meeting.) Voting were Councilors Buchanan, Collier, DeJardin, and Devlin, and Executive Officer Cusma. Councilor Wyers was unable to attend.

COMMITTEE DISCUSSION/ISSUES: Dick Engstrom discussed the materials in the Committee's packet: the staff report, draft intergovernmental agreement, and scope of work. He explained that the Resolution was in typing, and would be available soon. He also said that an Ordinance authorizing a budget modification was also being prepared. That Ordinance will come to Council at the earliest opportunity, which is hoped will be January 10, 1991. The contract is structured to cost less than the amount budgeted for the Intergovernmental Relations Officer; Engstrom estimates that the contract will be approximately \$10,000 less, on an annualized basis.

Western Advocates, Inc., will represent Metro through a contract with SDAO, of which Metro is a member. Mr. Burton Weast of Western Advocates described the nature of his company's services to SDAO. They lobby on behalf of SDAO on issues that affect special districts as a whole; they advocate for specific district interests only through contracts with district associations, including water districts and fire districts.

Executive Officer Cusma explained that a significant issue favoring Western Advocates was their good relations with local governments. She acknowledged that the agency would benefit from a more aggressive outreach effort and improved relations with local governments in the metro area.

Mr. Weast was asked what public and private agencies his firm represents. He listed them: SDAO; fire districts; water districts; Oregon Association of Water Districts (rural cities and water districts); and the Plumbing, Heating, and Cooling Contractors. Western Advocates also does community attitude surveys for local governments. They are also half owners of a planning firm that does business in Northern California and Southern Oregon.

Following some discussion of legislative strategy, Councilor DeJardin moved approval of Resolution No. 90-1377.

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF APPROVING)
AN INTERGOVERNMENTAL AGREEMENT)
WITH THE SPECIAL DISTRICT)
ASSOCIATIONS OF OREGON (SDAO))
TO PROVIDE LEGISLATIVE SERVICE)
TO THE METROPOLITAN SERVICE)
DISTRICT)

RESOLUTION NO. 90-1377

Introduced by Rena Cusma
Executive Officer

WHEREAS, The Metropolitan Service District needs to produce, coordinate and advance its legislative agenda at the 1991 Oregon State Legislative session; and

WHEREAS, The Metropolitan Service District is a member of the Special Districts Association of Oregon (SDAO); and

WHEREAS, The Metro Legislative sub committee has reviewed and approved the objectives and appropriateness of an agreement with the SDAO for legislative services; and

WHEREAS, Adequate funds for such services are included in the FY 1990-91 budget for the Metro legislative process and programs; now, therefore,

BE IT RESOLVED,

That the Council of the Metropolitan Service District hereby approves the agreement with SDAO for the purpose of producing and coordinating the legislative agenda of the agency during the 1991 Oregon Legislative Session.

ADOPTED by the Council of the Metropolitan Service District this _____ day of _____, 1991.

Tanya Collier, Presiding Officer

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 90-1377 FOR THE PURPOSE OF APPROVING AN INTERGOVERNMENTAL AGREEMENT WITH SPECIAL DISTRICT ASSOCIATIONS OF OREGON (SDAO) TO PROVIDE LEGISLATIVE SERVICES TO THE METROPOLITAN SERVICE DISTRICT.

Date: December 18, 1990

Presented by: Rena Cusma

BACKGROUND

The Governmental Relations Manager position has been vacant since November 7, 1990 due to the resignation of Greg McMurdo. A recruitment process was undertaken and finalists were interviewed by the Executive Officer and representatives from the Metro Council. It was determined by the Executive in consultation with the Council representatives that the agency would be better served to contract our lobbying services for the upcoming legislative session.

PROPOSAL

It is recommended that Metro approve an Inter Governmental Agreement with the Special District Associations of Oregon (SDAO). SDAO will provide lobbying services on behalf of its members through a contract with Western Advocates Incorporated, a Clackamas County lobbying, government and public relations firm.

As part of SDAO's membership dues structure, Western Advocates provides lobbying services on matters that generally affect all member districts.

As the state's only metropolitan services district, Metro has a legislative agenda that is unique to the agency. Therefore, it does make sense to contract with SDAO for additional lobbying services, to be provided by Western Advocates that will help Metro accomplish its legislative objectives.

OUTLINE OF PROPOSED ACTIVITIES

Metro's legislative sub committee will have primary responsibility for guiding Metro's legislative package through Salem's legislative process and for protecting the interests of the agency and its constituents during the session. Western Advocates will act as advisors and consultants to this committee and will take their primary direction from the deliberations of this committee. A member of the legislative sub committee will be appointed to serve as Metro's representative on SDAO's legislative committee.

In the execution of Metro's legislative strategy, Western Advocates shall coordinate contacts with:

- The Governor and her staff
- The Senate and House leadership
- Key committee chairpersons
- Legislators assigned to the committees where Metro's bills will be heard
- Legislators elected from within the boundaries served by Metro
- Local government representatives in the Metro service area.

Western Advocates staff will meet on a regular basis (a minimum of once per week) with the Executive Officer, Council staff and departmental staff to ensure that key personnel are informed about and involved in legislative activities.

In support of Metro's legislative agenda, Western Advocates staff will meet with local elected and appointed officials, both individually and in a group settings such as City Manager meetings. They will provide an opportunity for the Metro Council members, the Executive Officer and key staff to also participate in these activities.

RESOURCES

Office space will be provided by SDAO. This will include utilization of phone and fax services.

Metro will provide a part-time legislative aide to be utilized in tracking of bills, scheduling hearings and coordinating appearances of Metro representative in Salem. This position is budgeted in FY 90-91 budget.

Metro will provide a monthly fee of \$5,500 to SDAO for the services of Western Advocates.

In addition Metro will reimburse SDAO for special expenses not to exceed a total amount of \$5,000. This reimbursement will occur only with prior approval of the Deputy Executive Officer, or his designees.

The resources for this contract are available in the Executive Management budget. A budget modification request for transferring salary savings from Personnel Services to Materials and Services will be submitted for approval by the Council.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends adoption of Resolution No. 90-1376 for the purpose of entering into an Inter Governmental Agreement with Special District Association of Oregon to provide legislative services to the Metropolitan Service District.

ATTACHMENT

Contract No. _____

INTERGOVERNMENTAL AGREEMENT

THIS AGREEMENT dated this _____ day of _____ 1991 , is between METROPOLITAN SERVICE DISTRICT, a municipal corporation, hereinafter referred to as "METRO," whose address is 2000 S.W. First Avenue, Portland, OR 97210-5398, and SPECIAL DISTRICT ASSOCIATIONS OF OREGON (SDOA), hereinafter referred to as "CONTRACTOR," whose address is P. O. Box 12613, Salem, OR 97309, for the period of January 21, 1991 through June 30, 1991 and for any extensions thereafter pursuant to written agreement of both parties.

WITNESSETH:

WHEREAS, This Agreement is exclusively for Personal Services;

NOW, THEREFORE, IT IS MUTUALLY AGREED AS FELLOWS:

CONTRACTOR AGREES:

1. To perform the services and deliver to METRO the materials described in the Scope of Work attached hereto;
2. To provide all services and materials in a competent and

professional manner in accordance with the Scope of Work;

3. To comply with all applicable provisions of ORS Chapters 187 and 279, and all other terms and conditions necessary to be inserted into public contract in the state of Oregon, as if such provisions were a part of this Agreement;

4. To maintain resources relating to the Scope of Work on a generally recognized accounting basis and to make said records available to METRO at mutually convenient times;

5. To indemnify and hold METRO, its agents and employees harmless from any and all claims, demands, damages, actions, losses and expenses, including attorney's fees, arising out of or in any way connected with its performance of this Agreement, with any patent infringement arising out of the use of CONTRACTOR'S designs or other materials by METRO and for any claims or disputes involving subcontractors;

6. To comply with any other "Contract Provisions" attached hereto as so labelled; and

7. CONTRACTOR shall be an independent contractor for all purposes, shall be entitled to no compensation other than the compensation provided for in the Agreement, CONTRACTOR hereby certifies that it is the direct responsibility employer as provided in ORS 656,.407 or a contributing employer as provided in ORS 656.411. In the event CONTRACTOR is to perform the series described in this Agreement without the assistance of others, CONTRACTOR hereby agrees to file a joint declaration with METRO to the effect that CONTRACTOR services are those of an independent

contractor as provided under Chapter 864 of Oregon Laws, 1979.

METRO AGREES:

1. To pay CONTRACTOR for services performed and materials delivered in the maximum sum of Thirty Eight Thousand AND 00/100TH (\$38,000) DOLLARS and in the manner and at the time designated in the Scope of Works; and

2. To provide full information regarding its requirements for the work.

BOTH PARTIES AGREE:

1. That Metro may terminate this Agreement upon giving CONTRACTOR five (5) days written notice without waiving any claims or remedies it may have against CONTRACTOR:

2. That in the event of termination, METRO shall pay CONTRACTOR for services performed and materials delivered prior to the date of termination; but shall not be liable for indirect or consequential damages;

3. That, in the event of any litigation concerning this Agreement, the prevailing party shall be entitled to reasonable attorney's fees and court costs, including fees and costs on appeal to an appellate court;

4. That, this Agreement is binding on each party, its successors, assigns, and legal representatives and may not, under any condition, be assigned or transferred by either party; and

5. That this Agreement is binding on each party, its

successors, assigns, and legal representatives and may not, under any condition, be assigned or transferred by either party; and

SPECIAL DISTRICTS ASSOCIATION
DISTRICT
OF OREGON

METROPOLITAN SERVICE

BY: _____

BY: _____

Date: _____

Date: _____

APPROVED AS TO FORM

METRO GENERAL COUNSEL

EXHIBIT A

SCOPE OF WORK

The Special Districts Association of Oregon shall provide the following services to Metro through a contract with Western Advocates:

a) Liaison with the Metro Council, Executive Officer and staff to help shape Metro's legislative agenda and manage the agency's participation and involvement during the 1991 State Legislature.

b) Build a level of understanding, trust and support among other local governments in the region, counties, cities and special districts for Metro's legislative agenda and for its acceptance of its legitimate role in the government structure in the tri-county metropolitan area.

Metro's Legislative sub committee will have primary responsibility for coordination with Western Advocates' staff regarding the Metro legislative agenda. Western Advocates staff will act as advisors and consultants to this committee and will take their primary direction from the deliberations of this committee. The committee will meet on a regularly basis and the chairperson will have the ability to call emergency meetings as the occasion warrants.

In the execution of Metro's legislative agenda, Western Advocates staff will coordinate contacts with:

- Governor and her key staff
- Senate and House leadership
- Legislators assigned to committees where Metro's bills will be heard
- Legislators elected from within the boundaries served by Metro
- Local government representatives in the Metro service area.

Western Advocates staff will meet on a regular basis (at least weekly or more often if needed) with the Metro Legislative sub committee. Other meetings may be required to meet with the Executive Officer, Council staff and other departmental technical staff to ensure that key individuals are informed about and involved in legislative activities.

Western Advocates staff will also meet with local elected and appointed officials, both individually and in group settings, such as city managers meetings and elected officials meetings, and provide an opportunity for Metro Council members, the Executive

Officer and key staff to participate.

REQUIREMENTS

IN PROVIDING THESE SERVICES, SDAO REQUIRES

a) Metro to designate a representative to serve on SDAO's legislative committee, providing an opportunity for that person to both review SDAO initiatives for impacts on Metro and also to bring Metro issues before the Committee and seek SDAO support for Metro positions.

b) Metro to recognize that Western Advocates, is SDAO's lobbying contractor. As such, it is making their services available to lobby on behalf of Metro's legislative agenda, to the extent that the legislative actions or result being sought by Metro will not be detrimental to the interests of SDAO or its metropolitan area members. If a potential conflict is identified, Western Advocates will meet with representatives of both SDAO and Metro and attempt to resolve that conflict in a manner acceptable to both parties. In the event that resolution cannot be reached, Western Advocates will then represent the SDAO position and will not be available to represent Metro on that particular issue. SDAO and Western Advocates will assist Metro in finding outside representation on that issue.

COMPENSATION

For the products and process provided for in this agreement, Metro shall pay to SDAO an amount not to exceed \$38,000. This shall be paid in the following manner:

1. A fee of \$5,500 per month
2. Allowable expenses include long distance telephone calls, FAX charges, mileage for travel, meeting expenses necessary to conduct legislative work, copying charges, postage expense and general office expenses relating to legislative needs. Other expenses shall be allowed only if approved in advance by Metro. Expenses are not to exceed \$5,000.
3. Contractor shall bill Metro monthly. Metro shall pay Contractor within thirty (30) days of receipt of the approved invoice.

OTHER CONSIDERATIONS

1. Metro will provide a part-time legislative aide to track bills, schedule hearings and coordinate appearances of Metro's representatives in Salem.
2. SDAO will provide office space, telephone and Fax services for purposes of this agreement.

Agenda Item No. 4.3
Meeting Date: December 27, 1990

Resolution No. 90-1344

INTERGOVERNMENTAL RELATIONS COMMITTEE REPORT

RESOLUTION NO. 90-1344, ESTABLISHING A TECHNICAL ADVISORY COMMITTEE TO ASSIST THE METRO COUNCIL IN COORDINATING THE METROPOLITAN GREENSPACES PROGRAM

Date: December 12, 1990

Presented by: Councilor Devlin

COMMITTEE RECOMMENDATION

At its December 11, 1990 meeting, the Intergovernmental Relations Committee voted 3 - 0 (Councilors Bauer, Devlin, and Gardner in favor) to recommend Council adopt Resolution No. 90-1344.

EXPLANATION

Resolution No. 90-1344 establishes a Technical Advisory Committee (TAC) of professionals in parks and urban planning, biology, ecology, wetlands and wildlife habitat preservation, and representatives from the business community, and citizens.

This Committee will make recommendations to the Metropolitan Greenspaces Policy Advisory Committee, which will make recommendations to the Metro Council on how the Metropolitan Greenspaces Program should proceed.

Note that Resolution No. 90-1371 has changed the name of the Parks & Natural Areas Policy Advisory Committee to the "Metropolitan Greenspaces Policy Advisory Committee".

Exhibit A of Resolution No. 90-1344 specifies the purpose, composition, charge, and appointment procedures of the new TAC.

COMMITTEE DISCUSSION/ISSUES

It was clarified that the new TAC will follow existing practice parallel to the functioning of other Metro PACs and TACs. Final policy decisions and plans for the Metropolitan Greenspaces Program will be reviewed and approved by the Metro Council.

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF ESTABLISHING	)	RESOLUTION NO. 90-1344
A TECHNICAL ADVISORY COMMITTEE TO)	
ASSIST THE METRO COUNCIL IN	)	INTRODUCED BY EXECUTIVE
COORDINATING THE METROPOLITAN	)	OFFICER RENA CUSMA
GREENSPACES PROGRAM)	

WHEREAS, ORS 268.030 (4) allows the Metropolitan Service District to provide for those aspects of land-use planning having metropolitan significance; and

WHEREAS, ORS 268.390 (2) allows the Metropolitan Service District to prepare and adopt functional plans for those aspects of metropolitan development that the Council may identify; and

WHEREAS, on February 9, 1989, by Resolution No. 89-1043, the Council of the Metropolitan Service District expressed its support for a continued parks and natural areas planning and coordination role for the Metropolitan Service District; and

WHEREAS, on June 28, 1990, by Resolution No. 90-1261, the Council of the Metropolitan Service District established a policy advisory committee to assist the Council in coordinating the Parks & Natural Areas Planning Program; and

WHEREAS, after more than two years of planning for regional parks and natural areas in cooperation with the local jurisdictions, regional, state and federal agencies, and nonprofit park advocate organizations, it is time to commence a formal policy development phase; and

WHEREAS, the existing Natural Areas Program Coordinating Committee of local parks planning staff, planning department staff, aides to elected officials, other professional staff, and interested persons from park advocate organizations has been advising Metro on an informal basis as to the direction of the Natural Areas Program; and

WHEREAS, on August 24, 1989, by Resolution No. 89-1129, the Metropolitan Service District is conducting an inventory and analysis of natural areas within the region; and,

WHEREAS, formally established policy and technical advisory committees are necessary to assist the Council of the Metropolitan Service District in developing a functional plan and acquisition program to preserve, protect, and potentially purchase, and manage natural areas,

BE IT RESOLVED,

1) That the Council of the Metropolitan Service District hereby establishes a Technical Advisory Committee for the Metropolitan Greenspaces Program (Parks & Natural Areas Planning Program).

2) The purpose, composition, charge, and appointment procedures for the committee are hereby adopted as outlined in Exhibit A hereto.

ADOPTED: by the Council of the Metropolitan Service District this ____ day of _____, 1990.

Tanya Collier, Presiding Officer

EXHIBIT A

- 1) The Technical Advisory Committee (hereinafter referred to as "TAC") shall review data, inventories, maps, survey information, studies, reports, etc. in the preparation of draft plans and policies related to the Metropolitan Greenspaces Program. The studies, reports, proposed plans and policies will be forwarded to and reviewed by the Policy Advisory Committee for the Metropolitan Greenspaces Program (Parks & Natural Areas Planning Program). The PAC will then make recommendations to the Metro Council on how the program might proceed, including, but not limited to: a functional plan; protection and preservation policies; management and operations plans; public awareness and outreach program; pilot environmental education project; and regional finance strategy to potentially acquire natural areas.
- 2) The TAC shall be chaired by the Chair (or his designee) of the Metropolitan Greenspaces Program (Parks & Natural Areas Planning Program) Policy Advisory Committee.
- 3) The TAC shall be staffed by Metro's Planning and Development Department.
- 4) The TAC may have representation from the following jurisdictions and organizations. Members should have a professional or technical background in urban planning, land use, natural areas and parks/recreation planning, biology, or local government experience.
 - a) Chair of the Metropolitan Greenspaces Policy Advisory Committee (Parks and Natural Areas Policy Advisory Committee)
 - b) Vice-chair of the Metropolitan Greenspaces Policy Advisory Committee (Parks and Natural Areas Policy Advisory Committee)
 - c) Portland Parks Bureau
 - d) Office of the Portland Public Affairs Commissioner which oversees the Parks Bureau
 - e) Clackamas County Parks
 - f) Clark County Open Space Commission or Parks Staff
 - g) Multnomah County Parks
 - h) Washington County Facilities Management
 - i) Tualatin Hills Park & Recreation District
 - j) Vancouver Parks
 - k) Intergovernmental Resource Center of Clark County

- l) One member representing the cities of Clackamas County
 - m) One member representing the cities of Multnomah County
 - n) One member representing the cities of Washington County
 - o) One business representative
 - p) One environmental/park advocate organization representative
 - q) State of Oregon representative
 - r) U.S. Fish and Wildlife Service
 - s) Audubon Society of Portland
 - t) One citizen at-large
- 5) Appointments to the TAC (except for the Metro Council representatives) shall be made by Metro's Executive Officer in consultation with the Presiding Officer of the Metro Council. Council confirmation of appointments to the TAC shall not be required. The Metro Council will be notified of the TAC membership and its activities.
- 6) Members of the TAC shall be appointed for two-year terms and may designate alternatives consistent with the intent of this exhibit.
- 7) The TAC may adopt rules of procedure for its activities subject to Metro Council approval.
- 8) All program recommendations made by the TAC shall be forwarded to the Policy Advisory Committee for its review. Final policy decisions and plans for the program shall be reviewed and approved by the Metro Council.

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 90-1344 FOR THE PURPOSE OF ESTABLISHING A TECHNICAL ADVISORY COMMITTEE (TAC) FOR THE METROPOLITAN GREENSPACES PROGRAM (Parks & Natural Areas Planning Program)

Date: December 11, 1990

Presented By: Rich Carson and Mel Huie

FACTUAL BACKGROUND AND ANALYSIS

Resolution No. 90-1344 establishes a Technical Advisory Committee (TAC) of professionals in parks and urban planning, biology, ecology, wetlands and wildlife habitat preservation, and representatives from the business community, and citizens to make recommendations to the Greenspaces/Parks & Natural Areas Planning Program Policy Advisory Committee (PAC) and the Metro Council in developing the Metropolitan Greenspaces Program.

The activities of the Technical Advisory Committee include:

- o Review data, inventories, maps, surveys, studies and reports;
- o Review local plans, policies and programs to ensure coordination with the regional natural areas program;
- o Give direction to Metro staff in the drafting of the Greenspaces Master Plan;
- o Give direction to Metro staff in the drafting of the Management Study and Finance Plan for natural areas;
- o Give direction to Metro staff in the implementation of a public awareness and outreach program, and pilot environmental education project for the region;
- o Make recommendations to the Greenspaces Policy Advisory Committee in the formation of the Greenspaces Master Plan (Functional Plan)

All program recommendations made by the Technical Advisory Committee shall be forwarded to the Policy Advisory Committee for its review. Final policy decisions and plans for the program shall be reviewed and approved by the Metro Council.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends adoption of Resolution No. 90-1344.

Agenda Item No.4.4
Meeting Date: December 27, 1990

Resolution No. 90-1363

INTERGOVERNMENTAL RELATIONS COMMITTEE REPORT

RESOLUTION NO. 90-1363, AMENDING THE TRANSPORTATION IMPROVEMENT PROGRAM TO REVISE TRI-MET'S PROGRAM FOR LIGHT RAIL PROCUREMENT, TRANSIT MALL EXTENSION, AND BUS PURCHASES

Date: December 12, 1990

Presented by: Councilor Bauer

COMMITTEE RECOMMENDATION:

At its December 11, 1990 meeting, the Intergovernmental Relations Committee voted 3 - 0 (Councilors Devlin, Gardner and McFarland in favor) to recommend Council adopt Resolution No. 90-1363.

EXPLANATION

Tri-Met and the City of Portland have assembled a series of funding tradeoffs which Resolution No. 90-1363 accomplishes. These tradeoffs accommodate Transit Mall Extension North and procurement of light rail vehicles and diesel buses. The tradeoffs also make fiscal adjustments relating to the eligibility of certain expenditures for certain funding sources.

The staff report offers more detail on the tradeoffs.

COMMITTEE DISCUSSION/ISSUES:

There was no Committee discussion.

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AMENDING THE) RESOLUTION NO. 90-1363
TRANSPORTATION IMPROVEMENT PRO-)
GRAM FOR LIGHT RAIL PROCUREMENT,) Introduced by
TRANSIT MALL EXTENSION, AND BUS) George Van Bergen, Chair
PURCHASES) Joint Policy Advisory
Committee on Transportation

WHEREAS, The Joint Policy Advisory Committee on Transportation (JPACT) has approved an overall funding program for transit improvements; and

WHEREAS, Some specific project elements of the program have been allocated funding under the Interstate Transfer Program, Section 3 Trade and Section 9 Programs, and Federal-Aid Urban Program; and

WHEREAS, Some \$8.2 million of Section 3 Trade funding has been allocated to the Transit Mall Extension North Project; and

WHEREAS, Tri-Met has been advised by the Urban Mass Transportation Administration that some project elements of the Transit Mall Extension are highway related and therefore not eligible for Section 3 Trade funding; now, therefore

BE IT RESOLVED,

1. That the Council of the Metropolitan Service District endorses Tri-Met's proposal for an alternate FY 1991 funding program to accomplish these goals, as follows:

	<u>Current</u>	<u>Proposed</u>
Section 3 Trade		
Mall Extension	\$ 8.2 m.	\$ 5.2 m.
Standard Buses	0	3.0

	<u>Current</u>	<u>Proposed</u>
Interstate Transfer		
Light Rail Vehicle	\$6,050,990	\$2,863,490
Mall Extension	0	3,187,500
Section 9		
Articulated Buses (1993)	12.2 m.	9.2 m.
Light Rail Vehicles (includes \$1.9 m. supplement)	11.131	16.032

2. That all of the remaining FY '91 Section 9 funds (\$1.9 million) are to be made available for light rail procurement to cover potential cost adjustments.

3. That the Transportation Improvement Program be amended to incorporate these allocations and project changes.

4. That these actions are consistent with the Regional Transportation Plan and affirmative Intergovernmental Project Review is hereby given.

ADOPTED by the Council of the Metropolitan Service District this ____ day of _____, 1990.

Tanya Collier, Presiding Officer

WHP:mk
90-1363.RES
12-04-90

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 90-1363 FOR THE PURPOSE OF AMENDING THE TRANSPORTATION IMPROVEMENT PROGRAM TO REVISE TRI-MET'S PROGRAM FOR LIGHT RAIL PROCUREMENT, TRANSIT MALL EXTENSION, AND BUS PURCHASES

Date: December 4, 1990

Presented by: Andrew Cotugno

PROPOSED ACTION

Adoption of this resolution would amend the Transportation Improvement Program to include a series of revisions to Tri-Met's Interstate Transfer, Section 3 Trade, and Section 9 programs. Major considerations of the revised programs for FY 1991 include:

1. Transferring \$3,187,500 from Interstate Transfer funds, currently allocated to light rail vehicle procurement, to the Transit Mall Extension North.
2. Transferring \$3,000,000 from Section 3 Trade funds, currently allocated to the Mall Extension, to bus purchases.
3. Transferring \$3,000,000 from Section 9 funds, currently allocated to articulated buses in 1993, to light rail vehicles.
4. Supplementing light rail vehicle procurement with \$1.9 million of remaining FY 91 Section 9 funds.

TPAC has reviewed this TIP amendment and recommends approval of Resolution No. 90-1363.

FACTUAL BACKGROUND AND ANALYSIS

The Transportation Improvement Program, as adopted in September 1990, includes \$8.2 million of Section 3 Trade funds allocated to the Transit Mall Extension North. Recent discussions between Tri-Met and the Urban Mass Transportation Administration have indicated that some project elements are ineligible for Section 3 Trade funding because they are highway related.

Tri-Met and the City of Portland have devised a series of funding tradeoffs which will accommodate Mall Extension requirements as well as light rail vehicle procurement. The changes proposed are shown as follows:

	<u>Current</u>	<u>Proposed</u>
Section 3 Trade		
Mall Extension	\$ 8.2 m.	\$ 5.2 m.
Standard Buses	0	3.0

	<u>Current</u>	<u>Proposed</u>
Interstate Transfer		
Light Rail Vehicle	\$6,050,990	\$2,863,490
Mall Extension	0	3,187,500

Section 9

Articulated Buses (1993)	12.2 m.	9.2 m.
Light Rail Vehicles (includes \$1.9 m. supplement)	11.131	16.032

Some of the Section 9 funding accumulated for purchase of articulated buses in 1993 is needed now to keep the light rail vehicle procurement whole. However, \$3 million of substitute Section 3 Trade funds will go toward a standard bus procurement now rather than in 1993, allowed by final provisions of the Clean Air Act extending purchase of diesel buses through 1992. In addition, Tri-Met plans to allocate all remaining available FY '91 Section 9 funds to the light rail vehicle procurement. The \$1.9 million supplementing this procurement is needed to cover potential cost adjustments due to changes in the value of the dollar versus European currencies over the past year.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of Resolution No. 90-1363.

Agenda Item No. 4.5
Meeting Date: December 27, 1990

Resolution No. 90-1369

INTERGOVERNMENTAL RELATIONS COMMITTEE REPORT

RESOLUTION NO. 90-1369, AUTHORIZING SUPPLEMENTAL FEDERAL-AID URBAN FUNDS FOR LRT COMPATIBILITY OF THE HAWTHORNE BRIDGE

Date: December 12, 1990

Presented by: Councilor Bauer

COMMITTEE RECOMMENDATION:

At its December 11, 1990 meeting, the Intergovernmental Relations Committee voted 3 - 0 (Councilors Devlin, Gardner, and McFarland in favor) to recommend Council adopt Resolution No. 90-1369.

EXPLANATION:

Resolution No. 90-1369 transfers \$60,000 from the regional and Portland Federal-Aid Urban Reserve to the Hawthorne Bridge East Approach Ramps Replacement Project.

These funds, when combined with the \$190,000 previously allocated, will enable constructing additional structural support on the Bridge.

Accommodation for LRT can be made at a lower cost now if combined with the design and reconstruction of the bridge ramps rather than retrofitting the ramps at a future date if the bridge becomes an LRT corridor.

In January, 1990, JPACT approved \$100,000 in preliminary engineering funds to determine preferred track alignment and cost to retrofit the Hawthorne Bridge for LRT. The study determined a preferred alignment on the bridge, the cost of adding required structural support, and the rough cost of retrofitting at a later time (\$2 million) and of building a separate bridge (\$30 million for the bridge structure alone).

COMMITTEE DISCUSSION

Making these structural improvements will not prejudice the choice of an LRT route to the southeast, because the \$250,000 investment will be insignificant compared with the overall costs and other considerations pertaining to deciding among possible routes. Further, a proposal exists for routing vintage trolley across the Hawthorne Bridge.

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AUTHORIZING	)	RESOLUTION NO. 90-1369
SUPPLEMENTAL FEDERAL-AID URBAN)	
FUNDS FOR LRT COMPATIBILITY OF	)	Introduced by
THE HAWTHORNE BRIDGE	)	George Van Bergen, Chair
	)	Joint Policy Advisory
	)	Committee on Transportation

WHEREAS, Metro Resolution No. 90-1200 allocated Federal-Aid Urban Funds to the Hawthorne Bridge Transition Structure Replacement Project; and

WHEREAS, These funds in the amount of \$290,000 were to cover Preliminary Engineering to determine LRT compatibility of the bridge and a reserve for construction if LRT-compatible; and

WHEREAS, Evaluation of the bridge for LRT use has been completed with consultant findings appearing in Attachment A to the Staff Report; and

WHEREAS, Additional Federal-Aid Urban funds will be needed to strengthen the bridge for LRT with significant cost savings if implemented during bridge reconstruction; now, therefore,

BE IT RESOLVED,

1. That the Council of the Metropolitan Service District hereby allocates \$60,000, split between the region and Portland, from the Federal-Aid Urban Regional Reserve to the Hawthorne Bridge Transition Structure Replacement Project to supplement funds for additional structural support for LRT.

2. That the Transportation Improvement Program be amended to incorporate these allocations and project changes.

3. That this action is consistent with the Regional Transportation Plan and affirmative Intergovernmental Project Review is hereby given.

ADOPTED by the Council of the Metropolitan Service District this ____ day of _____, 1990.

Tanya Collier, Presiding Officer

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 90-1369 FOR THE PURPOSE OF
AUTHORIZING SUPPLEMENTAL FEDERAL-AID URBAN FUNDS FOR LRT
COMPATIBILITY OF THE HAWTHORNE BRIDGE

Date: December 4, 1990

Presented by: Andrew C. Cotugno

PROPOSED ACTION

This resolution would transfer \$60,000 from the regional and Portland Federal-Aid Urban Reserve to the Hawthorne Bridge East Approach Ramps Replacement Project. These funds, when combined with those previously allocated, will enable constructing additional structural support to accommodate a future LRT corridor. Accommodation for LRT can be made at a lower cost now if combined with the design and reconstruction of the bridge ramps rather than retrofitting the ramps at a future date.

FACTUAL BACKGROUND AND ANALYSIS

In January 1990, JPACT approved preliminary engineering funds to resolve the issue of accommodating light rail transit (LRT) as part of Multnomah County's Hawthorne Bridge Transition Structure Replacement Project. The amount allocated was \$100,000 for PE to determine preferred track alignment and cost to retrofit the entire Hawthorne Bridge for LRT. An additional amount (\$190,000) was set aside in a reserve account for future construction upon determination of specific alignment (inside/outside lanes) and in the event that the PE concluded that LRT compatibility was preferred to a future option of constructing a separate LRT bridge.

CH2M Hill was retained to answer the structural and operational questions of accommodating LRT on the main span of the bridge and has documented their findings in Attachment A. The results suggest that conversion of the outside lanes for use by LRT would cost \$60,000 additional to augment the \$190,000 previously allocated. This funding would be provided on a pro-rata basis by Portland and the region as follows:

Portland	\$25,440
Regional Reserve	<u>34,560</u>
	\$60,000

This funding used now to strengthen the structure in anticipation of LRT would make it easier and cheaper to retrofit the bridge for LRT in the future. To wait and retrofit the transition for this purpose at a later date would cost \$2.0 million. To construct a separate bridge would cost in excess of \$30 million. To

allow LRT conversion on the transition structure on any possible future LRT alignment (i.e., both inside and outside lanes) would cost in excess of \$500,000.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of Resolution No. 90-1369.

HAWTHORNE BRIDGE MAIN SPANS LIGHT RAIL FEASIBILITY AND COST STUDY

STUDY BACKGROUND

The transition structure portion of the Hawthorne Bridge connects the main spans to the eastside approach structures. The Transition Structure extends from the east bank of the Willamette River to Water Avenue. Extensive maintenance has been required on the transition structure, and Multnomah County has initiated a project to design and build a replacement structure.

The Hawthorne Bridge has often been mentioned as a possible river crossing option for the extension of the Light Rail Transit (LRT) system from downtown Portland to Milwaukie. During the preliminary engineering effort on the Transition Structure, the issue of whether or not to accommodate a possible future LRT line on the new structure was raised. Accommodations could be built into that structure that would make it easier and cheaper to retrofit LRT in the future if the decision were made to use the Hawthorne Bridge. Those accommodations would cost from \$255,000 if the outside lanes of the Main Spans were used for LRT, to \$315,000 if the center lanes were used for LRT, and to \$590,000 if the transition structure were built to accept any LRT alignment on the main spans. If no provisions are made in the near-term reconstruction, it would cost \$2.0 million (in 1990 dollars) to rebuild the deck and superstructure should the Hawthorne Bridge be chosen as the Willamette River crossing option.

Any funds expended on these LRT accommodations would have to come from the Portland Metropolitan Region's E-4 or Federal Aid Urban (FAU) allocation, since the LRT system is a regionwide issue. The authority to commit the E-4 or FAU funds rests with the Metro Council. The Joint Policy Advisory Committee on Transportation (JPACT) will make the decision recommendation to the Council.

LRT on the Hawthorne Bridge is not a given; that question will not be answered until the Alternatives Analysis and Environmental Impact Statement for the Milwaukie line are completed in the future. To help assess whether an LRT investment in the Transition Structure is wise, it was decided that the feasibility and cost of retrofitting LRT on the main spans should be studied. This study will help decision-makers quantify the probability of LRT being carried on the Hawthorne Bridge as well as provide useful information input to the Alternatives Analysis.

LRT OPTIONS

The Hawthorne Bridge has six main spans. Three of these are 209 feet long and three are 244 feet long. One of the 244-foot spans is a vertical lift opening span. All of the spans are riveted steel trusses built in 1910. The bridge carries one lane of westbound traffic

and one lane of eastbound traffic through the 20.8-foot wide trusses and one lane in each direction outside of the trusses.

Four alternatives for LRT alignments were assumed for this study:

- Two LRT tracks in the center lanes with vehicular traffic operating in the outside lanes at the same time
- One LRT track in the center lanes, one LRT track in an outside lane and vehicular traffic in the other outside lane
- An LRT track in each outside lane with vehicular traffic using the center lanes at the same time
- Two LRT tracks in the center lanes with vehicular traffic restricted from the bridge while LRT is on the bridge

In Options 1, 2, and 3, traffic can operate in all lanes when LRT is not present.

TRAFFIC OPERATIONS

Existing Conditions

The traffic operations analysis began with a review and update of a similar study conducted by JHK & Associates for the Metropolitan Service District (Metro) in 1985. Traffic counts were performed for morning and evening peak hour conditions. During current weekday evening peak hour conditions, approximately 1,680 vehicles used the Hawthorne Bridge in the eastbound (peak) direction, and approximately 1,100 traveled in the westbound direction. During the morning peak hour, these volumes were generally reversed. Approximately four-percent of the peak hour, peak direction traffic on the Hawthorne Bridge was classified as trucks, and another four percent was classified as buses.

On this basis and following procedures that are consistent with those employed in the JHK study, the capacity of the inside lanes is calculated to be 1,125 vehicles per hour; because of the presence of trucks and buses on the outside lanes, their capacity is slightly lower at 1,100 vehicles per hour. Thus, the total capacity of the bridge is estimated to be 2,225 vehicles per hour in each direction of travel. While this appears to be ample capacity in light of existing traffic volumes, it should be noted that the existing bottlenecks are at the signalized intersections located at either end of the bridge. These signalized intersections effectively meter traffic onto and off the bridge, and do not currently have the capacity to accommodate much more traffic than the peak hour volumes already being observed (i.e., about 1,700 vehicles per hour in the peak travel direction).

Analysis of LRT Alignment Options

From the perspective of traffic operations, the four LRT alignment alternatives identified earlier can be simplified into two basic options:

- Those alternatives that include an LRT track on an outside travel lane of the Hawthorne Bridge
- Those alternatives that include a single LRT track on the inside travel lanes

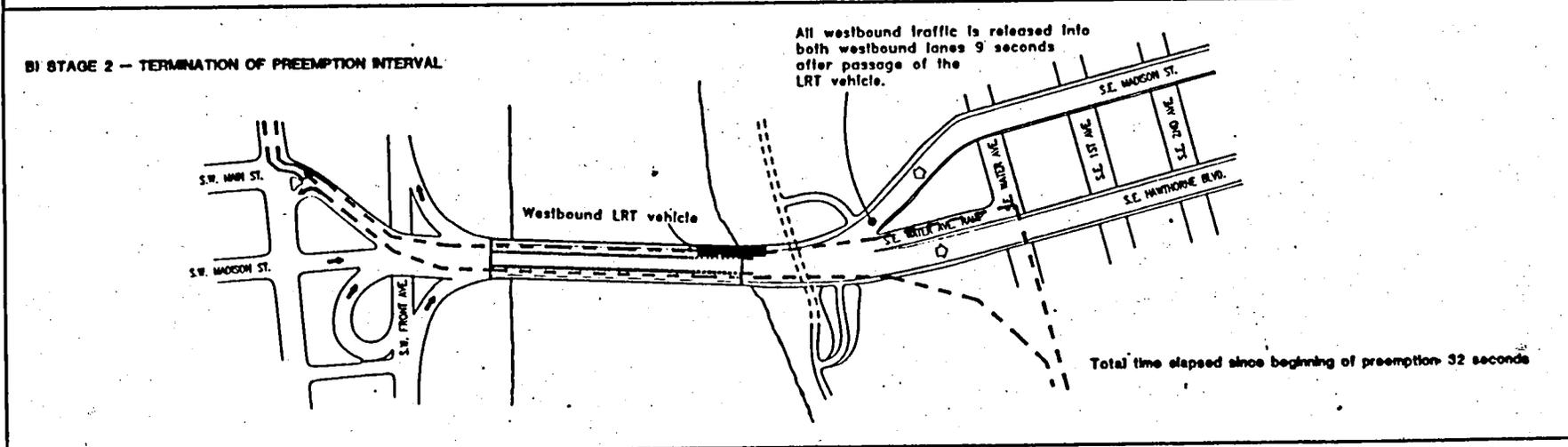
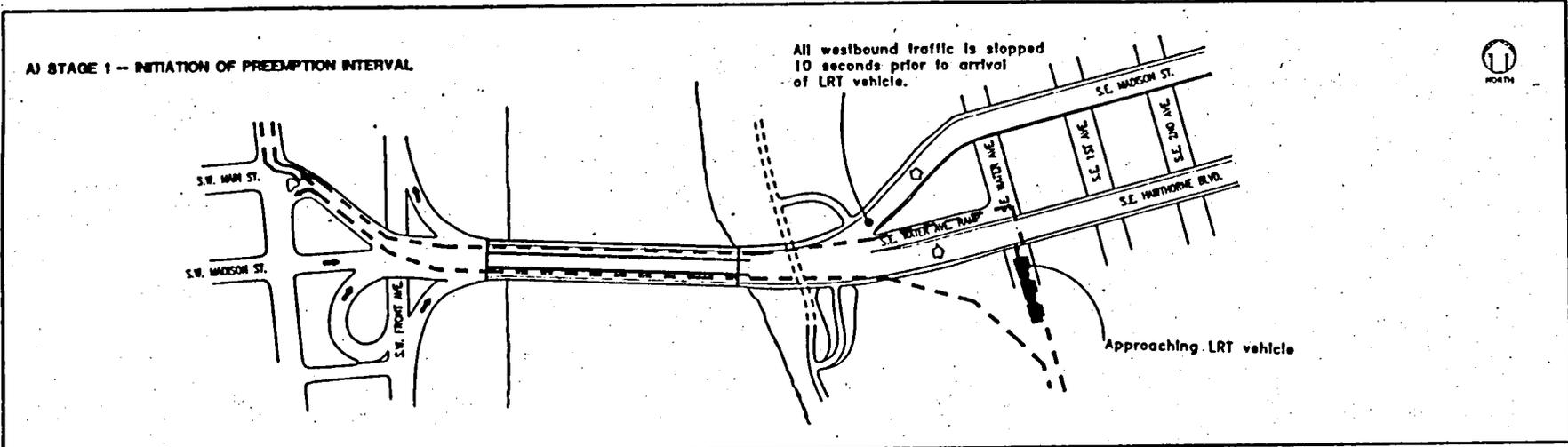
Outside Lane LRT Alignment. Figure 1 illustrates the preemption stages that will be necessary should the LRT tracks use the outside travel lanes. For illustrative purposes, it is assumed that the preemption is caused by a westbound LRT vehicle approaching from the east side; however, there is complete symmetry in the discussion that follows with regard to eastbound LRT vehicles approaching from the west side.

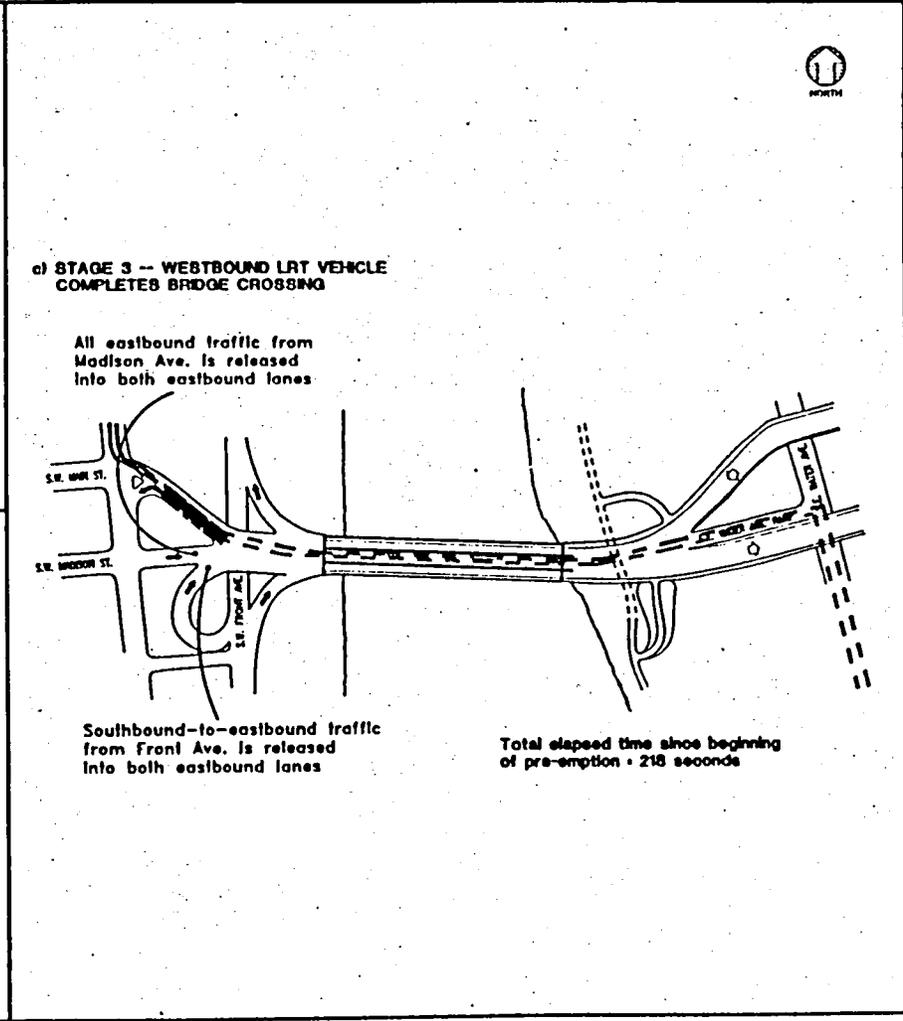
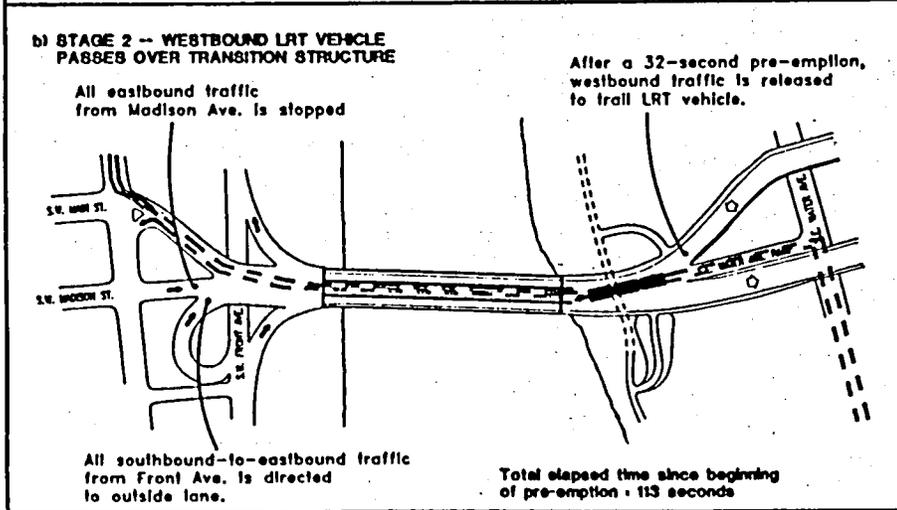
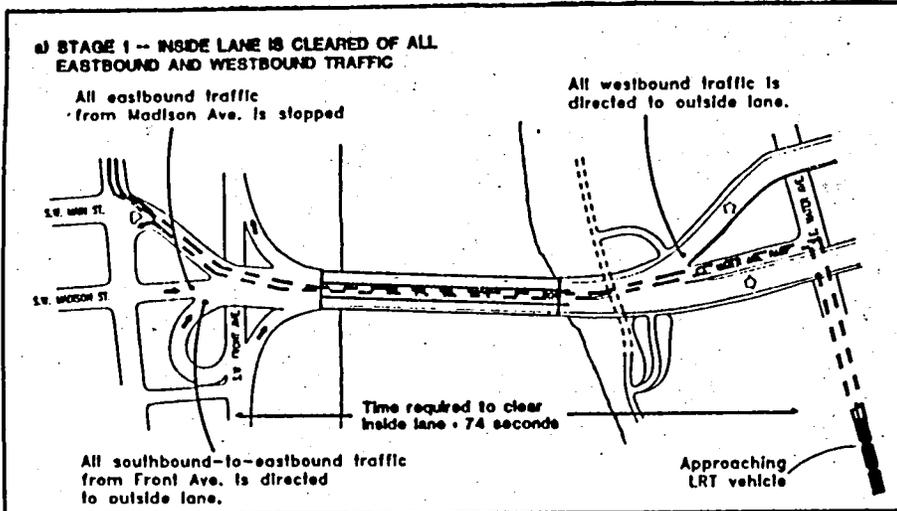
As Part A of Figure 1 illustrates, the first stage of the preemption strategy occurs 10 seconds prior to the arrival of the LRT vehicle, when all westbound traffic on S.E. Madison Street is directed (through signalization or gates) to stop east of the point where the LRT vehicle moves on to the transition structure. Part B illustrates that these vehicles are held for 32 seconds, or approximately 9 seconds after the passage of the LRT vehicle. They are then allowed to continue and to "trail" the LRT vehicle as it completes its passage across the bridge.

The total delay time of 32 seconds is sufficient to avoid long delays or congestion at either the upstream or the downstream ends of the bridge structure. It is also long enough to avoid significant interference with the operating characteristics of the upstream or downstream traffic signals. Therefore, it is concluded that operation of the LRT vehicles across the Hawthorne Bridge on an outside lane alignment can be accommodated without significant adverse operational or safety consequences.

Inside Lane LRT Alignment. Figure 2 illustrates the preemption stages that will be necessary in the event that the LRT uses the inside travel lanes. The operational strategy for an inside lane LRT alignment is considerably more complex than for an outside lane alignment because the inside lanes are too narrow to allow simultaneous traffic or LRT movements in the same or opposite direction. In the case of Figure 2, the preemption is assumed to be caused by a westbound LRT vehicle approaching from the east side during the evening peak hour; nearly identical findings apply in the event of an eastbound LRT vehicle approaching from the west side during the morning peak hour.

Figure 2 shows that the preemption must occur in three basic stages. During the first stage, the inside travel lanes (between the west end and S.E. Water Avenue) must be cleared of all vehicular traffic in both directions prior to the arrival of the LRT vehicle (see Figure 2, Part A). Next, the LRT vehicle must travel across the bridge (see Part B). During this stage, both directions of traffic can continue to use the outside travel lanes, and same direction traffic can trail the LRT vehicle; however, opposite-direction vehicular





**LRT PREEMPTION STRATEGY:
INSIDE LANE ALIGNMENT**

HAWTHORNE BRIDGE - PHASE 2
TRAFFIC IMPACT ANALYSIS
November 1990

Figure
2



4471001

traffic must continue to be excluded from the inside lanes. Only after the LRT vehicle has passed completely over the bridge structure can opposite-direction traffic be released into the inside travel lane (see Part C). The total estimated preemption time required for opposite-direction traffic as shown in Parts A, B, and C of Figure 2 is 218 seconds or slightly over 3.5 minutes.

Under existing evening peak hour traffic volume conditions and for the preemption strategy shown in Figure 2, there would be at least 44 eastbound vehicles waiting on S.W. Madison Street by the end of the preemption interval. This queue of vehicles could be expected to extend westward from the bridgehead to about S.W. Third Avenue. The queue would continue to extend in length for some time after the end of the preemption interval, so that the ultimate back-of-queue could be expected to be somewhere between S.W. Fourth Avenue and S.W. Fifth Avenue.

For the purposes of this analysis, it has been assumed that LRT vehicles will be moving during the morning and evening peak hours at average headways of 7.5 minutes in each direction of travel. With respect to evening peak hour conditions this means that, in order to avoid an unstable growing queue, the transportation system must be able to release 91 vehicles from S.W. Madison Street prior to the arrival of the next westbound LRT vehicle (consisting of 44 vehicles delayed by the passage of the LRT vehicle during the first 218 seconds, and 47 additional vehicles expected to arrive during the remaining 232 seconds). But the signalized grid making up the surface street system in the downtown core area is only able to release approximately 16 vehicles each minute. Therefore, 360 seconds will be required to fully dissipate the queue of vehicles on S.W. Madison Street, but only 232 seconds remain until the beginning of the next preemption. Thus, the queue will not be fully dissipated and will continue to grow. Without mitigation, this condition could cause other upstream intersections to fail with the next preemption, and ultimately have a mushrooming effect throughout the downtown area until sometime after the end of the evening peak hour.

If an inside lane alignment is chosen for the LRT, then it will be necessary to identify mitigation measures that eliminate the potential for queue buildup on the west end. Several options that have been identified through this analysis include the following:

- Increase the headway between LRT vehicles to at least 10 minutes. This would provide sufficient time between preemptions to dissipate the vehicle queues that are expected on the west end before the beginning of the next preemption.
- Prohibit vehicle usage of the S.E. Water Avenue ramp on the east end of the transition structure. By itself, this mitigation measure does not completely resolve the deficiency noted above, but it does have the effect of reducing the total required preemption time by nearly 33 seconds. This mitigation measure also would have no appreciable effect on morning peak hour queuing deficiencies caused by eastbound LRT vehicles.

- Through operational and geometric modifications, it may be possible to keep the curb lane on S.W. Madison Street open during a preemption by a westbound LRT vehicle, providing that all curb lane traffic is directed into the outside travel lane. Unfortunately, this mitigation measure would not, by itself, be sufficient to resolve the deficiency identified above. Northbound-to-eastbound and southbound-to-eastbound traffic from S.W. Front Avenue will combine to take up most of the available capacity of the outside lane during a westbound LRT vehicle preemption, and so very little additional volume could be accommodated from S.W. Madison Street. Specifically, it is expected that no more than 10 vehicles from S.W. Madison Street could be accommodated through this mitigation measure, saving no more than 15 to 30 seconds in total time required to dissipate the queue. Also, this mitigation measure will have no appreciable effect on morning peak hour queuing deficiencies cause by eastbound LRT vehicles.
- Do not allow any vehicular access to the Hawthorne Bridge on the west end except via S.W. Front Avenue. Buses and trucks could probably be allowed to continue to use S.W. Madison Street and S.W. Main Street, but all other private vehicles would be prohibited from using these streets for bridge access/egress, at least during the peak hours. The effects of this mitigation measure would include revising downtown traffic circulation patterns and increasing the potential for congestion on S.W. Front Avenue. An analysis of the extent of these effects is beyond the scope of this effort, but should be completed prior to implementing this mitigation measure.
- Reduce the demand for travel onto and off the Hawthorne Bridge via S.W. Madison Street and S.W. Main Street by an amount sufficient to eliminate the queue dissipation problem. Specifically, the diversion of approximately 300 vehicles per hour from SW Madison Avenue would resolve the identified weekday evening peak hour deficiency. This volume reduction could be accomplished either by diversion of these vehicles to other bridges and/or by diversion to alternate transportation modes (pedestrian, bicycle, carpool, bus, or LRT).

STRUCTURAL ANALYSIS

The first task was to review two previous studies. A 1984 study by ABAM Engineers took a cursory look at the feasibility and impacts of LRT on the Hawthorne Bridge. A 1986 study by Sverdrup and Parcel included a detailed analysis of the river spans for vehicular loads. That study considered the question of LRT loads in less detail than the ABAM study. The 1986 study was valuable in that it included a detailed structural analysis of the river spans and an evaluation of the lift span mechanical-electrical system. This review confirmed the earlier findings and provided a firm foundation for this study.

Several revisions need to be made to physically accommodate the LRT retrofit:

- Remove the existing deck
- Add new stringers under the proposed LRT alignment
- Provide a trough to electrically isolate the LRT rails
- Provide a new, half-filled concrete steel grid deck

Several samples of the structural steel were laboratory tested and found to be 20 percent stronger than would normally be assumed based on the age of the bridge.

With all of the LRT alternatives, the top chord and some of the vertical and diagonal members were over stressed in all of the spans. That degree of stress varied somewhat between the LRT alternatives and the strengthening requirements are reflected in the following cost estimates. These costs include the reinforcement and the revisions outlined above to physically accommodate the LRT rail.

Alternative 1	\$6.8 million
Alternative 2	7.4 million
Alternative 3	6.8 million
Alternative 4	6.4 million

FATIGUE ANALYSIS

The historical loads on the structure were documented, including the earlier streetcar traffic and vehicular traffic since the original construction. Future loading including LRT was projected and used in the fatigue analysis. According to that analysis, there is no significant fatigue problem nor will there be with the design loading.

There were, however, two minor problems. One is at the railing connection locations. This problem will be corrected with the County's Emergency Repair, Phase 2 project in 1991. The riveted joints supporting the outriggers that, in turn, support the outside lanes are also identified as a fatigue problem if LRT is placed in the outside lanes. This problem can be solved by replacing the rivets with high-strength bolts as a maintenance activity or as a minor part of a LRT project. The cost of this repair is not significant enough to be a part of this cost estimating effort.

LIFT SPAN EVALUATION

Several elements of the existing lift span mechanical-electrical system are only marginally acceptable now. Strengthening of the trusses and adding the LRT accommodation elements add 306,000 pounds of dead load to each 209-foot span and 374,000 pounds to each 244-foot span. This added weight applies to all of the LRT alternatives. The additional 374,000 pounds cannot be tolerated by the existing lift system. The wire ropes connecting the lift span to the counterbalance and the drive system must be replaced with higher

strength cables. The connections between the counterbalance weights and the ropes will also be overstressed and must be replaced.

Some of the stress in the existing system comes from the sheave bearings at the top of the lift towers. These bearings must be replaced with non-friction bearings to lower the stresses to a level that can be tolerated by the new ropes and connections. Also, the capacity of the emergency drive unit must be increased to accommodate the increased loads.

The cost to make these improvements is \$3.0 million.

SEISMIC EVALUATION

A cursory evaluation of the current AASHTO design seismic forces was done. The existing piers are acceptable under these forces. The anchor bolts connecting the spans to the tops of the piers would likely shear, but the tops of the piers are sufficiently wide that collapse of the spans is unlikely. Except as described in the next paragraph, the river spans would be expected to withstand the design earthquake.

Enough investigation was done to determine that the lift towers would fail under the design seismic forces. A detailed investigation that is well beyond the scope of this study would be required to determine with a high level of confidence what improvements would need to be made to the towers to allow them to withstand the design earthquake. It is likely, however, that the two towers would have to be entirely rebuilt.

The towers are braced by a member connected to the tops of the adjacent span trusses. It is likely that the top chords of these trusses would have to be additionally reinforced as well as several of the vertical and diagonal members.

A level of magnitude estimate for this cost is probably in the \$5-8 million range.

EASTSIDE LRT APPROACH MAP

With LRT Alternative 3 where LRT is using the eastbound outside lane, a separate structure must be provided so that LRT can exit the Hawthorne Bridge on the right and descent to ground level. This is required because of the undesirable reverse curve that would be required for an LRT vehicles to get from the outside lane to the Water Avenue ramp. The cost of providing that structure is \$400,000.

WESTSIDE APPROACH

Retrofitting LRT on this approach would require removing part of the deck, building new stringers at a lower level, and building a new deck. This investigation was a cursory one, and the cost estimate for accommodating LRT based on it is \$1.2 million.

HAWTHORNE BRIDGE LRT COST ESTIMATE

In summation, the cost to accommodate the LRT rails on the main spans, strengthen the main spans, increase the capacity of the lift span mechanism, bring the towers up to earthquake standards, provide an approach structure for Alternate 3, and revise the west approach is estimated to be as follows:

LRT Alternative 1	\$16.0 - 19.0 million
LRT Alternative 2	\$16.6 - 19.6 million
LRT Alternative 3	\$16.4 - 19.4 million
LRT Alternative 4	\$15.6 - 18.6 million

These revisions provide some new elements as discussed, but would not extend the service life of the piers or basic superstructure.

SEPARATE LRT RIVER CROSSING STRUCTURE

Cost estimates were developed for two options for a separate LRT river crossing. For study purposes, a location was assumed just upriver (south) of the Hawthorne Bridge.

One option was a high-level fixed structure. The clearance to the water surface would be 75 feet to match the clearance of the Hawthorne lift span. The LRT profile would be 5 1/2 to 6 percent approaching the mid-river crest. The touch-down point on the west side would probably be near Second Avenue, which would certainly be an issue considering downtown development. The cost of this structure would be \$16 million exclusive of approach and right-of-way costs.

The other option is a low-level, opening structure. The construction cost of this structure is \$27 million. The ongoing operational cost associated with an opening structure is not included.

Agenda Item No. 4.6
Meeting Date: December 27, 1990

Resolution No. 90-1360

SOLID WASTE COMMITTEE REPORT

CONSIDERATION OF RESOLUTION NO. 90-1360 ADOPTING
PROGRAM ACTIVITIES FOR YEAR TWO OF THE ANNUAL WASTE
REDUCTION PROGRAM FOR LOCAL GOVERNMENT

Date: December 20, 1990 Presented by: Councilor Judy Wyers

Committee Recommendation: At the December 18, 1990 meeting, the Committee voted unanimously to recommend Council adoption of Resolution No. 90-1360. Voting in favor were: Councilors Collier, DeJardin, Saucy and Wyers. Councilor Buchanan was excused.

Committee Discussion/Issues: Debbie Gorham, Waste Reduction Manager, explained that the Resolution adopts program activities for local governments to include in their second year Annual Waste Reduction programs.

Councilor Wyers asked if staff had objections to the Committee adding language to Attachment A, Paragraph 2, to include a reference to collection standards. With the additional language, the paragraph reads: "Regulate commercial garbage collection through franchise, license, or other means that will enable the local government to implement a uniform commercial waste reduction and recycling program that includes collection standards, waste audits and economic incentives." Councilor Wyers said the additional language was consistent with the intent of the program activities.

Staff had no objection to including the language.

The Committee voted to recommend Council adoption of the Resolution as amended.

**PROGRAM ACTIVITIES FOR YEAR TWO OF THE
ANNUAL WASTE REDUCTION PROGRAM FOR LOCAL GOVERNMENT**

1. Regulate residential garbage collection through franchise, license, or other means that will enable the local government to fully implement a uniform and comprehensive weekly curbside recycling program with containers.
2. Regulate commercial garbage collection through franchise, license, or other means that will enable the local government to implement a uniform commercial waste reduction and recycling program that includes collection standards, waste audits, and economic incentives.
3. Regulate multi-family garbage collection¹ through franchise, license, or other means that will enable local government to implement a multi-family recycling program that gives apartment owners\managers an economic incentive to promote recycling while allowing haulers to recover the costs of providing recycling services.
4. Implement in-house recycling programs to include as many materials as practical at all city and county facilities.
5. Expand local expertise on the part of haulers, recyclers, and/or recycling coordinators to perform commercial waste audits for a variety of different kinds of businesses (ie. offices, supermarkets, hospitals.) Document the completion of, at a minimum, ten commercial waste audits or waste audits for one percent of the businesses in the commercial sector, whichever is less. Develop a plan for a more comprehensive commercial waste audit program to be implemented in year three.
6. Provide schools with the opportunity to participate in waste audits and encourage them to implement waste reduction and recycling programs.
7. Begin developing language to insert into design review and/or site plan review procedures to facilitate the incorporation of recycling at commercial facilities and multi-family dwelling units.
8. Develop a plan to install recycling container systems in multi-family residential units.
9. Plan and implement a yard debris collection program that meets at least the minimum requirements of the regional yard debris recycling plan.

¹Multi-family units generate solid waste that is residential in composition but commercial in terms of the way it is collected.

10. Complete an Annual Report Worksheet for year one of the Program.
Submit this worksheet to Metro by September 30, 1991.

SK\WINACT.YR2
December 21, 1990

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF ADOPTING	)	RESOLUTION NO. 90-1360
PROGRAM ACTIVITIES FOR YEAR TWO)	
OF THE ANNUAL WASTE REDUCTION	)	INTRODUCED BY RENA CUSMA
PROGRAM FOR LOCAL GOVERNMENT	)	EXECUTIVE OFFICER

WHEREAS, Metropolitan Service District Ordinance No. 88-266B adopted the Regional Solid Waste Management Plan as a functional plan; and,

WHEREAS, Metropolitan Service District Ordinance No. 89-315 amended the Regional Solid Waste Management Plan's Waste Reduction Chapter to include the establishment of a Five Year Work Program for Metro and local governments which includes the specific activities that must be accomplished to achieve waste reduction goals; and

WHEREAS, The aforementioned ordinance establishes a cooperative process for implementing the Five-Year Program where Metro and local governments adopt annual work programs for the waste reduction activities they will undertake in a given year; and

WHEREAS, Metropolitan Service District Resolution No. 89-1246 adopted the Annual Waste Reduction Program For Local Government; and

WHEREAS, Local governments have substantially completed the writing of their first year programs; and

WHEREAS, Metro has worked with Wasteshed Representatives and Metro planning committees to develop a set of activities for year two of the program; and

WHEREAS, A set of program activities is necessary for local governments to proceed with the development of their second year programs; now therefore,

BE IT RESOLVED,

That the Council of the Metropolitan Service District adopts the program activities for Year Two of the Annual Waste Reduction Program For Local Government.

ADOPTED, by the Council of the Metropolitan Service District this ____ day of _____, 1990.

Tanya Collier, Presiding Officer

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 90-1360 ADOPTING
PROGRAM ACTIVITIES FOR YEAR TWO OF THE ANNUAL WASTE
REDUCTION PROGRAM FOR LOCAL GOVERNMENT

Date: November 6, 1990

Presented by: Debbie Gorham
Steve Kraten

BACKGROUND AND FACTUAL INFORMATION

This resolution adopts a set of program activities for inclusion in local governments' second year Annual Waste Reduction Programs. These activities have been developed jointly by Metro and the Metro area Wasteshed Representatives with input from the various Metro planning committees.

The Annual Waste Reduction Program For Local Government is a comprehensive program that sets forth a five-year plan for local governments to follow in developing and implementing their own waste reduction programs. The program includes a set of standards consistent with the regional waste reduction hierarchy of Reduce, Reuse, Recycle, and Recover. It explicitly describes how to accomplish the tasks involved in implementing a waste reduction program. This model program is intended to be used to aid local governments in the development of program plans that are specific to their own situations.

Each year the local governments will further their own and the region's progress in attaining waste reduction goals by planning and implementing additional waste reduction activities. Six activities were specified for year one. The primary focus of these activities was residential recycling. Ten activities, included as Attachment A to this report, have been identified for year two of the program. Nine of these are new activities or continuations of activities begun in year one. The tenth activity is completion of a form to report on the effectiveness of the previous year's program. This report is due two months later than the rest of the program in order to allow local governments time to evaluate their programs right through to the last day of the fiscal year.

The first three second-year activities are regulation of residential, commercial, and multi-family garbage collection by local governments in such a way as to facilitate recycling in those sectors. The three sectors are listed separately because they often differ markedly in the character of the waste generated and/or the collection technology employed.

Though several of the second year activities are the implementation phases of activities that were planned and scheduled in year one, a major focus of year two activities will be commercial recycling.

EXECUTIVE OFFICER RECOMMENDATION The Executive Officer recommends approval of Resolution No. 90-1360.

**PROGRAM ACTIVITIES FOR YEAR TWO OF THE
ANNUAL WASTE REDUCTION PROGRAM FOR LOCAL GOVERNMENT**

1. Regulate residential garbage collection through franchise, license, or other means that will enable the local government to fully implement a uniform and comprehensive weekly curbside recycling program with containers.
2. Regulate commercial garbage collection through franchise, license, or other means that will enable the local government to implement a uniform commercial waste reduction and recycling program that includes waste audits and economic incentives.
3. Regulate multi-family garbage collection¹ through franchise, license, or other means that will enable local government to implement a multi-family recycling program that gives apartment owners/managers an economic incentive to promote recycling while allowing haulers to recover the costs of providing recycling services.
4. Implement in-house recycling programs to include as many materials as practical at all city and county facilities.
5. Develop local expertise on the part of haulers, recyclers, and/or recycling coordinators to perform commercial waste audits for a variety of different kinds of businesses (ie. offices, supermarkets, hospitals.) Complete ten commercial waste audits or perform waste audits for one percent of the businesses in the commercial sector, whichever is less. Develop a plan for a more comprehensive commercial waste audit program to be implemented in year three.
6. Provide each school district the opportunity to participate in waste audits and encourage them to implement waste reduction and recycling programs.
7. Begin developing language to insert into design review and/or site plan review procedures to facilitate the incorporation of recycling at commercial facilities and multi-family dwelling units.
8. Develop a plan to install recycling container systems in multi-family residential units.
9. Plan and implement a yard debris collection program that meets at least the minimum requirements of the regional yard debris recycling plan.

¹Multi-family units generate solid waste that is residential in composition but commercial in terms of the way it is collected.

10. Complete an Annual Report Worksheet (Attachment B) for year one of the Program. Submit this worksheet to Metro by September 30, 1991.

**Annual Report Worksheet For
ANNUAL WASTE REDUCTION PROGRAM FOR LOCAL GOVERNMENT**

Year _____

City or County Name: _____

Primary Contact: _____

Mailing Address: _____

Phone: _____

I. Administration and Coordination

A,B. Please summarize the formal or informal working relationships your staff and elected officials have with your DEQ wasteshed representative. (For example: how often have you met over the past year to discuss waste reduction goals and/or the development of next year's standards?)

C. Explain your staffing arrangement for the "recycling coordinator" position, i.e. has your jurisdiction allocated a percentage of staff time or subcontracted with an outside consultant? If you are subcontracting, who does this person report to in your local government?

D. Has your local jurisdiction compiled any special reports on waste reduction issues during the past year? If yes, please list titles and attach copies.

- E. Attach a sample of your regulatory agreement with haulers and summarize the process you undertook to amend regulatory agreements to reflect the standards in the Local Government Waste Reduction Program. Please include major accomplishments and issues still needing attention. (Please use the back of this page or attach a separate sheet.)

II. Residential Curbside

- A,B, Please complete the attached chart by listing haulers and
C,D, summarizing collection schedules, container distribution
E data, and promotional materials distributed by haulers or included in local government mailings. Please attach samples of promotional materials.

List special promotional efforts that your local government has participated in during the past year. (For example: school visits, parades, community events or service club activities)

- F. Describe how your jurisdiction monitors whether or not haulers' collection equipment is maintained in good operating order.
- G. Describe how the costs of the container programs have been included in your rate review process.

- H. Describe the collection complaint resolution system in effect in your jurisdiction.
- I. What types of reporting forms do haulers report to you (other than the standard Metro/DEQ forms provided to the Wasteshed Representatives on a quarterly basis)? (please attach samples)
- J. Other than this annual waste reduction report, have there been other survey or system measurement projects undertaken by your local government in order to comply with regional solid waste management goals? If yes, please list.
- K. Please describe how your rate structure provides residents of single family dwellings an incentive to reduce waste. (please include description of efforts to establish mini-can rates, variable can rates, or weight-based rates).

- L. (Regulatory authority already summarized in Section I.)
- M. List the primary agenda items and dates of meetings your local government has held with haulers over the past year to discuss program goals and results.

III. Commercial/Institutional

- A. Please list the commercial waste audits completed during the past year and summarize any issues or trends you have discovered.

-
-
-
-
-
-
-
-
-
-

- B. Describe your experience with routing of commercial recycling loads.

C. Describe efforts to distribute information regarding brokers of recyclable materials to service providers and citizens.

D. Describe the efforts of various departments within your local government to reduce, reuse and recycle each year:

1) Reuse or recycling of Building/Construction Materials
a. Staff Contact: _____
b. Approximate Quantity Reused or Recycled: _____
c. Description:

2) Recycling of Motor Oil or Asphalt -
a. Staff Contact: _____
b. Approximate Quantity Recycled: _____
c. Description:

3) Recycling Office Paper-
a. Staff Contact: _____
b. Approximate Quantity Recycled: _____
c. Description:

4) Reuse of Yard Debris (On-site Composting by Public Works or Parks Crews) -
a. Staff Contact: _____
b. Approximate Quantity Reused: _____
c. Description:

5) Other Materials (please describe) -

- a. Staff Contact: _____
- b. Approximate Quantity: _____
- c. Description: _____

E. Summarize the efforts of your local government to participate in alternative waste recovery technologies.

F. Describe how your jurisdiction is reviewing existing zoning ordinances, design review procedures and/or site plan reviews to ensure recycling can be accommodated at commercial facilities.

IV. Markets and Procurement

A. Which recycled products did you purchase during fiscal 1990/91? What recycled products do you intend to purchase in the future?

- | | |
|--|---|
| <input type="checkbox"/> Xerographic paper | <input type="checkbox"/> Paper towels |
| <input type="checkbox"/> Ledger paper | <input type="checkbox"/> Re-refined motor oil |
| <input type="checkbox"/> Envelopes | <input type="checkbox"/> Retread tires |
| <input type="checkbox"/> Printing paper | <input type="checkbox"/> Recycled paint |
| <input type="checkbox"/> Computer paper | <input type="checkbox"/> Asphalt |
| <input type="checkbox"/> Toilet tissue | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Yard debris/sewage sludge compost | |
| <input type="checkbox"/> Other _____ | |

B. Which recycled products have you developed a purchasing policy for? Please attach a copy of those policies.

- Recycled paper
- Yard debris/sewage sludge compost
- Re-refined motor oil
- Retread tires
- Recycled paint
- Other _____

V. Yard Debris

A. Describe the methods by which your local government intends to comply with the standards of the Regional Yard Debris Recycling Plan.

B. List examples of use of yard debris compost on public property in your jurisdiction (such as parks or street right-of-way):

C. Describe how your local government has encouraged the use of yard debris compost by contractors working with local governmental departments.

D. Describe your local government's efforts to provide technical assistance regarding home composting.

E. Describe efforts to ensure that exclusionary language does not exist in local government ordinances or resolutions that would inhibit properly managed home composting systems.

VI. Multi-family Recycling

A. Describe efforts to promote and establish container systems for multi-family dwellings. If projects have been undertaken, please summarize the numbers of complexes and types of container systems currently in use.

B. Describe efforts to ensure zoning ordinances, design review procedures and site plan reviews incorporate needs of recycling facilities at multifamily complexes.

Agenda Item No. 5.1
Meeting Date: December 27, 1990

Ordinance No. 91-377

The Regional Yard Debris Recycling Plan, Exhibit A to Ordinance No. 91-377, has been distributed under separate cover to Councilors. Because of the volume of the document, it has not been included in this agenda packet. Persons wanting copies of the Plan can contact the Clerk of the Council at 221-1646 ext. 206.

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AMENDING)
ORDINANCE NO. 88-266B ADOPTING)
THE REGIONAL SOLID WASTE)
MANAGEMENT PLAN TO INCORPORATE)
THE YARD DEBRIS PLAN)

ORDINANCE NO. 90-377

Introduced by:
Rena Cusma,
Executive Officer

WHEREAS, Metro Ordinance No. 88-266B adopted the Regional Solid Waste Management Plan; and

WHEREAS, The Environmental Quality Commission on September 9, 1988 adopted rules which identified yard debris as a principal recyclable material in the Clackamas, Multnomah, Portland, Washington and West Linn wastesheds; and

WHEREAS, Metro Resolution No. 89-1047 initiated the development of a regional yard debris plan to assist local governments in meeting the Environmental Quality Commission rules pertaining to yard debris; and

WHEREAS, The Regional Yard Debris Plan (Exhibit "A") was developed through a cooperative process of local governments, haulers, recyclers, processors and citizens; and

WHEREAS, Metro Resolution 90-1290 approved the Regional Yard Debris Plan for submittal to the Department of Environmental Quality; and

WHEREAS, The Department of Environmental Quality recommended changes and clarification in the Regional Yard Debris Plan prior to their approval; and

WHEREAS, changes to the Regional Yard Debris Plan have been made in response to the Department of Environmental Quality's comments; now, therefore,

THE COUNCIL OF THE METROPOLITAN SERVICE DISTRICT HEREBY
ORDAINS:

That the Regional Solid Waste Management Plan is amended to include the Yard Debris
Plan as shown as Exhibit "A" to this Ordinance.

ADOPTED by the Council of the Metropolitan Service District this ____ day of
_____, 1991.

, Presiding Officer

ATTEST:

Clerk of the Council

STAFF REPORT

CONSIDERATION OF ORDINANCE NO. 90-377 FOR THE PURPOSE OF AMENDING ORDINANCE NO. 88-266B ADOPTING THE REGIONAL SOLID WASTE MANAGEMENT PLAN TO INCORPORATE THE YARD DEBRIS PLAN

Date: December 11, 1990

Presented by: Richard Carson
Becky Crockett
Gerry Uba

PROPOSED ACTION

Ordinance No. 90-377 amends the Regional Solid Waste management Plan to incorporate the Yard Debris Plan (Exhibit "A"). The Yard Debris Plan establishes program and collection options to be implemented by Metro and local governments which are expected to result in an effective reduction of the amount of yard debris that would otherwise be landfilled.

FACTUAL BACKGROUND AND ANALYSIS

The Environmental Quality Commission (EQC) on September 9, 1988, adopted rules which identified yard debris as a principal recyclable material in the Clackamas, Multnomah, Portland, Washington and West Linn wastesheds. As a result of these rules, local governments requested that Metro develop a regional yard debris plan as a means for local governments to meet the EQC rules. On February 9, 1989 the Metro Council adopted Resolution No. 89-1047 for the purpose of initiating the development of a regional yard debris plan. Metro has worked closely with local governments, haulers, yard debris processors and interested citizens over the past 14 months to develop the regional yard debris plan. The EQC Unilateral Order required that the plan be submitted to DEQ by July 1, 1990.

The Metro Council approved the Regional Yard Debris Plan for submittal to DEQ on June 28th, 1990 (Resolution No. 90-1290). Since that time, DEQ has made several comments on the plan (Attachment "A") which have been responded to (Attachment "B") and agreed upon by Metro staff and the Planning Committees.

DEQ has agreed that the changes made to the plan satisfy the Department's earlier concerns and questions as stated in a letter from the Department (Attachment "C").

The following is a summary of the changes made to the plan:

- 1) Addition of the criteria that Metro will use to determine that adequate processing and market capacity exists to justify weekly on-route community-wide curbside collection in 1994. The criteria include demonstration of the processor's ability to process and market yard debris generated in the region without creating environmental problems.
- 2) Addition of specific program requirements for local governments. This is felt to be

consistent with OAR 340-60-035 (5)(d)(A-F) requiring the plan to provide information for each local government on the proposed method of collection, amount of material available, projected participation, amount of material that will be collected and processors for that material. Local governments will be required to provide this information in their Annual Waste Reduction Program using information in the plan and Metro's technical assistance.

- 3) Addition of steps Metro will take to show how the implementation of the regional programs will result in a continuous growth in yard debris supply to a level which will justify weekly on-route community-wide curbside collection program by 1994. The steps are processing and market strategies that Metro will implement to assure that sufficient capacity exists.
- 4) Addition of the requirement that programs funded through user pay must comply with the Opportunity to Recycle Act, ORS 459.190. DEQ has indicated that the program funding elements (user pay) for regional minimum collection standards could be in violation of the ORS 459.100. After deliberation between Metro and DEQ staff, the Department agreed to pursue a rule amendment of ORS 459.100 in 1991. Metro has indicated that it will work with DEQ in the rule amendment process.
- 5) Addition of an additional criterion that will be used to determine whether local governments will implement on-route curbside collection in 1994. Specifically, it is stated that each local government in the region needs to work towards implementation of a weekly curbside collection system for yard debris unless: 1) Metro, after discussions with the region's local governments, determines that market capacity is not adequate to receive the material generated; or 2) it can be demonstrated that the cost per ton of a weekly curbside collection program is significantly greater than the yard debris collection option established to meet the minimum standards of the plan.

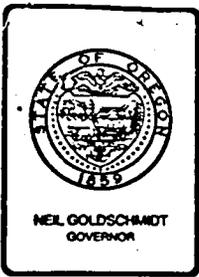
EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of Ordinance No. 90-377 adopting the Yard Debris Plan as a component of the Regional Solid Waste Management Plan.

ATTACHMENT "A"

DEQ Comments on the

Yard Debris Plan



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

September 11, 1990

Rena Cusma, Executive Officer
Metropolitan Service District
2000 S.W. First Avenue
Portland, OR 97201-5398

RECEIVED
SEP 14 1990
METRO SERVICE DISTRICT
EXECUTIVE MANAGEMENT

Re: Yard Debris Recycling

Dear Ms. Cusma:

The Department of Environmental Quality has completed a review of the June 1990 Draft Regional Yard Debris Plan. We are aware of the significant time and effort which Metropolitan Service District (Metro) staff and committees have committed to the development of this document, and the Department is pleased with the general direction of the plan.

As was stated in our letter of April 24, 1990, "the plan submitted on July 1, 1990 must be a complete plan containing all information specified in OAR 340-60-035(5)." From our review of this draft, the Department believes that the plan can be approved when it is revised to address the following issues:

- 1) When will on-route collection of yard debris be in place? The plan should state that local government on-route collection programs will be initiated in 1994 unless Metro finds that there is not adequate processor or market capacity.
- 2) What criteria will Metro use to determine when adequate processor and market capacity exist to justify weekly curbside collection? Since processor and market capacity are the limiting factors that will determine when and if local governments will implement on-route collection programs, the plan should specify the criteria to be used by Metro in determining adequate processor and market capacity. As required by the Department's yard debris rules, the plan should also contain specific projections of processor and market growth over the first four years of program implementation.
- 3) What are the specific yard debris plan and program requirements for each local government? The draft plan does not contain the specific information for each local government as required by OAR 340-60-035(5)(d). For example, the rules require that the plan specify, for each

local government, the proposed method of collection, the amount of material available, projected participation, expected amount of material that will be collected, and the projected processor for that material for the first four years of the local government program. Some of this information can be extracted from the plan and appendices, but other information is not in the plan. The plan should present this information in a clear and easily understandable format. This information should be provided to local governments with the intergovernmental agreements. Local governments should review this information prior to making their commitment to implement the programs outlined in the plan.

In addition, while the plan does identify existing yard debris processing facilities, it does not give a clear picture of where yard debris generated from specific local governments is expected to go for recycling. This is particularly important for the Portland and Multnomah wastesheds, as it is not clear to the Department that adequate facilities exist in appropriate locations to handle recyclable yard debris generated from these wastesheds.

The Department recommends that Metro address these issues more specifically in the plan. Metro should identify which information is not available at this time but will be collected from local governments as a part of their annual work plans.

- 4) The draft plan originally did not include an intergovernmental agreement as required by the rules and identified in the Department's April 24, 1990 letter. The Department and Metro have subsequently developed an adequate intergovernmental agreement form. The Department cannot grant final approval of the plan until the intergovernmental agreements have been executed.
- 5) What specific steps will Metro take to assure that sufficient processing and market capacity exists to handle all of the yard debris that is feasible to collect as recyclable material in the Metro region? The need for a presentation of this information was stated in the Department's May 22, 1990 letter to Metro and it remains the Department's understanding that the Environmental Quality Commission expects the plan to include this discussion.

- 6) How will the plan result in processor and market capacity growth between 1991 and 1994? Will there be a significant growth in yard debris supply after the initial effects of implementation in 1991? The Department recommends that the plan identifies program elements which will result in a continuous growth in yard debris supply to a level which will justify all jurisdictions having a weekly curbside collection. One option may be to phase in on-route collection between 1991 and 1994 in parallel with the growth of processor and market capacity.
- 7) Are the program elements which include a user fee in violation of ORS 459.190? The Department has been advised by the Attorney General that the opportunity to recycle cannot be provided by a system which includes a differential fee for on-route collection of source separated recyclable materials. The minimum collection program standards for 1991 include a user-pay curbside collection program for reasons we understand and appreciate. The Department recommends that Metro work with the Department's Solid Waste Reduction and Recycling staff to determine how this problem can best be addressed so that the Metro program is in compliance with the law.

The Department looks forward to approving the Metro Yard Debris Recycling Plan. When approved and implemented, the plan will provide excellent guidance to local governments and should be a model for other communities.

If you have any questions about the Department's comments or the specific issues addressed in this letter, please contact Bill Bree or Dave Rozell in the Solid Waste Reduction and Recycling Section, Oregon Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, OR 97204 or by phone at (503) 229-6975.

Sincerely,



Stephanie Hallock, Administrator
Hazardous and Solid Waste Division

SH:wrb:b
G:\YB9846

Received
NOV 07 1990



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

November 5, 1990

Richard H. Carson, Director
Planning and Development Department
Metro
2000 SW First Avenue
Portland, OR 97201

Dear Rich:

Thank you for sending the point-by-point response to our comments on the Metro Regional Yard Debris Plan. The suggested modifications in the plan adequately address the Department's expressed concerns in five of our seven comments: specifically, the first, third, fourth (pending completion of the intergovernmental agreements), fifth, and sixth comments. Metro's proposals regarding the second and seventh DEQ comments need further clarification in order for the plan to be approved.

Second comments: Criteria to be used for moving to curbside in 1994

Our second comment asked that the plan specify the criteria Metro will use in 1993 to judge market and processing capacity. It is possible that under your criteria if the yard debris received by processors were to dramatically increase beyond processing capacity, resulting in massive stockpiling of unprocessed material, the processors would still meet all eight of the proposed criteria. We suggest that criteria be added that: 1) the amount of material received by processors not exceed the amount of material processed by more than two or three months' worth of incoming material, 2) the amount of finished product stockpiled not exceed one year's worth of product based on incoming material for that year, and 3) that the amount of material collected for processing not exceed the amount of material that can be collected and marketed as a recyclable material under Metro's cost and demand projections.

At this time the only quantity-based projection in the plan for processing and market capacity in 1994(-96) is the projection of yard debris recycled on pages 92-94 of the plan and the long-term cost/demand model in Appendix V. If Metro is going to use short-term quantitative projections to determine in 1993 whether to move to curbside collection in 1994, then the criteria or methodology to be used in making those projections must be outlined now in the plan.

Seventh comment: Relationship of user-pay programs to ORS 459.190

Certain types of user-pay programs for financing yard debris collection may violate ORS 459.190 - the requirement that persons who recycle not be charged more than persons who do not recycle. The proposed footnote, the proposed addition to the "local government flexibility" section, the

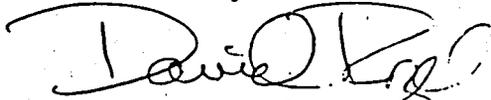
Richard Carson, Metro Planning Director
November 5, 1990
Page 2

Appendix III descriptions of user pay yard debris collection programs, and the collection program descriptions in pages 76-77 should all be modified to make clear that user pay programs adopted must be in compliance with ORS 459.190.

One additional issue relates to the yard debris plan's call for strong diversion programs for yard debris at transfer stations. Metro's recent rate incentive document calls for reduction or elimination of the rate incentives for source-separation of yard debris at the transfer stations. The Department views this as a serious modification to the plan since it was expected that rate incentives would be a major part of the diversion program. Please inform the Department about the yard debris diversion program at transfer stations. What does it entail?

If you have any questions, please call me at 229-6165 or Peter Spendelow at 229-5253.

Sincerely,



David Rozell, Manager
Solid Waste Reduction Section
Hazardous and Solid Waste Division

cc: Stephanie Hallock, Administrator, Hazardous and Solid Waste Division

ATTACHMENT "B"

Changes to the Yard Debris Plan

Resulting from DEQ Comments

RESPONSE TO DEQ COMMENTS
on the
DRAFT REGIONAL YARD DEBRIS PLAN

DEQ comments #1

RECOMMENDED CHANGES IN PAGE 86, PARAGRAPH #3

For the purpose of local governments planning and designing their collection programs it needs to be recognized that an objective of the regional yard debris system is to ultimately achieve implementation of a on-route weekly curbside collection system within each jurisdiction. This is felt to be a realistic objective ~~within 3 years~~ ~~in the fourth year~~ of plan implementation (July 1, 1994), provided an aggressive market program results in adequate market capacity for the material generated. This objective needs to be factored into the design of collection programs which are required by July 1, 1991. Specifically, local governments need to consider the cost of transitioning the collection system established in 1991 to a curbside collection system within a relatively short time. Local governments need to consider the cost of amortizing equipment necessary to establish the July 1, 1991 program.

RECOMMENDED CHANGES IN PAGE 95, ITEM #8

July, 1994

~~Local Governments carry out local program changes consistent with June — August, 1993 Program Evaluation~~
initiate on-route weekly community-wide curbside collection unless Metro's program evaluation in 1993 finds that market capacity is inadequate.

RECOMMENDED CHANGES IN PAGE 90, PARAGRAPH #4

* see also solution to DEQ comments #2 below

DEQ comment #2

RECOMMENDED CHANGES IN PAGE 90, ADD TO BOTTOM OF PAGE

While these programs are appropriate as the starting point for a region-wide collection system based on 1991 projected market capacity, the Plan analysis indicates that there will need to be an increase in collection service beyond these minimum standards to respond to market growth. For this reason, the region will re-evaluate the yard debris system by July 1, 1993 and determine if it should begin providing on-route curbside collection service in 1994 to all residents in the region. This re-evaluation shall include an assessment of both the long-term adequacy of collection programs established to meet the July 1, 1991 requirements, processing capacity and the market demand.

The criteria for determining adequate processing capacity and market demand include but not limited to the following:

Processing Capacity

- a) Evidence of a sustained upward trend in production of products containing composted yard waste;
- b) Demonstration that equipment capacity remains stable or improves;
- c) Record of continued operations, limited down-time;
- d) Ability to consistently provide products which meet the minimum requirements of established testing.

Markets Capacity

- a) Sustained upward trend in sales of product;
- b) Consistent, favorable product test results;
- c) Demonstrated new market penetration;
- d) Annual market analysis comparing yard debris products to other competitive products.

RECOMMENDED CHANGES IN PAGE 92, PARAGRAPH #2

Successful implementation of a regional weekly curbside collection program (cost spread across users base) if established by July 1,

1994 (~~3 years after initiation of the regional yard debris recycling program~~) will increase yard debris recycling in the region to 93 % by 1996 (5 years after initiation of the regional yard debris recycling program) as shown in the graphs in the next page. Estimates of annual increases are also shown in one of the graphs. This forecast is based on: 1) growth in residential and commercial recycling as shown in the "key" following Figure 15; 2) a 25% decline in mobile chipping in the residential sector; 3) adjustment of home composting (25% of the region's households continuing to home compost their yard debris); and 4) diversion of 72,000 loose cubic yards from Metro facilities. Additional information on breakdown of the forecast is presented in the "key" below.

DEO comments #3

RECOMMENDED ADDITION TO APPENDIX OF THE PLAN

Appendix #.....

Metro-Local Government Intergovernmental Agreement Packet

RECOMMENDED CHANGES IN PAGE 90, SUBSECTION C

C) Collection Program

Provide a yard debris collection service system to residents within the jurisdiction. This includes:

o Showing in the Annual Waste Reduction Program the proposed method of collection, amount of material available, projected participation, amount of material that will be collected, and processor for that material.

o Providing a service which results in generating yard debris volumes consistent with those collection options listed in Appendix VII of this Plan.

o

o

A NOTE OF CLARIFICATION ON COMMENT #3

A clear picture of where yard debris generated/collected from specific local governments is expected to go for recycling is shown in Appendix VIII of the Plan.

DEQ comments #4

RECOMMENDED ADDITION TO APPENDIX OF THE PLAN

Appendix #.....

Metro-Local Government Intergovernmental Agreement Packet

DEO comments #5

RECOMMENDED CHANGES IN PAGE 97, SECTION C

Steps Metro will take to assure that sufficient processing and marketing capacity exists:

Processing

- a) Continue established relationship with processors to keep abreast of business plans, provide technical assistance
- b) Provide technical assistance to individuals or companies desiring to start processing businesses
- c) Perform cooperative promotional campaigns geared toward proper source separation of product

Markets

- a) Continue general promotional campaigns on purchasing product
- b) Promote the purchase of recycled yard debris products by governments and business through Metro's Institutional Purchasing Program
- c) Continue to perform demonstration projects which will evaluate the compost products' performance in new uses, e.g. erosion control
- d) Work with processors to formulate yard debris products specifications
- e) Market products through trade shows displays, technical assistance to nursery groups and other professional organizations
- f) Provide spring forum for targeted audiences regarding use of yard debris compost

DEQ comments #6

RECOMMENDED ADDITION TO END OF REVISED SECTION C IN PAGE 97

Metro will monitor the implementation of the above market strategies to make sure that there is a balance between supply of yard debris materials and demand of yard debris products. Part of the monitoring efforts will be devoted to determining the impact of various local governments collection programs and the extent of local governments readiness to initiate on-route curbside collection. In the event that demand of yard debris products grows at a higher rate than supply of yard debris materials those local governments that are ready to implement on-route curbside collection before July 1994 will be encouraged to do so at an earlier date.

DEO comments #7

See attached legal opinion in this agenda packet.

OTHER CHANGES OF SIGNIFICANCE IN PAGE 99

Local Government Program

A) General

Continue implementation of local government programs established in the Waste Reduction Chapter of the RSWMP. This includes development of annual work programs and annual evaluation of waste reduction programs including yard debris.

B) Source Reduction Program

Assist and participate in establishing one of the four home composting education sites in the region by July 1, 1991. This includes working closely with Metro and the Wasteshed representative to set up the site and providing promotion and education materials to persons within a local government on "how to build composting bins", "how to home compost", and "how to use compost products"- and "how to use the composting education sites".

~~During the second year (FY 91/92) each local government will contribute to a regional funding pool for the continuation of the home composting education sites.~~

C) Collection Program

Provide a yard debris collection service system to residents within the jurisdiction. This includes:

- o Providing a service which results in generating yard debris volumes consistent with those collection options listed in Appendix VII of this Plan.
- o Having collection service on line by July 1, 1991.
- o Evaluating the collection service program annually and participating in the regional decision of when a higher intensity collection service needs to be established.
- o Adjusting the collection service to a higher intensity collection service consistent with the regional decision of when this should occur.
- o Working with Metro in managing the market impact of yard debris volumes generated if a new collection system is put on line which is known to generate more yard debris volume than those collection systems identified in Appendix VII.
- o Provide on-call, fee for service, source separated, drop box service if a depot system is established to meet

OTHER CHANGES OF SIGNIFICANCE RECOMMENDED BY METRO

1) RECOMMENDED ADDITION TO PAGE 76

Collection Programs

The collection programs analysis in the Plan indicates that the most efficient collection system is one which provides frequent (weekly) convenient (curbside) service paid for by a wide base of all potential users of the service. Therefore, each local government in the region needs to work towards implementation of a weekly curbside collection system for yard debris, ~~provided that unless:~~ 1) Metro, after discussions with the region's local governments, determines that market capacity is not adequate exists to receive the material generated; or 2) it can be demonstrated that the cost per ton of a weekly curbside collection program is significantly greater than the yard debris collection option established to meet the minimum standards of the plan. This is felt to be a realistic objective within 3 years of plan implementation (by July 1, 1994).

The collection programs established as the minimum standard to be implemented by July 1, 1991 are:

- Self-haul: o monthly rotating depot (user pay¹)
- o weekly low density depot (non-permanent, user pay)
- o weekly low density depot (permanent, user pay)

- Curbside: o weekly (user pay)
- o monthly (user pay)

These programs have been established as the minimum standard based in part on balancing yard debris volumes generated from these programs with expected market capacity for 1991. In designing collection programs, local governments need to consider the costs associated with transitioning the program established in 1991 to a curbside collection system within a relatively short time. A local government has the option to implement any collection program they wish as long as the volumes generated from these other collection programs are at least equal to the range of volumes expected from the collection options identified above. If a local government chooses to implement a new collection program that will be known to generate volumes greater

¹User of a yard debris recycling depot or curbside collection service pay a fee determined by the service provider. User pay programs must comply with ORS 459.190.

2) RECOMMENDED ADDITION TO PAGE 87

D) Collection Programs Conclusion

Section III of this plan describes the analysis conducted for the purpose of evaluating and ranking several potential source reduction and collection programs. This analysis clearly indicates that the most efficient collection system is one which provides frequent (weekly) convenient (curbside) service paid for by a wide base of all potential users of the service. This type of collection system is proven to be the most cost-effective in terms of the cost per cubic yard of material generated from that system. Further, this type of collection program has the highest recovery rate (amount recycled) of all the programs evaluated.

The findings of the collection analysis indicate that the region needs to work towards implementation of a community-wide weekly on-route curbside collection system for yard debris, provided that market capacity exists to receive the material generated. At this time it is inconclusive as to what is the best method for applying the cost for such a service across all potential users of that system. For some jurisdictions a tax base might be an option, whereas a fee applied to a utility bill may work better in other jurisdictions. For jurisdictions that are not able to get a tax base and have no unified utility billing program, a user pay system may prove to be the most practical approach to finance the collection service. However, such an approach may not result in the high levels of participation that may be desired.

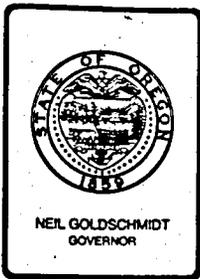
For the purpose of local governments planning and designing their collection programs it needs to be recognized that an objective of the regional yard debris system is to ultimately achieve implementation of on-route weekly curbside collection system within each jurisdiction. This is felt to be a realistic objective in the fourth year of plan implementation (July 1, 1994), ~~provided unless:~~ 1) Metro, after discussions with the region's local governments, determines that an aggressive market program results in adequate market capacity is not adequate to receive for the material generated; or 2) it can be demonstrated that the cost per ton of a weekly curbside collection program is significantly greater than the yard debris collection option established to meet the minimum standards of the plan. This objective needs to be factored into the design of collection programs which are required by July 1, 1991. Specifically, local governments need to consider the cost of transitioning the collection system established in 1991 to a curbside collection system within a relatively short time. Local governments need to consider the cost of amortizing equipment necessary to establish the July 1, 1991 program.

Jurisdictions which currently do not have any yard debris collection programs may find it best to initiate some type of regularly.....

ATTACHMENT "C"

DEQ Letter Stating They Agree With the

Yard Debris Plan Changes



Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

December 6, 1990

Mr. Rich Carson
Metropolitan Service District
2000 S.W. First Avenue
Portland, OR 97201

Re: Metro's Yard Debris Plan

Dear Mr. Carson:

As requested by Ms. Becky Crockett of your staff, this letter confirms that the Oregon Department of Environmental Quality is in general agreement with attached changes to the Metro Yard Debris Plan. The wording regarding variances for the weekly curbside collection system for yard debris is fine.

Thank you for the opportunity to comment.

Sincerely,

Stephanie Hallock
Administrator
Hazardous and Solid Waste Division

SH:jw:b
G:\YB10121

cc: Dave Rozell, Solid Waste Reduction & Recycling, DEQ

EXHIBIT "A" (Yard Debris Plan)

to Ordinance No. 90-377

Copies of the **Yard Debris Plan**
can be obtained from the
Planning & Development Department
or the Metro Council Office

Agenda Item No. 6.1
Meeting Date: December 27, 1990

Resolution No. 90-1365

FINANCE COMMITTEE REPORT

RESOLUTION NO. 90-1365 ACCEPTING THE FY 1990 COMPREHENSIVE ANNUAL FINANCIAL REPORT (AUDIT) AND SCHEDULE OF FEDERAL FINANCIAL ASSISTANCE

Date: December 21, 1990 Presented by: Councilor Van Bergen

Committee Recommendation: At its December 20, 1990 meeting the Committee voted unanimously to recommend Council adoption of Resolution 90-1365. Voting in favor were Councilors Collier, Gardner, Van Bergen and Wyers. Councilor Devlin was excused.

Committee Discussion/Issues: Susan Clement, KPMG Peat Marwick Audit Manager, presented the Comprehensive Annual Financial Report, the Independent Auditors' Reports in Accordance with the Single Audit Act of 1984 and the Letter to Management. She indicated that the financial report was prepared by the Metro accounting department and Peat Marwick has issued an unqualified opinion on the financial report. In regard to the Management Letter, Peat Marwick has added a comment since the Finance Committee reviewed the Draft Management Letter at its December 6, 1990 meeting. She indicated that the comment is in the nature of a "reportable condition" under standards of the American Institute of Certified Public Accountants, which places it a step above the normal comment in the Management Letter. The subject matter of the comment is a \$1.3 million expenditure in the Solid Waste Operating Fund which exceeds the Council-approved appropriation for the specific category in question. She indicated such an event is of concern to the auditors because it reveals a weakness in the financial management system.

Council staff presented a report expressing concern about: 1) the expenditures in excess of appropriations reported in the FY 1990 audit; and 2) the overstatement of certain budgeted Beginning Fund Balances as compared to the Actual Ending Fund Balances reported in the 1990 audit. The Council staff memo is attached as Exhibit A.

Committee members stated that the information presented by Peat Marwick and Council staff is of great concern to them and concurred with the Council staff recommendation that the appropriate administrative staff return with a written report on why the problems occurred, how they may be corrected and the financial status of the Solid Waste Revenue Fund, including how this problem may affect solid waste rates. Also, Council staff was instructed to review the Management Letter and return to the Finance Committee with recommendations for Committee consideration of items for which staff should take corrective action, and a method for insuring Committee oversight.



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503 221-1646

Memo

EXHIBIT A
(Fin. Comm./Res. 90-1365)

Date: December 20, 1990
To: Finance Committee
From: Donald E. Carlson, ^{DE} Council Administrator
Re: Fiscal Management Performance Indicators from the FY 89-90 Audit

The purpose of this memo is to use data from the FY 89-90 audit to test effectiveness of the District's financial management system. By "financial management system" I include the central budget and accounting operations in the Finance and Administration Department plus the fiscal management operations in each operating entity. Both parts are important to a responsive, responsible system.

The performance indicators tested are 1) the extent to which expenditures exceeded Council adopted budget and appropriation limits and 2) the accuracy of Actual Ending Fund Balances (FY 89-90) compared to Budgeted Beginning Fund Balances in the following fiscal year (FY90-91). The data used is taken from the Draft Annual Financial Report distributed at the December 4, 1990 Finance Committee meeting.

Exhibit A shows that there were seven (7) instances of expenditures in excess of appropriations during FY 89-90. They ranged in size from \$305 in Capital Outlay category in the Administration Division in the Zoo Operating Fund to \$1,342,826 in the Materials and Services category in the Operations Division in the Solid Waste Operating Fund. It should be pointed out that the FY 89-90 Budget and Schedule of Appropriations contained 15 funds and 145 separate appropriation units. Also, the information in Exhibit A does not mean that funds were expended for unlawful purposes.

Exhibit B shows a comparison of the actual Ending Fund Balances for FY 89-90 with the Beginning Fund Balances included in the FY 90-91 Budget. A positive figure in the third column indicates that there are more resources in the fund than were anticipated in the Budget and the opposite is true if the number is negative. Exhibit B is footnoted to note the changes in the structure of funds between the two fiscal years.

Of concern to Council staff is the substantial amount (\$6.3 million) of reduced resources available to the SW Revenue Fund during the current fiscal year. If revenue is realized in the

Fund as budgeted and expenditures occur as budgeted the net result will be that Ending Fund Balance in the fund will be substantially less than anticipated in FY 90-91 Budget. If it is important to maintain the Fund Balance then either expenditures will have to be reduced or revenue increased.

This same concern is held for the apparent reduced resources for the Convention Center Project Capital Fund.

Conclusion and Recommendations

The information contained in these exhibits indicates that there are problems with the District's financial management system. It does not appear that this system is responsive so that necessary budget and appropriation changes are brought to the Council in a timely manner to avoid over expenditures and that it fails to provide information for sound fund balance projections during annual budget deliberations.

Council Staff recommends that the appropriate representatives of the Finance and Administration Department and Solid Waste Department provide information in writing to the Finance Committee which address these problems and suggest solutions. Included in this information should be a report on the SW Revenue Fund which shows revenue and expenditures to date (11/30/90) and projects revenue and expenditures at the end of the fiscal year. The report should be at the appropriation unit level of detail. It should include an analysis of the impact of the reduced actual fund balance (and/or transfers) in the Solid Waste Revenue Fund.

Finance and Administration staff should prepare a similar report on the Convention Center Project Capital Fund.

DEC:lc
Fiscal.mgm

cc: Rena Cusma
Jennifer Sims
Bob Martin
Hal D'Ambrogia

EXHIBIT A

ACTUAL EXPENDITURES EXCEEDING BUDGET AND
 APPROPRIATION AMOUNTS FOR FY 1989-90

<u>Fund/Program</u>	<u>FY 89-90 Approp.</u>	<u>FY 89-90 Actual Exp.</u>	<u>Excess Amount</u>
<u>Zoo Operating Fund</u>			
Administration Division			
Capital Outlay	3,737	4,042	305
Marketing Division			
Personal Services	149,484	150,922	1,438
<u>SW Operating Fund</u>			
Operations Division			
Material & Services	13,119,107	14,461,933	1,342,826
Total Expenditure	13,795,343	14,925,215	1,129,872
<u>Metro ER Commission Fund</u>			
Material & Services	1,641,463	1,663,817	22,354
Capital Outlay	205,663	206,752	1,089
<u>CC Project Mgmt Fund</u>			
Personal Services	78,581	79,686	1,105

EXHIBIT B

COMPARISON OF ACTUAL ENDING FUND BALANCES FOR FY 89-90
WITH BUDGETED BEGINNING FUND BALANCES for FY 90-91

Fund	Column A	Column B	Difference
	FY 1989-90 Actual Ending Fund Bal.	FY 1990-91 Budgeted Beg. Fund Bal	
General Fund	\$ 532,548	\$ 448,000	\$ 84,548
Planning Fund ^A	469,650	279,815	189,835
Zoo Operating Fund	2,341,734	1,493,142	848,592
Zoo Capital Fund	5,686,827	4,715,764	971,063
SW Revenue Fund ^B	14,760,123	14,730,239	29,884
SW Operating Fund ^C	2,649,958	8,500,000	(5,850,042)
SW Debt Fund ^C	0	4,756	(4,756)
SW Capital Fund ^C	3,275,783	3,690,000	(414,217)
St. Johns Res. Fund ^C	26,220,270	26,375,520	(155,250)
Total All SW Funds ^D	46,906,134	53,300,515	(6,394,381)
Building Mgmt Fund	0	0	0
Metro ERC Fund ^E	2,638,101	1,802,961	835,140
CC Proj Mgmt Fund	388,127	302,336	85,791
CC Proj Cap Fund	10,320,942	13,571,252	(3,250,310)
Insurance Fund	3,098,316	2,956,435	138,881
St. Johns R&E Fund	1,884,269	1,934,871	50,602

^A FY 89-90 Fund included both Transportation Planning and Planning & Development functions. FY 90-91 Budget separated these functions into two funds. The Budgeted Fund balance for Transportation Planning was \$204,815 and for Planning & Development was \$75,000.

^B The Revenue fund in FY 89-90 includes all activities related to revenue bond project (Metro East composter)

^C These four funds are consolidated in the SW Revenue Fund for FY 90-91 the amounts in Column B are budgeted as transfers to the SW Revenue Fund in FY 90-91.

^D This "Total all SW Funds" portrays actual and budgeted fund balances for all SW activities now included in the Revenue Fund.

^E This fund is the "MERC Fund" for FY 89-90 (Column A) and the "Convention Center Operations Fund" for FY 90-91 (Column B)

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF ACCEPTING THE)
REPORT OF INDEPENDENT CERTIFIED)
PUBLIC ACCOUNTANTS ON METRO'S)
FY 1990 COMPREHENSIVE ANNUAL)
FINANCIAL REPORT AND SCHEDULE OF)
FEDERAL FINANCIAL ASSISTANCE)

RESOLUTION NO. 90-1365

Introduced by the
Council Finance
Committee

WHEREAS, the Metropolitan Service District is required to have an annual independent audit of their financial statements and schedule of federal financial assistance; and

WHEREAS, the Metropolitan Service District has prepared the required annual financial statements and schedule of federal financial assistance; and

WHEREAS, KPMG Peat Marwick has completed the audits required and prepared their reports thereon; and

WHEREAS, the Council Finance Committee has reviewed and considered the annual financial report, schedule of federal financial assistance and the reports thereon presented by KPMG Peat Marwick dated November 9, 1990; and

WHEREAS, the Council Finance Committee recommends accepting these reports; now therefore,

BE IT RESOLVED,

That the Council of the Metropolitan Service District hereby accepts the Comprehensive Annual Financial Report and Schedule of Federal Financial Assistance and approves its submittal to the proper agencies.

ADOPTED by the Council of the Metropolitan Service District the _____ day of _____, 1990.

Tanya Collier, Presiding Officer

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 90-1365 FOR THE PURPOSE OF ACCEPTING THE INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS REPORT ON METRO'S COMPREHENSIVE ANNUAL FINANCIAL REPORT AND SCHEDULE OF FEDERAL FINANCIAL ASSISTANCE

Date: December 6, 1990

Presented by: Jennifer Sims

FACTUAL BACKGROUND AND ANALYSIS

KPMG Peat Marwick has completed their field work for the audit of Metro's Comprehensive Annual Financial Report and Schedule of Federal Financial Assistance. Metro Accounting staff are in the final stages of drafting the two reports noted above as well as formulating responses to the draft Letter to Council and Executive Officer. Don Cox, Chief Accountant, and Susan Clement, Audit Manager for KPMG Peat Marwick, are present to answer questions of the Council.

The reports are presented in draft form at this time in order to provide the Council an opportunity for input and adequate review time prior to final acceptance. The reports must be submitted to the State of Oregon Secretary of State's Office no later than December 31, 1990. Copies of the draft reports have previously been provided to the Council.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends acceptance of the reports upon completion of the final draft and the submission of same to the appropriate government agencies.

Agenda Item No. 6.2
Meeting Date: December 27, 1990

Resolution No. 90-1337

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF ESTABLISHING	)	RESOLUTION NO. 90-1337
ECONOMIC INCENTIVES THAT)	
ENCOURAGE GREATER WASTE	)	Introduced by Rena Cusma,
REDUCTION AND RECYCLING	)	Executive Officer

WHEREAS, Environmental Quality Commission Order SW-WR-89-01 paragraph 4M(a) requires that Metro "conduct a study of the effectiveness of present rate incentives at reducing waste, and possible modifications to the rate structure that would further encourage the recovery of paper products, yard debris, metals, lumber, other salvageable building materials, asphalt, and other materials"; and

WHEREAS, The Metro Council adopted Ordinance No. 89-290 which amended the Waste Reduction Program to include a plan for accomplishing the EQC Order SW-WR-89-01; and

WHEREAS, Metro conducted a study of existing rate incentives and submitted a report to the Department of Environmental Quality (DEQ) in January [~~1991~~] 1990; and

WHEREAS, Both the DEQ and Metro Council requested that additional analysis of rate incentives be conducted by October 1, 1990; and Metro has completed such analysis with review by the Waste Reduction Subcommittee and the Solid Waste Policy Committee; and

WHEREAS, The Metro Council has adopted Ordinance No. 88-266, the Regional Solid Waste Management Plan, which established the policy that Metro shall provide financial support for source separation programs, to produce high-grade select loads and to carry out other waste reduction programs; and

WHEREAS, The Waste Reduction Chapter of the Regional Solid Waste Management Plan, adopted by Ordinance No. 89-315, states that Metro shall utilize rate incentives to encourage source separation of yard debris and recovery of recyclable materials at material recovery facilities; and

WHEREAS, the transition in February 1991 to a completely weight-based fee system at Metro facilities presents an opportunity to improve the current rate incentive related to self-haul delivery of recyclables to transfer stations; and

WHEREAS, the installation of scales and conversion to weight-based rates at one of the major yard debris processors and the potential for scales at the other major processor presents an opportunity to maximize the use of tip fees at transfer stations to encourage diversion of yard debris to processors; and

WHEREAS, The resolution was submitted to the Executive Officer for consideration and was forwarded to the Council for approval; now therefore,

BE IT RESOLVED:

That the Metro Council approves the following recommendations arrived at in the Analysis of Economic Incentives to Increase Recycling:

1. That transfer and material processing stations be designed [~~to the maximum extent feasible~~] to provide convenient drop-off of recyclables outside the weigh scales for non-commercial haulers at no charge.
2. That solid waste disposal rates at Metro transfer stations consider the following:
 - A. (5.02.025) By February 1, 1991, a recycling credit of a minimum of \$3.00 per load at existing transfer stations for public haulers in cars and pickups, and
 - B. (5.02.070) By February 1, 1991, a special yard debris rate at transfer stations, [~~based on disposal costs,~~] that is expected to be less than the fee for waste but more than the fee charged at private yard debris processors, and

- C. (5.02.045(d)) By July 1, 1991, franchised high grade material recovery centers must market 30% of their delivery tonnage in order to be eligible for the User Fee waiver, and
 - D. (5.02.080) By July 1, 1991, the post-collection recycling incentive shall be eliminated.
3. In order to minimize the residual waste from the Mass Compost Facility, Metro and Riedel shall discuss means to identify and encourage haulers to establish special collection methods that enable more food waste to be delivered to the Compost Facility.
 4. Solid Waste Department staff shall develop a proposal for a loan program to be jointly administered by Metro and the Portland Development Commission that would fund recycling businesses unable to get 100% conventional financing.
 5. The Local Government Waste Reduction Program shall be modified as shown in Attachment A to include levelized collection rates (the per-can charge for each additional can is constant).
 6. Metro staff shall conduct [~~periodic~~] yearly reviews of economic incentives in order to evaluate the

effectiveness of current incentives and opportunities
for new incentives.

ADOPTED by the Council of the Metropolitan Service
District this _____ day of _____, 1990.

Tanya Collier, Presiding Officer

TP:lc
November 27, 1990
INCENT\SW901337.RES

ATTACHMENT A

ANNUAL WASTE REDUCTION PROGRAM FOR LOCAL GOVERNMENT

Year 1 of A Five Year Plan (1990-1995)

Regional Reduce, Reuce, Recycle, Recover Standards

II. Residential Curbside

K. Each local government shall develop a rate structure that provides an incentive to reduce waste. The rate structure shall specify that the per unit disposal charge for high-volume service is equal to or greater than the per-unit charge for low-volume service higher per unit disposal charges for higher volume setouts. This includes:

1. a mini-can option for which the disposal charge per unit volume for a mini-can is equal to or less than the disposal charge per unit volume for a standard 32 gallon can, or
2. a weight based disposal rate that makes use of a sliding rate scale such that the disposal charge per unit of weight for garbage setouts of greater weight is equal to or greater than the per unit charge for setouts of lesser weight is less for garbage setouts of lesser weight than for garbage setouts of greater weight.
3. ~~The disposal rate for two 32-gallon cans or a single 60-gallon can shall be at a higher charge per unit volume than for one 32-gallon can. The disposal rate for a third can or for a single 90-gallon can shall be at a higher charge per unit volume than for two cans or a single 60-gallon can.~~
3. Local governments that establish rate structures with the same per unit charge regardless of level of service shall evaluate the potential for switching to variable rates after curbside collection is weekly with containers.



METRO

Memorandum

2000 S.W. First Avenue
Portland, OR 97201-5398
503-221-1646

DATE: December 12, 1990
TO: Councilor Judy Wyers
FROM: *BM* Bob Martin, Director of Solid Waste
RE: Your Memo of November 15, 1990

The following reiterates each of your six questions before answering them:

1. "I would like for staff to review Metro's past and present practice with regard to incentives, and for staff to explain how and why the proposed incentives differ".

Incentive #1. Self-haul delivery of recyclables to transfer stations.

Current Status: Metro charges a flat fee of \$15 for the disposal of self-haul loads. A discount is given to self-haulers who bring in source-separated recyclables with their waste. The discount is given for a minimum of 1/2 cubic yard (3 grocery bags) of recyclables.

Proposed: The proposed incentive has three parts: (1) new transfer stations will provide areas for drop off of recyclables prior to crossing the scales, (2) a \$3 discount in the tip fee at Metro South and Metro Northwest if the hauler has recyclables, (3) haulers have the option of making two trips through the facility to drop off recyclables prior to being weighed for waste if they have more than \$3 worth of recyclables.

Explanation: The proposal provides a free drop-off opportunity without Metro paying or charging for recyclables. Paying for recyclables would discourage use of established collection programs.

Incentive #2. Volume-based collection rates with mini-can service.

Current: Exists locally within the region.

Proposed: Local governments implement volume-based rates in two steps. Levelized rates (constant per-unit volume fee) are first established. Once curbside collection is well established, opportunities for variable rates (increasing per-unit volume fees) would be examined further.

Explanation: Local government representatives and haulers believe that implementation of volume-based rates should start with levelized rates. They think that variable rates may not increase recycling, would discriminate against larger families, and could result in greater illegal dumping.

Incentive #3. Diversion of source-separated yard debris from Metro facilities.

Current: At Metro South there is no discount for clean yard debris. At St. Johns, commercial loads are charged \$25/ton for clean yard debris rather than the garbage fee of \$48/ton. Self-haul loads at St. Johns are charged \$10/trip rather than \$15/trip.

Proposed: All haulers will be weighed. There will be a discounted fee for clean yard debris that will be lower than the garbage tip fee, but more than the fee currently charged at private yard debris processors. This fee structure would be: \$35/ton for clean yard debris at processors, \$45/ton for clean yard debris at transfer stations, and \$55/ton for waste at transfer stations.

Explanation: An intermediate rate for clean yard debris provides incentive for haulers to separate it from their waste without diverting a significant amount from the processors.

Incentive #4. Recycling rebates for haulers.

Current: Does not exist in the Metro region.

Proposed: Do not implement.

Explanation: This incentive could not be administered equitably by Metro. Though it is attractive to push the supply side through subsidies to realize short-term gains, a more efficient market will be established through technical assistance in collection and increased demand. Local governments are establishing recycling standards as part of the Local Government Waste Reduction Programs. They will develop plans to cover hauler costs, such as including the cost of collecting recyclables as a part of the franchise rates.

Incentive #5. Routing of food waste to the MSW Compost facility.

Current: Does not exist in the Metro region.

Proposed: Metro and Riedel discuss opportunities for this type of incentive.

Explanation: The cost of landfilling residue from the Compost Facility could be reduced if high-organic loads are delivered to the facility. This incentive would encourage haulers to create special collection routes or make other changes that might be need to deliver such loads to the facility.

Incentive #6. Recovery of Construction/Demolition Debris.

Current: Does not exist in the Metro region.

Proposed: Defer consideration of this incentive to the procurement of the special waste facilities.

Explanation: There are no construction/demolition debris recovery facilities currently in the region. It is impossible to evaluate the need for incentives without knowing what kind of facilities will exist and what the tip fee would be without special incentives. Therefore, the recommendation is to defer the evaluation of this incentive to procurement of the special waste management system.

Incentive #7. Support of Mixed Waste Paper Collection Programs.

Current: Metro currently offers a \$2/ton payment to processors for mixed paper recovered from loads of 50% to 79% mixed paper. Mixed paper is defined as "uncontaminated, recyclable paper exclusive of newspaper and cardboard". The incentive has been totally ineffective.

Proposed: Do not increase the payment to the level that would be required to subsidize the mixed waste paper market.

Explanation: In the short-term, this could divert more waste paper. Long-term market efficiency will result from strong demand for waste as feedstock, not artificial supports. Such interference may cause undesirable market impacts as low value material approaches the value of higher value material. Could reduce incentive to source-separated material.

Incentive #8. User-fee Waivers

Current: Metro Code Chapter 5.02 states that "The User Fee shall be waived at material recovery facilities that accomplish recycling as a primary operation".

Proposed: Facilities must recover 30% of incoming waste in order to be eligible for the user fee waiver.

Explanation: The proposed incentive should encourage facilities to increase recovery levels in order to be eligible for the waiver.

Incentive #9. Recycling Credits for Non-Profit Charitable Organizations

Current: Implemented (Ordinance No. 90-362).

Proposed: No Change.

Incentive #10. Metro Recycling Business Development Revolving Loan Fund

Current: Does not exist in the Metro region.

Proposed: Metro research opportunities for creating a loan program to fund recycling businesses unable to get 100% conventional financing. The program would be jointly administered by the Portland Development Commission and Metro.

2. "What would be the advantages and disadvantages of (Metro) providing a straight rebate for commercial source-separated loads?"

Advantages:

1. Haulers who market commercial recyclables would receive money to help pay for collection costs and/or to market low value material.

Disadvantages:

1. The money for the program would come from higher tip fees charged on commercial and residential waste. There is no feasible way for a higher fee to be charged just on commercial waste. Therefore, residential haulers would pay for the incentive but not be eligible for the rebate.
 2. The recycling potential of waste varies among different types of commercial generators. Some commercial haulers would pay higher tip fees and not get the rebate because of differences in the recycling potential of their accounts, regardless of the effort they make to collect recyclables.
3. "What are the pros, cons, and cost impacts of significantly increasing the per ton rebate for mixed paper loads as a means of encouraging this type of recycling?"

Pros:

1. Profitability of handling low or no value material could be guaranteed regardless of market conditions. Processors could continue to attract mixed waste paper when prices drop.

Cons:

1. An artificial per-ton payment or price support ignores market conditions. Undesirable market impacts could result, such as displacement of market niche for a higher value commodity.
2. In general, government rebates like this could accentuate poor market conditions. However, the mixed waste paper market is an

international market and the impact of the Metro region may be minimal.

3. Such a rebate does little to improve the poor market conditions that are the cause of low recovery rates for mixed waste paper.

4. If one commodity is subsidized, and one collection point subsidized (mixed paper at high-grade material recovery facilities), why should not all secondary materials and all collection points be subsidized?

5. Impact on the region's tip fee would be small for one material at one facility; much greater for more materials at more locations.

Cost Impacts

The market price for mixed waste paper was about \$25/ton in 1987 and 1988 and fell to \$0 during 1989. At the same time OPRC stopped accepting mixed waste paper. Based on 1987-1989 market prices, the rebate would have been as high as \$25/ton.

4. "How can we revise the process for establishing the special yard debris rate referenced in Paragraph 2B of the resolution to clearly establish an incentive for the public?"

Your revision to eliminate "based on disposal costs" accomplished this. This means that haulers who do not bring clean yard debris to the transfer stations (including those who choose to home compost or use yard debris depots) pay a higher tip fee on mixed waste to subsidize the cost of assuring that source-separated yard debris is recycled at transfer stations.

5. "What types of incentives can be developed to encourage businesses or projects which focus on reuse of building materials?"

Please see Incentive #6.

6. "What steps can we take to ensure that drop-off is available outside the weigh scale at all facilities?"

Available space at Metro South and Metro Northwest will be used for weigh scales and household hazardous waste collection. Creating new space would require major investment. Given the cost and the alternatives that the public has for recycling, the proposed recommendation of providing free drop-off through a tip fee discount appears to be the best alternative.



METRO

2000 S.W. First Avenue
Portland, OR 97201-3398
503 221-1646

Memorandum

SOLID WASTE COMMITTEE REPORT
Resolution 90-1337
Attachment No. 1

TO: Debbie Gorham, Waste Reduction Manager
FROM: Judy Wyers, Councilor *JW*
DATE: November 15, 1990
SUBJ: Waste reduction and recycling incentives

I wanted to give you advance notice of some issues and concerns I will be raising when the Solid Waste Committee considers this agenda item next Tuesday.

First, I would like for staff to review Metro's past and present practice with regard to incentives, and for staff to explain how and why the proposed incentives differ.

Second, in my view it is important for Metro to encourage recycling by commercial businesses. It seems to me that we need a way to encourage concerted collection efforts. What would be the advantages and disadvantages of providing a straight rebate for commercial source-separated loads?

Third, what are the pros, cons, and cost impacts of significantly increasing the per ton rebate for mixed paper loads as a means of encouraging this type of recycling?

Fourth, how can we revise the process for establishing the special yard debris rate referenced in Paragraph 2B of the resolution to clearly establish an incentive for the public?

Fifth, what types of incentives can be developed to encourage businesses or projects which focus on reuse of building materials?

Sixth, the proposed resolution states that transfer and processing stations should be designed to the maximum extent feasible to provide convenient drop-off of recyclables for non-commercial haulers at no charge. What steps can we take to ensure that drop-off is available outside the weigh scale at all facilities?

I'm looking forward to your presentation on this important subject, and I'll be interested to hear from the department about facts and policy considerations which impact resolution of the issues highlighted in this memorandum.

JW:KP:pa
K1:1115JUDY

cc: Council Solid Waste Committee
Bob Martin

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 90-1337 FOR THE PURPOSE
OF ESTABLISHING INCENTIVES THAT ENCOURAGE GREATER WASTE
REDUCTION AND RECYCLING

December 18, 1990

Presented by: Debbie Gorham
Terry Petersen

Metro staff has completed an evaluation of economic incentives that could be used to reduce waste. The types of incentives included in the analysis are those that are related to collection rates or disposal fees. Incentives that local governments, as well as Metro, are responsible for are included.

Resolution No. 90-1337 includes economic incentives that staff recommends for adoption. A summary that includes all incentives examined and action required for implementation is shown on the reverse side.

BACKGROUND

Environmental Quality Commission Order SW-WR-89-01 required that by January 1, 1990, Metro "conduct a study of the effectiveness of present rate incentives at reducing waste, and possible modifications to the rate structure that would further encourage the recovery of paper products, yard debris, metals, lumber, other salvageable building materials, asphalt, and other materials". A report was submitted to the DEQ that described the effectiveness of existing incentives and Metro's options for possible future incentives.

The DEQ and the Metro Council Solid Waste Committee requested that staff complete a more in-depth analysis of alternative incentives by October 1, 1990. To accomplish this, a series of meetings have been held to get ideas and reviews from haulers, processors, local governments, and recycling advocates. A draft report and update was presented to the Solid Waste Technical Committee on August 31. An oral status report was delivered to the Council Solid Waste Committee on September 4. The draft was reviewed by the Waste Reduction Subcommittee on September 5 and the Solid Waste Policy Committee on September 14. In October, meetings were held with members of the Association of Oregon Recyclers, Recycling Advocates, and the Oregon Environmental Council.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends adoption of Resolution No. 90-1337, approving recommendations for economic incentives.

SUMMARY: IMPLEMENTATION

	<u>TARGET DATE</u>	<u>ACTION REQUIRED</u>
GENERATOR INCENTIVES		
1. Self-Haul Recycling at Transfer Stations		
a. Provide drop-off of recyclables at no charge. Weight-based fee system provides incentive to separate recyclables. Recycling credit of \$3.00 is given to all customers who bring recyclables to existing facilities.	FY90/91	DO NOT IMPLEMENT
b. Same as a. but at Metro South and Metro East haulers have option of crossing scales twice in order to drop off heavy recyclables prior to weighing of waste.		AMEND METRO CODE CHAPTER 5.02 (SOLID WASTE DISPOSAL FEES)
c. Do not provide free drop off. Apply full tip fee on all material delivered to transfer stations to encourage use of curbside and private depots.		DO NOT IMPLEMENT
2. Volume-Based Collection Rates With Mini-Can Service		
a. Charge for each additional can is constant (levelized rates).	FY90/91	MODIFY LOCAL GOVERNMENT WORK PLAN
b. Per-can charge increases with each additional can (variable rates). Exemptions are provided for large families.		DO NOT IMPLEMENT
HAULER INCENTIVES		
3. Diversion of Source-Separated Yard Debris from Metro Facilities		
a. Apply full tip fee at Metro facilities to provide maximum incentive for delivery to private yard debris processors. Transfer stations recover clean yard debris for delivery to processors.	FY91/92	DO NOT IMPLEMENT
b. A "three-tier" rate structure in which the yard debris fee at transfer stations is less than the fee for waste but more than the yard debris fee at private processors.		AMEND METRO CODE CHAPTER 5.02 (SOLID WASTE DISPOSAL FEES)
4. Recycling "Rebates" for Haulers		
Metro increases the tip fee to create a fund to pay haulers on a per ton basis for material collected and marketed.		DO NOT IMPLEMENT
5. Routing of food Waste to the MSW Compost Facility		
Metro and Riedel establish a tip fee incentive that encourages haulers to create special collection routes for high-organic loads.	FY91/92	METRO AND RIEDEL DISCUSSIONS
6. Recovery of Construction/Demolition Debris		
a. Local governments increase disposal fees at out-of-region limited-purpose landfills to levelize fees with recovery facilities.	FY94/95	DEFER TO PROCUREMENT OF SPECIAL WASTE SYSTEM
b. Utilize Metro's flow control authority and franchises to divert material from landfills to recovery facilities.	FY94/95	DEFER TO PROCUREMENT OF SPECIAL WASTE SYSTEM
PROCESSOR INCENTIVES		
7. Support of Commercial Mixed-Waste Paper Collection Programs		
a. Increase the per ton payment of the existing \$2 per ton incentive.		DO NOT IMPLEMENT
b. Eliminate existing \$2 per ton incentive because it is not effective.	FY91/92	AMEND METRO CODE CHAPTER 5.02 (SOLID WASTE DISPOSAL FEES)
c. Financial support is provided to private processors so that collection programs are not interrupted during market downturns. Payments are based on tonnage marketed. Payments decrease as the market improves.		DO NOT IMPLEMENT
8. User Fee Waiver		
a. Maintain current fee waiver but establish a minimum recovery level to determine eligibility for waivers.	FY91/92	AMEND METRO CODE CHAPTER 5.02 (SOLID WASTE DISPOSAL FEES)
b. Make the current user fee waiver at high-grade facilities dependant on the facility's recovery level.		DO NOT IMPLEMENT
9. Recycling Credits for Non-Profit Charitable Organizations	FY90/91	IMPLEMENTED (ORDINANCE No. 90-352)
10. Loan Program		
Loan program to fund recycling businesses unable to get 100% conventional financing. Ten-year program administered jointly by Portland Development Commission and Metro.		LOAN PROGRAM PROPOSAL

SOLID WASTE COMMITTEE REPORT

RESOLUTION NO. 90-1337, FOR THE PURPOSE OF ESTABLISHING INCENTIVES THAT ENCOURAGE GREATER WASTE REDUCTION AND RECYCLING

Date: November 21, 1990 Presented by: Councilor Judy Wyers

Committee Recommendation: At the November 20, 1990 Solid Waste Committee meeting, Councilors Collier, DeJardin, Saucy and Wyers voted unanimously (Wyers; 4/0 vote) to recommend Council adoption of Resolution No. 90-1337 as amended. Councilor Buchanan was excused.

Committee Discussion/Issues: Bob Martin, Director of Solid Waste; Debbie Gorham, Waste Reduction Manager; and Terry Peterson, Associate Solid Waste Planner; gave staff's report.

Ms. Gorham noted the resolution was in response to EQC's Order SW-WR-89-01 directing Metro conduct a study of the effectiveness of present rate incentives at reducing waste...

Mr. Petersen listed and explained the 10 incentives. With regard to Incentive No. 1 and said the current procedure for "Self-haul" was a discounted tip fee and said staff proposed a \$3/credit. He said there would be no significant impact on regional recycling levels but tip fees on remaining waste could be decreased because Metro would no longer pay for recyclables.

Regarding Incentive No. 2, Mr. Petersen pointed out that Metro has no authority to set collection rates since this is a local function. Metro can establish region-wide standards for waste reduction and staff proposes the curb can charge for higher volume service be at least equal to per can charge for low volume service and could significantly increase recycling from the residential waste stream and would not impact state or Metro tip fees. Mr. Petersen said the issue could be viewed as unfair to large households and could result in illegal dumping if the per can charge is too high.

Regarding Incentive No. 3, Mr. Petersen said the current charge for yard debris was \$25/ton at St. Johns and staff proposed the three tier rate and assisting processors. He said the rate would eventually be \$45 per ton.

In discussing Incentive No. 4, Mr. Petersen said there was no current procedure for hauler rebates and staff proposed local government responsibility. Staff's concept was to pay haulers for the material they marketed, similar to Lane County practice. He said haulers were paid as much as \$175 per ton there. He said it was an alternative method of funding collection programs. He said an alternative to this rebate would be to establish standards and ensure the cost of implementing those standards was covered through collection rates.

SOLID WASTE COMMITTEE REPORT

Resolution No. 90-1337

November 21, 1990

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Mr. Petersen said Incentive No. 5 related to directing routes to the Riedel Composter facility to ensure it got the proper solid waste.

In regard to Incentive No. 6, Mr. Petersen said there was no current procedure for construction/demolition debris and proposed a procedure be dealt with as part of the procurement process for select waste.

Regarding the incentive for mixed waste paper collection (No. 7), Mr. Petersen said the current procedure was to offer a \$2 payment per ton for mixed waste paper recovered. He said that payment was made regardless of market price, but said the payment has had no impact on the recovery of mixed waste paper. He said staff proposed, instead of market subsidies, that market development be depended upon to increase the recycling level for that material and eliminate the \$2 payment.

Regarding user fee waivers (Incentive No. 8), Mr. Petersen said the Metro Code stated user fee shall be waived at facilities which accomplished recycling as a primary operation. He said there were no standards for "primary" and therefore no incentives for facilities to improve their standards and become eligible for the user fee waivers. Staff proposed minimum recovery levels facilities had to meet to be eligible for the user fee waiver.

In regard to Incentive No. 9, Mr. Petersen said the non-profit recycling credits listed were already implemented.

Regarding Incentive No. 10, Ms. Gorham explained the Metro Recycling Business Development Revolving Loan Fund would assist market development through a revolving loan program. Councilor Wyers referred to her November 15, 1990 memorandum (see Attachment No. 1 to this report) "Waste Reduction and Recycling Incentives." Ms. Gorham explained Metro and other entities would match funds. Councilor Wyers asked how the revolving loan fund differed from tax credits.

The Committee opened a public hearing and heard testimony on the issues.

Kip Childs, Oregon Environmental Council (OEC), said the OEC strongly supported, regarding the self-haul incentive, making recycling depots and drop boxes centers available before the transfer stations. With regard to the volume-based collection rates, the OEC supported a sliding scale that would result in an increased fee for additional cans to provide an incentive to encourage customers to reduce waste. The OEC supports the

SOLID WASTE COMMITTEE REPORT

Resolution No. 90-1337

November 21, 1990

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source-separated yard debris and think it appropriate the fee be in between the normal tipping fee and the fee charged for dropping off at the processor. He said the OEC also supported rebates for collection and the marketing of recyclables. He said they knew it was controversial, but the OEC did support it. He said they believed it should be supported by increased tipping fees. Mr. Childs said one incentive that had been dropped was the possibility of increasing the collection and recycling of construction/demolition materials. The OEC believed that was an important issue which required further study because approximately 17 percent of transfer station waste was construction/demolition material. He said that incentive deserved further study. The OEC also supported continued payments to processors for accepting mixed waste. He noted staff said \$2 did not result in significant recycling. He said a higher incentive rate should be looked at.

Jeanne Roy, Recycling Advocates, recommended a rate be set for yard debris lower than mixed waste but higher than the processor's fee. Recycling Advocates recommended the fee be no higher than \$45 per ton. Recycling Advocates recommend the payment to processors of 50-79 percent high graded paper be increased to \$18 per ton and given only for the tonnage of paper recycled. She said if the market price rose, the amount of the rise could be subtracted from the \$18. She said Metro could estimate the extra amount of paper which would be recycled and budget a certain amount so that the incentive would not be open-ended. Recycling Advocates recommended an incentive be established for commercial haulers of cardboard. She said they could be paid for the extra they recycled over a based amount. She said if they were paid \$25 per ton, and the amount recycled increase from 41 to 50 percent, Metro would pay \$523,175. Metro would then be paying less per ton than what they paid the non-profit recycling agencies and 21,000 additional tons of cardboard would be recycled. Recycling Advocates recommended Metro establish an incentive for accepting and marketing of reusable building materials using the same formula for non-profit recycling agencies. Ms. Roy said building materials were included in DEQ's order to Metro, but not addressed by staff. Ms. Roy distributed recommended amendments to the resolution based on Recycling Advocate's recommendations.

Ms. Roy additionally commented that Recycling Advocates would rather see free drop-off of recyclables outside Metro South and Metro Northwest Stations than implementation of the \$3 credit. They encouraged the increase flow of food waste to the composting facility. They did not want a business loan program administered by Metro because Metro had difficulty administering the 1% for

SOLID WASTE COMMITTEE REPORT

Resolution No. 90-1337

November 21, 1990

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Recycling grants. Recycling Advocates also recommended the Economic Incentives report include a tip fee impact for each incentive and explain the assumptions.

Estle Harlan, Tri-County Council, noted she had served on the Waste Reduction and Yard Debris Committees from their inception. Tri-County advocates, regarding Incentive No. 1, separate recyclable drop off points and said if not possible, then the \$3 discount was the most simple and effective method. Tri-County Council recommended with regard to Incentive No. 2, to continue the mini-can and the level can rate. Tri-County Council agreed with the recommendation for Incentive No. 3 on yard debris and noted processors planned to install scales also. Ms. Harlan said Incentive No. 4 presented the most concern. She said the issue should be simple and it seemed that the haulers themselves should push for rebates. She said it presented difficulties because haulers had no way of collecting their tip fees in some areas. She said if the incentive were attached to the commercial rates, the small haulers would be adversely affected because he/she would pay high tip fees but have very little chance for rebate. Tri-County Council asked that Metro not collect from the haulers and then try to give money back. Tri-County Council said if Incentive No. 5 could be implemented, it was an acceptable incentive. Ms. Harlan said the haulers were trying very hard and would introduce new programs on multi-family and office paper collection.

Dave Phillips, Clackamas County, recommend drop off facilities before the gate house also. He supported the mini-can collection rate incentive and said Clackamas County had had real success with a similar measure. He said Incentive No. 4, Recycling Rebates, had real problems and said it did not make sense to raise disposal fees and then immediately back to the haulers. He said there were no markets for materials recovery. He said recovery of construction/demolition was not being ignored but would come before the Committee in the Special Waste Chapter. He concurred with directing special loads to the composter facility. He concurred over all on staff's incentives recommendations.

Merle Irvine, Wastech, Inc., said the incentive to recycle was Metro's disposal fee especially as it increased. He concurred with Ms. Roy that the \$2 incentive be made larger. He supported composter routing. He recommended staff research the controversial issues further and incorporate the incentives into next year's work program. Mr. Irvine supported Incentive No. 8 to increase recycling center's accountability.

SOLID WASTE COMMITTEE REPORT

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November 21, 1990

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The Committee amended BE IT RESOLVED, Section 1 to read: "That transfer and material processing stations be designed [to the maximum extent feasible] to provide convenient drop-off of recyclables outside the weigh scales for non-commercial haulers at no charge."

The Committee amended BE IT RESOLVED, Section 2(B) to read: "(5.02.070) by February 1, 1991, a special yard debris rate at transfer stations [based on disposal costs,] that is expected to be less than the fee for waste but more than the fee charged at private yard debris processors, and." Councilor Wyers said incentives do not have to relate to disposal costs.

The Committee amended BE IT RESOLVED, Section 6 with the deletion of the word "periodic" to be replaced by "yearly."

Councilor Wyers said the issues were complicated. She said she would take the issues raised tonight and fashion some sort of a work program and come back and address some of the questions raised in her memorandum as well as those raised in testimony at this meeting. The Committee concurred with Councilor Wyers' plan and amendments.

The Committee voted unanimously to recommend Resolution No. 90-1337 as amended to the full Council for adoption.

STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 90-1337 FOR THE PURPOSE OF ESTABLISHING INCENTIVES THAT ENCOURAGE GREATER WASTE REDUCTION AND RECYCLING

November 20, 1990

Presented by: Debbie Gorham
Terry Petersen

Metro staff has completed an evaluation of economic incentives that could be used to reduce waste. The types of incentives included in the analysis are those that are related to collection rates or disposal fees. Incentives that local governments, as well as Metro, are responsible for are included.

Resolution No. 90-1337 includes economic incentives that staff recommends for adoption. A summary that includes all incentives examined and action required for implementation is shown on the reverse side.

BACKGROUND

Environmental Quality Commission Order SW-WR-89-01 required that by January 1, 1990, Metro "conduct a study of the effectiveness of present rate incentives at reducing waste, and possible modifications to the rate structure that would further encourage the recovery of paper products, yard debris, metals, lumber, other salvageable building materials, asphalt, and other materials". A report was submitted to the DEQ that described the effectiveness of existing incentives and Metro's options for possible future incentives.

The DEQ and the Metro Council Solid Waste Committee requested that staff complete a more in-depth analysis of alternative incentives by October 1, 1990. To accomplish this, a series of meetings have been held to get ideas and reviews from haulers, processors, local governments, and recycling advocates. A draft report and update was presented to the Solid Waste Technical Committee on August 31. An oral status report was delivered to the Council Solid Waste Committee on September 4. The draft was reviewed by the Waste Reduction Subcommittee on September 5 and the Solid Waste Policy Committee on September 14. In October, meetings were held with members of the Association of Oregon Recyclers, Recycling Advocates, and the Oregon Environmental Council.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends adoption of Resolution No. 90-1337, approving recommendations for economic incentives.

TP:jc
October 2, 1990
INCENT\STAF1002.RPT

ANALYSIS OF ECONOMIC INCENTIVES TO INCREASE RECYCLING

November 20, 1990

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ATTACHMENT A -- A Proposed Rate Incentive to Promote Recycling by Self-Haulers at the Metro South Transfer Station

SUMMARY: RECOMMENDATIONS

GENERATOR INCENTIVES

1. Self-Haul Recycling at Transfer Stations

- a. Provide convenient drop-off of recyclables at no charge. Weight-based fee system provides incentive to separate recyclables. Recycling credit of \$3.00 is given to all customers who bring recyclables to existing facilities.
- b. Same as a. but at Metro South and Metro East haulers have option of crossing scales twice in order to drop off heavy recyclables prior to weighing of waste.
- c. Do not provide free drop off. Apply full tip fee on all material delivered to transfer stations to encourage use of curbside and private depots.

2. Volume-Based Collection Rates With Mini-Can Service.

- a. Charge for each additional can is constant (levelized rates).
- b. Per-can charge increases with each additional can. Exemptions are provided for large families.

HAULER INCENTIVES

3. Diversion of Source-Separated Yard Debris from Metro Facilities

- a. Apply full tip fee at Metro facilities to provide maximum incentive for delivery to private yard debris processors. Transfer stations recover clean yard debris for delivery to processors.
- b. A "three-tier" rate structure in which the yard debris fee at transfer stations is less than the fee for waste but more than the yard debris fee at private processors.

4. Recycling "Rebates" for Haulers

Metro increases the tip fee to create a fund to pay haulers on a per ton basis for material collected and marketed.

5. Routing of Food Waste to the MSW Compost Facility

Metro and Riedel establish a tip fee incentive that encourages haulers to create special collection routes for high-organic loads.

6. Recovery of Construction/Demolition Debris

- a. Local governments increase disposal fees at out-of-region limited-purpose landfills to levelize fees facilities.
- b. Utilize Metro's flow control authority and franchises to divert material from landfills to recovery facilities.

PROCESSOR INCENTIVES

7. Support of Commercial Mixed-Waste Paper Collection Programs

- a. Increase the per ton payment of the existing \$2 per ton incentive.
- b. Eliminate existing \$2 per ton incentive because it is not effective.
- c. Financial support is provided to private processors so that collection programs are not interrupted during market downturns. Payments are based on tonnage marketed. Payments decrease as the market improves.

8. User Fee Waiver

- a. Maintain current fee waiver but establish a minimum recovery level to determine eligibility for waivers.
- b. Make the current user fee waiver at high-grade facilities dependant on the facility's recovery level.

9. Recycling Credits for Non-Profit Charitable Organizations

10. Loan Program

Loan program to fund recycling businesses unable to get 100% conventional financing. Program administered jointly by Portland Development Commission and Metro.

RECOMMENDATIONS

DO NOT IMPLEMENT

IMPLEMENT

DO NOT IMPLEMENT

IMPLEMENT

DO NOT IMPLEMENT

DO NOT IMPLEMENT

IMPLEMENT

DO NOT IMPLEMENT

IMPLEMENT

DEFER TO PROCUREMENT OF SPECIAL WASTE SYSTEM

DEFER TO PROCUREMENT OF SPECIAL WASTE SYSTEM

DO NOT IMPLEMENT

IMPLEMENT

DO NOT IMPLEMENT

IMPLEMENT

DO NOT IMPLEMENT

IMPLEMENT

RESEARCH

SUMMARY: IMPLEMENTATION

	<u>TARGET DATE</u>	<u>ACTION REQUIRED</u>
GENERATOR INCENTIVES		
1. Self-Haul Recycling at Transfer Stations		
a. Provide drop-off of recyclables at no charge. Weight-based fee system provides incentive to separate recyclables. Recycling credit of \$3.00 is given to all customers who bring recyclables to existing facilities.	FY90/91	DO NOT IMPLEMENT
b. Same as a. but at Metro South and Metro East haulers have option of crossing scales twice in order to drop off heavy recyclables prior to weighing of waste.		AMEND METRO CODE CHAPTER 5.02 (SOLID WASTE DISPOSAL FEES)
c. Do not provide free drop off. Apply full tip fee on all material delivered to transfer stations to encourage use of curbside and private depots.		DO NOT IMPLEMENT
2. Volume-Based Collection Rates With Mini-Can Service		
a. Charge for each additional can is constant (levelized rates).	FY90/91	MODIFY LOCAL GOVERNMENT WORK PLAN
b. Per-can charge increases with each additional can (variable rates). Exemptions are provided for large families.		DO NOT IMPLEMENT
HAULER INCENTIVES		
3. Diversion of Source-Separated Yard Debris from Metro Facilities		
a. Apply full tip fee at Metro facilities to provide maximum incentive for delivery to private yard debris processors. Transfer stations recover clean yard debris for delivery to processors.	FY91/92	DO NOT IMPLEMENT
b. A "three-tier" rate structure in which the yard debris fee at transfer stations is less than the fee for waste but more than the yard debris fee at private processors.		AMEND METRO CODE CHAPTER 5.02 (SOLID WASTE DISPOSAL FEES)
4. Recycling "Rebates" for Haulers		
Metro increases the tip fee to create a fund to pay haulers on a per ton basis for material collected and marketed.		DO NOT IMPLEMENT
5. Routing of food Waste to the MSW Compost Facility		
Metro and Riedel establish a tip fee incentive that encourages haulers to create special collection routes for high-organic loads.	FY91/92	METRO AND RIEDEL DISCUSSIONS
6. Recovery of Construction/Demolition Debris		
a. Local governments increase disposal fees at out-of-region limited-purpose landfills to levelize fees with recovery facilities.	FY94/95	DEFER TO PROCUREMENT OF SPECIAL WASTE SYSTEM
b. Utilize Metro's flow control authority and franchises to divert material from landfills to recovery facilities.	FY94/95	DEFER TO PROCUREMENT OF SPECIAL WASTE SYSTEM
PROCESSOR INCENTIVES		
7. Support of Commercial Mixed-Waste Paper Collection Programs		
a. Increase the per ton payment of the existing \$2 per ton incentive.		DO NOT IMPLEMENT
b. Eliminate existing \$2 per ton incentive because it is not effective.	FY91/92	AMEND METRO CODE CHAPTER 5.02 (SOLID WASTE DISPOSAL FEES)
c. Financial support is provided to private processors so that collection programs are not interrupted during market downturns. Payments are based on tonnage marketed. Payments decrease as the market improves.		DO NOT IMPLEMENT
8. User Fee Waiver		
a. Maintain current fee waiver but establish a minimum recovery level to determine eligibility for waivers.	FY91/92	AMEND METRO CODE CHAPTER 5.02 (SOLID WASTE DISPOSAL FEES)
b. Make the current user fee waiver at high-grade facilities dependant on the facility's recovery level.		DO NOT IMPLEMENT
9. Recycling Credits for Non-Profit Charitable Organizations	FY90/91	IMPLEMENTED (ORDINANCE No. 90-362)
10. Loan Program		
Loan program to fund recycling businesses unable to get 100% conventional financing. Ten-year program administered jointly by Portland Development Commission and Metro.		LOAN PROGRAM PROPOSAL

INTRODUCTION

This study evaluates economic incentives that could be used to encourage additional recycling in the Portland metropolitan region. The objectives of the study are to determine the advantages and disadvantages of each option and provide technical data related to each incentive. This draft report has been reviewed by the Metropolitan Service District (Metro) staff and Metro's Policy and Waste Reduction Committees during August and September 1990. The resolution attached to this report will be presented to the Metro Council for consideration during October 1990.

The following sections are included in this report:

- o *Background Information.* Legislation and ordinances that create statutory authority and responsibilities of Metro and local governments are outlined. Their relevance to recycling economic incentives is discussed.
- o *Description of Incentives.* The advantages and disadvantages of each option are outlined.
- o *Technical Data.* When possible, the new recycling that would result from each incentive is estimated.

Incentives Included In This Study

1. *Self-haul recycling at transfer stations.* Three options are considered: (a) Provide convenient drop-off of recyclables at no charge. Weight-based fee system provides incentive to separate recyclables. Recycling credit of \$3.00 is given to all customers who bring recyclables to existing facilities; (b) Same as (a) but at Metro South and Metro East haulers have option of crossing scales twice in order to drop off heavy recyclables prior to weighing of waste; and (c) Do not provide free drop off. Apply full tip fee on all material delivered to transfer stations to encourage use of curbside and private depots.
2. *Volume-based collection rates with mini-can service.* Two options are considered: (a) The collection charge established by local governments is constant for each additional can (levelized rates), and (b) The per-can charge increases with each additional can (variable rates). Exemptions are provided for large families.
3. *Diversion of source-separated yard debris from Metro facilities.* Two options are considered: (a) Apply full tip fee at Metro facilities to provide maximum incentive for delivery to private yard debris processors. Transfer stations recover clean yard debris for delivery to processors, and (b) A "three-tier" rate structure in which the yard

debris fee at transfer stations is less than the fee for waste but more than the yard debris fee at private processors.

4. *Recycling "rebates" for haulers.* Metro raises tip fees in order to make payments to haulers based on the amount of recyclables they collect and market.
5. *Routing of food waste to the Municipal Solid Waste (MSW) Compost Facility.* Disposal of residual material could be reduced if haulers deliver loads with a high proportion of organic material (food waste) to the compost facility. Metro and Riedel could discount the tip fee for loads that meet desired specifications. This reduction in the amount of residue would increase compost sales for Riedel.
6. *Recovery of Construction and Demolition Debris.* Two options to divert construction/demolition debris from landfills to recovery facilities are considered:
(a) Local governments increase disposal fees at out-of-region limited-purpose landfills. This would eliminate the rate differential that causes recoverable material from the Metro region to flow to these out-of-region limited-purpose landfills instead of to in-region processing centers; and (b) Utilize Metro's flow control authority to divert material from landfills to recovery facilities.
7. *Support of Mixed Waste Paper Collection Programs.* Three options are considered:
(a) Increase the per ton payment of the existing \$2.00/ton incentive; (b) Eliminate existing \$2.00/ton incentive because it is not effective; and (c) Financial support is provided to private processors so that collection programs are not interrupted during market downturns. Payments are based on tonnage marketed. Payments decrease as the market improves.
8. *User fee waivers.* Two modifications in the current fee waiver for facilities that accomplish recycling as a primary objective: (a) Maintain the current fee waiver but establish a minimum recovery level to determine eligibility for waivers; and (b) Make the current user fee waiver at high-grade facilities dependent on the facility's recovery level.
9. *Recycling Credits for Non-Profit Charitable Organizations.* Metro would provide recycling credit for qualified organizations that prepare donated goods for re-use or recycling.
10. *Loan Program.* Loan program to fund recycling businesses unable to get 100% conventional financing. Ten-year program administered jointly by Portland Development Commission and Metro.

Evaluation Criteria

- o *Recycling/Waste Reduction.* - The incentive promotes the recycling of material that, in the absence of the incentive, would be landfilled. An incentive that results in a shift of recyclables among programs (e.g. from curbside and depot systems to transfer stations) would not produce the desired result.
- o *Equity.* The incentive should be fair and equitable. This includes a fair apportionment of costs among different groups.
- o *Acceptability.* The incentive must be acceptable to local governments, Metro, haulers, processors, and the community. At best, the incentive would provide alternative choices for the generator and hauler. There should be no adverse market impacts.
- o *Implementation.* The incentive is understandable, requires minimal administration, and poses no major operational problems.
- o *Rate Effects.* The incentive is in agreement with the rate setting policies of local governments and Metro.

BACKGROUND INFORMATION

In order to evaluate economic incentives it is necessary to understand fundamental authorities, responsibilities and constraints.

Statutory Authority

Planning Metro's functional planning authority, delineated in ORS 268.390, enables Metro to prepare and adopt functional plans and recommend or require that plans of cities and counties within the Metro boundary be consistent with these functional plans. The Regional Solid Waste Management Plan (RSWMP) has been adopted as a functional plan and therefore local comprehensive plans must be consistent with its provisions relating to waste management and waste reduction.

Disposal Responsibility for solid waste disposal is defined in ORS 268.317. Metro's authority encompasses rate-setting, franchising, flow control and other regulatory authorities. These powers can be used to influence waste reduction levels by establishing needed waste reduction facilities, setting rates that encourage waste reduction or by controlling the amounts and types of waste going to various facilities.

Rate-setting The authority to establish, maintain and amend rates for disposal, transfer and resource recovery sites or facilities is outlined in ORS 268.317. In addition, ORS 268.515 provides that "a district may impose and collect service or user charges in payment for its services or for the purposes of financing the planning, design, engineering, construction, operation, maintenance, repair and expansion of facilities, equipment, systems or improvements."

Disposal Rates

Disposal rates are set by Metro Council and adopted as Title V, Chapter 2 of the Metro Code following an annual rate analysis and recommendations by Solid Waste staff. Staff recommendations are based on projected operating costs that are derived from projected waste flow data. Rates are set to cover operational and fixed costs.

Components Metro's Solid Waste Department administers three basic fee components which cover specific system expenses:

- o The Base Disposal Rate pays for the transportation and disposal of waste at St. Johns Landfill and Columbia Ridge Landfill in Gilliam County.

- o The User Fee, which is collected on all wastes generated in the region, pays the cost of solid waste programs that are indirectly related to disposal system and transfer station operation. This includes management, administration, engineering and planning, and implementation of Waste Reduction programs. As of July 1990, the User Fee has been modified to a two-tiered approach that is lower at non-Metro facilities and higher at Metro facilities in order to recover higher fixed costs at Metro facilities. Tonnage recovered at material recovery facilities are currently exempt from the User Fee.
- o The Regional Transfer Charge is assessed on both commercial and publicly-hauled tonnage at general-purpose disposal sites. Revenues pay the cost of operating Metro's transfer and material recovery system.

Surcharges Surcharges include mitigation fees for neighborhood rehabilitation and enhancement at landfill and transfer stations. An additional surcharge is imposed by DEQ.

Constraints Metro is obligated by ordinance to set rates that cover the cost of system operations and debt service. Metro is further constrained by how rates are set for principal recyclables. ORS 459.190 states that rates at disposal sites may not be higher for source-separated material at disposal sites than for waste.

Collection

Cities and counties have responsibility for solid waste collection in the Portland Metropolitan region. Collection service is provided by private haulers who are regulated by local governments. When assessing potential economic incentives it is important to clarify the role of cities and counties in setting collection rates.

Recycling Cities and counties are required by state statute to ensure that the opportunity to recycle is provided. Specific local government responsibilities to carry out the Opportunity to Recycle Act are identified in the Waste Reduction Chapter of the RSWMP and include ensuring that curbside collection is provided to customers requesting recycling service, promotion and education programs, and preparation of recycling reports (wasteshed reports).

Haulers Local governments have designated refuse haulers as responsible for providing recycling collection programs required under the Opportunity to Recycle Act.

In franchised areas, the recycling requirement is contained in the language of refuse hauling franchises. In the City of Portland, haulers are required by ordinance to provide recycling collection.

Collection rates

Agreements Clackamas and Washington Counties regulate haulers through franchise agreements that give haulers the exclusive right to collect refuse in distinct service areas. Franchise agreements are also employed in some cities in Multnomah County. However, the City of Portland and unincorporated areas of Multnomah County do not have franchised service areas but instead issue permits that require haulers to meet service standards. This approach results in competitive, unregulated collection rates.

Statutes ORS 459.200 (8), which outlines collection rate-setting responsibilities of cities and counties, states that rates shall allow the franchisee to recover the additional costs of providing the opportunity to recycle, at a minimum level or required by statute or at a higher level designated by the city or county. ORS 459.200 (9) gives cities and counties the option of providing alternatives to rates as a means of funding the opportunity to recycle.

Waste Reduction

Statutes ORS 459.250 requires that a place for source-separated recyclables be located either at the disposal site or another location more convenient to the population being served. Cities with a population of 4,000 or more must also provide, at a minimum, monthly collection of recyclable materials for their collection customers. An alternative method may be used if approved by DEQ.

Existing Incentives Metro presently employs several economic incentives to encourage participation in waste reduction efforts. These include payments of \$2/ton for recycled mixed waste paper; a reduced rate for source-separated yard debris delivered to the St. Johns Landfill; a discounted disposal fee to self-haulers who bring recyclables to disposal facilities; and waiver of the Metro User Fee at material recovery facilities. An analysis of the effectiveness of these incentives is included in this report.

DESCRIPTION OF INCENTIVES

Incentive #1

Self-Haul Delivery of Recyclables to Transfer Stations

Existing System

Metro currently charges a flat fee for the disposal of self-hauled loads. A discount is given to self-haulers who bring in source-separated recyclables along with their garbage. The discount is given for a minimum of 1/2 cubic yard (three grocery bags) of recyclables according to the following schedule:

Minimum charge without recyclables	\$15
2 1/2 cubic yards of garbage with recyclables	\$10
2 cubic yards of garbage with recyclables	\$ 8
1 1/2 cubic yards of garbage with recyclables	\$ 6
1 cubic yard of garbage with recyclables	\$ 4

Any of the materials normally included in curbside programs qualify for the discount.

There are several difficulties with providing a disposal discount such as the one currently used. First, determining whether a self-hauler has the minimum 1/2 cubic yard of recyclables necessary to qualify for a discount is highly subjective. Second, the necessity of keeping loads covered during transport, coupled with the need to expedite the flow of traffic through the scalehouse during peak hours, make an "honor system" necessary in which self-haulers are simply asked whether they have source-separated recyclables present difficulties. Repeat self-haulers quickly learn that an affirmative response results in a discount. Disposal discounts also create an artificial and transferable value for recyclables. The result is an incentive to acquire recyclables to use as money to pay disposal fees at the transfer station. These could be recyclables that the self-hauler had acquired from someone else.

Metro will soon install a new truck scale at the Metro South Transfer Station and begin weighing self-haul loads. Self-haul loads at the Metro East Transfer Station will also be weighed. This raises the question of how rate incentives for recycling should work after the switch from a flat fee system to a weight based system for self-haul.

Analysis of Recyclables Per Trip

The tonnages delivered to Metro South Station and St. Johns Landfill during 1989 and 1990 are shown below.

Metro South Transfer Station

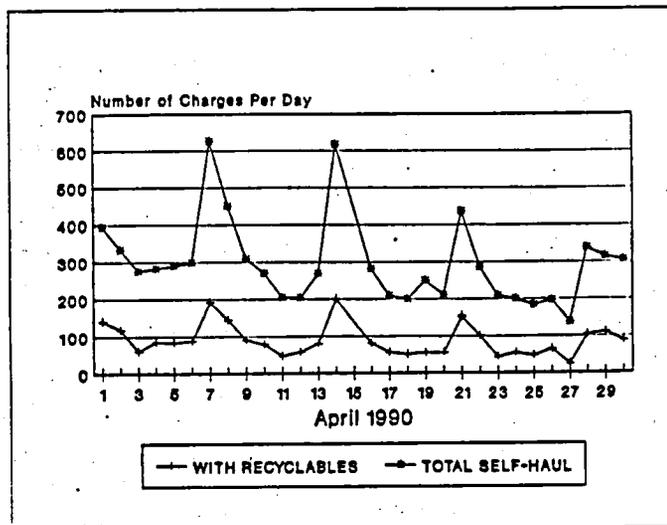
Month	Delivery (tons)		% Change
	1989	1990	
JAN	212	181	-15%
FEB	158	178	13%
MAR	234	226	-3%
APR	256	278	9%
MAY	292	224	-23%
JUN	267	263	-2%
JUL	298		
AUG	294		
SEP	228		
OCT	278		
NOV	209		
DEC	257		

St. Johns Landfill

Month	Delivery (tons)		% Change
	1989	1990	
JAN	42	64	52%
FEB	34	37	9%
MAR	31	76	145%
APR	54	65	20%
MAY	70	73	4%
JUN	54	81	50%
JUL	50		
AUG	64		
SEP	63		
OCT	49		
NOV	65		
DEC	48		

To provide free drop-off of recyclables the discount in tip fee would need to be equal to the weight of recyclables. One approach would be to base the discount on an estimate of the average weight of recyclables in discounted loads.

Past data was used to make this estimate. For April 1990 at Metro South, the cash transaction records were used to determine (1) the total number of self-haul trips, and (2) the number of self-haul trips that claimed the discount. These data are shown in the following figure. Comparisons could also be made for other months and for St. Johns Landfill, but it requires entering data that has not been computerized until now.



Waste Management provides monthly tonnages of recovered material that is marketed. This tonnage for April was combined with the trip data to get an average weight of recyclables per discounted trip as follows:

Total Self-Haul Trips	8,651 trips
Self-Haul Trips With Discount	2,585 trips
Total Tons Recovered	241 tons
Total Pounds Recovered	482,000 pounds
Adjustments:	
-10% for recyclables from pure loads	-48,000 pounds
- 5% for recyclables from self-haulers who don't claim the discount	-24,000 pounds
-20% for recovery by Waste Management	-96,000 pounds
Pounds delivered with discounted fee	314,000 pounds
AVERAGE POUNDS PER DISCOUNTED TRIP	121 pounds
AVERAGE TIP FEE VALUE OF RECYCLABLES	\$3.30

- NOTE: (1) Total tons recovered includes glass (8.65 tons), newspaper (26.39 tons), tin (141.52 tons), ferrous (48.23 tons) and corrugated (16.09 tons), but excludes appliances, appliance strippings, bicycles, lawn mowers, oil, batteries, and tires.
- (2) The 10% adjustment is for self-haulers who bring just recyclable material to the transfer station without any waste.
- (3) The 5% adjustment is for self-haulers who deliver both recyclables and waste but don't take the discount.
- (4) The 20% adjustment is for recovery of glass, newspaper, tin, ferrous, and corrugated from mixed waste by Waste Management workers.

An estimate of 121 lbs/trip can be compared to curbside collection programs. Good curbside programs collect 70-80 lbs/participating household/month of mostly glass, tin, and newspaper. Excluding ferrous from the 121 lbs per discounted self-haul trip gives a weight of about 97 lbs.

This appears reasonable if it is assumed that (1) self-haulers deliver recyclables to transfer stations that would have otherwise been put out curbside, and (2) self-haulers

come to the transfer station about once every 4-5 weeks. Note that the current rate structure encourages self-haulers to come as infrequently as possible (4 weekly trips with 1 cubic yard of garbage with recyclables costs a total of \$16; 1 monthly trip with the same amount of garbage and recyclables costs \$10).

Given the densities of recyclables (glass (whole)=700 lbs/cubic yard, newspaper (stacked)=500 lbs/cubic yard, tin cans (uncrushed)=150 lbs/cubic yard), 97 lbs of a mixture of these materials would be about .3 cubic yards or a cubic volume with dimensions of 2 feet on a side. This is less than the .5 cubic yard required for the existing incentive.

If rates are to be established based on this type of analysis, it would be helpful if self-haul loads were periodically sampled to check the weight of recyclables. As curbside programs become more effective, the amount of recyclables delivered to transfer stations may decrease and the discount would need to be adjusted.

If the objective is to provide free drop off of recyclables for the "average" self-hauler, the discount would need to be around \$3/trip.

Possible New Action

Note: A detailed discussion of alternatives specific to Metro South Station is given in Attachment A. Three of the most likely alternatives that are relevant to the regional system are described below.

Alternative 1. Convenient drop-off of recyclables is provided at transfer stations at no charge. Weight-based fee system provides incentive to separate recyclables. A recycling credit of \$3.00 is given to all customers who bring recyclables to existing facilities.

Alternative 2. Same as the first alternative with the addition of giving haulers with recyclables the option of crossing the scales twice in order to drop off recyclables prior to weighing of garbages. Haulers would decide whether they want to accept the standard \$3.00 discount or make two trips through the facility.

Alternative 3. Free drop off is not provided at transfer stations. The full tip fee is applied to all material delivered to transfer stations to provide the maximum possible encouragement for use of curbside and private collection depots.

Alternatives 1 and 2 make recycling convenient for those who choose not use curbside collection or do not have easy access to established recycling depots. However, they have several disadvantages. As with the current system, recyclables could be diverted from curbside and other collection programs without causing any new recycling. Haulers could simply take recyclables that would have otherwise been recycled through one of these other programs to the transfer station in order to get the discount.

Alternative 3 encourages use of curbside collection and private depots. A clear signal is given to haulers that the best way to avoid high tip fees is reduce the amount of waste they deliver to transfer stations. However, the tip fees may not be high enough to create an adequate incentive. With a disposal fee of \$55/ton, there would be a \$2.75 savings for every 100 pounds of recyclables.

Alternative 3 also depends on convenient alternatives to transfer stations being available for self-haul residents. While this is the case for most, there is a small percentage of rural residents who do not have convenient alternatives to transfer stations.

Recommendation

Implement Alternative 2. Metro policy shall be that transfer and material processing stations are designed to the maximum extent feasible to provide convenient drop-off of recyclables for non-commercial haulers at no charge. Requires amendment of Metro Code 5.02 (Solid Waste Disposal Fees). At existing facilities customers have the option of accepting a standard \$3.00 discount in tip fee or crossing the scales twice to deposit recyclables prior to weighing of garbage.

Regional Recycling Level Impact

Alternative 2 provides an incentive similar to what exists in the current rate structure. It is expected that the tonnage currently being recovered at disposal facilities will be maintained if the recommendation is implemented. It is not likely that a significant amount of new recycling will take place because of this incentive.

Tip Fee Impact

On the average, customers will not pay the tip fee for recyclables they deliver to transfer stations. The full fee would still be assessed against waste in their load. Therefore, there should be impact on the tip fee if alternative 2 is implemented.

Incentive #2

Volume-Based Collection Rates With Mini-Can Service

Local governments responsible for establishing collection rates can use volume-based rates with a mini-can service to create one of the most direct economic incentives for encouraging waste reduction.

Existing System

Most residents of the Metro region are offered collection service on a volume basis. However, relatively few are offered a service level at less than one full can. As a result, the collection rates do not serve as an economic incentive to those who are already at a one-can level.

Existing rates in the Metro region are at most levelized, such that the charge for each additional can is constant. A stronger incentive for waste reduction could be created by increasing the per can charge for each additional can.

Metro recently conducted a household survey to determine the current level of household waste generation. The survey will include approximately 5,000 households. Results shown below are based on the 1,943 households that have been sampled to date.

<u>Cans Per Week</u>	<u>Number of Households</u>	<u>Percent of Households</u>
0.0	22	1.13%
0.5	325	16.73%
1.0	1,206	62.07%
2.0	317	16.31%
3.0	52	2.68%
4.0	10	0.51%
5.0	4	0.21%
6.0	3	0.15%
7.0	4	0.21%

Approximately 18% of the households surveyed produced less than one can of waste each week. Of these households, 7% produced no waste for disposal.

For the purpose of predicting the potential new diversion of mini-can rates were implemented region-wide, it is assumed that the 18% of the households that generate less than one can of waste are either paying for one-can service or are not subscribing to commercial collection services.

If the response to mini-cans is similar to what has occurred in Seattle, 30% of households would subscribe. Assuming that 18% would be the households currently producing less than one can, the remaining 12% would most likely be households currently producing one can or more. Total potential diversion from just the mini-can rate is shown below.

The potential new diversion is approximately 17,000 tons each year. This is 1.4% of the 1,171,500 tons of all waste projected to be disposed in 1990 and 4.7% of the 363,000 tons of residential waste.

Current Generation (cans/hh/wk)	Estimated Percent of All Households	Estimated Number of Households	Expected Household Participation (%)	Expected Participating Households	Potential Diversion (cans/hh/wk)	New Diversion (cans/hh/wk)	New Diversion (tons/year)
0	1.13%	4,238	100%	4,238	0	0	0
0.5	16.73%	62,738	100%	62,738	0	0	0
1	62.07%	232,763	20%	45,525	0.4	18,495	16,830
2	16.31%	61,163	0%	0	1.4	0	0
3	2.68%	10,050	0%	0	2.4	0	0
4	0.51%	1,913	0%	0	3.4	0	0
5	0.21%	788	0%	0	4.4	0	0
6	0.15%	563	0%	0	5.4	0	0
7	0.21%	788	0%	0	6.4	0	0
Total	100%	375,000		112,500		18,495	16,830

NOTES:

1. Expected participation rate for 1-can households of 20% assumes 30% of all households will participate.
2. Current cans/hh/wk is based on preliminary results of 1990 Metro Survey.
3. Potential diversion is based on a mini-can volume of 19 gallons.
4. Potential new diversion assumes 32 gallon cans weigh 35 pounds and 19 gallon cans weigh 23 pounds (10% higher density).
5. Households are single-family dwellings in the tri-county area..

Possible New Action

Though Metro has no direct responsibility in setting collection rates, recommendations can be made as part of the Local Government Work Plan. The current Plan states that:

"Each local government shall develop a rate structure that provides an incentive to reduce waste. The rate structure shall specify higher per unit disposal charges for higher volume setouts. This includes: (1) a mini-can option for which the disposal charge per unit volume for a mini-can is less than the disposal charge per unit volume for a standard 32 gallon can, or (2) a weight based disposal rate that makes use of a sliding rate scale such that the disposal charge per unit of weight is less for garbage setouts of lesser weight than for garbage setouts of greater weight. The disposal rate for two 32 gallon cans or a single 60 gallon can shall be at a higher charge per unit volume than for one 32 gallon can. The disposal rate for a third can or for a single 90 gallon can shall be at a higher charge per unit volume than for two cans or a single 60 gallon can".

Alternative 1. Modify the Local Government Work Plan to recommend that the per unit disposal charge for high-volume service is equal to or greater than the per-unit charge for low-volume service.

Alternative 2. Maintain the higher per unit disposal rates for higher volumes (or weights) recommended in the Local Government Work Plan with the addition of exemptions for large families.

There are risks associated with implementing Alternative 2 throughout the region at the present time. Higher rates for extra service could create an incentive for reducing waste by both illegal and legal means. Presumably, the availability of convenient recycling programs will help minimize illegal dumping.

Convenient collection of recyclables is not presently available throughout the region. The risks of illegal dumping could be minimized if local governments wait to implement Alternative 2 until after weekly curbside collection is offered with containers provided.

Recommendation

Implement Alternative 1. Local governments have the option of establishing a constant per unit disposal charge. After weekly curbside collection with containers is provided, re-evaluate the proportion of residents with different levels of service. If convenient collection plus levelized rates have not reduced waste, then reconsider Alternative 2.

Regional Recycling Level Impact

If the response is similar to what has occurred in Seattle, the region-wide availability of mini-cans could increase the regional recycling level by about 1%. Response to variable per-unit volume rates is difficult to predict. While some areas have reported significant reductions in waste, West Linn has found that the percentage of households subscribing to different levels of service was not affected by a change to a levelized rate structure.

Tip Fee Impact

No impact on Metro's fees.

Incentive #3

Diversion of Source-Separated Yard Debris from Metro Facilities

A significant portion of waste delivered to Metro South Station and St. Johns Landfill is yard debris. In order to reach regional recycling goals, diversion of yard debris is necessary. The Regional Yard Debris Plan (June 1990) states that Metro shall "Establish an effective diversion program which results in yard debris getting to regional yard debris processors instead of dumped as mixed solid waste at disposal facilities."

An effective diversion program would have two objectives:

- (1) Diversion of as much yard debris as possible directly to the private processors. If Metro is not going to build and operate a full-scale yard debris processing center, then support of private facilities is necessary for long-term enhancement of the region's yard debris recycling program.
- (2) Recovery of yard debris that is delivered to transfer stations by providing separate dumping areas with capacity for sorting slightly contaminated loads to the extent possible giving operational constraints.

The rate structure and operational plans at transfer stations should be consistent with accomplishing these two objectives.

Existing System

Current rates for disposal of mixed waste at St. Johns Landfill are \$48 per ton and \$15 per trip for commercial and self-haul loads respectively. Rates for delivery of source-separated yard debris to St. Johns Landfill are \$25 per ton and \$10 per trip for commercial and self-haul loads.

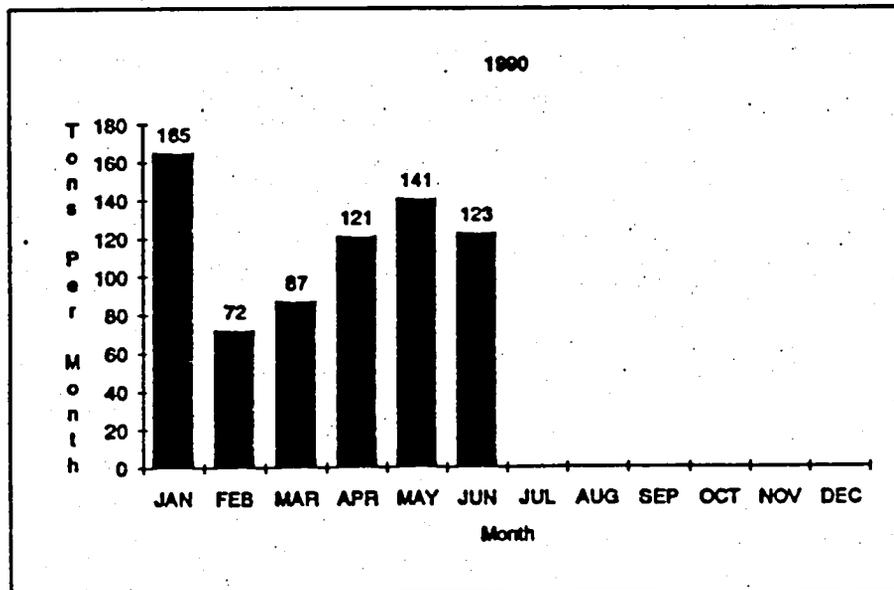
A comparison of yard debris rates at processors and St. Johns Landfill is shown below. Grimm's and McFarlane's are currently charging on a cubic yard basis. The per ton rates are estimated equivalents using 9:1 for loose cubic yards and 3:1 for compacted cubic yards.

	St. Johns Landfill	Grimm's	McFarlane's	ECRC	American Container
Self-Haul	\$10/trip (\$36/ton)	\$4/lcy (\$12/ton)	\$4/lcy	\$55/ton	\$4/cy branches \$3/cy leaves, grass
Commercial	\$25/ton	\$3.50/lcy (\$31.50/ton)	\$4/lcy (\$36/ton)	\$55/ton	\$4/cy branches \$3/cy leaves, grass
		\$6.50/ccy (\$19.50/ton)	\$4/ccy (\$12/ton)		

- Note:
- (1) lcy=loose cubic yards; ccy=compacted cubic yards.
 - (2) East County Recycling (ECRC) accepts only loads greater than 600 pounds.
 - (3) A special rate has recently been established for landscapers and contractors of \$3.50/lcy. Grimm's has also provided a special rate of \$6.50/ccy for material in packer trucks.

More than 90% of the yard debris delivered to Metro South Station and St. Johns Landfill is loose rather than compacted. For most yard debris, therefore, the rate at St. Johns Landfill is about \$10/ton lower than the rate at the two major yard debris processors, Grimm's and McFarlane's. At Metro South there is no discounted yard debris rate and the tip fee is about \$20/ton higher than the rate at processors.

The source-separated yard debris tonnage received at St. Johns Landfill during 1990 is shown below.



The geographic distribution of facilities that collect or process yard debris is shown on the map on the following page. Unless new private facilities are developed, there will be no major yard debris processors serving both self-haul and commercial haulers in the northern part of the region after St. Johns Landfill closes in 1991.

Loose cubic yards received at the two major processors, Grimm's and McFarlane's, during 1989 and 1990 are shown below.

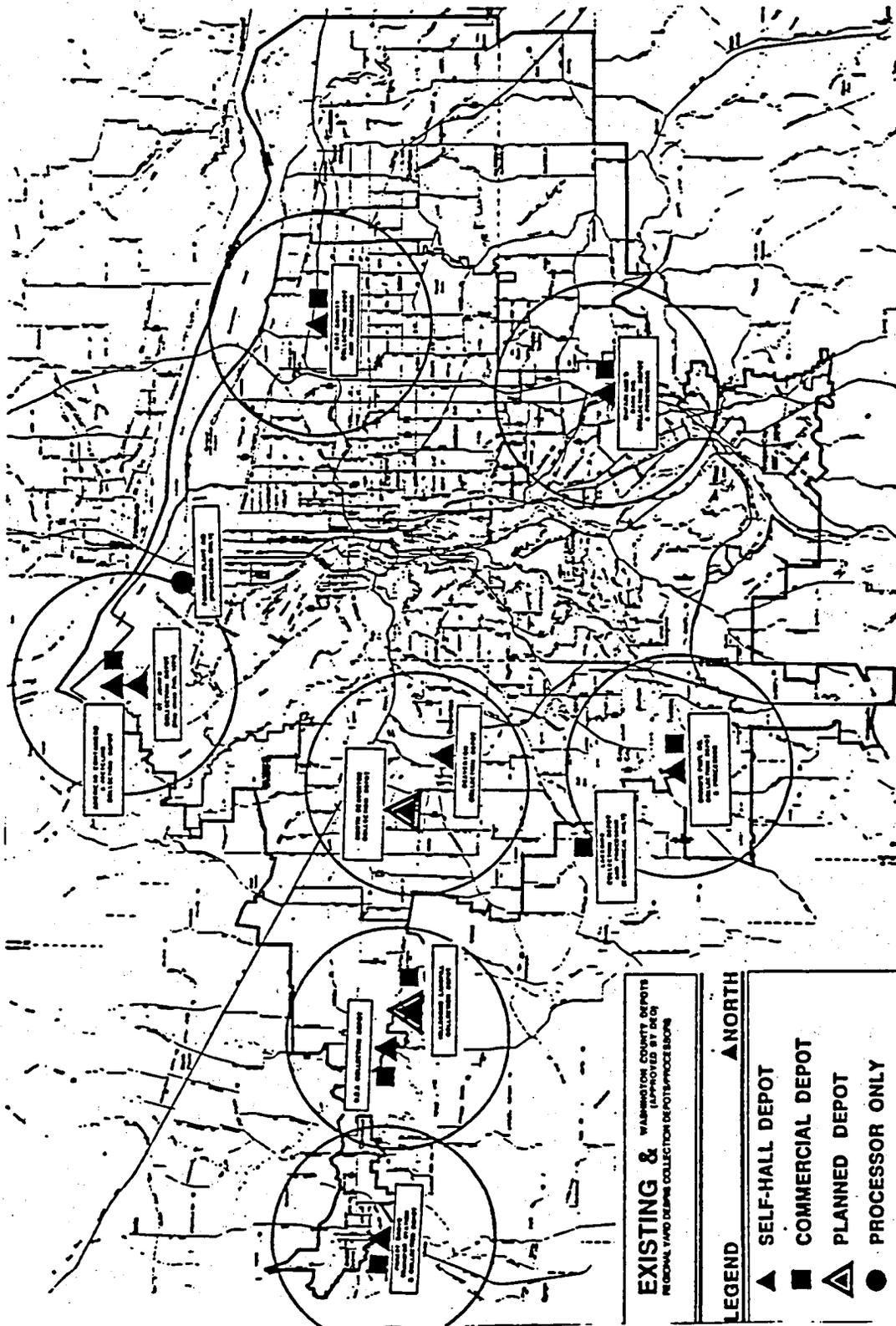
Grimm's Fuel Company

Month	Received (cubic yards)		% Change
	1989	1990	
JAN	8476	13045	54%
FEB	5196	5121	-1%
MAR	10158	12418	22%
APR	14405	12273	-15%
MAY	14819	11021	-26%
JUN	15977	12649	-21%
JUL	15004		
AUG	12224		
SEP	12583		
OCT	8688		
NOV	13686		
DEC	10108		

McFarlane's Bark, Inc.

Month	Received (cubic yards)		% Change
	1989	1990	
JAN	8579	7575	-12%
FEB	3722	4735	27%
MAR	5232	10215	95%
APR	10038	11251	12%
MAY	10200	11525	13%
JUN	9094	11965	32%
JUL	8121		
AUG	7807		
SEP	7207		
OCT	6722		
NOV	6116		
DEC	4756		

LOCATION OF YARD DEBRIS COLLECTION AND PROCESSING FACILITIES



The percentage of yard debris in the waste delivered to Metro South and St. Johns Landfill during 1989 is shown below. An estimate is made of the potentially recoverable portion of this waste stream.

	Metro South	St. Johns Landfill
Total Waste Delivered to Facility (tons)	341,000	393,200
Self-Haul (%)	16%	10%
Commercial Drop Box (%)	25%	30%
Self-Haul Waste (tons)	55,000	39,000
Commercial Drop Box Waste (tons)	85,000	117,960
Self-Haul Yard Debris (%)	10%	10%
Commercial Drop Box Yard Debris (%)	5%	5%
Self-Haul Yard Debris (tons)	5,500	3,900
Commercial Drop Box Yard Debris (tons)	4,500	4,700
Self-Haul Recoverable Yard Debris (%)	80%	80%
Commercial Recoverable Yard Debris (%)	50%	50%
Self-Haul Recoverable Yard Debris (tons)	4,000	3,000
Commercial Recoverable Yard Debris (tons)	2,000	2,000
Total Recoverable Yard Debris (tons)	6,000	5,000

Yard debris is 12.3% (42,000 tons annually) and 7.7% (30,000 tons annually) of all waste delivered to Metro South and St. Johns Landfill, respectively. Most yard debris, therefore, is in mixed waste loads such as from residential packer trucks. It is not likely that this yard debris can be effectively diverted by special tip fees for yard debris.

Bans on Yard Debris

Banning yard debris is an alternative to using tip fee incentives to encourage source-separation. Several states have implemented bans as shown below.

<i>State</i>	<i>Date Effective</i>	<i>Yard Waste Banned</i>	<i>Market Development</i>	<i>Compliance</i>
Connecticut	1/1/91	Leaves only	Preferential procurement for recyclables that could include yard waste	Measures under consideration; enforcement possible under solid waste law
Florida	1/1/92 (from lined landfills only)	Vegetative matter, including stumps & branches	State agencies required to buy compost products when cost-competitive	Vis achievement of 30% state recycling goal by 1994; yard waste can represent 15% of the 30% goal
Illinois	7/1/90 (ban on truckloads of leaves by 9/89 repealed)	All landscaping waste, grass, leaves, tree trimmings	State working with Dept. of Transportation on compost use	Enforcement action at landfill
Iowa	1/1/91	Not yet specified	Agencies should give preference to compost use in all land maintenance activities	Unannounced inspections at landfills
Minnesota	1/1/90 for 7 county metro area; 1/1/92 for rest of state	Yard waste, clippings, boughs, etc.	1985 Exec. Order covers state use of compost products; Waste Mngt. Act also requires market development for compost	Enforced at county level
New Jersey	8/89 (Ban extended to year-round vs. only 9/1-12/31)	Leaves only	All public lands must give preferential procurement to compost materials	Provisions available under Solid Waste Mngt. Act to impose fines; enforcement at landfills and transfer stations where permits don't allow acceptance of yard waste
North Carolina	1/1/93	All yard trash	Market evaluation due by 3/91; all state agencies & local govts. required to procure compost when cost-competitive & suitable substitute	
Ohio	1/1/93	Leaves, grass, brush & other woody bits	Assistance being evaluated for all recycled products, including compost	Fines; and need provision for yard waste composting in solid waste mngt. plan to get state approval and funding
Pennsylvania	9/26/90	Leaf waste, inc. leaves, garden residues & tree trimmings but not inc. grass clippings	Preferential consideration to use of compost in maintenance of public lands	Non specific to leaf waste ban but mechanisms are available
Wisconsin	1/1/93 (6 of 72 counties have bans in place)	Leaves, grass, small woody bits under 6"	Communities' responsibility	No state mechanism

From: Yard Waste Composting. 1989. JG Press, Inc.

Problems With the Existing System

Reasons that haulers take yard debris to disposal facilities instead of processors include:

- (1) Processors have not had a weight based rate structure. Haulers have reported that the equivalent per ton charge is sometimes much higher than at transfer stations. A 20 cubic yard drop box containing one ton of yard debris could be charged \$70 to \$80 at processors and only \$55 at transfer stations.

- (2) Turn around time for commercial loads may be greater at processors than at transfer stations because of less efficient traffic arrangements.
- (3) Processors may reject loads or assess penalties for slightly contaminated loads. Haulers may not know what is in the bottom of drop boxes until the load is emptied. Rather than risking penalties, they take the load to the disposal facility and pass any higher cost of disposal back to the generator.

These kinds of problems are not likely to be solved with tip fee incentives. The long term solution that will result in more yard debris diversion is to provide a convenient system of processors that have weight based rates and the capability of accepting slightly contaminated loads.

Possible New Actions

Alternative 1. Apply the full tip fee to yard debris delivered to Metro transfer stations in order to create the maximum incentive for delivery of yard debris to private processors. Transfer stations recover clean yard debris for delivery to processors.

Alternative 2. Create a "three-tier" rate structure in which the yard debris fee at transfer stations is less than the fee for garbage but more than the yard debris fee at private processors. Yard debris rates would be set by charging the disposal cost (to be negotiated), the Regional Tier One User Fee (covering fixed costs), and the Regional Transfer Charge (covering facility operator costs). With the current rate structure, the fees would be \$35/ton at yard debris processors, about \$45/ton for yard debris at transfer stations, and \$55/ton for mixed waste at transfer stations.

Alternative 1 is a better approach for accomplishing the first objective of an effective diversion program: encouraging haulers to deliver yard debris directly to processors. The larger the difference between yard debris fees at transfer stations and processors, the greater will be the incentive for taking yard debris to processors.

If rate incentives were the only means to accomplish the second objective, recovery of yard debris delivered to transfer stations, Alternative 2 would be the better approach. However, there are other approaches that can be used. Spotters and scalehouse personnel can be used to direct mostly clean loads of yard debris to special dumping areas within transfer stations. Combining Alternative 1 with new operational practices at existing facilities would be most likely to accomplish both objectives of a diversion program.

Alternative 1 should also provide a greater incentive for the long-term development of private processing capacity. If Metro maintains a discounted tip fee for yard debris there will less incentive for businesses to start or expand yard debris processing capacity.

The effectiveness of Alternative 1 in causing haulers to deliver yard debris directly to processors depends on two factors: (1) there must be a convenient system of yard debris processors available to most haulers in the region that serves as an alternative to transfer stations, and (2) the differential between the transfer station fee (currently \$55/ton) and the fee at processors (currently \$35/ton) must be enough to cause haulers to switch from transfer stations to processors.

The convenience factor for many haulers includes a consistent weight-based fee structure. Haulers need to know what the savings will be if they deliver yard debris to processors rather than to transfer stations. Using volume-based fees, as is currently the case at the major processors, creates uncertainty that causes some haulers to deliver to transfer stations even though the tip fee is higher. One processor is installing scales and the other major processor is looking at the possibility of scales.

The rate differential must be maintained if Alternative 1 is to be effective. This may mean that Metro would need to enter into some type of agreement with processors that would ensure that rate differentials are maintained. Metro staff is currently examining this possibility.

Recommendations

(1) Implement Alternative 2. Metro creates a yard debris rate based on disposal costs plus appropriate fixed costs. Requires amendment of Metro Code Chapter 5.02 (Solid Waste Disposal Fees).

(2) Metro pursues options for eliminating the problems that cause haulers to choose not to deliver yard debris to processors. This may include some form of regulation.

Regional Recycling Level Impact

The implementation of a yard debris rate that is less than the full tip fee but more than the processors will result in new recovery at Metro South. Less yard debris may be recovered at St. Johns than currently is with the \$25/ton rate. However, some of this potential loss will likely be compensated for by more direct deliveries to processors.

The new recovery at Metro South is likely to be greater than the decrease at St. Johns (Metro East). Therefore, the net effect of this recommendation should be an increase in the regional recycling level. Based on the deliveries to St. Johns during the past year, recovery rates may be about 100 tons/month at each facility.

Improvements in processing facilities would have a much greater impact on the regional recycling level. If such improvements resulted in recovery of half of the yard debris currently being disposed, about 35,000 more tons would be recycled every year.

Tip Fee Impact

If the rate for yard debris is sufficient to cover the cost of processing, there should be no impact on the rates charged for waste. If a disposal cost of \$30/ton could be negotiated for yard debris delivered to transfer stations, the rate structure would be as follows:

Disposal fee (negotiable)	\$30/ton
Tier One User Fee (fixed costs)	\$ 7/ton
Transfer Charge (facility operator)	<u>\$7/ton</u>
TOTAL YARD DEBRIS RATE	\$44/ton

This assumes that DEQ charges could be waived on yard debris.

If the disposal cost is higher than \$30/ton, part of the user fee or transfer charge would have to be waived to maintain the rate near \$45/ton. Fees on other tonnage would need to be increased in order to collect sufficient revenue to cover expenses.

Incentive #4

Recycling Rebates for Haulers

The current market value of recyclables does not cover the cost of collection and marketing. Ratepayers must pay for the costs of establishing new collection programs.

Local governments could set collection standards and establish collection rates that cover the costs of accomplishing the standards. An alternative used by some governments (e.g. Lane County) has been to pay haulers on a per ton basis for material collected and marketed. Revenue for such payments is generated by increased tip fees. Because tip fees are passed back to ratepayers, this incentive is an indirect way of making sure collection rates are high enough to pay for the cost of collecting and marketing recyclables.

Existing System

Local governments are responsible for setting collection rates. In franchised areas of the Metro region, collection rates include the cost of implementing recycling standards. The changes being considered by the City of Portland would create standard and rates for residential collection.

Possible New Action

Metro makes per ton payments to haulers for material collected and marketed by haulers. Money for the incentive is generated from higher tip fees on waste disposed.

The major problem with this incentive is the potential inequities caused by demographic variability. Regardless of effort on the part of haulers, the amount of recyclables collected may vary among neighborhoods because of differences in the type of businesses, household income, family size, education, and other factors that influence waste generation and participation in recycling programs.

One approach to reduce this inequity would be to base payments on the annual change in tonnage marketed by a hauler. Tonnage marketed by each hauler during a base year could be determined prior to implementing the incentive.

Recommendation

Do not implement. Instead, Metro encourages local governments to continue to improve recycling standards and develop rate-setting processes that ensure that recycling costs will be included in both residential and commercial rates. The Waste Reduction Subcommittee suggested that Metro re-evaluate this incentive in the future depending on the success of local government programs.

Regional Recycling Level Impact

The greatest potential for this type of incentive would be in commercial recycling. The costs of residential recycling will be included in rates set by franchise collection areas. Haulers can not be assured of exclusive rights to commercial recyclables at a franchise rate.

An estimated 52% (624,000 tons) of all waste disposed in the region is from non-residential generators. 35% (218,000 tons) of this waste is paper. If an incentive results in recovery and marketing of even a relatively small portion of this tonnage, the impact on the regional recycling level could be significant.

Tip Fee Impact

Approximately 135,000 tons of paper were recycled during 1989 from the non-residential sector for an overall recycling level of 38%. If this increases to 50%, about 40,000 more tons would be recycled. If \$50/ton payments were made for new recycling tonnage, the total cost of the incentive would be \$2 million and the tip fee increase would need to be \$2/ton.

Incentive #5

Routing of Food Waste to the MSW Compost Facility

Existing System

The tip fees at the MSW Compost Facility will include the cost of disposing residual material. The residual waste is determined by the waste composition of loads delivered to the facility. The "reference waste composition" used in the Service Agreement is:

Paper	34.8%
Yard Debris	9.9%
Wood	8.0%
Food Waste	8.8%
Diapers	1.5%
Misc. Organic	6.7%
Textiles	3.8%
Fines	2.0%
Plastics	7.8%
Aluminum	0.9%
Misc. Inorganics	5.5%
Ferrous Metal	6.0%
Nonferrous Metal	0.2%
Glass (recyclable)	3.6%
Other	0.5%

Residual can be reduced if loads with higher organic contents than the above waste composition are delivered to the Compost Facility. Accomplishing this, however, may require that haulers create special collection routes or make other changes in collection methods (e.g. providing a second container for food wastes). The avoided cost of disposal could be used to fund these changes.

Possible New Action

A tip fee incentive is established that encourages haulers to create special collection routes for high-organic loads that will be delivered to the Compost Facility.

Metro would offer the incentive without specifying how haulers will accomplish high-organic loads.

The incentive may not be sufficient to pay the extra cost of establishing special collection routes. The inspection of loads needed to determine eligibility would be operationally difficult to accomplish.

Recommendation

Metro and Riedel negotiate an amendment to the Compost Facility Service Agreement that creates an incentive for haulers to create special collection routes and deliver loads with less residue.

Regional Recycling Level Impact

Without this incentive the annual delivery to the compost facility is expected to be 185,000 tons with a residual of 55,500 tons that will be landfilled. If this incentive reduces the residual level to 10% of delivery tonnage, there would be a net increase in the regional recycling tonnage of about 37,000 tons. A residual of 10% would be similar to recovery levels at compost facilities with wet/dry collection systems and is probably the best that could be expected using rate incentives to divert loads.

Tip Fee Impact

The incentive offered would not exceed the avoided cost of transporting and landfilling residue. Therefore there should be no impact on Metro tip fees.

Incentive #6

Recovery of Construction/Demolition Debris

The 1989/1990 Waste Characterization Study estimated that construction and demolition debris makes up 17% of all tonnage disposed in the Metro Region. Metro's Special Waste Project has concluded that a significant portion of this waste is potentially recyclable.

Existing System

There is no major facility capable of recovering a significant amount of the construction and demolition debris generated in the region. Instead, the material is being delivered to transfer stations and landfills without recovery capacity.

Disposal fees at some landfills (e.g. Hillsboro Landfill) are low enough to cause haulers to pay the extra transportation cost to deliver material to the landfills.

Expansion of existing facilities or construction of new ones capable of handling construction and demolition debris will occur in the near future. Diversion of recoverable waste from landfills to recovery facilities could be accomplished in several different ways.

Possible New Actions

Alternative 1. Local governments increase disposal fees at out-of-region limited-purpose landfills to levelize fees with recovery facilities.

Alternative 2. Metro utilizes its flow control authority and franchise agreements to divert recoverable material from landfills to recovery facilities.

Alternative 1 maintains haulers' freedom of choice in selecting facilities for delivering loads. However, it makes the rate-setting process more difficult because rates at recovery facilities would need to be considered. There would need to be some way to ensure that rate differentials are maintained.

Alternative 2 may be a more certain way of achieving desired flow patterns. However, it removes hauler flexibility.

The best approach will depend on the system that is being developed for recovering construction/demolition debris. The need for flow control or special rates can not be evaluated at present.

Recommendation

... **Defer to the implementation stage of the Special Waste Project.**

Regional Recycling Level Impact

Construction and demolition debris makes up 17% (192,000 tons) of all waste disposed in the region. The potential impact on the regional recycling level is significant if a portion of this material can be recovered.

Tip Fee Impact

Cannot be estimated at this time.

Incentive #7

Support of Mixed Waste Paper Collection Programs

Fluctuations in market prices have made it difficult to maintain consistent collection programs for mixed waste paper in the Metro region. During the past few years, private processors, haulers, Metro, local governments, and recycling groups have all been actively working with commercial customers to establish special recycling programs for mixed waste paper. Large offices have sometimes invested in special janitorial services. Haulers have purchased new trucks and containers in order to service small generators with special collection routes.

Market prices may create instability that makes it difficult to maintain these programs. When processors stop accepting mixed waste paper or increase the tip fees they charge because of low market prices, haulers cancel special collection routes. Both generators and haulers may be less likely to re-establish collection programs if there is no assurance that cancellations will not be repeated as the market price once again falls.

Metro and local governments could take several actions to help create stability in waste paper collection programs. Some local governments in the region have considered making commercial recycling services a requirement of hauler franchises. Any loss that haulers incur because of poor markets could be considered during the franchise rate-setting process.

Metro could accomplish the same objective by providing financial support to processors when market prices are low. Processors would then be able to continue accepting deliveries of mixed waste paper. While such support would help maintain program stability, there are several risks. Poor market conditions could be made worse by supporting continued collection when prices are low. Source-separation may also be discouraged by such an incentive.

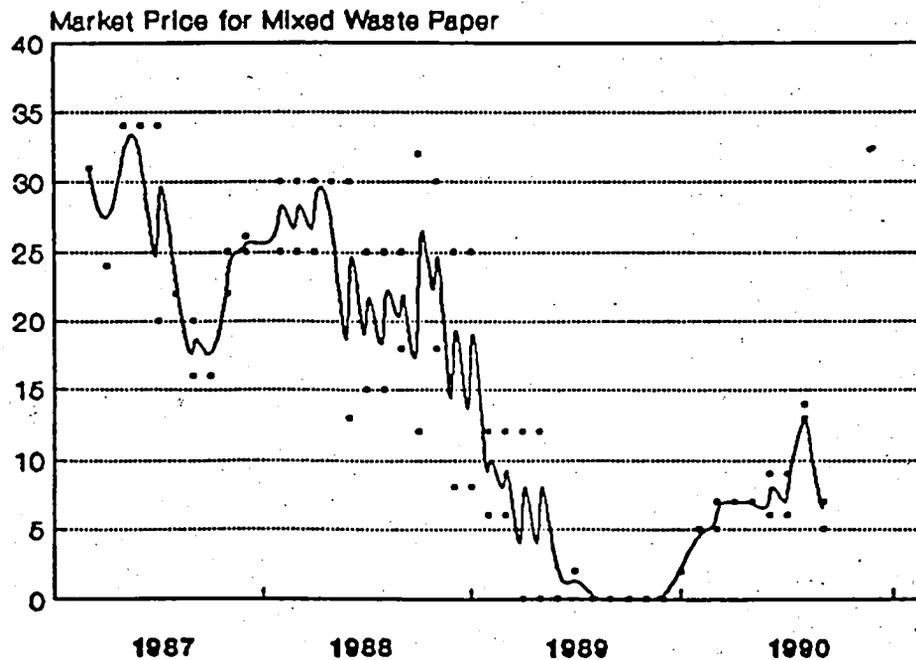
Existing System

Metro currently offers a \$2 payment to processors for each ton of mixed paper recovered from loads of 50% to 79% mixed paper. Mixed paper is defined as "uncontaminated, recyclable paper exclusive of newspaper and cardboard". The payment is offered regardless of market price.

The existing incentive has been ineffective. Even those processors who are eligible for the incentive have not applied for payment.

An example of the instability caused by market prices, and the ineffectiveness of the current incentive, is demonstrated by the recent experience of the Oregon Processing and Recovery Center. The following chart is the regional monthly market price for mixed waste paper since 1987. Recovery of mixed waste paper at OPRC peaked during 1987 when market prices were approximately \$20/ton higher than they currently are.

The \$2/ton incentive did not help maintain recovery during the 1989 market downturn. Special collection programs created for mixed waste paper were cancelled during 1989 and as market prices improved during 1990, the tonnage recovered at OPRC did not increase. Collection programs were eliminated and not re-established once markets prices improved.



Possible New Actions

Three alternative actions could be taken given the ineffectiveness of the current incentive:

Alternative 1. Increase the per ton payment (e.g. from \$2 to \$5).

Alternative 2. Create a variable payment that is sensitive to the market conditions. The incentive would not be offered when market conditions are good and disruption of collection programs is not likely. The payment could be structured such that if the

current month's market price for mixed waste paper is above the average price of the previous year, no payment would be made. If the current month's market price for mixed waste paper is below the average price of the previous year, the per ton payment would be the difference between the two. For example, average price during 1987 and 1988 was about \$23/ton. Payments during 1989 would have been as high as \$23/ton when the market price dropped to \$0/ton.

Alternative 3. Eliminate the incentive entirely.

Alternative 1 would make it more likely that the incentive would accomplish the objective of supporting collection programs during poor markets. However, it still has the disadvantages associated with any fixed incentive. Regardless of market conditions a fixed payment would be made. When markets are good, Metro would unnecessarily be asking other users of the system to make payments to processors of mixed waste paper. When markets are bad, the payment would have to be increased to over \$20 per ton to have been effective when mixed waste paper prices dropped to \$0 per ton. Increasing the payment to \$5 or \$10 per ton may not be enough to avoid program disruptions during bad markets, but too much during good markets.

Alternative 2 links the payment to market prices and eliminates many of the problems associated with a fixed payment. The key decision question, however, is whether haulers and generators are refusing to re-establish collection programs during market improvements.

Both Alternatives 1 and 2 could act as disincentives to source-separate paper. However, more than 70% of OPRC's mixed waste paper customers also have source-separated programs in place. Paper collected as mixed waste has not been acceptable for the source-separation process.

Recommendation

Eliminate the existing incentive because it has been ineffective and a high level subsidy would be required to make it effective.

Regional Recycling Level Impact

During 1989 only 8% (11,000 tons) of mixed waste paper were recycled. More than 130,000 tons were disposed. A significant portion of this is from the non-residential waste stream that could be targeted with this incentive.

Tip Fee Impact

Tip fee impacts would depend on market conditions and would vary from year to year. During the past year, an average of about \$15/ton would have needed to be paid on about 2,000 tons of paper recovered from mixed waste.

Incentive #8

User-Fee Waivers

Metro Code Chapter 5.02 states that "The User Fee shall be waived at material recovery facilities that accomplish recycling as a *primary* operation". The objective was to create an economic incentive for high-grade recovery.

Loads with a low percentage of recyclable material will be delivered to transfer stations for processing. Some material recovery will take place at transfer stations, but the recovery level will be considerably lower than at high-grade facilities.

Facilities that operate primarily as transfer stations are not the intended targets of this incentive. The lack of clear standards creates confusion about which facilities should be eligible for User Fee waivers.

Existing System

There are currently two franchised facilities that apply for the User Fee Waiver: Oregon Processing and Recovery Facility and East County Recycling Center. The delivery and recovery tonnages for these two facilities are shown on the next page.

Possible New Action

Alternative 1. Maintain the current fee waiver but establish a minimum recovery level to determine eligibility for waivers. 30% is the recommended standard.

Alternative 2. Establish a sliding scale for waivers such that the facility's recycling level determines what percentage of the fee is waived.

Alternative 1 is a more direct approach to encouraging high-grade facilities to improve recovery levels.

Recommendation

Implement Alternative 1. Requires amendment to Metro Code Chapter 5.02 (Solid Waste Disposal Fees).

Oregon Processing and Recovery Center

	Tons				Recovery Percent	
	Delivery		Recovery			
Month	1989	1990	1989	1990	1989	1990
Jan	796	687	449	299	56%	44%
Feb	704	539	353	261	50%	48%
Mar	840	617	321	337	38%	55%
Apr	861	492	327	221	38%	45%
May	1071	532	92	215	9%	40%
Jun	1414	464	175	215	12%	46%
Jul	574		149		26%	
Aug	377		57		15%	
Sep	592		355		60%	
Oct	578		216		37%	
Nov	856		324		38%	
Dec	703		233		33%	

East County Recycling Center

	Tons				Recovery Percent	
	Delivery		Recovery			
Month	1989	1990	1989	1990	1989	1990
Jan	345	2185	58	497	17%	23%
Feb	237	1422	229	250	97%	18%
Mar	380	2529	130	422	34%	17%
Apr	564	2965	564	926	100%	31%
May	670	3629	305	1746	46%	48%
Jun	1931	3170	1405	1074	73%	34%
Jul	3224		1626		50%	
Aug	3546		1250		35%	
Sep	3077		685		22%	
Oct	2808		663		24%	
Nov	2137		455		21%	
Dec	1985		420		21%	

Incentive #9

Recycling Credits for Non-Profit Charitable Organizations

The purpose of this incentive is to provide disposal cost relief at Metro solid waste disposal facilities for charitable, nonprofit entities that accomplish a significant level of waste reduction and recycling. It is the intent of this incentive to provide assistance to organizations that uniquely qualify by achieving significant amounts of waste reduction and recycling while at the same time providing assistance to needy citizens of the region and opportunities for employment.

Existing System

Charitable organizations pay the full tip for waste generated from their operations.

Possible New Action

Recycling credits are established to provide disposal cost relief at Metro disposal facilities to organizations that qualify under the following eligibility criteria.

- (a) The organization must be classified as a nonprofit organization under Section 501 (c) (3) of the United States Internal Revenue Code. Furthermore, the organization must submit an annual report on Federal Form 990 (Return of Organization Exempt for Income Tax).
- (b) The organization must be registered as a nonprofit organization with the Corporation Commission of the State of Oregon.
- (c) The organization submits an annual report to the Oregon Department of Justice Charitable Trust Section.
- (d) The organization does not contract with for-profit organizations to collect, process, or sell used goods.
- (e) The organization must be engaged, as a primary form of revenue, in the processing of donated goods for resale or reuse.
- (f) The organization facilitates the opportunity to reuse and recycle for the general public via curbside collection of donated goods or staffing of drop-off sites.
- (g) The waste reduction activities of the organization divert a significant amount of material that might otherwise be landfilled. A significant amount is defined as a minimum of 250 tons per year of donated goods that are either reused or recycled.

- (h) The organization is a credit customer in good standing at Metro disposal facilities.
- (i) The organization submits annual waste reduction data to the Metro Solid Waste Director by February 15th of each year which documents the organization's recycling level for the preceding calendar year using a methodology approved by Metro.
- (j) No portion of the District funds authorized by this program will benefit any religious function of any religious organization.

Recycling Credits are based on an eligible organization's overall waste reduction level. The waste reduction level includes both reuse and recycling activities. The following formula establishes the amount of the Recycling Credit relative to the organization's recycling level. Recycling Credits will be applied to total disposal costs at the time Metro bills the eligible organization:

- If the recycling level is 70% or above,
a 100% credit is granted;
- If the recycling level is 65% or above,
a 90% credit is granted;
- If the recycling level is 60% or above,
an 80% credit is granted;
- If the recycling level is 55% or above,
a 70% credit is granted;
- If the recycling level is 50% or above,
a 60% credit is granted;
- If the recycling level is below 50%,
no credit is granted.

The recycling level of the eligible organization will be based on documentation provided to Metro's Solid Waste Director on an annual basis.

Recommendation

Implemented (Ordinance No. 90-362).

Incentive #10

Metro Recycling Business Development Revolving Loan Fund

Some businesses are unable to get conventional financing to start or expand recycling operations. One way Metro can assist is through a loan program co-sponsored by the Portland Development Commission.

Background

A proven public sector tool to stimulate the rapid emergence of private business development in new industries or economically lagging sectors is the revolving loan fund. Programs have existed in the Portland area for over ten years, using Federal, state and private grants and loans for initial capitalization, to stimulate new business expansion in slum and blighted area. This same tool can be used to maximize investment dollars to accomplish specific public goals. In this case, a revolving loan fund is envisioned to assist in the assembly of capital resources for companies organizing to accomplish METRO's solid waste management objectives. loan funds would be made available on a companion loan basis to qualified companies and projects. Eventually, these loan funds would be repaid out of business operations, and be available to reloan into a new project.

A revolving loan program will complement other solid waste management incentive programs, such as the 1% For Recycling Program. loans would be directed at the capital needs of specific companies that cannot gain needed capital on normal terms, and thereby fill a large and critical gap which currently stops the emergence of private business in this rapidly evolving industry.

Program Development

Creating a revolving loan program will take place in three phases spanning six to eight months prior to initial funding.

Phase One: Revolving Loan Fund Plan

In this phase, the goals and objectives for the fund are established, based upon research indicating the capital needs of recycling businesses seeking start-up and expansion funds. The plan should characterize: Economic and private sector lending problems for recycling businesses; a strategy to deal with these problems; how the revolving loan fund would be used; and how the fund would be coordinated with other business development activities planned or underway at METRO.

At the completion of Phase One, a review would be made of other potential funding sources to establish potential areas of joint interest and funding.

Phase Two: Administrative Planning

During this phase, an evaluation would be made to determine how and where to administer the fund. A Loan Administration Board is envisioned to make specific loan application decisions. This board, appointed by and responsible to METRO, could operate with the support of METRO or take advantage of other regional agencies now operating revolving loan funds. This would facilitate not having to re-create the loan administration staff and portfolio maintenance procedures for a relatively small volume of work.

Also during this phase, a marketing plan, loan selection and approval process, loan administrative and servicing concept, administrative cost and payment formula, and capital management strategy would be worked out. Plans would be formed to expand the capital base of the fund. Audit and funds control procedures would be established in coordination with METRO financial officers and appropriate State agencies. The entire plan then would be presented for review and approval by the METRO Council and appropriate agencies of the State and Federal governments.

Phase Three: Start-up

Based upon an acceptable plan, the METRO Council would approve members of the Loan administrative board who would be selected from the local community based upon their knowledge of lending, business management, and solid waste recycling. The board would serve for a fixed period of time, making decisions on the operation of the fund.

Initial marketing and loan application screening would commence immediately.

Recommendation

Implement Phase One and Phase Two in the next 12 months. Direct staff to prepare a METRO Revolving Loan Program Plan that utilizes funds to sponsor the start-up and expansion of business activities for recycling. Based upon the feasibility of the plan, negotiate with other participating providers of capital funds and development joint statements of goals and objectives. Finally, select a method to administer the loan program, taking advantage of other municipal agencies prepared to offer these services with existing program resources.

ATTACHMENT A

A PROPOSED RATE INCENTIVE TO PROMOTE RECYCLING
BY SELF-HAULERS AT THE METRO SOUTH TRANSFER STATION

Steven L. Kraten

Introduction

This report describes five alternatives for implementing a recycling incentive at the Metro South transfer station. It was found that technical limitations of the scales and design limitations of the facility severely constrained the number of feasible alternatives. Of the five alternatives listed, three require major or minor facility modifications. At least two of the alternatives require further study to determine whether or not they are actually feasible. In addition to the complications associated with facility and procedural modifications, each alternative presents some unique operational difficulty to be overcome. The final decision process may thus come down to choosing among several sub-optimal solutions.

Three primary criteria were used in evaluating the alternatives. The first criterion was effectiveness of the incentive in diverting recyclables from the waste stream. The second criterion was safety of the users of the facility. And the third criterion was minimization of disruptions in transfer station operations. Though it would be preferable to develop an incentive system that could be implemented in the same way at both the Metro South and the Metro East transfer stations, the differences in the physical plants and the large role that facility layout plays in determining the feasibility of any particular recyclable handling system may require a site specific alternative for each facility.

Description of the Present Recycling Incentive

Under the present system Metro charges a flat fee for the disposal of self-hauled loads at the Metro South transfer station. A disposal discount is given to self-haulers who bring in source separated recyclables along with their garbage loads. The discount is given for 1/2 cubic yard (three grocery bags) of recyclables according to the schedule given below:

Minimum charge without recyclables.....	\$ 15
2-1/2 cu. yds. with recyclables.....	10
2 cu. yds. with recyclables.....	8
1-1/2 cu. yds. with recyclables.....	6
1 cu. yd. with recyclables.....	4

The disposal charge varies with the quantity of garbage, not with the quantity of recyclables. Thus the fee schedule listed above is really a two part incentive. One part is a flat \$5 discount.

The second part is an exemption from the minimum fee system in favor of a stepped system which allows the hauler to pay in incremental amounts for small quantities of garbage. This part of the incentive has the unintended effect of encouraging small loads of waste to be brought to the transfer station.

Any of the materials normally included in curbside programs qualify for the discount. Scrap metal, mostly in the form of major appliances, comprises the largest tonnage of recyclable materials delivered to the transfer station by self-haulers. On a monthly basis, the proportion of self-haulers who take advantage of the disposal discount ranges from half to three quarters. Most of those bring in the minimum amount of recyclables required to qualify for the discount.

Prices Paid by Metro For Recyclables

Under the current discount schedule, the prices paid by Metro for recyclables are well above market prices. Consider, for example, a discount given for old newspapers. Three grocery bags full of newspapers weighs in the neighborhood of 75 pounds. Even the minimum discount of \$5 equates to a price paid by Metro of \$133 per ton for a commodity with a market value of about \$20 per ton. Three grocery bags of uncrushed aluminum cans weigh approximately three pounds. A five dollar discount would thus be equivalent to \$1.67 per pound, even though the average market price of aluminum cans is only about \$0.27 per pound.

Why a New Incentive Structure is Needed

Metro will soon install a new truck scale at the Metro South transfer station and begin weighing self-haul loads. This raises the question of how rate incentives for recycling should work after the switch from a flat fee system to a weight based system for self-haul.

Difficulties Related to the Weighing of Recyclables

One of the difficulties in implementing a weight based system at Metro South is that installation of the scale still will not allow a complete conversion to weight based disposal charges. Due to limited accuracy at low weights, the gatehouse scales presently being considered cannot legally be used in trade for weighing loads of less than 500 pounds (excluding the weight of the vehicle). Use of a somewhat more sensitive scale may be feasible but scales that are accurate at low weights are less usable at higher weights. A second problem is that the outbound scale is not sensitive at low weights, though it may be possible to recalibrate it for somewhat greater sensitivity.

This effectively creates two different categories of self-hauler; those with loads of more than 500 pounds and those with 500

pounds or less. Those in the heavy category can save money by separating out their recyclables and saving on the weight charge with an approximate sensitivity of plus or minus five pounds. Those in the light category cannot be weighed accurately and will continue to pay a flat fee for disposal. Thus a self-hauler with less than 500 pounds will have no incentive to lighten his load.

A second difficulty is that with an inbound weighing and an outbound weighing there is no way to separate the weight of the recyclables from the weight of the garbage. Both will have to be weighed together. The only way to prevent self-haulers from having to pay the weight charge on the recyclable portion of the load would be to unload the garbage keeping the recyclables on the vehicle for the outbound weighing and then to make another circuit through the transfer station to unload the recyclables. This would probably not be a very effective incentive to recycle. Unless one had a relatively large volume of recyclables it is doubtful that the avoided weight charge would be worth the inconvenience.

Difficulties with a Disposal Incentive

There are several difficulties with providing a disposal discount such as the one presently in place. First, the decision of whether or not a self-hauler has a sufficient quantity of recyclables to legitimately qualify for a discount is a highly subjective one. Recyclable materials brought to the transfer station tend to be highly irregular in shape and extremely variable in weight and density. Second, the necessity of keeping loads covered during transport coupled with the need to expedite the flow of traffic through the gatehouse during peak hours often makes it impractical to actually check for recyclables. Thus it becomes necessary to rely on an "honor system" where self-haulers are simply asked whether or not they have source separated recyclables. Repeat self-haulers quickly learn that an affirmative response results in a discount.

Disposal discounts also create an artificial and transferable value for recyclables. The result is an incentive to acquire recyclables to use as money to pay garbage disposal fees at the transfer station. These could be recyclables that the self-hauler had already source separated or had acquired from someone else.

Purpose of a Recycling Incentive

The purpose of a recycling incentive is to promote the recycling of material that, in the absence of the incentive, would have been landfilled. An incentive that merely results in a shifting of recyclables from curbside and depot systems to the transfer station would not be producing the desired result. It is also

important that the recycling incentive chosen be equitable and practical to administer.

Alternative Proposals for a Recycling Incentive

Six recycling incentive alternatives are offered for consideration. These alternatives are explained below.

Alternative #1 - Construction of a Recycling Depot Separate from the Transfer Station

The Metro South transfer station is functionally obsolete and cannot efficiently facilitate even garbage disposal, much less the handling of recyclables. Given the facility's current configuration and limited space there does not appear to be any fully satisfactory way to handle recyclables. Typically an integrated waste management system will incorporate a recycling buy-back center upstream of the transfer station. This is not possible at Metro South due to a lack of space.

In the long run, the best solution might be for Metro to buy or lease a nearby property for construction of a separate recycling depot. The triangular parcel of property that lies on the south side of Washington Street and to the west of the transfer station has already been leased by Metro for temporary storage of transfer trailers and might be a suitable site for such a depot. Access to the site is an issue of concern with this proposal. The site has two paved access points from Washington Street which would facilitate traffic in and out of the property. However, at present, the part of Washington Street adjacent to these access points is divided by a double yellow line. In order to facilitate the flow of traffic a left hand turn lane for vehicles entering the depot from the east. Another possibility is to access the property from the entry point directly opposite the transfer station and to drive through the property currently used by Keller Drop Box. This might cause too much traffic congestion at the entrance to the transfer station. Public access through the drop box area might also cause operational difficulties.

The depot would consist of a pole barn with a set of scales and drop boxes. The facility could be a drop off center, a buy-back facility, or it could issue weight tickets good for disposal credits at the transfer station. Self-haulers would be diverted to this facility to unload their recyclables before entering the transfer station. Prominent signage would direct vehicles with recyclables to the depot.

The recycling drop boxes presently situated at the transfer station would be retained in their present location and used for recyclables that are either separated by spotters or deposited by customers who may choose not to use the recycling depot.

However, no rebate would be given for recyclables brought to the transfer station.

A possible problem with this proposal is the inconvenience of having to untarp the load at the depot and then tarp it again for the short trip down the street to the transfer station. Many haulers may not bother to securely re-tarp their loads.

Another concern is the cost to implement such a solution. In addition to the cost of the site, building, scales, and drop boxes, the area would have to be fenced and manned.

The advantages of this solution are minimal disruption of transfer station operations and efficient handling of recyclables.

Alternative #2 - Recycling Depot in "The Loop"

Another solution is to enable self-haulers to unload recyclables before crossing the scales. This alternative would eliminate the need to weigh or estimate the weight of incoming recyclables.

After the compactors are relocated, the loop presently used for loading transfer trailers will be used for access to the household hazardous waste facility which will be located in what is now a lawn in the center of the loop. One way to unload recyclables before weighing would be to locate recycling drop boxes in the area that is now a steeply sloped grass strip bordering the south end of the loop. Under this scenario no disposal discount would be offered. Lightening the load would be the incentive to recycle. However, this would only apply to heavy loads. Self-haulers with loads of less than 500 pounds would still have no incentive to unload their recyclables separately.

There are several possible problems to be overcome in order to implement this solution, the most serious of which is a liability issue due to the proximity to the household hazardous waste (HHW) facility. According to law a HHW facility must be sited at the transfer station. In order to divert the maximum amount of hazardous waste from the MSW stream and to assure the safety of other transfer station users, this facility must be located upstream of the scalehouse. The only possible location for the facility is the loop. The presence of hazardous waste including potentially explosive materials most likely precludes this area from being used as a recycling depot.

A second potential problem is the width of the road between the barrier wall and the recycling drop boxes. It must be determined whether or not the width would be adequate to meet any relevant requirements.

A third problem is a requirement by the city of Oregon City that all unloading be done in a covered area. For this solution to be implemented either a waiver would have to be granted or the recycling area would have to be covered.

A fourth problem is simply the traffic flow. Household hazardous waste collection is a careful and deliberate process that will require a relatively slow traffic flow. The number of HHW participants is projected to be less than 100 even on the busiest day of the year. For most days it is projected to be well under 50. Unloading recyclables, on the other hand, is a rapid process and will have a much heavier traffic volume. Routing two different traffic flows through the same area when they are very different in both volume and speed may create a serious logistical problem.

Finally, it might be difficult for a pickup truck and trailer to make a sharp enough right turn at the end of the loop to smoothly enter the flow of traffic to the fee booth and scales in order to dispose of the garbage portion of the load.

Alternative #3 - Disposal Discount for Flat Fee Customers Only

Under this alternative, avoidance of payment for the weight of recyclables contained in garbage loads would be the primary incentive to recycle for self-haulers with loads in excess of 500 pounds. However, there would be a disposal discount incentive for light weight loads subject to the flat fee. A potential problem with this alternative is that it may be perceived by the public that flat fee customers are being offered a recycling incentive while weighed customers are not.

It would be incumbent upon the self-hauler to make the material easily accessible for inspection by the gatehouse staff. Transition to the new system would be preceded by an informational program to publicize and explain the new system.

Alternative #4 - Continuation of Disposal Discount for All Self-haul Customers

This alternative consists of a flat fee disposal discount for self-haulers who bring in some minimum quantity of any recyclable materials. Whether or not the quantity of recyclables brought in is sufficient to qualify for the discount would be estimated at the gatehouse just as it is now. Recyclables would be weighed along with the garbage but the increased weight would be more than offset by the disposal discount up to some break-even point.

The difficulty of such a system is that weighing combined with a discount on recyclables, which are also weighed, gives two conflicting incentives. Weighing provides an incentive not to bring recyclables to the transfer station while a disposal

discount is an incentive to do just that. The self-hauler's decision may then be based on which is the greater incentive. With a large enough disposal discount one may choose to pay the charge for the additional weight in order to get the discount. With a smaller discount one may choose to forego the discount and save on the weight. A self-hauler with a large volume of recyclables may be better off to take them to a depot or buy-back center.

The above analysis only applies to self-haulers with loads over 500 pounds. A self-hauler with a light load will have an incentive to bring in enough recyclables to qualify for the discount but will not be concerned about weight. A 400 pound load will cost the same to dispose of as a 200 pound load.

Alternative #5 - Separate Scales to Weigh Recyclables

Another possible solution that was studied is to install one or two small scales inside the transfer station. These scales would be designed to weigh lighter weights and smaller increments than the gatehouse scales. Recyclables would be unloaded onto carts by transfer station staff who would roll the carts over the scales before depositing the recyclables into drop boxes. A weight ticket would then be issued which would be given to the gatehouse attendant on the way out. The weight ticket on recyclables would be valid for a credit on the garbage disposal charge. In order to make it worth the effort to separate recyclables, it may be necessary to offer a credit that is greater than the avoided weight charge. At \$55 per ton the avoided charge for 40 pounds of recyclables is only \$1.10. A credit equal to double the avoided charge would probably be a sufficient incentive to recycle. This would still be less than the disposal discounts currently being offered by Metro. For ease of administration Metro would issue the same credit for all types of recyclables and would not differentiate among different recyclable materials.

The advantages of such a system would be accurate charges, the elimination of subjectivity in determining volumes of recyclables, and an ability to maintain records on the amount of material recycled. The disadvantage of such a system is greater complexity due to the need for dealing with second weight ticket. However, since each customer must present a weight ticket at the gatehouse anyway, this may not be a significant change.

Of more concern is the bottleneck in traffic flow that would be created by the delay as recyclables are weighed and credit tickets are issued. Even if two scales are used and if an efficient system of traffic flow and cart routing can be devised, it seems unlikely that such a system could be made workable. Even on slow days the self-haul side of the Metro South transfer station is a somewhat disorganized and dangerous place as

vehicles jockey for positions within the tightly restricted space between the pit and at the recyclables loading dock. At the same time users who have backed up to the pit are dodging traffic as they walk across the transfer station to the loading dock with armfuls of recyclables. In this environment it is unlikely that users would tolerate the added complication of having to weigh recyclables. They might in fact dispose of them in the pit rather than go to the trouble to recycle them.

Alternative #6 - Weight Based Rates as a Recycling Incentive

A weight based disposal rate is, by itself, be an efficient market driven incentive to recycle. The less a load weighs, the less it costs to dispose of. It is analogous to the incentive that garbage customers have to recycle enough material at curbside to enable them to realize a savings on their garbage bills. The only way a self-hauler can realize a savings is to actually remove the recyclables from his garbage load and the savings is directly related to the quantity of recyclables diverted.

The key reason for having weight reduction as the sole incentive is that combining a weight based disposal rate with a disposal discount would create conflicting incentives. Weighing provides an incentive to remove recyclables from garbage loads for curbside recycling or drop-off at a recycling depot before bringing the non-recyclable fraction to the transfer station for disposal. A disposal discount, on the other hand, encourages self-haulers to bring their recyclables to the transfer station along with their garbage.

Second, giving disposal discounts for bringing recyclables to the transfer station may not serve as an incentive to separate additional recyclable material from MSW but may instead simply be an incentive to take already separated recyclables to the transfer station.

A key point is that weight based rates and disposal discounts are not different *degrees* of the same kind of incentive. Rather they are different *kinds* of incentives that result in different kinds of behavior. With weight based rates the value is associated with the garbage and not the recyclables. By contrast, with a discount system the value is associated with the recyclables rather than the garbage. Recyclables now take on an additional value over and above the savings realized on garbage bills. This additional value derives from the fact that recyclables can be used by self-haulers in lieu of money to pay for disposal charges at Metro South.

The disadvantage of this alternative is that minimum fee customers will have no incentive to lighten their loads and thus will still have no incentive to recycle. It is estimated that

approximately one third of self-haulers presently fall into this category. However, assuming a fairly constant ratio of recyclables to garbage in loads of different weights, the third of the self-haulers that fall into the minimum fee category would account for less than a third of the recyclable material. Furthermore, it is anticipated that, with the new fee structure, there will be a decline in the number of light loads being self-hauled to the transfer station.

Summary

The alternatives for dealing with the recycling of source separated material brought to the transfer station along with MSW can be conceptualized relative to where in the process the recycling takes place.

Recycling at a separate site involves the complications of siting and constructing the facility. However, given the severe space and logistical problems associated with recycling at the transfer station itself, it could be the most practical and cost effective solution in the long run. Having the capability to accurately weigh recyclables regardless of the total weight of material to be disposed is a superior incentive in that the disposal rebate is proportional to the amount of material recycled. A major disadvantage is the high cost of siting, constructing, and manning such a facility. A second disadvantage is that operation of a recycling depot by Metro may be perceived as working at cross purposes to Metro's stated policy of promoting curbside collection as the preferred method of dealing with recyclables.

Recycling at the loop would avoid all of the complications and inequities, both real and perceived, inherent in trying to administer a disposal discount program. The problem with this alternative is that it poses a number of potential traffic flow and liability problems due to the proximity of the household hazardous waste facility.

Providing a recycling incentive at the fee booth can only be done through continuation of a disposal discount. The monitoring problems described above may allow self-haulers to claim the discount without really bringing in recyclables. Such a system also tends to overprice recyclables and has limited value as a recycling incentive in that, for flat fee customers, there is no advantage to separating out any more recyclables than the minimum necessary to qualify for a discount and there is no correlation between the volume of material recycled and the discount received. For weighed self-haulers there are two conflicting incentives. The advantage of this alternative is that it requires no structural reconfiguration in order to be implemented.

The weighing of recyclables on carts rolled over small scales set into the floor of the transfer station appears to be a relatively low cost solution requiring only marginal modifications of the procedures currently in use. However, this solution may pose insurmountable operational difficulties due to limited space both for queuing and for weighing recyclables within the transfer station.

A weight based disposal rate charged for all material self-hauled past the gatehouse is, by itself, an effective market driven incentive to recycle. Under such a system, the only way a self-hauler can realize a savings is to actually remove the recyclables from his garbage load and the amount of savings is directly related to the amount of diversion. A weight based disposal rate is also consistent with other elements of the region's recycling programs in that it encourages the use of curbside collection and depots.

A technical difficulty of this system is the limited scale sensitivity which precludes the weighing of loads of less than about 500 pounds. An operational disadvantage of a weight based system is that it requires transfer station users to have knowledge of how the system works. An uninformed self-hauler does not have an opportunity to recycle at no cost after arriving at the transfer station. A second disadvantage is that a weight based incentive is less visible than other alternatives and, for this reason, will be misperceived by some as not being an incentive at all.

Disposal discounts create an artificial and transferable value for recyclables. The result is not an incentive for further source separation but rather an incentive to acquire a predetermined quantity of recyclables to use as money for the payment of garbage disposal fees at the transfer station. These could be recyclables that the self-hauler had already source separated for curbside collection or had acquired from someone else (recyclables are, after all, are a free good placed at the curb by most of the self-hauler's neighbors).

Most of the recycling incentives discussed above pose serious problems for both the users and the operators of the transfer station. Upon further investigation some may prove to be infeasible. Given functional obsolescence of the Metro South transfer station, any option chosen will have to be a difficult compromise that balances the factors of the strength of the incentive to effect source separation with safety factors, cost, and operational feasibility.