



METRO

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

Agenda

Meeting: Solid Waste Planning Technical Committee
Date: June 24, 1988
Day: Friday
Time: 9:00 a.m. - 11:00 a.m.
Place: Metro Council Chambers, 2000 S.W. First Avenue

- I. Citizen and Committee Members Communications Rich Owings
- II. Approval of Minutes from April 29th Meeting (White Pages) Rich Owings
- III. General Project Updates Rich Owings
- IV. Status of Privatization, East Transfer Station Rich Owings
- V. Status of Transport Request for Bids Bob Martin
- VI. Briefing on the Results of the June 4th Policy Retreat (Ivory Pages) Dave Phillips
- VII. Next Meeting Rich Owings

SOLID WASTE TECHNICAL COMMITTEE

Minutes

April 29, 1988

The meeting was called to order at 9:04 a.m. by Chair Rich Owings.
The following were present:

Members and Alternates

Bob Brown, DEQ
Delyn Kies, City of Portland
Dave Phillips, Clackamas County
Kevin Martin, Washington County
Jim Rapp, City of Sherwood
Tom Miller, Washington County Refuse Disposal Assoc.
John Trout, Teamsters Local 281
Merle Irvine, Wastech, Inc.
Gary LaHaie, Citizen
Ed Gronke, Citizen
Carolyn Browne, Citizen
Joe Glicker, Portland Water Bureau

The following members were not present:

Sebastian Degens, Port of Portland
Jim Claypool, City of Portland
Dominic Mancini, Clackamas County
Bruce Warner, Washington County
Lorna Stickel, Multnomah County
Dick Howard, Multnomah County
Lynda Kotta, City of Gresham
Michael Borg, Clackamas County Refuse Disposal Assoc.
Dick Cereghino, Multnomah County Refuse Disposal Assoc.
John Drew, Far West Fibers
Mark Williams, McMenamin Associates
Ed Druback, City of West Linn
Jeanne Roy, Citizen

Metro Staff and Consultants

Rich Owings, Metro
Bob Martin, Metro
Vickie Rucker, Metro
Marilyn Matteson, Metro
Bob Baldwin, Consultant
Leigh Zimmerman, Metro
Ray Barker, Metro

Guests

Todd Jones, Northwest Strategies
Jim Benedict, Schwabe et. al.

Citizen and Committee Member Communication

There were no communications.

Minutes

It was moved and seconded to approve the minutes of the March 25, 1988 meeting. Carried unanimously.

Project Updates

- **Rich Owings reviewed the Metro Council Update by Gary Hansen which was included in the packet.**
- **Rich Owings explained that staff will present summaries of the 22 waste reduction programs to the Council Solid Waste Committee (CSWC) at its May 3 meeting. In addition, staff will introduce a draft outline for the Waste Reduction White Paper. If the CSWC approves the concepts put forward in the outline, it will be sent to the Policy Committee and then to the Technical Committee and Metro staff for preparation of the Waste Reduction White Paper.**

Merle Irvine pointed out that it was not a good idea to put dollar figures to the penny on the waste reduction projects, and that it would be preferable to include a range of figures.

Tom Miller stated that the dollar figures assigned to the projects were merely for comparison and not the final cost figures.

- **Vickie Rucker, Director of Metro's Public Affairs Department, announced the Household Hazardous Waste Day to be held May 14, 1988, at four sites in the tri-county area.**

Ed Gronke asked about advertisement of the event. Vickie responded that there will be newspaper advertisements in the Sunday Oregonian and two television spots as well as Metro leaflets on the event.

Dave Phillips commented that it was a mistake not to have made provisions for the collection of Dioxins. Bob Martin responded that there is a problem with the storage of Dioxins.

Summary of Policy Committee Interview Results

Vickie Rocker reviewed the summary of the Policy Committee Interviews, explained the format and went over each question.

She pointed out that this questionnaire was also sent to Technical Committee members. Many members stated that they had not received them, so duplicate questionnaires were distributed. Bob Martin stated he would be happy to interview Technical Committee members personally. Members should call Bob if they want to set up an appointment for an interview.

Revised Decision Making Process for Solid Waste Management Plan

Rich Owings presented the revised decision-making process suggested by staff, explaining that this should help integrate the Metro Council into the decision-making process. A flow chart was introduced to show the proposed process. Staff believes this will be a more efficient procedure that will lead to better understanding and create a greater probability of building a consensus. He concluded by indicating that both the Metro CSWC and Policy Committee had concurred with the new approach. The Waste Reduction White Paper will be initiated using this new process.

Revised Work Program Options

Bob Martin presented three options on how to proceed with the Solid Waste Management Plan work program. He summarized the options and presented the pros and cons of each.

1. Complete all policy work before siting
2. Prioritization of time-certain issues
3. Facility by facility plan

Bob Baldwin then presented the fourth option - developing a short-term framework plan which could also be used as a basis for a long-term comprehensive solid waste management plan. This framework plan will become a functional plan after it has been approved by the Council. The framework plan will focus on time critical issues and include plan policies, system design and an operations component.

Rich Owings explained that the Metro Council and Policy Committee will hold a retreat on June 3-4 to develop the key issues that need to be addressed in the framework plan.

Ed Gronke commented that the process sounds positive if the Council will accept decisions made at the retreat.

Several committee members asked who would be present at the retreat. Rich Owings responded that the key players are Mike Ragsdale and Rena Cusma. The focus will be on setting policy and technical support will be limited. Decisions to be made include: 1) Does the Metro Council want a regional waste management program or one that has sub-regional differences? 2) Is waste reduction a disposal method? If not, should it be a Metro priority?

Timeline for St. Jones Landfill Closure

Bob Martin presented the timeline for St. Johns Landfill Closure, based on the remaining capacity of three million cubic yards. At present this is being consumed at 85,000 CY/month. Factors that will affect the remaining life include the tonnage limit at CTRC.

Ed Gronke questioned diversion to sites other than St. Johns Landfill. Bob Martin explained that several possible diversions, such as reopening negotiations with Yamhill County, were being explored.

Bob Martin pointed out that the second factor affecting the life of St. Johns Landfill was the closure of Killingsworth Fast Disposal in November. The replacement, Waybo Pit, has not yet been approved by the DEQ. If it is not approved soon, or an alternate site is not selected, waste will have to go to St. Johns Landfill.

It was also brought out that more emphasis has to be placed on alternative facilities for the disposal of low-grade wastes (special wastes) that do not need to go to a general purpose landfill.

The third factor to be considered is the ability to transport to Arlington by January of 1990. Will the Metro East Transfer Station be in place? Options were discussed as to where the waste would go if the Metro East Station is not completed.

Depot/Transport Request for Bids

Bob Martin discussed the timeline for the Request for Bids on the Transport Depot element for the out-of-region landfill. Several basic assumptions were presented for developing the RFB: 1) there are three modes of transportation available (truck, rail or barge); 2) rail or barge would require a depot; 3) material coming from the transfer station would be containerized; 4) no materials recovery or waste handling would be available at the depot; 5) transport vendors would need to provide their own containers; and 6) at least three transfer stations will exist in the region.

Merle Irvine asked if it was practical to transport by truck to Arlington as ODOT has not funded any road work.

Ed Gronke asked if there is a contingency plan, if the transportation is not in place to get the high-grade waste to Arlington. Rich explained that the alternatives are to increase the elevation at St. Johns Landfill or to divert more waste to CTRC . . . neither of these are satisfactory.

Bob Martin pointed out that the siting of the publicly-owned Metro East Station is going forward, while the issue of privatization is being resolved by the Metro Council.

Bob Martin explained that there are several unresolved questions that must be considered before the RFB can go to the Evaluation Committee. 1) Where will the transporter receive the delivery of waste? 2) How will it be containerized or packaged? 3) How much waste is to be hauled? 4) How long a time period will the contract cover? 5) When will the contract start? 6) What form will the contract take with regard to down time, labor disputes and allowances for rise in fuel prices? 7) What is Metro's risk vs. the contractor's risk?

These points were discussed and suggestions offered. The group agreed that closed containers could be transported by any of the three types of transport options.

Questions were raised as to inclement weather transport and closing of the Bonneville locks for maintenance. Bob Martin stated the viable alternatives for transport during bad weather and locks maintenance would need to be addressed by the bidder. He concluded by stating that it is important that decision makers be kept informed about the critical timelines.

Next Meeting - May 27, 1988

The next meeting was confirmed for May 27, 1988. The meeting was adjourned at 11:10 a.m.



METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1616

Memorandum

Date: June 17, 1988

To: Technical Committee

From: Rich Owings, Solid Waste Director

Regarding: JUNE 4 POLICY RETREAT

This paper is a summary of a synopsis of the retreat held by the Metro Council and the Solid Waste Planning Policy Committee on June 3 and 4, 1988. The purpose of the retreat was to gain consensus on key policies for the management of solid waste in the region. The agreed upon policies will form the basis for the development of a Policies Plan to be completed by the Policy Committee by August 1, 1988. This Policies Plan, when adopted by the Metro Council, will be used to develop the System Design Plan and the Operations Programs, the other two elements of the proposed Solid Waste Management Functional Plan.

Following are brief statements which summarize the policies developed at the retreat. We will distribute a more complete synopsis at your June 24 meeting. This synopsis will provide a more thorough explanation of the discussion which led to consensus on these policies. Copies of the materials that were distributed at the retreat are attached for your information.

1. Public or Private Ownership

"Solid waste facilities may be publicly or privately owned, subject to established criteria."

Facilities may be private if:

- a. cost competitive
- b. not a monopoly (two out of three parts of the collection/transfer station/landfill system does not constitute a monopoly)
- c. public access allowed
- d. best serves the public interest
- e. environmentally acceptable
- f. flexible to change
- g. ease of management
- h. provide materials recovery/recycling opportunities

2. Metro vs. Local Governments (roles/responsibilities)

"Solid waste implementation shall give priority to solutions developed at the local level through intergovernmental cooperation, consistent with environmental and waste reduction requirements and regional plan policies."

3. Host Fees/Mitigation/Enhancement

"Metro shall require payment for mitigation on all solid waste facilities. In addition, a fee will be negotiated during the permitting process to include:

- in lieu of property tax
- an enhancement program not to exceed \$0.50/ton

A reclamation plan and financing shall be developed at the half-life of the facility, by Metro in cooperation with the local government(s)."

4. Illegal Dumping

"Negative impacts caused by change in the waste system will be corrected."

5. Rates; Uniform or Variable

"Rates are to be developed based on real cost-of-service."

6. Low-Grade Waste (Special Waste)

"Special Waste is a regional problem. Metro is responsible for developing a special waste plan through the regional planning process."

7. Waste Reduction

"Pursuant to state law and to minimize disposal costs, the region will place highest priority on waste reduction."

and

"Existing local government/Metro partnership in maximizing waste reduction shall be maintained."

The group further requested that the Policy Committee address the feasibility of a mandatory regional recycling system. If such a system is feasible, then the Policy Committee is to address the feasibility of a mandatory standardized regional recycling program.



METRO

2000 SW First Avenue
Portland, OR 97201-5398
(503) 221-1646
Fax 241-7417

June 3, 1988

Mr. Rich Owings, Director
Solid Waste Department
Metropolitan Service District
2000 S. W. First Avenue
Portland, OR 97201-5398

Dear Rich:

You have requested a one page summary of Metro's solid waste authorities for use by the Policy Committee and the Council at the upcoming retreat.

Metro has authority to operate solid waste disposal facilities including landfills, transfer facilities, resource recovery systems, and all other improvements, facilities, or equipment necessary or desirable for the District.

Metro also has the authority to exercise "flow control" by directing generators of waste and persons engaged in the transport of waste to deliver the waste to specific facilities of the District.

Metro is required to collect household hazardous materials on a semi-annual basis after July 1, 1988, once it begins use of an out-of-region landfill. Metro must develop a DEQ approved waste reduction plan and on a biannual basis report to DEQ its success in implementing the plan. Metro must also implement a curbside container recycling pilot project by July 1, 1989.

Cities and counties have authority to regulate commercial collectors of solid waste. This includes the power to grant exclusive franchise territories and regulate rates. Cities and counties also have the responsibility to ensure that there is an opportunity for curbside pick up of recyclable material.

Metro does have implied powers to regulate commercial collectors in order to carry out the functions which are Metro's responsibility.

Executive Officer
Rena Cusma

Metro Council

Mike Ragsdale
Presiding Officer
District 1

Corky Kirkpatrick
Deputy Presiding
Officer
District 4

Richard Waker
District 2

Jim Gardner
District 3

Tom DeJardin
District 5

George Van Bergen
District 6

Sharron Kelley
District 7

Mike Bonner
District 8

Tanya Collier
District 9

Larry Cooper
District 10

David Knowles
District 11

Gary Hansen
District 12

Mr. Rich Owings
June 3, 1988
Page 2

As any summary must the above cannot be viewed as a definitive statement of the full legal authority of Metro, cities or counties regarding solid waste.

Yours very truly,


Daniel B. Cooper
General Counsel

gl
9618C/D4

Solid Waste Definitions

Solid Waste Management Plan

June 1988

- 1. Energy recovery** — The recovery in which all or a part of the solid waste materials are processed to utilize the heat content or other forms of energy, of or from the material. (ORS 459)
- 2. Flow control** — The power to direct or otherwise require that solid waste be delivered to particular locations. (Undefined term under law)
- 3. General purpose landfills** — Those facilities which accept all types of residential, commercial and industrial wastes, excluding hazardous wastes, for disposal in the ground. (Solid Waste Management Plan (SWMP), Landfill Chapter, 1988)
- 4. Hazardous waste** — Unwanted materials or residues that cause or significantly contribute to, an increase in mortality, or an increase in serious irreversible, or incapacitating reversible, illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. (ORS 466.005)
- 5. Limited purpose landfills** — Those facilities which are prohibited from accepting putrescible waste and hazardous waste, but are permitted to receive commercial and industrial solid wastes that are non-putrescible, and demolition debris for disposal by burying in the ground. (SWMP, Landfill Chapter, 1988)
- 6. Low-grade waste** — Waste having a generation characteristic which results in a relatively homogeneous uniform material, and/or by its nature may not require disposal at a facility with all the environmental controls of a general purpose landfill. (Staff)
- 7. Material recovery** — The process of obtaining from solid waste, by pre-segregation or otherwise, materials which still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. (ORS 459)
- 8. Mixed waste** — Solid waste containing both recyclable and non-recyclable material; includes high grade loads. (Staff)
- 9. Non-putrescible waste** — Non-food solid waste and demolition debris not capable of being rapidly decomposed by microorganisms, which does not emit foul-smelling odors during decomposition. (SWMP, Landfill Chapter, 1988)
- 10. Putrescible waste** — Solid waste containing organic material that can be rapidly decomposed by microorganisms which may give rise to foul-smelling, offensive products during such decomposition or which is capable of attracting or providing food for birds and potential disease vectors such as rodents and flies. (OAR, Chapter 340, Division 61, Section 10)
- 11. Recycling** — Any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity. (ORS 459)

12. Resource recovery — The process of obtaining useful material or energy resources from solid waste and includes: energy recovery, material recovery, recycling, and reuse. (ORS 459)

13. Reuse — The return of a commodity into the economic stream for use in the same kind of application as before without change in its identity. (ORS 459)

14. Solid waste — All putrescible and non-putrescible wastes, including but not limited to garbage, rubbish, refuse, ashes, waste paper, and cardboard; sewage sludge, septic tank and cesspool pumpings or other sludge; commercial, industrial, demolition and construction wastes; discarded or abandoned vehicles or parts thereof; discarded home and industrial appliances; manure, vegetable or animal solid and semi-solid wastes, dead animals and other wastes; but the term does not include:

a.) Hazardous waste as defined in ORS 466.005

b.) Materials used for fertilizer or for other productive purposes or which are salvageable as such materials are used on land in agricultural operations and the growing or harvesting of crops and the raising of fowls or animals. (ORS 459)

15. Source separated waste — Recyclable material which has been kept from being mixed with solid waste by the generator in order to reuse or recycle that material. (Staff)

16. Waste reduction — To substantially reduce the volume of solid waste that would otherwise be disposed of in land disposal sites through techniques including, but not limited to, rate structures, source reduction, recycling, reuse and resource recovery. (ORS 459)

Achieving Waste Reduction in the Region

June 1988

Metro, through the work of the regional Solid Waste Management Plan project, will establish a new system to increase waste reduction in the tri-county Portland area.

The multi-faceted system, currently under review, will be selected for maximum waste reduction through the most efficient and cost effective methods. It will be based on the state-mandated waste reduction hierarchy: to reuse, reduce, recycle, recover energy and landfill refuse.

Preliminary recycling recommendations

The Waste Reduction Subcommittee—a technical subcommittee of the Solid Waste Management Plan effort—recommends an integrated approach to the reduction of waste. This approach will maximize the efficiency of the existing recycling system and provide supplementary programs to increase recycling rates.

Based on the analysis of materials and the scoring of programs, the Waste Reduction Committee presents the following five basic programs as preliminary recommendations:

1. A program to promote increased recycling in the commercial sector:

Promotion of additional "high grade" collection routes to recover cardboard, newspaper, office paper, mixed paper, plastics, glass, ferrous metals, aluminum, non-ferrous metals and lumber from the commercial waste stream.

2. A program to perform "back end" material recovery on waste not recovered through curbside or commercial recycling:

Mixed waste containing recyclables is delivered to a processing facility where it is mechanically and manually processed for recovery of recyclables including cardboard, newspaper, plastics, ferrous metals, aluminum and non-ferrous metals.

3. A program to collect and process separated loads of lumber:

Provide a drop-off/processing center for source separated lumber from the commercial and residential sectors. The lumber will be salvaged for reuse or shredded for hog fuel.

4. A program to encourage recycling at multi-family dwellings:

Provide special recycling dumpsters at apartments and other multi-family dwellings for collection of recyclable newspaper, cardboard, glass, ferrous metals, aluminum and non-ferrous metals.

5. A program to enhance existing residential curbside recycling:

Provide residents with containers for storage and collection of recyclable cardboard, newspaper, glass, ferrous metals, aluminum and non-ferrous metals. Recycling collection should occur at least monthly (or more frequently if cost effective), and on the same day as garbage collection.

Estimated recovery rates

It is estimated that this combination of programs can recover the following amounts of waste annually:

Current recycling rate			22% current
Program 1 Commercial recycling	152,800 tons	12% increase	
Program 2 Back-end recovery/recycling	63,670 tons	05% increase	
Program 3 Separated lumber recycling	41,000 tons	03% increase	
Program 4 Apartment dropbox recycling	5,500 tons	01% increase	
Program 5 Residential curbside recycling	21,400 tons	02% increase	
Total recycling rate goal			23% increase 45% total

The selected programs are preliminary recommendations. The specific plans, designs and tools for implementation of the system will be included in a forthcoming Waste Reduction White Paper. Background information on the waste composition study, the ranking of waste reduction programs, the waste reduction system and the original list of optional recycling programs will be incorporated into the white paper.

Program analysis and selection

In selecting the recommended programs, the Waste Reduction Subcommittee studied over 20 programs and ranked them according to the following criteria:

1. Amount recovered -- Ability of program to recover a significant portion of the waste generated in the region.
2. Impact on existing collection system -- Use of existing routes, equipment and facility sites.
3. Cost per processed ton -- Cost for collection and processing of recyclable material is reasonable and cost effective.
4. Strength of markets -- Materials removed have strong or expandable markets.
5. Ease of implementation -- Socially acceptable, feasible and permissible programs using proven technology.
6. Consistency -- Consistent with existing state, regional and local waste reduction policies.

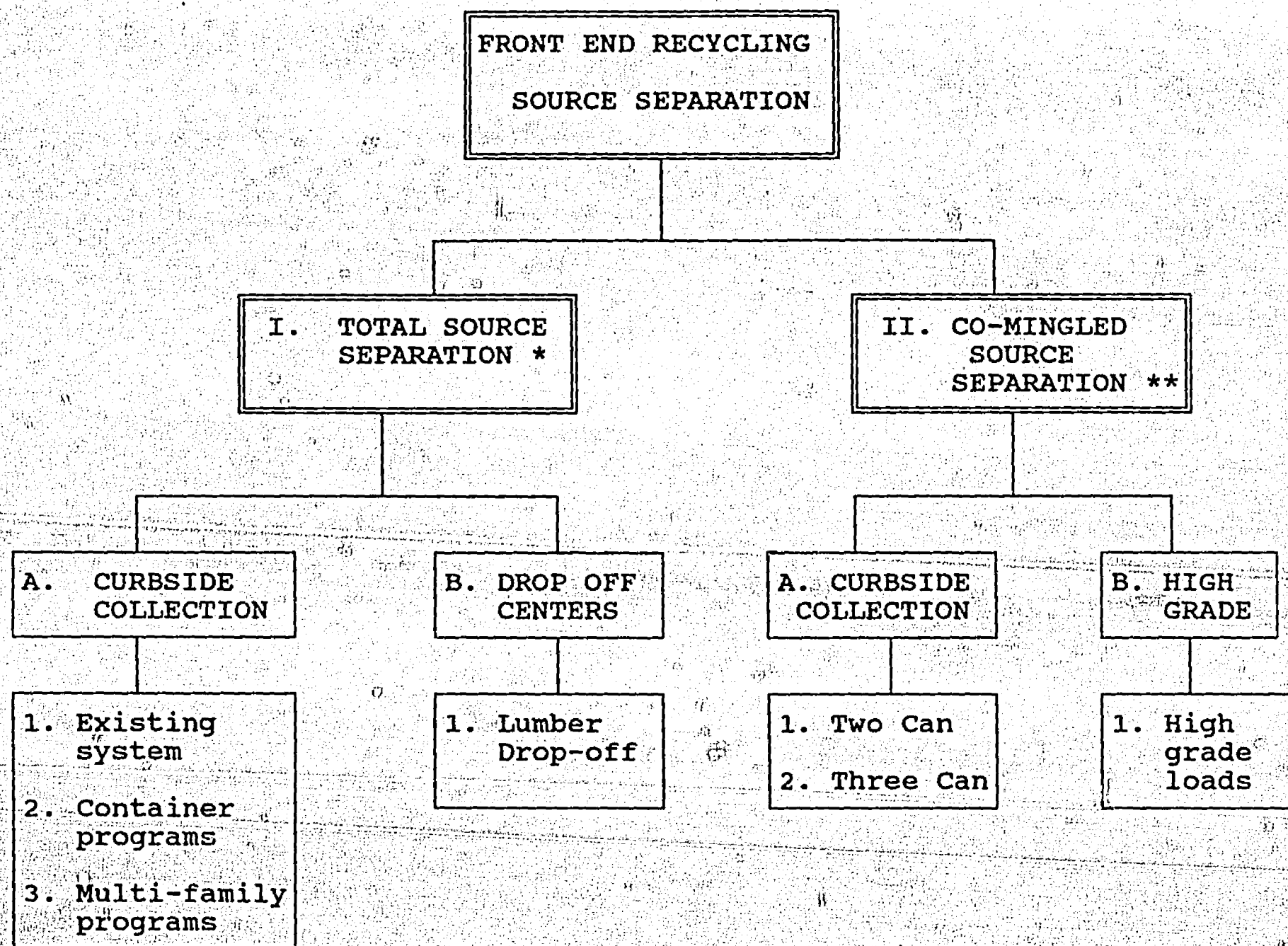
The scoring was based on numbers from 1 - 5, with 5 as the highest ranking. Five basic programs were selected by the Waste Reduction Subcommittee through ranking and weighting to make up the preliminary recommended system.

Initial waste analysis included data on recyclable materials from the Waste Composition Study completed in December 1987. The study showed that the current regional recycling rate is about 22 percent. It also provided data on quantity, quality and source of recyclable materials currently going into local landfills.

Public involvement

It is anticipated that a Waste Reduction Forum will be held this summer to solicit public comments on the proposed program recommendations. Date, time and place will be widely publicized to encourage attendance.

WASTE REDUCTION PROGRAM OPTION SCHEMATIC



* Total source separation programs require the generator to separate each recyclable material into individual containers, ie. one container for newspaper, one for tin cans, one for glass etc.

** Co-mingled source separation programs differ from the above in that all recyclable material may be placed in one container. The material is separated later at a processing center.

WASTE REDUCTION PROGRAM OPTION SUMMARY

SOURCE SEPARATION

(FRONT END RECYCLING)

CATEGORY	TYPE	PROGRAM	% RCVORY RATE ¹	EST. COST ²
I. Total Source Separation	A. Curbside Collection			
	1. Existing System	Effect of increased landfill tip fee on recycling	5.8	\$0-30
	2. Containers	<u>STACKABLE CONTAINERS</u>		
	Containers provided to residents for storage and collection of 405 material*	a) weekly pickup of recyclables (Res 3A-W)	2.7	over \$100
		b) bi-weekly pickup of recyclables (Res 3A-B)	2.1	over \$100
		c) monthly pickup of recyclables (Res 3A-M)	1.7	\$35-65
		d) weekly pickup of 405 material and plastic milk jugs (Res 3B)	2.8	over \$100
		<u>SINGLE CONTAINER WITH 3 SEPARATE COMPARTMENTS</u>		
		a) Monthly pickup of recyclables (Res C-M)	1.7	\$90-100
	3. Multi-family	<u>STORAGE/COLLECTION</u>		
		a) container provided on premises for disposal of 405 material (Res 4A)	.4	\$0-30
		b) same as above with addition of in-apartment containers for storage of 405 material (Res 4B)	1.0	\$0-30

¹Percent of total waste generated the program expected to recover

²Estimated cost per processed ton

*405 Material: glass, newspaper, tin cans, motor oil, cardboard, scrap metal

• Ranked among top five programs

WASTE REDUCTION PROGRAM OPTION SUMMARY

SOURCE SEPARATION

(FRONT END RECYCLING)

CATEGORY	TYPE	PROGRAM	% RCOVRY RATE ¹	EST. COST ²
I. Total Source Separation	B. Drop-off Centers			
	1. Lumber	Drop off of residential and commercial waste lumber and processing for hog fuel (Total 1)	3.2	\$0-35
II. Co-Mingled Source Separation	A. Curbside Collection			
	1. Two Can	a) bi-weekly pickup of recyclables and bi-weekly pickup of trash (Res 1A)	3.8	\$0-30
	Two cans are provided residential genera- tors to sort waste as "trash" or "dry recyclables"	b) bi-weekly pickup of of recyclables, weekly pickup of trash (Res 1B)	4.4	over \$100
		c) monthly pickup of recyclables, weekly pickup of trash (Res 1C)	3.1	\$70-100
	2. Three Can			
	Three cans are pro- vided to residential generators for "trash", "dry recyclables" and "wet recyclables"	a) bi-weekly pickup of dry recyclables and trash and weekly pickup of wet recyclables (Res 2)	6.4	over \$100
III. Co-Mingled Source Separation	B. High Grade			
	1. High Grade re-routing of commercial routes	(Com 1)	11.5	\$0-30

¹Percent of total waste generated the program expected to recover

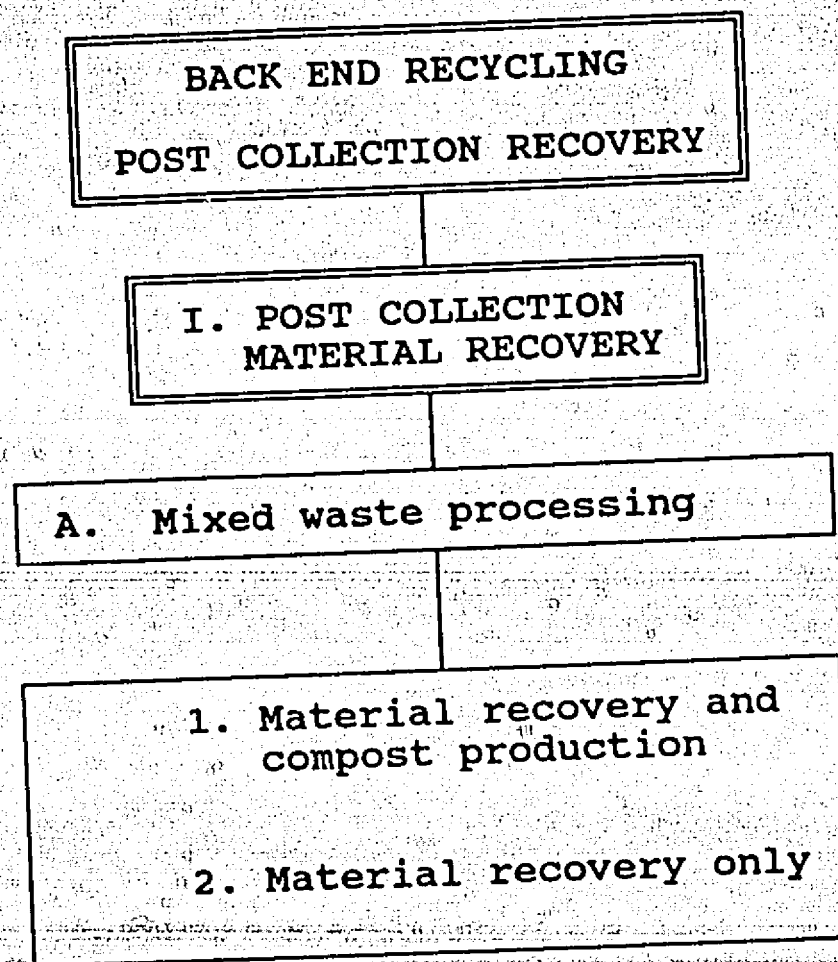
²Estimated cost per processed ton

* dry recyclables: cardboard, newspaper, office paper, plastics, glass, scrap metal

** wet recyclables: yard debris and putresible food waste

• Ranked among top five programs

WASTE REDUCTION PROGRAM OPTION SCHEMATIC



WASTE REDUCTION PROGRAM OPTION SUMMARY

POST COLLECTION

(BACK END RECYCLING)

CATEGORY	TYPE	PROGRAM	% RCOVRY RATE ¹	EST. COST ²
I. Post Collection	A. Mixed Waste Processing			
		1. Material Recovery and Compost Production		
		a) emphasis on material recovery from total mixed mixed wastestream (Total 4B M&C)	30.7	\$0-30
		b) emphasis on material recovery from commercial wastestream (Total 2B M&C)	17.3	\$0-30
		c) emphasis on compost production for total wastestream (Total 4A M&C)	53.8	\$0-30
		d) emphasis on compost production from commercial wastestream (Com 2A M&C)	29.8	\$0-30
		2. Material Recovery only		
		a) from total mixed waste- stream (Tot 4B-M)	16.6	\$0-30
		b) from commercial waste- stream (Com 2B-M)	9.7	\$0-30

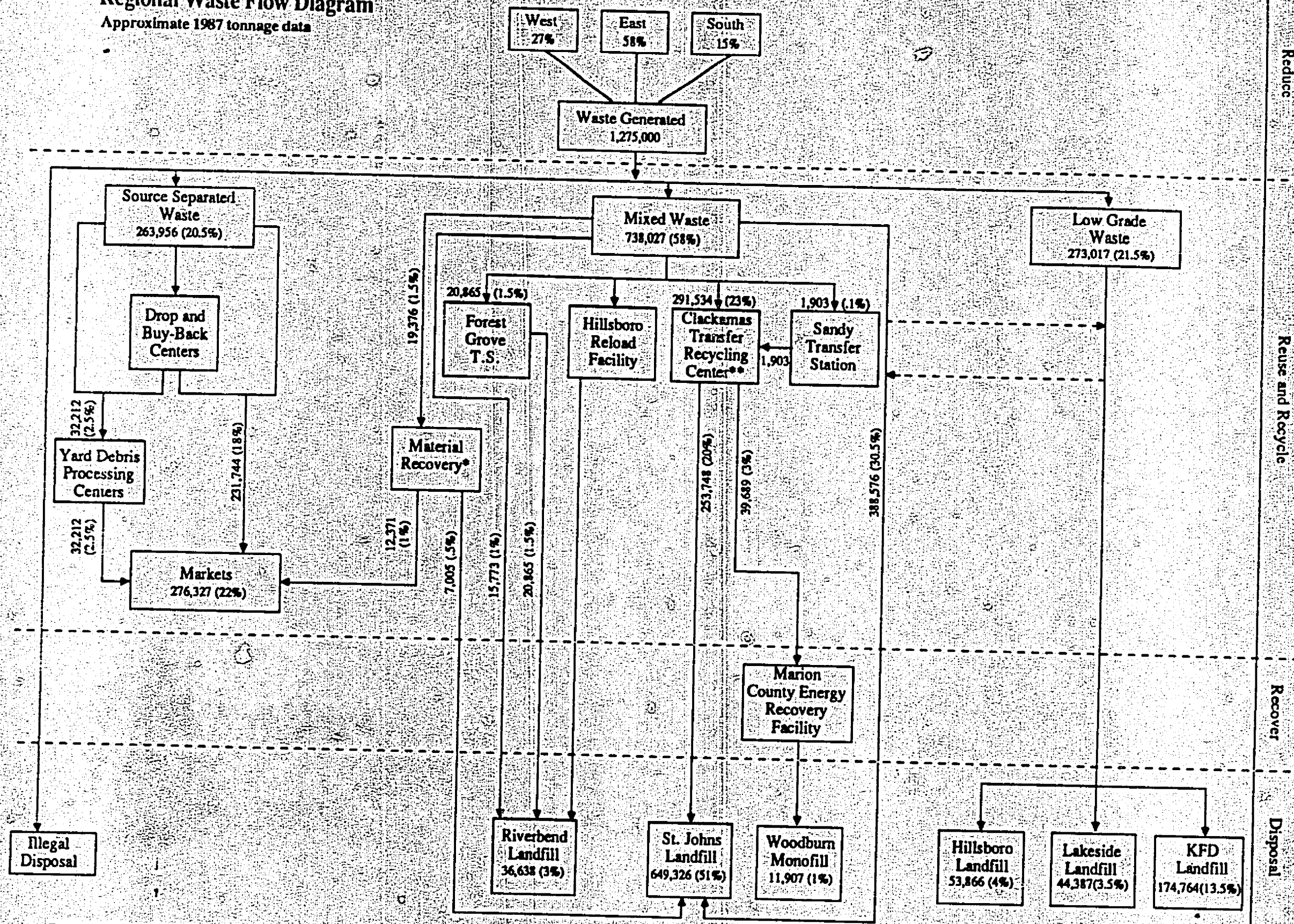
¹Percent of total waste generated the program expected to recover

²Estimated cost per processed ton

• Ranked among top five programs

Regional Waste Flow Diagram

Approximate 1987 tonnage data



* Includes OPRC, EC, MDB, CTRC

** Source separated materials received at CTRC is accounted for within the Drop and Buy Back Center category.

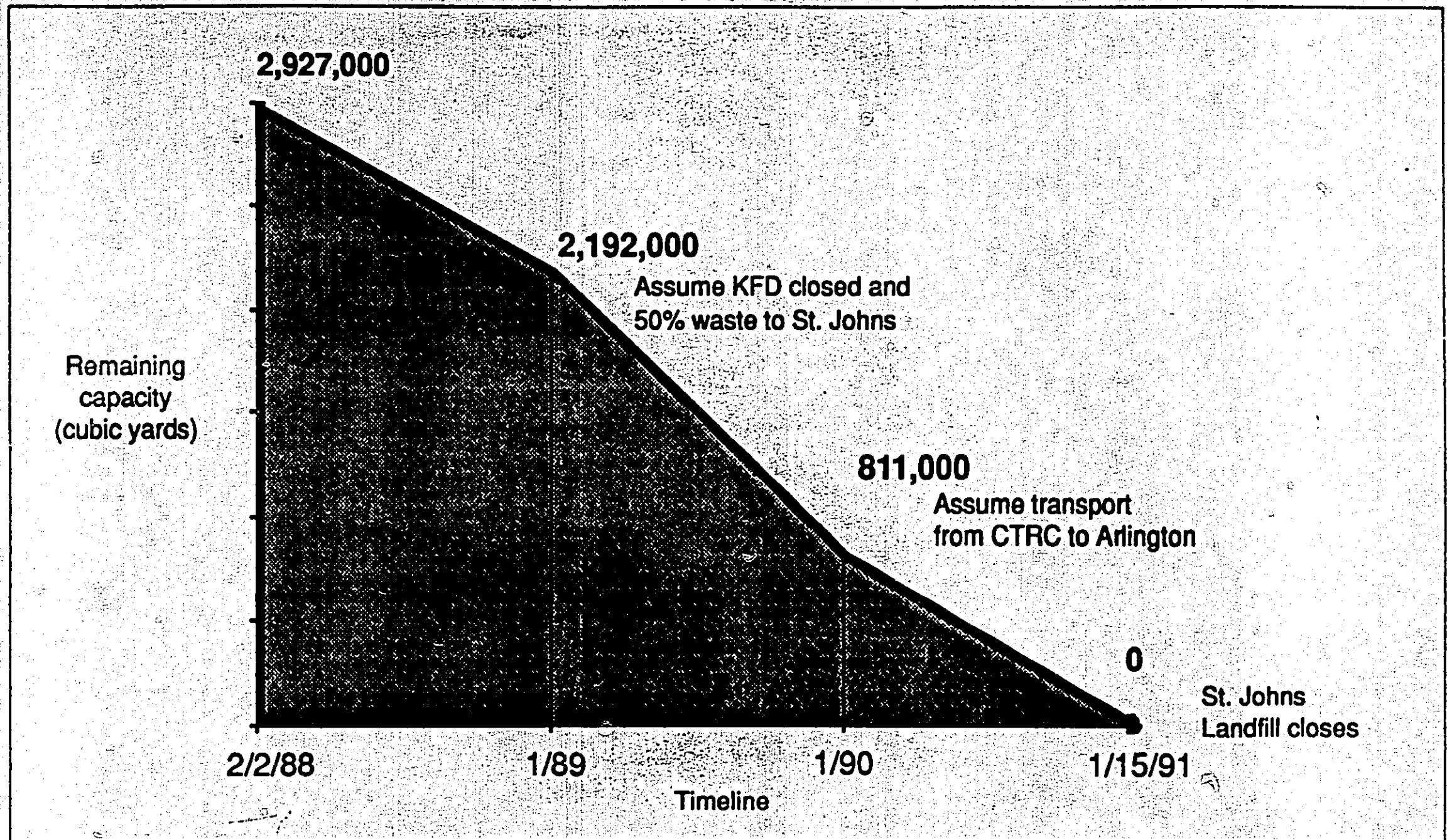
Solid Waste Management Functional Plan

A. Policies Plan	Sets the region's solid waste policies for the short-term (Phase I) and the long-term (Phase II) as guidelines for planning, designing and operating the solid waste system. The plan establishes a regional management strategy and is reflected in the city and county comprehensive plans.	
	Phase I – One Year Framework Plan	Phase II – Management Plan
B. System Design Plan	The interim system of facilities and measures, consistent with the Policies Plan necessary to solve existing and short-term problems. <i>Examples: East transfer station, depot, low-grade waste solutions, waste reduction.</i>	The integrated long-range regional solid waste system, keyed to the projected needs, facilities, capabilities and responsibilities. Subject to periodic updates.
C. Operations Programs	Coordinated implementation and operation of facilities, programs, time tables and assignments of Metro cities, counties and the private sector. <i>Examples: Mandatory collection, variable can rates.</i> Local plan revisions to fit with the Phase I, Interim plan. <i>Examples: Necessary local plan changes to site interim facilities and resolve CTRC issue.</i>	Long-term measures for the implementation of the policies through the system design plan. Modifications of local plans and programs, if required. Ongoing implementation of plan through regional partnership.

Transportation and Transfer Station Timeline (Public/Private)

	3/1/88	1/1/89	1/1/90	1/1/91
1. Council approves Arlington Landfill	●			
2. Prepare transportation/depot RFB	4 months			
3. Solicit/evaluate transportation/depot RFB	4 months			
4. Transportation/depot alternative selection		●		
5. Negotiate transportation/depot contract		5 months		
6. Develop transportation/depot facility (private)			10 months	
7. Transfer station site evaluation	6 months			
8. Design public transfer station (preliminary)		7 months		
9. Site permit/approval/option		6 months		
10. Prepare transfer station RFP		4 months		
11. Solicit/analyze transfer station RFP		4 months		
12. Evaluate public/private options			3 months	
13. Transfer station alternative selected by Council			●	
14. Contract for Arlington landfill starts			●	
15. Detailed transfer station design (public/private)			4 months	
16. Select construction contractor			2 mo.	
17. Transfer station construction (public/private)				12-15 months
18. Begin transportation from CTRC to Arlington landfill			●	late projection
19. Begin transportation from ETRC to Arlington landfill				early projection ●
20. St. Johns Landfill closes early 1991				●

Projected St. Johns Landfill Life



Assumptions:

1. Steady (1987) generation rate
2. No increase in present diversion
3. No overfilling for settlement
4. 1350 #/yd³ in landfill, 1:12 cover ratio
5. Blind slough available by 9/1/88

000

= Cubic yards x 1000
remaining life

All dates approximate