BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE REGIONAL SOLID WASTE MANAGEMENT PLAN RELATED TO DISPOSAL FACILITIES.	)))))	METRO ORDINANCE NO. 00-865 Introduced by Executive Officer Mike Burton

WHEREAS, The Metro Council adopted the Regional Solid Waste Management Plan (RSWMP) as a functional plan in Ordinance No. 95-624; and

WHEREAS, RSWMP sets forth policies on disposal facilities related to disposal capacity and access to that capacity; and

WHEREAS, The Recommended Practices of the RSWMP related to access rely on small-scale reload facilities to serve as feeders to regional facilities; and

WHEREAS, Reload facilities have not been built, and are not likely to be built in sufficient numbers to address the accessibility objectives of the Plan; and

WHEREAS, Accessibility to regional disposal capacity remains a matter of metropolitan concern; and

WHEREAS, The potential conversion of material recovery capacity to disposal capacity is a matter of metropolitan concern; and

WHEREAS, These recitals were reviewed and recommended for approved by the Regional Solid Waste Advisory Committee; and,

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

THE METRO COUNCIL ORDAINS AS FOLLOWS:

SECTION 1. "Solid Waste Facilities and Services: Transfer and Disposal System," located on pages 7-25 of the Regional Solid Waste Management Plan, is amended to read:

Solid Waste Facilities and Services, Transfer and Disposal System

The recommendations identify four practices of regional concern for the transfer and disposal system. These practices are contingent upon growth forecasts and adoption of successful implementation of the recommended waste reduction practices.

1. Allow additions to the existing system of three transfer stations as necessary to maintain solid waste transfer and disposal service levels that provide reasonable access for residents, businesses and haulers. New transfer stations may be authorized where they provide a net benefit to the regional solid waste system. New transfer stations shall perform material recovery subject to facility recovery rate standards.

2. Maintain the existing system of private general and limited-purpose landfills.

3. Maintain options for haulers to choose among disposal alternatives.

4. Allow the siting of reload facilities for consolidation of loads hauled to appropriate disposal facilities.

SECTION 2. Recommended Practice No. 1, "Solid Waste Facilities and Services: Transfer and Disposal System," located on pages 7-25 to 7-26 of the Regional Solid Waste Management Plan, is amended to read:

1. Allow additions to the existing system of three transfer stations as necessary to maintain solid waste transfer and disposal service levels that provide reasonable access for residents, businesses and haulers. New transfer stations may be authorized where they provide a net benefit to the regional solid waste system. New transfer stations shall perform material recovery subject to facility recovery rate standards.

- Key Concept and Approach of the Recommended Practice:

  Most of the region's waste is delivered to the three transfer stations (Metro South, Metro Central and Forest Grove) rather than being directly hauled to landfills. These three stations have sufficient capacity to handle the future demand for transfer services under the projected economic growth and waste reduction impacts of the recommended practices. However, an efficient disposal system depends on both capacity and accessibility. New transfer stations may be considered when the delivery of efficient disposal services is negatively affected by either of these two factors.

- Key Elements of the Recommended Practice:

  a) Successful implementation of waste reduction practices to reduce demand for transfer services.
  b) Allow additional transfer stations in the region. Such additional stations may, but need not be, limited as to the amount of waste they accept, process or dispose of, except to the extent that such limitations are required by local regulations or are in conflict with Goals and Objectives of this Plan.
  c) Provide more uniform access to transfer stations, in order to improve system efficiencies in those areas of the Metro region that are under-served.
  d) New transfer stations may be authorized where they benefit residents, businesses and solid waste haulers within the under-served areas.
  e) Preserve and enhance the region's material recovery capacity.
  f) Modifications to existing facilities as required to maintain service levels
  g) When necessary implement waste handling practices sufficient to reduce demand on transfer facilities.
  h) Modify transfer stations as needed to coordinate with any changes in collection technologies (*e.g.*, co-collection of waste and recyclables).
  i) Provide a full range of public services at transfer stations that serve a broad or regional market. Examine service options to include reuse, recycling and disposal for households and businesses that self-haul their waste.

- Key Elements of Alternative Practices:

  In the event waste reduction efforts do not perform as expected or growth is greater than expected, options to be evaluated on a case-by-case basis, depending on tonnages and system cost, will include:

  - operational changes to existing facilities
  - redirection of haulers from any transfer station that is exceeding capacity
  - remodeling of publicly-owned transfer stations

  Alternative practices may be adopted that achieve the same performance as the recommended practice.

- Roles and Responsibilities:

Metro will review service levels on a regular basis to determine if any of the alternative elements listed above need to be implemented. Metro will put maximum feasible effort into material recovery at the publicly-owned stations. Metro will monitor and report annually on the rate and amount of material recovery achieved at all regional facilities, and will include an analysis of any differences among facility recovery rates, especially any differences between facilities that are subject to minimum recovery rate standards and facilities that are not subject to the recovery rate standards. Metro's Capital Improvement Plan shall include plans for any modification to the publicly-owned transfer stations needed to maintain service levels including material recovery.

ADOPTED by the Metro Council this 15th day of June, 2000.

David Bragdon, Presiding Officer

ATTEST:

Recording Secretary

Approved as to Form:

Daniel B. Cooper, General Counsel

DA:clk
S:\SHARE\DEPT\SVC_PLAN\LEGISLATION\ORDINANCE 00-865.DOC

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE REGIONAL SOLID WASTE MANAGEMENT PLAN RELATED TO DISPOSAL FACILITIES.	)))))	METRO ORDINANCE NO. 00-865 Introduced by Executive Officer Mike Burton

WHEREAS, The Metro Council adopted the Regional Solid Waste Management Plan (RSWMP) as a functional plan in Ordinance No. 95-624; and

WHEREAS, RSWMP sets forth policies on disposal facilities related to disposal capacity and access to that capacity; and

WHEREAS, The Recommended Practices of the RSWMP related to access rely on small-scale reload facilities to serve as feeders to regional facilities; and

WHEREAS, Reload facilities have not been built, and are not likely to be built in sufficient numbers to address the accessibility objectives of the Plan; and

WHEREAS, Accessibility to regional disposal capacity remains a matter of metropolitan concern; and

WHEREAS, The potential conversion of material recovery capacity to disposal capacity is a matter of metropolitan concern; and

WHEREAS, These recitals were reviewed and recommended for approved by the Regional Solid Waste Advisory Committee; and,

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

THE METRO COUNCIL ORDAINS AS FOLLOWS:

SECTION 1. "Solid Waste Facilities and Services: Transfer and Disposal System," located on pages 7-25 of the Regional Solid Waste Management Plan, is amended to read:

Solid Waste Facilities and Services, Transfer and Disposal System

The recommendations identify four practices of regional concern for the transfer and disposal system. These practices are contingent upon growth forecasts and adoption of successful implementation of the recommended waste reduction practices.

1. ~~Maintain~~ Allow additions to the existing system of three transfer stations as necessary to maintain solid waste transfer and disposal service levels that provide reasonable access for residents, businesses and haulers. ~~Build no new transfer stations. No redirection of haulers from Metro South to Metro Central.~~ New transfer stations may be authorized where they provide a net benefit to the regional solid waste system. New transfer stations shall perform material recovery subject to facility recovery rate standards.
2. Maintain the existing system of private general and limited-purpose landfills.
3. Maintain options for haulers to choose among disposal alternatives.
4. Allow the siting of reload facilities for consolidation of loads hauled to appropriate disposal facilities.

SECTION 2. Recommended Practice No. 1, "Solid Waste Facilities and Services: Transfer and Disposal System," located on pages 7-25 to 7-26 of the Regional Solid Waste Management Plan, is amended to read:

1. ~~Maintain~~ Allow additions to the existing system of three transfer stations as necessary to maintain solid waste transfer and disposal service levels that provide reasonable access for residents, businesses and haulers. ~~Build no new transfer stations. No redirection of haulers from Metro South to Metro Central.~~ New transfer stations may be authorized where they provide a net benefit to the regional solid waste system. New transfer stations shall perform material recovery subject to facility recovery rate standards.

- Key Concept and Approach of the Recommended Practice:

  Most of the region's waste is delivered to the three transfer stations (Metro South, Metro Central and Forest Grove) rather than being directly hauled to landfills. These three stations have sufficient capacity to handle the future demand for transfer services under the projected economic growth and waste reduction impacts of the recommended practices. However, an efficient disposal system depends on both capacity and accessibility. New transfer stations may be considered when the delivery of efficient disposal services is negatively affected by either of these two factors.

- Key Elements of the Recommended Practice:

a) Successful implementation of waste reduction practices to reduce demand for transfer services.

b) Allow additional transfer stations in the region. Such additional stations may, but need not be, limited as to the amount of waste they accept, process or dispose of, except to the extent that such limitations are required by local regulations or are in conflict with Goals and Objectives of this Plan.

c) Provide more uniform access to transfer stations, in order to improve system efficiencies in those areas of the Metro region that are under-served.

d) New transfer stations may be authorized where they benefit residents, businesses and solid waste haulers within the under-served areas.

e) Preserve and enhance the region's material recovery capacity.

f~~b~~) Modifications to existing facilities as required to maintain service levels

g~~c~~) When necessary implement waste handling practices sufficient to reduce demand on transfer facilities

h~~d~~) Modify transfer ~~the existing~~ stations as needed to coordinate with any changes in collection technologies (e.g., co-collection of waste and recyclables).

i~~e~~) Provide a full range of public services at transfer stations that serve a broad or regional market. Examine service options to include reuse, recycling and disposal for households and businesses that self-haul their waste.

- Key Elements of Alternative Practices:

  In the event waste reduction efforts do not perform as expected or growth is greater than expected, options to be evaluated on a case-by-case basis, depending on tonnages and system cost, will include:

  - operational changes to existing facilities
  - redirection of haulers from any transfer station that is exceeding capacity
  - remodeling of publicly-owned transfer stations ~~existing facilities~~
  - ~~adding reload capacity~~
  - ~~building a new transfer station~~

  Alternative practices may be adopted that achieve the same performance as the recommended practice.

- Roles and Responsibilities:

  Metro will review service levels on a regular basis to determine if any of the alternative elements listed above need to be implemented. Metro will put maximum feasible effort into material recovery at the publicly-owned stations. Metro will monitor and report annually on the rate and amount of material recovery achieved at all regional facilities, and will include an analysis of any differences among facility recovery rates, especially any differences between facilities that are subject to minimum recovery rate standards and facilities that are not subject to the recovery rate standards. Metro's Capital Improvement Plan ~~will~~ shall include plans for any modification to the publicly-owned ~~existing~~ transfer stations needed to maintain service levels including material recovery.

ADOPTED by the Metro Council this _____ day of _____, 2000.

_____
David Bragdon, Presiding Officer

ATTEST:

_____
Recording Secretary

Approved as to Form:

_____
Daniel B. Cooper, General Counsel

EXECUTIVE SUMMARY
ORDINANCE NO. 00-865

AMEND THE REGIONAL SOLID WASTE MANAGEMENT PLAN RELATED TO FACILITIES

PROPOSED ACTIONS

The proposed RSWMP amendments will allow the Metro Council to consider authorizing additional transfer stations when a positive benefit to the regional solid waste system can be realized. New transfer stations will be required to perform material recovery and meet minimum standards.

WHY NECESSARY

- The current RSWMP Recommended Practice for disposal facilities is to build no new regional transfer stations. Access to disposal sites is addressed by recommending the development of small-scale "reload" facilities that serve as feeders to Metro Central or South. These reloads are unlikely to solve the access problems.
- An efficient disposal system depends on both capacity and accessibility. The proposed amendments allow Metro to consider new transfer stations when the delivery of efficient disposal services is negatively impacted by either of these two factors. Transfer stations could resolve the access problem.
- Material recovery requirements are necessary to strengthen the commitment to recovery at transfer stations. This is to help ensure that material recovery capacity is not converted to disposal capacity if existing MRFs apply to become regional transfer stations.

ISSUES / CONCERNS

- Additional transfer stations can provide a positive benefit to the regional solid waste system, if strategically located.
- Existing RSWMP policies do not allow Metro to authorize additional transfer stations - even in areas where a positive benefit to the regional system can be demonstrated.
- Authorizing additional transfer stations does not require building new public facilities, but rather could occur through the expansion of existing private facilities.

BUDGET / FINANCIAL IMPACTS

- Metro's costs change as tonnage shifts to new transfer stations. These changes are reflected in costs to operate its two transfer stations, and to transport and dispose of the waste. Generally these costs decline as the waste shifts to the new facilities. Under the scenario where two transfer stations are added to the system, the cost at Metro facilities would decline by over $7 million (almost $9.5 million in inflated dollars).
- While overall Metro's costs decline as waste shifts to other facilities, its unit cost (cost per ton) increases. This is due to the declining block rate structure of its transfer station operation and disposal contracts, and the fixed costs charged only at Metro's facilities. Metro's unit cost for the two transfer stations would rise about $1.70 per ton ($2.26 in inflated dollars in 2010) under the scenarios above. If Metro makes no changes to its cost or rate structures, this might ultimately have to be reflected in the tip fee.

BM:gbc
S:\SHARE\Dept\SVC_PLAN\Legislation\exec_summaries\execsum_1.doc

STAFF REPORT

IN CONSIDERATION OF ORDINANCE NO. 00-865 FOR THE PURPOSE OF AMENDING THE REGIONAL SOLID WASTE MANAGEMENT PLAN RELATED TO DISPOSAL FACILITIES.

DATE: June 1, 2000 Presented by: Terry Petersen
Doug Anderson

Action Requested and Purpose of the Ordinance

The Council is requested to adopt Ordinance No. 00-865 amending the Regional Solid Waste Management Plan. This ordinance is accompanied by two additional ordinances (No. 00-866 and 00-867) that would amend Metro Code to implement the Plan amendments.

These amendments were developed during the 1999–2000 review of the RSWMP and Metro Code provisions for regional transfer stations. The amendments make changes that are necessary to ensure the Regional Solid Waste Management Plan (RSWMP) remains a current and relevant policy document and that the Metro Code Chapter 5.01 implements the guiding policies contained in the RSWMP. The amendments are summarized later in this staff report.

Existing Law

Metro Council adopted the Regional Solid Waste Management Plan (RSWMP) as a functional plan in Ordinance No. 95-624. Any amendments to the Plan require adoption of an ordinance by the Council.

I. SUMMARY

Ordinance No. 00-865 would amend the Regional Solid Waste Management Plan policies regarding transfer stations. Ordinances No. 00-866 and 00-867 would amend Metro Code to implement the Plan amendments.

Given changes in the region and in the solid waste industry since adoption of the Plan, it is desirable to have a framework in which Council could consider expanding the system of transfer stations. Ordinance No. 00-865 provides this broader framework.

Ordinance No. 00-865 would not of itself authorize any new transfer stations. Rather, it provides a vehicle by which the private sector could apply to operate a new transfer station, and a framework in which Council could approve or deny the application. Any decision on a specific facility would be based on Council deliberations pursuant to the application and evaluation criteria in Metro Code Chapter 5.01.

Together, the three ordinances add specific new obligations designed to (1) conserve the region's material recovery capacity, (2) achieve higher levels of material recovery, (3) minimize the impact on Metro's two transfer stations, and achieve other public objectives.

This report recommends that the Regional Solid Waste Management Plan (RSWMP) and Metro Code be amended to allow Metro to consider new transfer stations where positive benefits can be realized. As discussed below, new transfer stations, under the appropriate set of circumstances, can provide a positive benefit to the regional solid waste system. Any new transfer stations would be required to provide a full range of public services, including provision of a recycling drop site, accommodating household hazardous waste collection, accepting all customers, and achieving a minimum material recovery rate of 25 percent from non-putrescible waste. Amending the RSWMP and Metro regulations to allow new transfer stations, requires action on the attached ordinances by the Metro Council.

II. INTRODUCTION

Commercial haulers in the Metro region spend 270,000 hours per year driving from their routes to disposal sites, at a cost to ratepayers of approximately 19 million dollars and about 12 million vehicle miles traveled (VMT). Self-haulers add another 100,000 hours and 4.5 million VMT.

This is partly the result of the location of transfer stations, which tend to be located in at the edges of the region or in remote industrial areas. A more spatially distributed set of facilities is one method of improving access. Depending on assumptions about location and the habits of users, additional transfer stations could reduce regional off-route time by at least 2 to 4 percent. This translates, conservatively, into at least $970,000 and perhaps over $1,200,000 per year in off-route cost savings (refer to Section VI – System Cost). These figures do not include the scope for savings due to capital and routing efficiencies, nor do they include the regional benefit of a reduction in VMT, localized congestion at existing facilities, and other impacts of transport.

In the long run, the amount of solid waste can grow only as fast as the region. Thus, adding disposal capacity is a zero-sum game in the short run. That is, for every ton received at a new facility, an existing facility loses tonnage. If, in the interest of achieving haul-time efficiency, Metro were to authorize new transfer stations, the flow of solid waste to Metro Central and Metro South would diminish. As a consequence, Metro's unit costs for station operation could rise.

Herein lies a dilemma for Metro. As the agency responsible for regulating disposal in the region, Metro has the opportunity to reduce—or at least contain—the costs of access to disposal sites by authorizing new transfer stations. However, as a market participant, Metro will lose commerce if it allows more players in the market.

The RSWMP, adopted by Metro Council in 1995, provides a policy to guide decisions in this situation. Goal 3 of the Plan states, "The costs and benefits to the solid waste system as a whole are the basis for assessing and implementing alternative management practices." Objective 3.1 goes on to define "system cost (the sum of collection, hauling, processing, transfer and disposal)" as the "primary criterion" for evaluation "rather than only considering the effects on individual parts of the system." Applying Goal 3 to the question of authorizing new transfer stations, Metro should decide in favor if the net savings are positive, even if this means a loss to its own enterprise activities.

As will be shown in this report, new transfer stations can provide a positive benefit to the regional solid waste system. Accordingly, this report recommends that the RSWMP and Metro Code be amended to allow Metro to authorize new transfer stations where these positive benefits can be realized. The RSWMP and Code revisions set up a framework and evaluation criteria that would allow the Metro Council to consider and approve applications for new transfer stations when these benefits can be demonstrated; and to deny them when benefits cannot be demonstrated.

However, the issue does not quite end here. Metro's two transfer stations play several public roles in addition to serving as disposal sites for commercial solid waste haulers. They provide a drop site for recyclable materials and household hazardous waste; they accept all customers including the self-hauling public; and the operators perform post-collection material recovery. As is the nature of public goods, the charge for these services does not always cover the cost. Thus, if Metro were to authorize a private company to operate a new transfer station, it is unlikely these public services would be offered voluntarily at the new station. If Metro were to authorize new transfer stations without conditions, Metro would risk a shift of high-value, efficient commercial loads to the new private facilities and be left as the main supplier of the public services.

This concern was addressed in Metro's revision of its Facility Regulation Code in 1998. As a result of that revision, Metro authorized a limited form of transfer station — one that delivered 50,000 or fewer tons per year to a disposal site. According to the new Code, facilities that delivered over 50,000 tons are required to take on some level of public function.

This policy—transfer stations must provide a certain level of public services—is re-affirmed as a recommendation in this report. To the three existing obligations - recycling drop site, accommodate hazardous waste collection and accepting all customers - is added a fourth: Perform material recovery at a rate of at least 25% of non-putrescible waste. These recommendations are described in more detail in the report.

This report also makes some ancillary recommendations for changes to the RSWMP or Metro Code. These are designed to support the main recommendation concerning transfer stations:

- Extending the minimum recovery rate requirement to dry waste materials recovery facilities. This is intended to help plug an opportunity to avoid the requirement by delivering to a facility without a minimum recovery rate standard.
- Extending the minimum recovery rate requirement to facilities that receive putrescible waste, but dispose of less than 50,000 ton per year This extension is recommended for the same reason as above, but in addition, it helps level the playing field between "small" and "large" transfer stations with respect to the cost of operation in providing full public services.

Currently, there are several existing solid waste facilities that would be likely applicants to become regional transfer stations: Pride Recycling and Willamette Resources in Washington County, and Recycle America in Troutdale. These facilities are capable of handling additional waste, and are located in areas that would produce system efficiencies. It would then be up to local communities to weigh the pros and cons of allowing a facility to operate as a regional transfer station before Metro would consider granting a franchise.

We conclude this Introduction with a summary of the recommendation. Each of these recommendations are outlined in more detail later in this report in Section V – Recommendation on the Regional Policy Toward Transfer Stations. The basic components of the recommendation are as follows:

1. **Change the Plan framework to allow Metro to consider authorizing new transfer stations.**
2. **Require material recovery at transfer stations.**
   - *Establish minimum recovery requirements*
   - *Extend recovery requirements to all facilities regulated by Metro*
3. **Re-affirm the public obligations of regional transfer stations:**
   - *Accept all customers*
   - *Accommodate hazardous waste collection events*
   - *Provide a recycling drop site for the public*
4. **Maintain a distinction between types of facilities:**
   - *Reloads (small-scale, consolidated waste delivered to a transfer station)*
   - *Local transfer stations (disposal of 50,000 or fewer tons per year)*
   - *Regional transfer stations(disposal of more than 50,000 tons per year)*
   - *Maintain a further distinction of the role of the public (Metro's) transfer stations*
5. **Increase Metro's oversight of public obligations and performance standards**

III. STATEMENT OF THE PROBLEM AND THE POLICY FRAMEWORK

Background

Metro is responsible for providing solid waste planning and disposal services for the citizens in the Metro region. Currently, most of the area's waste is processed through Metro's two transfer stations (Metro South in Oregon City, and Metro Central in NW Portland), and a privately-owned, Metro-regulated transfer station in Forest Grove. During a recent update of the Metro Code regulating such facilities, Metro committed to revisit the adequacy of this network of regional transfer stations. Metro's Regional Environmental Management Department (REM) staff have been meeting regularly with representatives from the solid waste industry and local government solid waste staff to explore the question of whether additional solid waste transfer station services are needed.

In 1997, a number of stakeholders proposed amendments to the RSWMP policies toward reload facilities. These amendments removed a number of constraints on reloads, and simplified the RSWMP policy to: "Allow the siting of reload facilities for consolidation of loads hauled to appropriate disposal facilities." It was understood that reload facilities would be authorized to handle putrescible waste. This amendment was approved by Metro Council in 1997.

What had changed, since adoption of the plan, that motivated stakeholders to suggest that the RSWMP was in need of revision? There are two basic reasons that came to light during Council's deliberation on the reload policies in 1997. First, accessibility to disposal sites was a growing problem. To address accessibility, the RSWMP recommends that a feeder system of

reloads be developed at locations distant from transfer stations. However, this was not proving to be an efficient solution. Second, Metro's changing fee structure was undermining the economic foundation for operating material recovery facilities (MRFs), and several operators sought to handle putrescible waste in order to keep the facility operating. These factors are examined in turn.

RSWMP, Transfer Stations and Reloads

The Plan addresses two factors related to solid waste:

1. *Capacity to handle waste (throughput).* The Plan states that the 3 regional transfer stations (Metro Central & South, and Forest Grove) have sufficient capacity to handle the future demand for transfer services. Accordingly, the Recommended Practice is to build no new regional transfer stations.

   Under the current Plan, a new transfer station could be authorized pursuant to an "Alternative Practices" process, and only upon a finding that the capacity of transfer stations to meet demand has been outstripped due to unanticipated regional growth or because the regional waste reduction program has not performed as expected.

2. *Accessibility to disposal sites.* Although the Plan assumed there was sufficient waste-handling capacity, access to disposal sites was also addressed. The Plan recommends that problems with access be addressed by the development of small-scale "reloads." These were to be located in areas with a "service gap," and perform simple consolidation of waste for delivery to Metro Central or South.

By 1997, it was becoming clear that accessibility was eroding. The amount of time that haulers spent travelling off-route to a disposal facility was growing faster than the rate of growth in the amount of solid waste. The fastest-increasing component of local rates was transport, especially in the suburban counties (source: local governments). The planning problem was not transfer capacity, but accessibility to that capacity.

By 1998, it was clear that reloads were not an efficient solution. Reloads provide savings only from a short intra-regional haul, provide limited economy of scale, require specialized investment (short-haul transport trucks), are as difficult to site as a large solid waste facility, and ultimately, the waste is handled twice: Once at the reload and again at the transfer station.

Only one company has attempted to develop a reload consistent with the Plan (Miller's Sanitary Service—Citistics, in Beaverton). Mainly due to siting and permitting problems, that facility took two-and-a-half years longer than expected to complete, and ended up five times over budget. The facility operated only a few months and is now closed. Other solid waste companies have taken Miller's experience as instructive, and no new reloads are known to be in the planning.

Metro Fee Changes

In 1998, Metro proposed the third drop in its tip fee in as many years. In succession, the rate fell from $75 per ton, to $70, to $62.50 at Metro transfer stations. As the operator of largest disposal facilities in the region, Metro leads the market in price; no private facility can charge much more than the Metro tip fee, else it risks losing business. Thus, Metro's tip fee tends to peg the revenue available per ton at any regional solid waste facility. Metro's tip fee reductions

effectively cut the revenue at private solid waste facilities.

Metro also charges a fee and a tax on waste that is landfilled: a Regional System Fee (RSF) that funds Metro's non-disposal solid waste programs (e.g., hazardous waste), and an excise tax that helps fund general government functions (excluding solid waste; e.g., the Metro Council). During the three years that the tip fee fell, the RSF also fell, from $17.50 per ton, to $15, to $14. (The excise tax rate did not change significantly during this period.)

Because they are levied on disposal, the RSF and excise tax are costs to operators of solid waste facilities. And clearly, these costs did not fall commensurately with the tip fee. Thus, while Metro cut potential revenues by $12.50 per ton ($75.00-62.50), it cut costs by only $3.50 ($17.50-$14.00). By 1998, this loss in operating margin put several MRFs at risk. During the 1998 Code Revision, several operators argued that, if they were allowed to accept and transfer putrescible waste, they might be able to stay in business. This proposal converged in time and effect with the arguments that reloads are unlikely to solve the accessibility problem, as they are unlikely to be built. Furthermore, allowing MRFs to handle putrescible waste was consistent with the RSWMP policy to capitalize on existing solid waste infrastructure when expanding the disposal system (Objective 11.1, page 5.8 and Reload Key Element (a), page 7.27).

The Present Situation

Many of these issues were partially addressed in 1998, when the Solid Waste Regulatory Chapter of the Metro Code underwent a major revision. The revised Code authorizes solid waste facilities to accept putrescible waste *and* directly haul this waste to an appropriate landfill to avoid the double-handling inefficiency. The Code defined a difference between "small" and "large" facilities (disposal of less or more than 50,000 tons of waste per year, respectively), and imposed certain obligations on "large" facilities. Under the assumption that 50,000 tons confers sufficient economy of scale, "large" facilities are required to provide certain public services—acceptance of public self-haul customers, hazardous waste and a free recycling drop-site—to help reduce service burdens on the regional transfer stations.

After the 1998 revision, "small" transfer station status was granted to three solid waste facilities. These facilities are allowed (but not required) under the code to meet the obligations above. The Council found no conflict with the RSWMP in approving these applications. However, the revised Code continues to require a finding of consistency with the RSWMP in order to confer "large" transfer station status on a solid waste facility. As it is difficult to demonstrate either RSWMP condition—failure of the waste reduction program or unanticipated regional growth—no "large" station status has been granted to date.

The three new facilities do not fully solve the accessibility problem that the Plan intended them to address. Many haulers cannot be accommodated under the 50,000 ton cap, and these haulers continue to incur longer commute times to regional transfer stations—unable to capitalize on haul-time efficiencies afforded by the closer facilities. The accessibility problem for self-haulers (half of which are businesses) was never addressed by these new facilities, and continues to worsen.

IV. DECISION PROCESS

In response to the unresolved issue regarding additional regional transfer stations, a team of REM staff began working on the question of regional transfer stations. The project team worked to define the problem with Metro Council and the Executive Office, SWAC, the hauling community, solid waste facility operators and REM management. Their basic charge was to determine:

- Does the region need more transfer stations?

  If so:
  - Where should they be located?
  - What are their obligations in the solid waste system?
  - What changes to the RSWMP and Metro Code are required?

In June 1999, the REM asked the Solid Waste Advisory Committee (SWAC) to appoint a subcommittee to work with the project team to study the problem and develop solutions to carry forward for further review and refinement. The SWAC subcommittee included representatives from the solid waste hauling, processing and recycling industries and local government representatives.

For empirical work, the team has completed a survey of haulers, intercept surveys at facilities and a national travel time survey. It developed and calibrated a solid waste flow-simulation model that is capable of providing estimates of tonnage and off-route travel for a number of scenarios was also developed for the project. Transportation data used in the model were provided by Metro's Transportation Department, and are consistent with the current Regional Transportation Plan. Demographic and economic data were provided by Metro's Data Resource Center and are consistent with Metro's Region 2040 Plan. In addition, geographic information and mapping was provided by Metro's Data Resource Center. REM's Business & Regulatory Affairs Division conducted fiscal assessments. A system cost analysis was conducted by an independent consultant (R.W Beck) hired by Metro.

The planning process has focused on examining accessibility (the time that commercial garbage trucks and the public must travel in order to get to an existing transfer facility) and solutions that would be both durable and flexible enough to guide the region for the next 5 to 10 years. Based on outcomes of the planning sessions, recommendations were developed for incorporation into both the RSWMP and Metro Code Chapter.

Does the region need more transfer stations?

Based on the Regional Transportation Plan, and as illustrated in the travel time maps for the three existing regional transfer stations (refer to Attachment 1(a) and 1(b)-*Travel Time Maps to Existing Transfer Stations*), there are significant service gaps for haulers and residents of the eastern portions of Multnomah and Washington counties. Based on projections, travel times for these areas will increase as the region grows, and ultimately will increase the cost to ratepayers.

Early in planning sessions with the subcommittee, staff verified that the planning problem was not transfer station capacity, but accessibility to that capacity. Users of the facilities (commercial haulers and self-haul) agree that continued growth in the region and the resulting traffic

congestion has made it significantly more time-consuming to access the existing system of three regional transfer stations (refer to the Commercial and Self-Hauler Surveys – Dotten & Associates, September 9, 1999). The subcommittee also found that siting of reloads and the problem of double-handling inefficiencies argued against their development as a solution to accessibility problems.

The subcommittee agreed that authorizing new transfer stations did not require building new public facilities. Rather, the region could potentially save costs by utilizing the existing infrastructure of solid waste facilities to help provide the needed services.

This direction is consistent with current RSWMP Goals and Objectives for Facilities and Services:

Goal 11 – Accessibility, which states:

There is reasonable access to solid waste transfer and disposal services for all residents and businesses of the region.

Objective 11.1 states:

Extend and enhance the accessibility of the infrastructure already in place for management of the waste stream for which the RSWMP is responsible.

Service Gaps Identified

The RSWMP benchmarks for access to transfer stations for the year 2005 are already being exceeded in growing areas of the Metro region. The current RSWMP benchmarks for access to regional transfer stations lists the expected average haul times, by county, as between 18 and 23 minutes. These haul times were expected to remain relatively unchanged to the year 2005 if the recommended practices in the RSWMP are in place.

Findings from the planning sessions indicate that both commercial collection vehicles and the general public are spending considerably more time driving on the road to reach a regional transfer station. In particular, there are currently significant "service gaps" in eastern Washington and Multnomah counties, where access exceeds 25 minutes for large areas (refer to Attachment 1(a) and 1(b)-*Travel Time Maps to Existing Transfer Stations*). These "service gaps" are projected to grow by 2010, based on information from Metro's Transportation Department. These gaps result in an imbalance in the accessibility and level of services typically provided by regional transfer stations to both commercial waste haulers and public self-haulers (e.g., solid waste disposal, household hazardous waste collection events, public self-haul access).

V. RECOMMENDATION FOR REGIONAL POLICY TOWARD TRANSFER STATIONS

The following recommendations were developed primarily by the SWAC subcommittee working with the REM Department. The actual RSWMP and Metro Code amendments are detailed in the Ordinances. SWAC held a work session on May 17 that resulted in a formal recommendation to Metro Council on the regional policy toward transfer stations, preservation of material recovery capacity, and related issues. The following is a summary of the recommendations with background on each point.

The basic components of the recommendation are:

1. Change the Plan framework to allow Metro to consider authorizing new transfer stations.
2. Require material recovery at transfer stations.
   - *Establish minimum recovery requirements*
   - *Extend recovery requirements to all facilities regulated by Metro*
3. Re-affirm the public obligations of regional transfer stations:
   - *Accept all customers*
   - *Accommodate hazardous waste collection events*
   - *Provide a recycling drop site for the public*
4. Maintain a distinction between types of facilities:
   - *Reloads (small-scale, consolidated waste delivered to a transfer station)*
   - *Local Transfer Stations (disposal of 50,000 or fewer tons per year)*
   - *Regional Transfer Stations(disposal of more than 50,000 tons per year)*
   - *Maintain a further distinction of the role of the public (Metro's) transfer stations*
5. Increase Metro's oversight of public obligations and performance standards

Summary of the Recommendation

1. Change the Plan framework to allow Metro to consider authorizing new transfer stations

The Regional Solid Waste Management Plan currently states that the three regional transfer stations (Metro Central, Metro South, and Forest Grove) have sufficient capacity to handle the future demand for transfer services. The current Recommended Practice is to build no new regional transfer stations.

Under the current RSWMP language, a new transfer station could be authorized upon a finding that (a) the regional waste reduction program has not performed as expected; or (b) regional growth is greater than expected, and service levels cannot be maintained within the existing system of three transfer stations because of lack of capacity.

The current Plan addresses access to disposal sites by recommending the development of small-scale "reloads" that serve as feeders to Metro Central or South. However, an efficient disposal system depends on both capacity and accessibility. Metro should be able to consider new transfer stations when the delivery of efficient disposal services is negatively affected by either of these two factors. The SWAC subcommittee's evaluation indicates that reloads are unlikely to improve the access problem, as it is unlikely they will be built. Transfer stations could resolve the access problem, and they are more likely to be built due to the efficiencies and economies of scale that are possible.

The new policy toward transfer stations would change the conditions under which transfer stations could be authorized. These conditions would take into account the recognition that reloads are unlikely to solve the access problem. The subcommittee's proposed new language is:

> ~~*Maintain*~~ *Allow additions to the existing system of three transfer stations as necessary to maintain solid waste transfer and disposal service levels that provide*

reasonable access for residents, businesses and haulers. ~~*Build no new transfer stations. No redirection of haulers from Metro South to Metro Central.*~~ *New transfer stations may be authorized where they provide a net benefit to the regional solid waste system. New transfer stations shall perform material recovery subject to recovery rate standards.* [RSWMP page 7.25]

The last sentence in the new language above is designed to confirm the region's commitment to material recovery, and to help ensure that material recovery capacity is not converted to disposal capacity in a manner that affects regional recovery goals. See also 2, below.

2. Require material recovery at transfer stations

This policy is triggered by several concerns: (1) a general concern about the level and trend of post-collection recovery in the region; (2) the effect of this trend on recycling goals; and (3) the potential conversion of material recovery capacity to disposal capacity if existing MRFs apply to become regional transfer stations.

As shown above, new Plan language would strengthen the commitment to recovery at transfer stations. In addition, Metro Code would be amended to implement a minimum recovery standard on new regional transfer stations. A standard of 25% from non-putrescible waste is proposed. This recovery rate reflects a balance between a number that is real and achievable at a solid waste facility, and a concern that too-high a standard might provide a disincentive to serve source-separation programs. The recovery requirements would also be imposed on local transfer stations and MRFs, primarily for equity; but also to strengthen the effect of the policy by minimizing the number of alternatives that are not subject to the recovery requirement.

Solid waste stakeholders recommend that the recovery requirement be imposed only on new regional transfer stations (that is, franchised after July 1, 2000). This has the effect of "grandfathering" the existing regional transfer stations, and is a result of the following concerns:

a) One role of the public stations (Metro Central and South) is as disposal sites of last resort. Furthermore, as disposal sites of first resort, they have no control over their incoming waste streams. Thus, they play a different role in the solid waste system than regulated private transfer stations. Furthermore, Metro's stakeholders have noted: (i) Metro is very public about its commitment to recycling, and stakeholders felt assured that Metro would always recover materials with maximum feasible effort. (ii) There is no real mechanism to enforce the recovery rate at public stations.

b) The existing private station (Forest Grove) was not designed to perform material recovery, and the addition of recovery capacity at this time would not be cost-effective. Furthermore, land-use regulations constrain any additional uses of the site. The Forest Grove franchise has eight years to run. Metro's solid waste stakeholders have indicated this is adequate lead time to address the issue of recovery at the Forest Grove transfer station.

However, SWAC recommended that the Plan be amended to include language that commits Metro to maximum feasible recovery effort, in lieu of explicit recovery rate standards.

3. Re-affirm the public obligations of regional transfer stations

This policy recommendation arises from the concern that private transfer station operators would minimize the provision of public services (that is, accept all customers, accommodate hazardous waste collection events, and provide a public recycling drop site), leaving these to be provided solely by Metro. Re-affirmation of the policy ensures a fair sharing of responsibility for public services, and improves the equity of access to all users of disposal sites.

4. Maintain a distinction between types of facilities

This policy arises from the observation that a range of solid waste facilities can better serve the varied disposal needs of the region. However, without some level of certainty about the capital and operating requirements, private firms will be less willing to invest the time and resources in siting a facility.

Reloads
Reloads are currently exempt from Metro regulation, if their sole purpose is consolidation of loads collected by a single hauler and delivered to facilities within the region. This exemption is based on the intended role of reloads: efficiency-enhancing extensions of a collection system. The exemption is proposed to remain in Metro code, with a revised definition that better clarifies the purpose of this type of facility within the regional system. Multi-hauler reloads would remain subject to Metro regulation.

Local Transfer Stations
This type of facility is currently not formally defined in Metro code. Rather, it is described as a solid waste facility that disposes of 50,000 or fewer tons of solid waste per year. In conversation, these are sometimes called "direct-haul reloads." It is proposed to define this type of a facility formally as a "Local Transfer Station," to re-affirm the obligations currently specified in Metro Code, and to extend the new recovery rate requirements to Local Transfer Stations. The intent is to re-affirm that there is a need for medium-scale facilities in the solid waste system, and to specify the level of public obligations and operating conditions that would be required of them.

Regional Transfer Stations
This type of facility is currently not formally defined in Metro code. Rather, it is described as a solid waste facility that disposes of more than 50,000 tons of solid waste per year. However, an application for authority to dispose of more than 50,000 tons must be accompanied by an analysis showing that the proposed facility is consistent with the Regional Solid Waste Management Plan. As discussed previously, such a demonstration would be difficult under the current language of the Plan.

If Council were to approve amendments to the Regional Solid Waste Management Plan consistent with the option laid out in 1 above ("Change the plan framework..."), then Metro could begin considering applications for "large" transfer stations. To implement this change, Metro Code would be amended to formally define a "Regional Transfer Station," to re-affirm the obligations currently specified in Metro Code for "large" transfer stations, and to include a minimum recovery rate requirement.

5. Increase Metro's oversight of public obligations and performance standards

Metro Code currently contains substantial monitoring and enforcement language. However, solid waste stakeholders have recommended a review of Metro Code, policies and staffing in this area, with the goal of having an effective enforcement mechanism. REM recommends that Metro wait until the Council has decided on any changes to the Plan and Metro Code regarding transfer station policy, before undertaking this review. REM expects that review and recommendations would take three to four months after the Council's decision.

Accordingly, no specific options or language on monitoring and enforcement is provided at this time.

Consequences of the Proposed Policy

The following is a summary of the main consequences of the proposed policy:

- *Helps contain future cost increases in residential and commercial route collection* and *helps balance the equity of access to disposal services*. The main purpose of authorizing new transfer stations is to provide system efficiencies and more uniform access to public services in those areas of the Metro region that are under-served. Reductions in hauler travel time account for approximately half the savings that are projected in Section VI – System Cost. Such savings could be captured in the local government rate setting process.

- *Helps maintain regional recovery capacity*. The purpose of the new requirement for material recovery is to ensure consistency with the RSWMP provisions to preserve material recovery capacity and increase actual recovery of material. The 25% level was chosen to provide a good balance between a meaningful number, something that is achievable by the facility, and yet is not enough to provide any disincentive to service source-separation programs.

- *Helps reduce congestion and vehicle-miles traveled (VMT)*. By increasing accessibility, haul times and congestion at existing facilities are reduced, which provides a benefit to the solid waste system, and also supports Metro's broader regional transportation goals.

- *Helps free up space at Metro transfer stations to accommodate growth and more recovery (e.g. organics reloading)*. If additional transfer stations are authorized, some waste will flow away from the Metro facilities. This can free up space and become an opportunity to conduct additional material recovery or focus on new recovery strategies, such as organic waste reloading.

Other Issues

During the course of discussions, REM heard from independent haulers regarding (1) their concern about degrading access to transfer stations, and (2) concerns about price discrimination if new transfer stations are not tightly regulated. Several haulers recommended that Metro operate the scalehouses of any new regional transfer stations. This option was discussed at length, but rejected for now. Basically, REM found that operating the scalehouses would not provide sufficient protection from price discrimination. Furthermore, REM intends to review the resources available for oversight and regulation of new transfer stations, as discussed in subsection 5 above.

VI. SYSTEM COST

The basic empirical work involved comparing system costs among 3 basic scenarios:

1. Status quo. No new facilities are added to the system.
2. Target Service Gaps. What is the change in system cost if new transfer stations are developed to serve the areas identified as most-distant from transfer capacity?
3. Expand Existing System. What is the change in system cost if we capitalize on sunk investment, consistent with Objective 1.1 of the Plan?

The basic findings are:

1. Target Service Gaps. If new transfer capacity is located to best serve the areas most distant from existing transfer stations, there are significant annual savings in off-route transportation cost. It is important to note that this scenario assumes an appropriate solid waste site can be found within the areas with a "service gap." Even so, however, the cost of new transfer stations (amortized siting, construction and capital, plus operating costs) appears to be greater than the transport savings, if one assumes these will be full-service stations.

2. Expand Existing System. Although the previous scenario is not sufficient to conclude that new transfer stations will not be built, it does suggest that development of new transfer stations are unlikely. Accordingly, a second scenario was examined based on upgrading existing facilities into regional transfer stations. By capitalizing on sunk investment, the facility costs are significantly reduced relative to the previous scenario. However, because we rely on existing locations which do not necessarily address the "service gaps" perfectly, the transport savings are not as great as with the previous scenario. However, positive net system benefits are realized under this scenario.

The basic conclusion is that net system savings are possible with the development of new transfer stations. Accordingly, in the public interest, the Council should be able to consider applications for new transfer stations; and the Council should be able to approve or deny these applications based on their merits, including whether they provide a net benefit to the regional solid waste system.

The Scenarios

Metro retained a consulting firm (R. W. Beck) to conduct an independent analysis of the net costs to the system of various scenarios of new transfer stations in the region. These are summarized below. The methodology and results of the analysis are described in greater detail in the R. W. Beck report. The analysis of system cost is comprised of the following components:

- Changes in transportation cost as facilities are added or expanded.
- Cost changes at new or expanded facilities.
- Changes in Metro's costs as tonnage shifts to the new or expanded facilities.
- Changes in other facilities' costs as tonnage shifts to the new or expanded facilities.

On-route savings are not considered in the calculation. Insofar as greater accessibility provides an opportunity for on-route efficiencies, the system cost analysis is conservative.

Note: these scenarios have been prepared for analytical purposes, and does not imply that Metro will authorize two transfer stations only, or that only the listed facilities would be considered for transfer station status.

Transfer Station Scenario Summaries: "Existing Facilities are Expanded"

The following tables summarize the components of system cost for a scenario in which two regional transfer stations are added to the system. For purposes of scenario construction, Recycle America and WRI were chosen as the sites of the new regional transfer stations. From the tables, costs for the two facilities rise significantly, reflecting: (1) The large amount of additional tonnage that is projected (and the associated increase in capital and operating costs) and (2) the concomitant new public obligations. However, this increase is more than matched by decreased costs at facilities that lose tonnage. Finally, there is a decrease in off-route transportation cost, as would be expected with more accessibility.

- The analysis for the year 2000 shows system **savings** of $972,000 if Recycle America and WRI were to operate as regional transfer stations (see table for year 2000 below).
- The analysis for the year 2010 shows system **savings** of $1,282,000 (in year 2000 uninflated dollars) if Recycle America and WRI were to operate as regional transfer stations (see table for year 2010 below).

Planning Level System Cost Analysis - Year 2000
(annual costs; not inflated; 2000 dollars)

Component	Status Quo	"Expanded"	Difference
On-Route Transport	NA	NA	NA
Off-Route Transport	$ 18,720,000	$ 18,400,000	$ (320,000)
Recycle America	$ 1,742,000	$ 6,409,000	$ 4,667,000
WRI	$ 2,310,000	$ 5,047,000	$ 2,737,000
Metro facilities	$ 27,125,000	$ 21,122,000	$ (6,003,000)
Other facilities*	$ 14,164,000	$ 12,111,000	$ (2,053,000)
Net cost (benefit)	$ 64,061,000	$ 63,089,000	**$ (972,000)**

NA = not applicable
** The figure represents the change for all facilities combined*

Source: R.W. Beck

Planning Level System Cost Analysis - Year 2010
(annual costs; not inflated; 2000 dollars)

Component	Status Quo	"Expanded"	Difference
On-Route Transport	NA	NA	NA
Off-Route Transport	$ 22,930,000	$ 22,370,000	$ (560,000)
Recycle America	$ 1,615,000	$ 7,298,000	$ 5,683,000
WRI	$ 2,249,000	$ 5,749,000	$ 3,500,000
Metro facilities	$ 30,372,000	$ 23,032,000	$ (7,340,000)
Other facilities*	$ 17,072,000	$ 14,507,000	$ (2,565,000)
Net cost (benefit)	$ 74,238,000	$ 72,956,000	**$ (1,282,000)**

NA = not applicable
** The figure represents the change for all facilities combined*

Source: R.W. Beck

Practical interpretation of this analysis is that these transportation savings can be "bought" for less than the cost of upgrading the two facilities to handle more tonnage and the required public obligations.

The following table is a summary of projected material quantities (tons per year). The table compares the "Status Quo" scenario to the "Existing Facilities are Expanded" scenario previously described. The table illustrates tonnage flow shifts and recovery projections for the years 2000 and 2010 for the existing regional transfer stations and the direct-haul MRFs used in the scenario analysis by R.W. Beck.

Summary of Projected Material Quantities (tons per year)
Year 2000

Year 2000	Total wet + dry	Recovered	Disposed
"Status Quo" (Existing system of three regional transfer stations: Central, South and Forest Grove)			
Metro Central	399,964	29,571	37,0392
Metro South	353,529	11,183	342,346
Forest Grove	108,799	1,828	106,971
RA (direct-haul/MRF)	51,923	2,858	49,822
WRI (direct-haul/MRF)	63,632	13,810	49,822
"Expanded System" (Two existing MRFs authorized as regional transfer stations: RA and WRI)			
Metro Central	317,695	25,772	291,923
Metro South	263,937	9,195	254,743
Forest Grove	93,378	1,713	91,665
RA	211,596	18,628	192,969
WRI	144,264	26,518	117,746

Summary of Projected Material Quantities (tons per year)
Year 2010

Year 2010	Total wet + dry	Recovered	Disposed
"Status Quo" (Existing system of three regional transfer stations: Central, South and Forest Grove)			
Metro Central	481,988	33,788	448,2000
Metro South	437,578	12,968	424,611
Forest Grove	138,124	2,192	135,932
RA (direct-haul/MRF)	52,829	2,833	49,996
WRI (direct-haul/MRF)	65,113	15,153	49,960
"Expanded System" (Two existing MRFs authorized as regional transfer stations: RA and WRI)			
Metro Central	374,324	29,293	345,031
Metro South	317,065	10,530	306,535
Forest Grove	117,680	2,050	115,630
RA	253,344	21,555	231,789
WRI	178,281	31,115	147,166

As expected, when two additional regional transfer stations are authorized (RA and WRI), tonnages shift from the existing transfer stations (Metro Central, South and Forest grove) to the newly authorized "expanded" facilities (RA and WRI). There is also a projected increase in material recovery directly related to the policy decision to require minimum recovery standards at new transfer stations. For additional details on scenario modeling, assumptions and tonnage shifts by facility, please refer to the System Impact Assessment report prepared by R.W. Beck, April 25, 2000.

"Service Gaps" Targeted

The following tables summarize the components of system cost for a scenario where two new regional transfer stations are added to the system in order to target the "service gaps" in the eastern and western part of the region. For planning purposes, the western transfer station is assumed to be a new facility located in close proximity to the Hillsboro Landfill. The eastern transfer station is modeled by an expansion of Recycle America into a full regional transfer station.

The "off-route transport" savings are about triple that of the previous scenario where existing facilities are "expanded", as would be expected when facilities are located specifically to reduce a "service gap". However, because an entirely new facility must be built in the west (i.e., there is no existing facility to expand or convert), the facility costs swamp the transport savings resulting in a net increase in the system costs.

- The analysis for the year 2000 shows system cost of $727,000 (see table for year 2000 below).
- The analysis for the year 2010 shows system cost of $531,000 (see table for year 2010 below).

Planning Level System Cost Analysis - Year 2000
(annual costs; not inflated; 2000 dollars)

Component	Status Quo	"Gaps" Targeted	Difference
On-Route Transport	NA	NA	NA
Off-Route Transport	$ 18,720,000	$ 17,720,000	$ (1,000,000)
New Transfer Station	$ 0	$ 7,090,000	$ 7,090,000
Recycle America	$ 1,742,000	$ 6,522,000	$ 4,780,000
WRI	$ 2,310,000	$ 2,310,000	$ 0
Metro facilities	$ 27,125,000	$ 21,322,000	$ (5,803,000)
Other facilities*	$ 14,164,000	$ 9,824,000	$ (4,340,000)
Net cost (benefit)	$ 64,061,000	$ 64,788,000	$ **727,000**

NA = not applicable
** The figure represents the change for all facilities combined*

Source: R.W. Beck

Planning Level System Cost Analysis - Year 2010
(annual costs; not inflated; 2000 dollars)

Component	Status Quo	"Gaps" Targeted	Difference
On-Route Transport	NA	NA	NA
Off-Route Transport	$ 22,930,000	$ 21,540,000	$ (1,390,000)
New Transfer Station	$ 0	$ 8,188,000	$ 8,188,000
Recycle America	$ 1,615,000	$ 7,454,000	$ 5,839,000
WRI	$ 2,249,000	$ 2,193,000	$ (56,000)
Metro facilities	$ 30,372,000	$ 23,598,000	$ (6,774,000)
Other facilities*	$ 17,072,000	$ 11,796,000	$ (5,276,000)
Net cost (benefit)	$ 74,238,000	$ 74,769,000	$ **531,000**

NA = not applicable
** The figure represents the change for all facilities combined*

Source: R.W. Beck

Finally, although this cost analysis does not mean a private firm will not build a facility in this location, it points out the cost effectiveness of capitalizing on existing facilities, consistent with the RSWMP objectives for extending and enhancing the infrastructure already in place.

VI. METRO FISCAL IMPACTS

Metro Costs

Metro's costs change as tonnage shifts to new transfer stations. These changes are reflected in costs to operate its two transfer stations, and to transport and dispose of the waste. Generally these costs decline as the waste shifts to the new facilities. Under the scenario where two transfer stations are added to the system, the cost at Metro facilities would decline by over $7 million (almost $9.5 million in inflated dollars).

Metro Fiscal Impacts

While overall Metro's costs decline as waste shifts to other facilities, its unit cost (cost per ton) increases. This is due to the declining block rate structure of its transfer station operation and disposal contracts, and the fixed costs charged only at Metro's facilities. Metro's unit cost for the two transfer stations would rise about $1.70 per ton ($2.26 in inflated dollars in 2010) under the scenarios above. If Metro makes no changes to its cost or rate structures, this might ultimately have to be reflected in the tip fee.

Conclusion

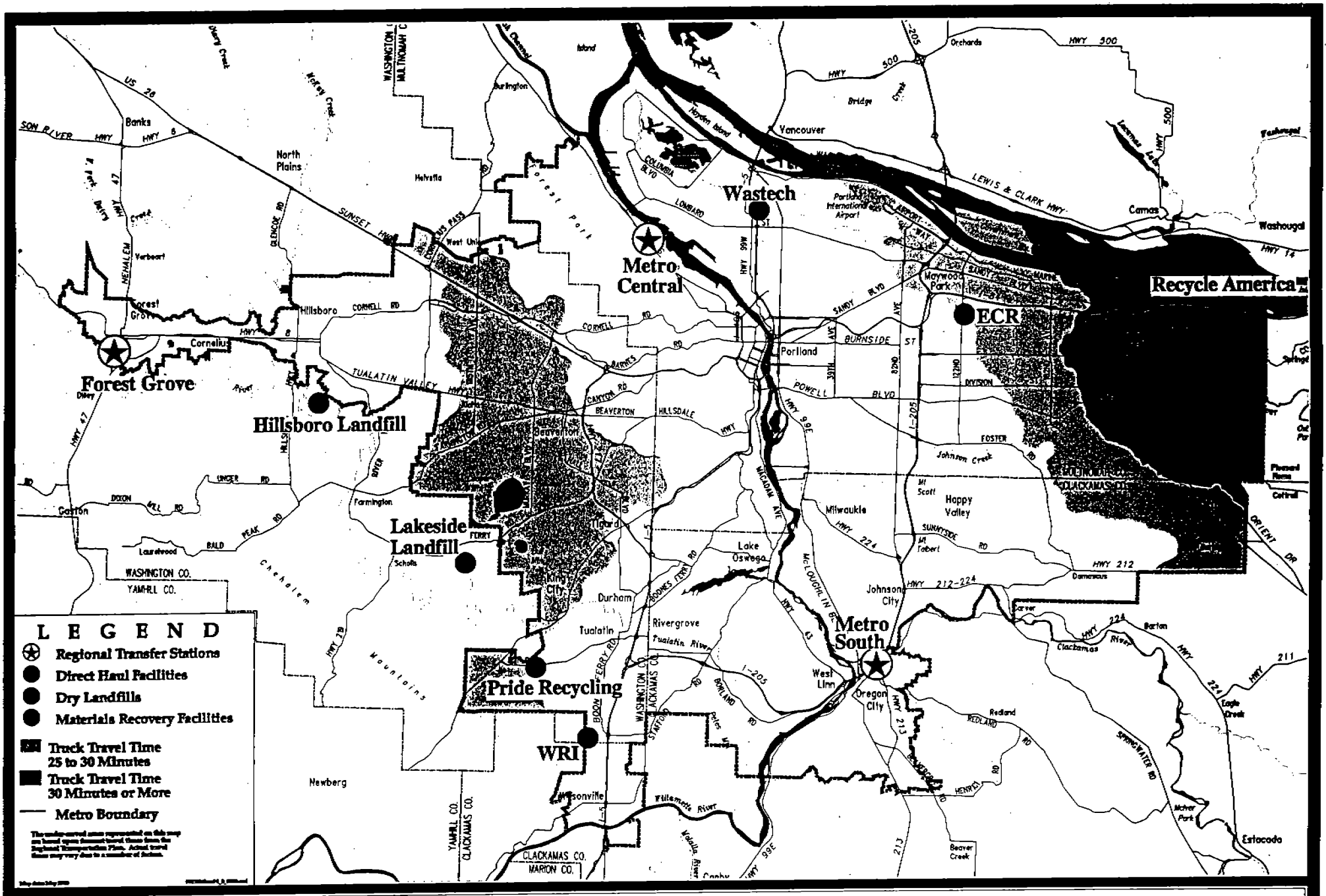
This report recommends that the Regional Solid Waste Management Plan (RSWMP) and Metro's regulatory code (Chapter 5.01) be amended to establish a framework, that would allow Metro to consider authorizing new transfer stations where positive benefits can be demonstrated. New transfer stations, under the appropriate set of circumstances, can provide a positive benefit to the regional solid waste system. Any new transfer stations would be required to provide a full range of public services, including provision of a recycling drop site, accommodating household hazardous waste collection, accepting all customers, and achieving a minimum material recovery rate of 25 percent. Amending the RSWMP and Metro regulations to allow Metro Council to consider applications for adding new transfer stations to the existing solid waste system, requires action on the attached ordinances by the Metro Council.

The amendments proposed under Ordinances No. 00-865, No. 00-866 and No. 00-867 will provide a framework with evaluation criteria, that will implement the recommendations described in this report. These amendments are consistent with the overall goal of the RSWMP which is to continue to develop and implement a Solid Waste Management Plan that achieves a solid waste system that is regionally balanced, environmentally sound, cost-effective, technologically feasible and acceptable to the public.

VIII. EXECUTIVE OFFICER RECOMMENDATION

The Executive Officer recommends approval of Ordinances No. 00-865, No. 00-866 and No. 00-867.

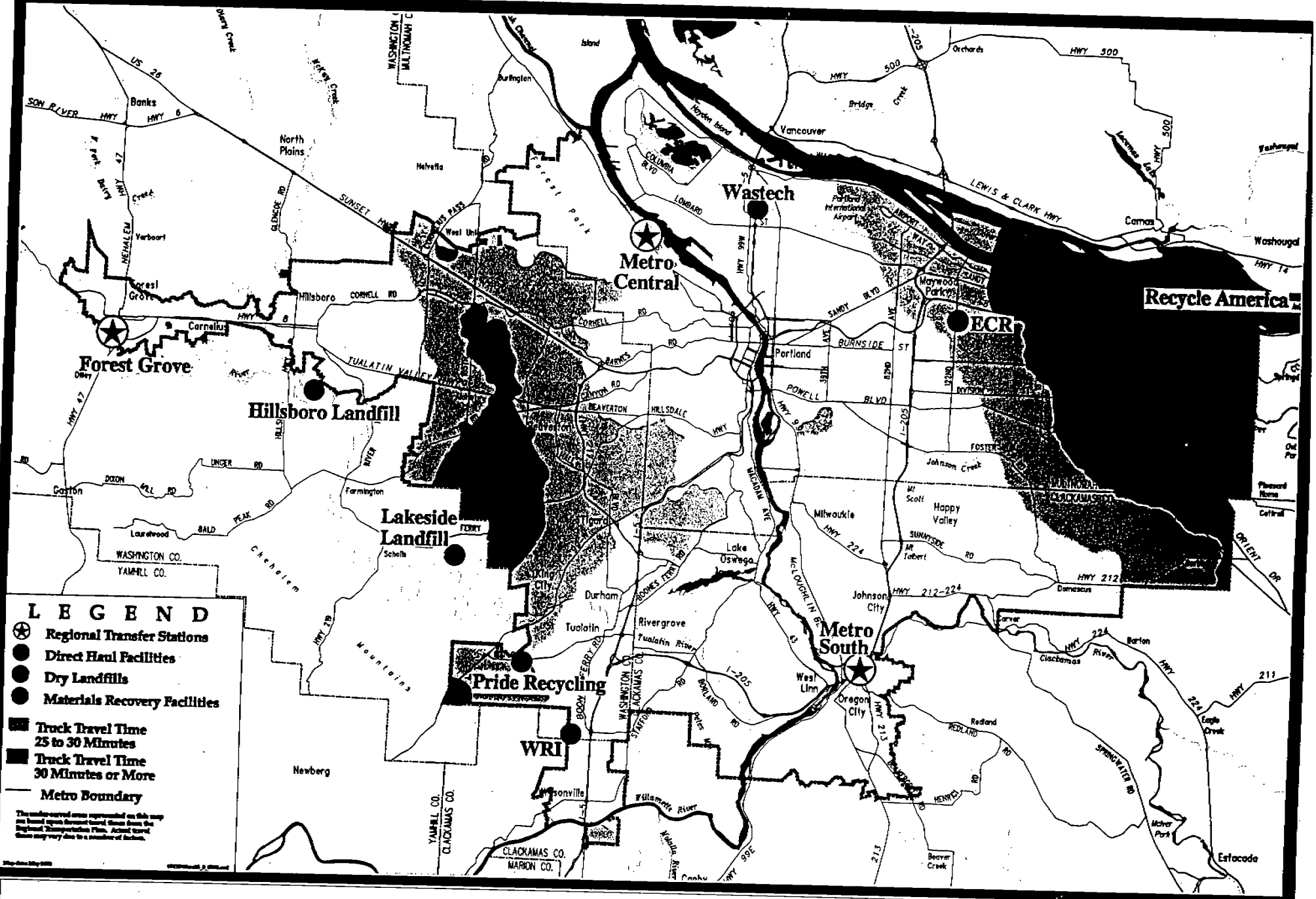
BM:gbc
Attachments
S:\SHARE\Dept\SVC_PLAN\Legislation\staff_rpt\staffrpt_5_24_00.doc



Travel Time to Existing Regional Transfer Stations (1994)

ATTACHMENT 1(a)

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
TEL 503 797 1650 | FAX 503 797 1794



Travel Time to Existing Regional Transfer Stations (2015)

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232-2736
TEL 503 797 1650 | FAX 503 797 1793

ATTACHMENT 1(b)