

Wet waste tonnage allocation

Proposed 2020 methodology

March 2018

Solid Waste Information, Compliance & Cleanup Property and Environmental Services

Public service

We are here to serve the public with the highest level of integrity.

Excellence

We aspire to achieve exceptional results

Teamwork

We engage others in ways that foster respect and trust.

Respect

We encourage and appreciate diversity in people and ideas.

Innovation

We take pride in coming up with innovative solutions.

Sustainability

We are leaders in demonstrating resource use and protection.

Metro's values and purpose

We inspire, engage, teach and invite people to preserve and enhance the quality of life and the environment for current and future generations. If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

So, hello. We're Metro - nice to meet you.

In a metropolitan area as big as Portland, we can do a lot of things better together. Join us to help the region prepare for a happy, healthy future.

Stay in touch with news, stories and things to do.

oregonmetro.gov/news

Follow oregonmetro









Metro Council President

Tom Hughes

Metro Councilors

Shirley Craddick, District 1 Betty Dominguez, District 2 Craig Dirksen, District 3 Kathryn Harrington, District 4 Sam Chase, District 5 Bob Stacey, District 6

Auditor

Brian Evans

600 NE Grand Ave. Portland, OR 97232-2736 503-797-1700

TABLE OF CONTENTS

Purpose	1
History and current process	1
2020 allocation methodology	7
Summary of new allocation approach	15
Allocation updates and changes	18

APPENDICES

Appendix A – Metro Council Resolution 16-4716: For the Purpose of Adopting a Transfer System Configuration Policy

Appendix B – Metro Council Ordinance No. 17-1401: For the Purpose of Adopting a Landfill Capacity Policy and Amending Metro Code Chapters 5.00 and 5.05

PURPOSE

This paper summarizes the history of tonnage allocations of wet waste to the greater Portland area's transfer station, Metro Council's 2016 adopted policy and direction to staff, and staff's proposed process to implement that policy beginning in 2020. In evaluating options including the status quo, staff concluded that the current process for allocating wet waste tonnage is inefficient and no longer serves the public interest that can be achieved by an alternative approach. The proposed process will allow for a clearer, more predictable and more transparent tonnage allocation system for the safe, efficient and cost-effective movement of wet waste in the Metro region. This approach serves the public benefits of the region's garbage and recycling system: protecting health and the environment, getting good value for the public's money, ensuring the highest and best use of materials, being adaptable and responsive in managing materials and ensuring services are available to all types of customers.

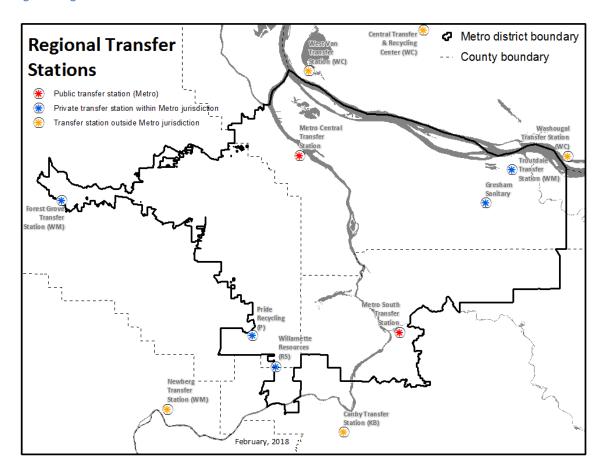
HISTORY AND CURRENT PROCESS

The Metro region has had a combination of privately owned and publicly owned solid waste transfer stations since 1985 when Metro first operated two public transfer stations and Forest Grove transfer station (privately owned) was granted a facility franchise by Metro. Three privately owned dry waste sorting facilities were granted approval to accept small amounts of wet waste in the late 1990s, and in 2016 the Gresham Sanitary Service reload facility sought and obtained a franchise to transfer wet waste primarily from its haulers. There are now five privately owned and two publicly owned stations transferring both wet and dry waste within Metro's jurisdictional boundary.

As shown in Figure 1, these facilities are:

- Forest Grove Transfer Station (FGTS) owned by Waste Management
- Troutdale Transfer Station (TTS) owned by Waste Management
- Willamette Resources Inc. (WRI) owned by Republic Services
- Pride Recycling Company (Pride) independently owned
- Gresham Sanitary Service (GSS) independently owned
- Metro South publicly owned
- Metro Central publicly owned

Figure 1 Regional transfer stations



Only three transfer stations located *outside* the Metro regional service boundary currently receive waste generated from within the Metro region: Canby Transfer in Clackamas County (independently owned) and West Van and Central Transfer stations (both owned by Waste Connections¹) in Clark County, Washington.

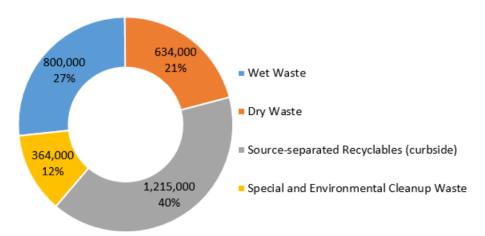
These facilities receive small amounts of waste under the authority of non-system licenses (NSLs)².

As shown in Figure 2, wet waste comprises approximately 27 percent of the region's total generated waste. Dry waste, at 21 percent, includes: 1) residual waste generated from

Wet waste comprises approximately 27 percent of the region's total generated waste.

processing recyclable material collected from residents and business and 2) residual waste generated from sorting and processing other dry waste such as construction and demolition debris. Source-separated recyclables comprise 40 percent, and special waste and environmental cleanups (e.g., remediation waste and street sweepings) are 12 percent annually. Wet waste is approximately one quarter of the greater Portland area's total generated waste but represents a key profit center for some privately held transfer stations. Of the three million tons of waste generated in the Metro region, about 56 percent is disposed in landfills and about 44 percent is recovered or recycled.

Figure 2 2017 estimated regional waste types



Tonnage figures are estimates rounded to the nearest thousand.

Data sources: Metro Solid Waste Information System, DEQ 2016 Material Recovery Survey

¹ The Clark County transfer stations are currently owned by Waste Connections. However, Clark County has a contractual option to own them all in 2027 for \$1.00.

² Non-system licenses or "NSLs" are granted by Metro to allow waste generated within the Metro region to be transported to processing, transfer or disposal sites that are located outside the Metro region. The non-system licensee is obligated to pay Metro's per-ton regional system fee and excise tax on the garbage it receives from homes and businesses located within Metro's jurisdiction.

Forest Grove transfer station was the first privately owned wet waste transfer station in the region and was authorized to operate without any tonnage limitation until 2014. Metro subsequently authorized the Troutdale, Pride and WRI facilities to accept limited amounts of wet waste in the late 1990s. These authorizations were intended to improve wet waste

collection efficiencies in the region and ensure that the public's interest in obtaining and investing in solid waste services region-wide was maintained. These initial authorizations capped the amounts of wet waste that each station could receive. These tonnage caps were kept uniform at all of the stations except for Forest Grove.³

Since 2002, Metro has not imposed limits on the amount of dry waste that any facility may receive in order to encourage recovery and processing across the region at several processing locations.

Prior to 2002, dry waste was generally included in the tonnage caps at "local" transfer stations.⁴ Since 2002, Metro has not imposed limits on the amount of dry waste that any facility may receive in order to encourage recovery and processing across the region at several processing locations. Dry waste may be accepted without limit by any authorized facility that performs material recovery in accordance with Metro Code.⁵

Over the years, privately owned transfer stations have periodically sought to improve their operational efficiencies through larger wet waste tonnage caps. Relying on the annual solid waste tonnage forecast and system knowledge, Metro has periodically increased tonnage caps when the forecast indicated growth in regional tonnage was available. While Metro aspired to improve system efficiencies, there was not always a consistent methodology for calculating adjustments for each transfer station.

This current process is not always predictable and often results in tonnage caps that may not provide optimal public benefit. Setting current wet waste tonnage caps does not fully account for changes in waste generation caused by increased sub-regional population or business growth. In other words, the current tonnage caps are blind to real increases in waste generation in areas of increased housing and economic development. It was in part

Wet waste tonnage allocation: Proposed 2020 methodology | March 2018

³ Forest Grove was initially authorized as a "regional" transfer station which, at that time by definition, did not have a tonnage cap or limitation. In 2014, Metro discontinued the regional transfer station distinction and established a 125,000-ton annual cap at the facility.

⁴ A local transfer station generally provided fewer disposal services than that of a regional transfer station. In 2014, Metro discontinued the local transfer station distinction.

⁵ The requirement to process dry waste was established by Metro's adoption of the Enhanced Dry Waste Recovery Program (EDWRP) in 2008. Prior to that time, Metro allowed the direct disposal of unprocessed dry waste.

because of these allocation issues that the Metro Council directed staff to develop a consistent, predictable, scientific process to allocate wet waste tonnage beginning in 2020.

In July 2016, Council adopted the "Transfer System Configuration Policy" (Appendix A: Resolution No. 16-4716). This policy was the culmination of a lengthy study by Metro staff and stakeholders such as the Transfer System Task Force (consisting of representatives from each transfer station in the region), the Solid Waste Alternative Advisory Committee (SWAAC), local government solid waste directors, and others. The policy reiterated support for the region's current hybrid public/private transfer station ownership model and directed staff to develop an allocation process for wet waste.

Metro Council's 2016 transfer system policy requires that the new methodology serves maximum public benefit and:

- Allocates wet waste tonnage to the privately owned transfer stations on a percentage basis to ensure sufficient flow to support the hybrid system;
- Encourages haulers to minimize off-route travel to reduce greenhouse gases, traffic congestion and provide other public benefits; and
- Minimizes system inefficiencies by requiring that all landfill-bound waste use a transfer station located within the regional boundary.⁶

While Metro seeks to minimize system disruption, it is important to remember that significant system changes are expected to occur in 2020 when this allocation proposal is implemented including:

- Metro's existing disposal contract with Waste Management will terminate at the end of 2019 and no longer require that 90 percent of the region's wet waste be delivered to this disposal contractor.
- Metro will enter into a new disposal contract for the publicly owned transfer stations but allow the privately owned stations to establish their own disposal contracts.
 Privately owned stations may have the option to be included under Metro's new disposal contract, pending final contract negotiations.
- Metro will rebid one or both of its transfer station operations contracts.
- Metro will likely phase-in requirements for certain businesses to have food scraps collected separately from garbage, including a possible landfill disposal ban for food waste in the future, and establishing a processing technology to recover food waste.
- Metro will begin implementing the 2030 Regional Waste Plan, once adopted by Metro Council in 2018.

⁶ More than 99 percent of the region's wet waste is generated nearest to a transfer station located within the region. In the proximity-based allocation model, out-of-region transfer stations are inefficient in the system, and are positioned to receive less than one percent of the region's wet waste.

• Metro's landfill capacity policy (Appendix B: Ordinance No. 17-1401)⁷ will be in effect and preclude the use of the Riverbend Landfill for disposal of waste originating within the Metro region starting in 2020.

In response to the Metro Council's 2016 transfer system policy, Metro staff evaluated many alternative methodologies for ensuring that the publicly owned stations retain at least 40 percent of the region's wet waste tonnage while most efficiently allocating the remaining waste to the privately owned stations. Staff considered a wide range of alternatives including directing local governments to require waste haulers to use a specific transfer

station, mandating which station a hauler must use based on where it ends its route, and retaining the status quo. As part of the evaluation criteria, staff sought to establish a consistent process and framework to allocate tonnage.

Staff concluded that a tonnage allocation approach based on proximity that relies on *uncongested* travel time⁸ from the end of a haul

The proposed allocation methodology uses proximity to calculate the appropriate proportion of wet waste tonnage for each wasteshed. It does not direct flow of waste to specific transfer stations.

route to a transfer station best met the Metro Council's policy direction. The analysis for this approach relies on spatial proximity to establish a boundary or "wasteshed" around each individual transfer station. Metro then relies on traffic analysis zones (TAZ) as the granular base unit for estimating the volume of wet waste generated within each wasteshed based on population density and types of businesses. The proposed allocation methodology uses proximity to calculate the appropriate proportion of wet waste tonnage for each wasteshed. It does not direct the flow of waste to specific transfer stations.

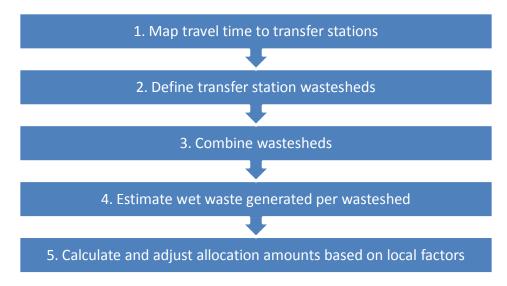
⁷ Ordinance No. 17-1401, For the Purpose of Adopting a Landfill Capacity Policy and Amending Metro Code Chapters 5.00 and 5.05. Adopted by Metro Council May 25, 2017, effective January 2020.

⁸ See pages 8-10 for additional details on uncongested travel time to represent access to transfer stations.

2020 ALLOCATION METHODOLOGY

Effective January 1, 2020, Metro will allocate a share of regional wet waste to each private transfer station based on the amount of waste that is generated in closest proximity to it. Figure 3 shows the basic steps to completing that analysis; additional detail for each step is provided later in this document:

Figure 3 Allocation steps



Step 1: Map travel time to transfer stations

Metro maintains a regional transportation model for regional planning purposes that produces, among other metrics, zone to zone travel times. From this model, staff mapped uncongested travel times (which consider speed limits, but not actual traffic flows which fluctuate during the day) to transfer stations to show baseline travel times from any point in the region to the nearest transfer station in the region (Figure 4).

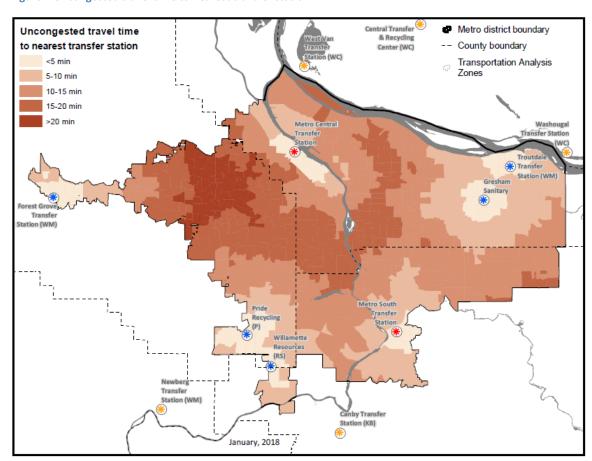
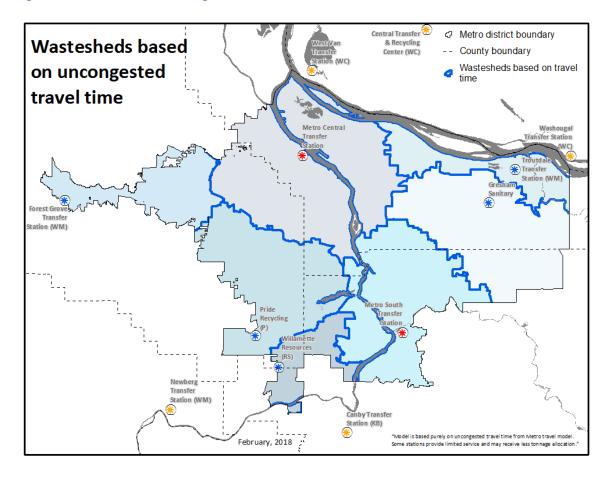


Figure 4 Uncongested travel time to nearest transfer station

Step 2: Define transfer station wastesheds

Each wasteshed is the area most accessible to and most efficiently served by an existing transfer station. Wastesheds are defined and delineated to establish the areas around each station that would, if used by haulers, minimize travel time across the region. The boundaries split the region so that the area within each boundary is closest (in travel time) to the transfer station that is also within the boundary. Uncongested travel times from Metro's regional transportation model are used to delineate the boundaries between these wastesheds (Figure 5).

Figure 5 Wastesheds based on uncongested travel time



Metro evaluated several different facility accessibility and proximity measures to delineate wastesheds, including road network distance and peak hour travel times (7-9 a.m. weekdays). All measures were found to result in similar wastesheds, so the choice of accessibility measure had little influence on the ultimate wasteshed boundaries and resulting allocations. Most industry and local government stakeholders indicated a preference for travel time over distance because the time-based measure better reflects the costs associated with route-based hauling operations. Uncongested travel time is a more stable metric than peak hour travel time, so it results in a more predictable and consistent policy. It is also more consistent as a baseline measure for all haulers than arbitrarily choosing a specific window of peak-hour travel to represent truck travel. No single

accessibility measure captures all offroute garbage truck costs accurately and completely, and Metro will continue to evaluate alternative models for the basis of future allocations.

Truck parking lots and barns are not used to define wastesheds because the parking is a variable that can be modified. Including parking in the analysis tends to create a less stable, less predictable

The most reliable and relevant factor in creating regional efficiency and public benefits is the location of the transfer station, not the parking lot, compared to the end-of-route for garbage collectors.

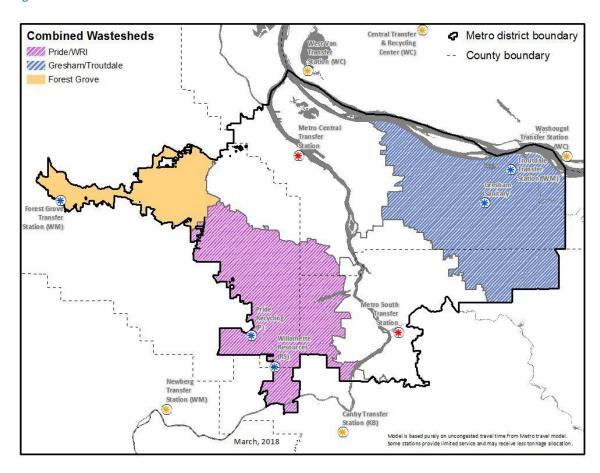
allocation system and fragments the analysis unnecessarily. The most reliable and relevant factor in creating regional efficiency and public benefits is the location of the transfer station, not the parking lot, compared to the end-of-route for garbage collectors.

⁹ While peak time reflects the "worst case" traffic scenario, it does not necessarily represent the actual time of day when hauler trucks are traveling off-route since this varies among haulers and routes. Further, off-route travel time of day is difficult to model since individual hauling decisions are often made on a daily basis based on ever-changing factors such as congestion, road traffic accidents, road repairs and other factors. Travel in peak traffic times is less efficient than at off-peak times, so uncongested travel time was selected as the measure that is both unbiased and most consistent with the Metro Council's objectives of minimizing off-route travel time, greenhouse gas (GHG) emissions, and traffic congestion. Metro intends to further analyze travel scenarios for garbage trucks and update the proposal as appropriate.

Step 3: Combine wastesheds

Because the region's existing transfer stations were not located specifically to achieve an ideal dispersed distribution or achieve a particular public benefit, they are not distributed evenly across the region. Some are clustered closely together. As a result, individual wastesheds vary in size. To address this, where transfer stations are located in close proximity to one another, Metro merged wastesheds (Figure 6). Stations less than 10 minutes apart according to the travel time model are merged into a single wasteshed; for example, Pride and WRI share a wasteshed in the final model, as seen in the purple hatched area of the map below. This approach supports consistency in allocations over time and reduces overall system disruption in transition to the new methodology and to potential future changes in the transfer system configuration.

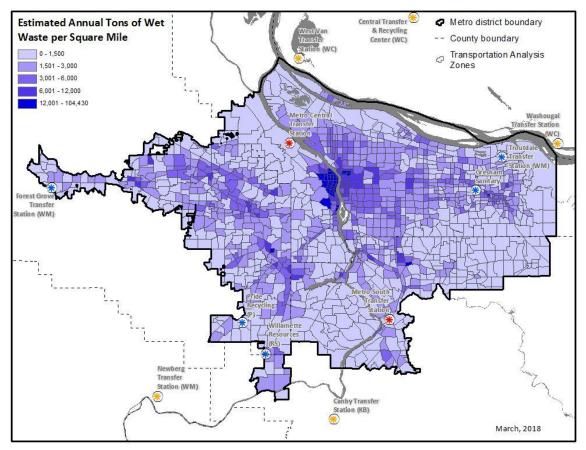
Figure 6 Combined wastesheds



Step 4: Estimate wet waste generated per wasteshed

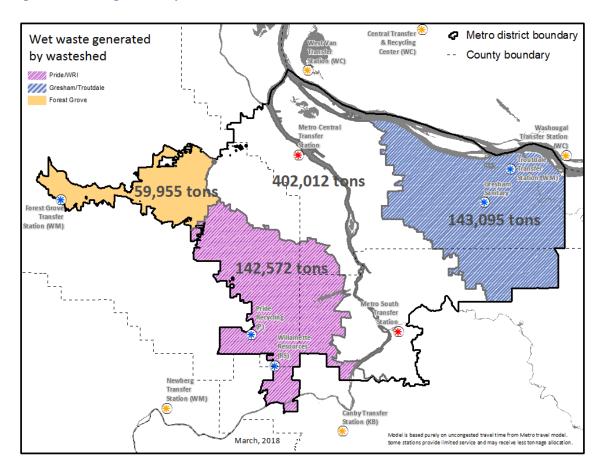
The amount of wet waste generated across the region is estimated based on population and employment data. Metro used TAZs to determine how population and employment is distributed across the region. Metro calculates the amount of waste generated for each TAZ to establish an estimate based on a model that is based on standard generation rates applied to each TAZ's specific population and employment figures (Figure 7).





Metro aggregates the TAZ-based wet waste estimates to wasteshed areas to calculate the most proximate tonnage for each transfer station. Figure 8 shows the estimated wet waste generated in each wasteshed¹⁰ which will serve as the basis for allocations. Because the waste estimates are based on regularly updated population and employment data, this approach ensures that tonnage allocations will be sensitive to dynamic regional population and business changes over time.





_

¹⁰ These tonnage allocations are derived from the wasteshed's proportion of the regional tonnage applied to the 2018 regional forecasted wet waste generation. Actual allocations for 2020 would be calculated based on each transfer station's regional percentage share applied to the 2020 regional wet waste forecast.

Step 5: Calculate and adjust allocation amounts based on local factors

Metro sets tonnage allocations for each facility based on the wet waste generated in its wasteshed, adjusting for facility physical capacity; hauler control (or lack thereof); local government limitation on size, traffic and land use designations, and other factors related to public benefits.

Where Metro combined wastesheds because of clustering (Step 3), Metro splits the tonnage evenly between the transfer stations. In cases where one transfer station's operating franchise authorizes a smaller number of tons than its potential allocation, the allocation is adjusted to match the franchise amount and the remaining tonnage is re-allocated to the transfer stations that share the wasteshed. For example, because Gresham Sanitary is currently authorized to receive 23,687 tons (the amount of waste under its direct control), Metro would assign the remaining 47,860 tons in that shared wasteshed to Waste Management's Troutdale Transfer Station.

Key implementation points

Wastesheds are only used to determine and establish optimal wet waste tonnage allocations—they do not direct flow to specific transfer stations. Under this proposal, each transfer station is limited to receiving the amount of wet waste tonnage that would naturally flow to it if each hauler were to go to the nearest transfer station (except Gresham Sanitary Station, which is adjusted to a lower amount as determined by its solid waste franchise¹¹).

A hauler is free to use any transfer station authorized by Metro within the region. Transfer stations must, however, accept all haulers within their wasteshed, even to the exclusion of accepting haulers owned by the same company if their collection territories are located further away than the local hauler located within the wasteshed.

Out-of-region transfer stations will be ineligible to receive wet waste generated within the region because no out-of-region station is found to be located in closer proximity to a significant number of hauler routes located within the Metro regional boundary¹². In addition, this approach conforms to the Metro Council's 2016 policy to invest in facilities already located inside the Metro jurisdictional boundary.

SUMMARY OF NEW ALLOCATION APPROACH

Metro's present wet waste tonnage cap/allocation method was never designed to serve the public interest, has been demonstrated to be inefficient, and will only become more challenging as the region continues to change and grow. Past practice of adjusting wet waste caps based on private operator requests and regional tonnage growth and trends does not allow for transparency, predictability, or the

A hauler is free to use any transfer station authorized by Metro within the region. Transfer stations must, however, accept all haulers within their wasteshed – even to the exclusion of accepting haulers owned by the same company if they are located further away than the local hauler located within the wasteshed.

¹¹ Gresham Sanitary Station current tonnage allocation in its Metro Solid Waste Franchise is limited to that which it controls in its local hauling franchise. The balance of tonnage in the combined wasteshed is assigned to the other transfer station in that wasteshed, Troutdale Transfer Station.

¹² Metro is responsible for managing the region's waste and ensuring that it is handled appropriately and efficiently. If Metro continued to allow in-region wet waste to be handled outside the region, additional oversight of those facilities would be required. The amount of wet waste generated within the region that is geographically closer to out-of-region stations is estimated at less than one-quarter of one percent of the total regional wet waste tonnage, which is not sufficient to warrant the extra administrative costs, authorization, and oversight of those facilities.

important geographic differences in regional growth. Development, population, jobs, and other factors do not occur uniformly across the Metro region and this new, scientific method of determining where waste is being generated, and how efficiently it can move a transfer station, provide for smart, predictable, transparent policy making. Metro finds that current wet waste tonnage movements are often the result of the relationships between hauling companies and transfer station ownership rather than established travel time efficiency or other public benefit. Hauling companies, at times, prefer to bring wet wastes to their affiliated stations rather than the closest station. In short, the current system may not promote regional transfer efficiency.

Under the proposed methodology, the tonnage that would be allocated to each transfer station conforms to the 40 percent minimum requirement for Metro public transfer stations, based on current transfer station authorizations, population and employment data, and analysis.

The following table (Table 1) shows the difference in tonnage shares for transfer stations that currently receive Metro wet waste, including Metro's own stations. It provides a comparison between 2017 actual tonnage received, authorized 2018 allocations, and proposed allocations based on the new methodology which would be implemented in 2020. The percentage shares listed under "Proposed 2020 Allocations" would be applied to the 2020 forecast to calculate actual tons authorized to each private transfer station. The comparison demonstrates the impact of the proposed new methodology, holding the total regional tonnage constant.

Table 1 Wet waste tonnage allocations; current and proposed

In-region private stations	2017 actual tonnage delivery	Current 2018 allocations	3	Proposed 2020 allocations	2018-2020 allocation % change
	Tonnage %	Tonnage %	Tons	Tonnage %	
Forest Grove ¹³	16.59%	16.73%	125,000	7.97%	-8.76%
Troutdale	9.74%	10.69%	79,880	15.98%	5.29%
WRI	10.26%	10.69%	79,880	9.54%	-1.15%
Pride	10.37%	10.69%	79,880	9.54%	-1.15%
Gresham Sanitary	3.04%	3.17%	23,687	3.17%	0%
CORE	0%	0.06%	472	0%	-0.06%
In-region public stations					
Metro South and Metro Central ¹⁴	45.85%	41.79%	312,270	53.80%	12.02%
Out-of-region stations					
Canby Transfer	1.48%	2.22%	16,600	0%	-2.22%
Clark County	2.66%	3.43%	25,601	0%	-3.43%
Covanta	0.24%	0.53%	3,967	0%	-0.53%
Total			747,236		

-

 $^{^{13}}$ Forest Grove TS was allocated a 125,000-ton limit instead of receiving a percentage-based allocation. The resulting derived amount is 16.73 percent.

¹⁴ The percentages for Metro's public stations in the Current 2018 and Proposed 2020 Allocations are the estimated tons generated in these wastesheds. Metro does not allocate tonnage to publicly owned stations.

ALLOCATION UPDATES AND CHANGES

In future years, each transfer station's wet waste tonnage allocation will be periodically calculated by applying that station's percentage share to the upcoming forecast of annual regional wet waste tonnage. Metro will update the percentage shares to reflect the most current transfer station configuration and population and employment data. Wastesheds will periodically be redrawn and waste share recalculated if new transfer stations open, capacity changes at existing facilities, or new travel time data becomes available.

APPENDIX A - METRO COUNCIL RESOLUTION 16-4716: FOR THE PURPOSE OF ADOPTING A TRANSFER SYSTEM CONFIGURATION POLICY			

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING A)	RESOLUTION NO. 16-4716
TRANSFER SYSTEM CONFIGURATION)	
POLICY)	Introduced by Chief Operating Officer Martha
		Bennett in concurrence with Council
		President Tom Hughes

WHEREAS, Metro, as the solid waste system planning authority for the region, regulates solid waste facilities and disposal sites within the region and the disposal of solid waste generated in the region, pursuant to Metro's constitutional, statutory, and charter authority, consistent with the policies included in the Regional Solid Waste Management Plan, and as set forth in Metro Code Title V; and

WHEREAS, solid waste regulation, disposal, and planning are traditional local government functions within Metro's authority; and

WHEREAS, Metro owns and operates two transfer stations located in the Metro region, and

WHEREAS, Metro Code Chapter 5.01 requires a legislative grant of authority by Metro, through issuance of a solid waste franchise, before a private transfer station located in the region is allocated solid waste that would otherwise flow to a public transfer station; and

WHEREAS, the Chief Operating Officer has developed options regarding the configuration of the public and private transfer station system in the Metro region; and

WHEREAS, the Chief Operating Officer recommends, to ensure that the transfer system provides maximum public benefit, that Metro maintain the current configuration of public and private transfer stations and (1) allocate tonnage on a percentage basis to ensure flow to public stations; (2) limit the amount of putrescible solid waste any one private company may transfer; and (3) ensure transparency of rates; and

WHEREAS, the Metro Council finds that maintaining two public transfer stations and ensuring flow to those stations results in significant health and environmental public benefits because the public stations provide enhanced services, including longer hours, self-haul capacity, and acceptance of hazardous waste and recyclables; and

WHEREAS, the Metro Council finds that maintaining a consistent flow of solid waste to public transfer stations serves the public benefit of promoting innovative solid waste programs; for example, the Council has identified the recovery of food scraps as a priority policy and flow of solid waste to public transfer stations is key to the success of that policy; now therefore

BE IT RESOLVED that the Metro Council (1) adopts the Transfer System Configuration Policy, attached as Exhibit A; (2) directs the Chief Operating Officer to proceed with implementation of the Policy.

ADOPTED by the Metro Council this <u>alst</u> day of <u>July</u> 2016.

Fom Highes, Council Presiden Retro CONSEIL METRO

Approved as to Form:

Alison R. Kean, Metro Attorney

Exhibit A:

Transfer System Configuration Policy:

- 1. **Tonnage Allocation based on Percentage**. Allocating putrescible waste tons on a percentage basis with a minimum percentage reserved for the public facilities will ensure that rising regional tonnage will increase all allocations proportionally. Conversely, if, for example, food waste collection or economic recession reduces wet waste regionally, then flow to **all** transfer stations will be reduced proportionally, and not just reduce flow to the public stations.
- 2. **Tonnage Allocation Appeals Process**. Emphasize predictability and transparency so that all operators can plan accordingly. Minimize ongoing tonnage allocation "negotiations" and try to prevent continually re-adjusting allocations. However, the collection and transfer system is dynamic, and it may be unreasonable to keep allocations fixed indefinitely. At a minimum, staff should seek to develop a consistent process and framework for adjusting allocations that could be adopted by Council as a matter of policy and the details implemented by the COO.
- 3. **Flexibility to Pursue Additional or New Services, or Technology.** Ensure that any changes to the transfer system can accommodate future decisions related to important new services with public benefits, such as organics recovery, or pursuing new technology, such as advanced materials recovery (AMR), or waste-to-energy.
- 4. **Small Business Opportunities**. Support smaller locally-based businesses remaining in the collection system and other small businesses that use the system.
- 5. **Promote Efficient Off-Route Travel**. For reduction of greenhouse gas and other public benefits, encourage haulers to minimize off-route travel (i.e., trip between collection route and transfer station or base yard).
- 6. **Improve Transparency about the Cost of Services Provided at the Public Stations**. Provide a separate accounting of the cost of various discrete public services provided at the public stations i.e., separate out the cost of services such as wet waste consolidation and transfer, dry waste recovery, self-haul, and organics consolidation and transfer to provide a more detailed and direct comparison of the cost of services offered at private stations.
- 7. **Rate Transparency at Private Stations**. Local government staff have stated they would benefit from additional transfer station rate transparency in their collection franchise rate review processes. A number of approaches are described in the implementation details.
- 8. **Wet Waste Generated in Region Should Utilize the Regional Transfer System.** In order to minimize inefficiencies, all landfill-bound waste should utilize the regions transfer system, or some alternative disposal system (Waste to Energy, Alternative Materials Recovery, etc.).

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 16-4716, FOR THE PURPOSE OF ADOPTING A TRANSFER SYSTEM CONFIGURATION POLICY

Date: July 21, 2016 Prepared by: Tim Collier X1913

BACKGROUND

The RSWMP and Resolution no. 06-3729 (adopting the Transfer Station Ownership study, aka Disposal System Planning "DSP1") state that Metro should continue to operate two public stations, but that policy direction did not elaborate to what degree, in what role, or with what footprint. At a work session on March 1, 2016, Metro Council confirmed that the transfer system should be managed to provide the following public benefits:

- 1. Protect people's health
- 2. Protect the environment
- 3. Maintain our commitment to the solid waste hierarchy as set forth in state law
- 4. Maintain a system that is flexible and adaptable to changing needs and circumstances
- 5. Ensure adequate and reliable services are available to all customers
- 6. Recognize prior and future public and private investment
- 7. Ensure sustainable finance
- 8. Minimize long-term life cycle cost of providing transfer services

The Metro Council also confirmed the role of the public stations as follows:

Metro should continue its public transfer station operations to achieve multiple objectives:

- Provide a rate benchmark for local government regulators of collection;
- Provide enhanced services, such as household hazardous waste collection,, long operating hours and days, enhanced employee benefits, etc.;
- Provide a public disposal option for any and all haulers (keeps level playing field for small businesses and the public, facilities open to all); and
- Provide flexibility to pursue new services or technologies, consistent with the waste management hierarchy.

At the work session, staff presented the following findings about the transfer system:

- Metro's public/private system works well: its basic functions, geographic locations of facilities and service responsibilities should be retained.
- There is adequate access to self-haul disposal and no need for substantial new service.
- For household hazardous waste, if additional service is desired (beyond what is being provided at MCS and MSS), additional mobile services, such as round-ups, are the preferred delivery method.
- The public/private putrescible waste tonnage split is currently about right to balance the following competing goals:
 - Minimizing off-route collection cost and related traffic and emissions impacts.

- Ensuring adequate private station throughput and tip fees to allow for continued operations at current service levels.
- Ensuring adequate public station throughput to allow the provision of enhanced public services at reasonable cost, and to provide the opportunity to pursue new, innovative solutions.

Guiding Principles for Transfer System Management Options

When considering management options for the transfer system, the following principles will shape how those options are developed:

- 1. Metro has the broad legal authority to require all waste to be delivered to its public transfer stations and may choose to allocate waste tonnage to private facilities to achieve desired regional outcomes and public benefits.
- 2. Metro will continue to move all solid waste to higher and better forms of management, as guided by the state waste management hierarchy, while also considering technical and economic feasibility.
- 3. During the 2017-2019 interim period, franchises should be viewed as transitional prior to full-term franchises (5 years) taking effect in 2020.
- 4. Metro will continue to utilize franchises to authorize in-region transfer stations, and non-system licenses to authorize haulers seeking to deliver solid waste to out-of-region non-system facilities.

The following staff proposals are for Council to consider to improve governance and operation of the Metro region transfer system. It is the culmination of a lengthy study of issues facing the transfer system by Metro staff and key stakeholders such as the Transfer System Task Force (consisting of representatives from each transfer station in the region), the Solid Waste Alternatives Advisory Committee, local government solid waste directors, and others. More specifically, it responds to questions and comments from Council members at a Work Session held on March 1, 2016 and additional feedback from stakeholders since that time.

The proposals seek to ensure that the transfer system provides maximum Public Benefits (as defined by the Metro Council) today and in the future. The key recommendations for the transfer system are as follows:

- A. **Percentage Tonnage Allocation**: Allocations would be made on a pre-established *percentage* basis. Individual facility tonnage allocations would then be set on this percentage. That way tonnage allocations for each year will increase (or decrease) according to the change in total tons available.
 - A tonnage "floor" is recommended to ensure that public stations continue to provide the high quality service for which they are known. Staff proposes that a minimum of 40% of the region's putrescible waste be delivered to Metro transfer stations leaving up to 60% available for allocation to private transfer stations. (Figure 1 illustrates which portion of the region's waste is subject to allocation, i.e., approximately 690,000 putrescible tons in 2015).
 - Percentage allocations to private facilities would recognize private investment and provide greater certainty for future business planning.
 - Flexibility would be built in to respond to system changes, such as to accommodate new facilities, lower than anticipated deliveries, and shifting tons from one station to another.
- B. **Small Business Opportunities.** To enable small, local business to thrive, Metro should limit to 40% the amount of putrescible waste that any single company can transfer.

C. **Rate Transparency**. Three options have been identified for Council consideration that would improve the transparency of tip fees at private putrescible waste transfer stations and to assist local government collection rate review.

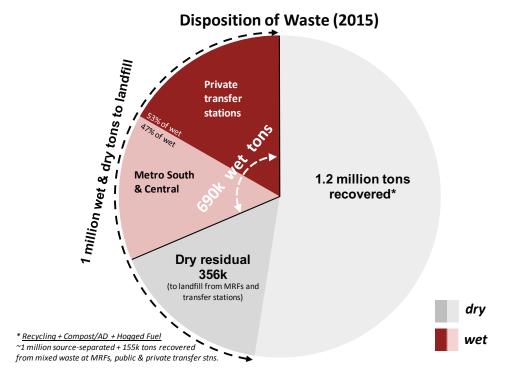


Figure 1. Disposition of Metro region waste in 2015. Metro authorized private transfer facilities to accept a little over half of the 690,000 tons of putrescible waste generated in the region.

Further detail on the specific policy proposals is provided below.

Policy Proposals:

- Tonnage Allocation based on Percentage. Allocating putrescible waste tons on a
 percentage basis with a minimum percentage reserved for the public facilities will ensure that
 rising regional tonnage will increase all allocations proportionally. Conversely, if, for
 example, food waste collection or economic recession reduces putrescible waste regionally,
 then flow to all transfer stations will be reduced proportionally, and not just reduce flow to
 the public stations.
- 2. Tonnage Allocation Appeals Process. Emphasize predictability and transparency so that all operators can plan accordingly. Minimize ongoing tonnage allocation "negotiations" and try to prevent continually re-adjusting allocations. However, the collection and transfer system is dynamic, and it may be unreasonable to keep allocations fixed indefinitely. At a minimum, staff should seek to develop a consistent process and framework for adjusting allocations that could be adopted by Council as a matter of policy and the details implemented by the COO.
- 3. **Flexibility to Pursue Additional or New Services, or Technology.** Ensure that any changes to the transfer system can accommodate future decisions related to important new services with public benefits, such as organics recovery, or pursuing new technology, such as advanced materials recovery (AMR), or waste-to-energy.

- 4. **Small Business Opportunities**. Support smaller locally-based businesses remaining in the collection system and other small businesses that use the system.
- 5. **Promote Efficient Off-Route Travel**. For reduction of greenhouse gas and other public benefits, encourage haulers to minimize off-route travel (i.e., trip between collection route and transfer station or base yard).
- 6. Improve Transparency about the Cost of Services Provided at the Public Stations. Provide a separate accounting of the cost of various discrete public services provided at the public stations i.e., separate out the cost of services such as putrescible waste consolidation and transfer, dry waste recovery, self-haul, and organics consolidation and transfer to provide a more detailed and direct comparison of the cost of services offered at private stations.
- 7. **Rate Transparency at Private Stations**. Local government staff have stated they would benefit from additional transfer station rate transparency in their collection franchise rate review processes. A number of approaches are described in the implementation details.
- 8. Putrescible Waste Generated in Region Should Utilize the Regional Transfer System. In order to minimize inefficiencies, all landfill-bound waste should utilize the regions transfer system, or some alternative disposal system (Waste to Energy, Alternative Materials Recovery, etc.).

ANALYSIS/INFORMATION

- 1. **Known Opposition:** There is no known opposition to this resolution.
- 2. **Legal Antecedents:** Oregon Constitution, ORS Chapter 268, Metro Charter, Metro Code, Regional Solid Waste Management Plan
- 3. **Anticipated Effects:** Metro staff will initiate planning activities to address policy issues identified by the Council and move forward with rules to implement that policy direction.
- 4. **Budget Impacts:** The budget impacts in this resolution have been accounted for in the 2016-17 budget adopted by the Metro Council.

RECOMMENDED ACTION

The Chief Operating Officer recommends adoption of Resolution No. 16-4716.

APPENDIX B - METRO COUNCIL ORDINANCE NO. 17-1401: FOR THE PURPOSE OF ADOPTING A LANDFILL CAPACITY POLICY AND AMENDING METRO CODE CHAPTERS 5.00 AND 5.05	

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING A)	ORDINANCE NO. 17-1401
LANDFILL CAPACITY POLICY AND)	
AMENDING METRO CODE CHAPTERS 5.00)	Introduced by Councilor Bob Stacey
AND 5.05	Ś	•

WHEREAS, Metro regulates solid waste disposal generated within the Metro region through issuance of non-system licenses and designated facility agreements, pursuant to Metro's constitutional, statutory, and charter authority as set forth in Metro Code Chapter 5.05; and

WHEREAS, the capacity of existing permitted landfills available for the disposal of waste generated within the Metro region, without expanding existing landfills or constructing new landfills, can serve the needs of the region at current rates of disposal for at least 100 years; and

WHEREAS, the Metro Council has considered, as part of the Solid Waste Roadmap, a policy that would prohibit the use of new or expanded landfills beyond the current disposal supply available to the region; and

WHEREAS, the Metro Council finds that a landfill capacity policy that prohibits disposal of waste generated in the Metro region at a new or limited capacity landfill will conserve limited land and resources in and around the Metro region and encourage waste reduction; and

WHEREAS, the Metro Council finds that implementation of the landfill capacity policy should be consistent with the timeline for the Solid Waste Roadmap, including the procurement process to plan for the January 1, 2020 expiration of Metro's 30 year disposal contract; now therefore,

THE METRO COUNCIL ORDAINS AS FOLLOWS:

- 1. A landfill capacity policy that prohibits disposal of waste generated in the Metro region at a new or limited capacity landfill is hereby adopted.
- 2. Metro Code Chapter 5.00 is hereby amended to add the language in Exhibit A to Metro Code Section 5.00.010.
- 3. Metro Code Chapter 5.05 is hereby amended to add Section 5.05.055 as set forth in Exhibit B.

ADOPTED by the Metro Council this 25th day of May 2017.

Tom Hughes, Council President

Attest:

Approved as to Form:

Nellie Pansdorf Recording Secretary

Alison R. Kean, Metro Attorney

CHAPTER 5.00

SOLID WASTE DEFINITIONS

5.00.010 Definitions.

"Limited capacity landfill" means a landfill that has sought a site development plan amendment for expansion of the landfill capacity from the Oregon Department of Environmental Quality, and has not received approval from the Department by May 25, 2017, or the equivalent determination in another state.

"New landfill" means a landfill that receives its initial permission from DEQ to receive solid waste on or after May 25, 2017, or the equivalent determination in another state.

CHAPTER 5.05

SOLID WASTE FLOW CONTROL

5.05.055 Limited Capacity and New Landfills

- (a) **Prohibited Use**. After January 1, 2020, disposal of waste generated in the Metro region in a limited capacity landfill or new landfill, as those terms are defined in Metro Code Chapter 5.00, is prohibited.
- (b) **Implementation**. Effective January 1, 2020, the Metro Chief Operating Officer must implement the prohibition. Implementation of this section includes, without limitation, the authority to deny an application for designated facility status, terminate a designated facility agreement, deny an application for a non-system license, and terminate a non-system license, for putrescible or non-putrescible waste, where disposal is sought at a limited capacity or new landfill.
- (c) **Final decision and appeal**. Notwithstanding any other provision of the Metro Code, the Metro Chief Operating Officer's decision under this section is final and is appealable only as provided by Oregon law. The Chief Operating Officer's decision under this section is not subject to a contested case proceeding.

STAFF REPORT

IN CONSIDERATION OF ORDINANCE 17-1401 FOR THE PURPOSE OF ADOPTING A LANDFILL CAPACITY POLICY AND AMENDING METRO CODE CHAPTERS 5.00 AND 5.05

May 18, 2017 Prepared by: Paul Slyman 503-797-1510

The proposed ordinance amends Metro Code Chapter 5.00 (Definitions) to add definitions for "limited capacity landfill" and "new landfill," and it amends Chapter 5.05 (Solid Waste Flow Control) to prohibit disposal of waste generated in the Metro region in a "limited capacity landfill" or "new landfill."

BACKGROUND

Previous Council Direction and Policy Basis

In December 2014, the Metro Council approved Resolution 14-4589, which directed Metro staff to develop a landfill capacity policy to evaluate the disposal capacity of waste at new, existing or expanded landfills and to recommend changes to Metro Code to implement the policy. This direction was based on Council's awareness that existing landfills available for the disposal of waste from the Metro region had well over 100 years of capacity (see chart below), and that Council did not want to contribute unnecessarily to the expansion of any specific landfill or to the development of a new one. As the resolution recitals noted, Council was also specifically concerned that the Riverbend Landfill in Yamhill County was almost out of space and was proceeding with expansion plans. Metro-area waste in 2016 represented 58% of total putrescible waste delivered to Riverbend.

Landfill	Projected life remaining*
Coffin Butte Landfill, Benton County, OR	40 years
Columbia Ridge Landfill, Arlington, OR	117 years
Finley Buttes Regional Landfill, Boardman, OR	186 years
Hillsboro Landfill, Hillsboro, OR**	39 years
Riverbend Landfill, McMinnville, OR	1-2 years
Wasco County Landfill, The Dalles, OR	106 years

^{*}According to Oregon Department of Environmental Quality (DEQ), 2015

In May 2016, Metro staff completed the policy development task directed by Council. The proposed policy approach incorporates input staff received from Council at three work sessions. The drafted approach uses an amendment of a landfill's DEQ-required Site Development Plan (SDP) to expand capacity as the trigger for removing that landfill's eligibility to accept Metro-area waste. Given the significant amounts of capacity at most of the existing landfills that serve or can serve the disposal needs of the Metro region, only new landfills and Riverbend Landfill are likely to be affected by a policy based on the SDP approach.

^{**}Not currently authorized as a putrescible waste landfill

On May 26, 2016, the Council adopted resolution 16-4710, which:

- Found that the Chief Operating Officer (COO) had met the direction to develop a draft Landfill Capacity Policy by June 30, 2016; and
- Resolved that Metro Council would defer its consideration of Metro Code changes to implement the draft policy; and
- Directed the COO to seek direction from Metro Council no sooner than Dec. 1, 2016 on scheduling these code changes for Council action.

The proposed ordinance brings forward those code changes.

Recent Developments

Unrelated to Metro's work on a landfill capacity policy, in December 2016 Waste Management staff informed Metro staff that the Riverbend Landfill would reach its capacity within a few months. Waste Management staff further stated that any decision by the DEQ related to the proposed expansion may be significantly delayed due to appeals and litigation. Waste Management indicated that it wanted to reserve the limited remaining capacity for its customers outside the Metro region e.g. Willamette Valley and coastal communities. Therefore, it needed to stop accepting Metro-area waste, whether delivered by its own hauling operations or others.

In response to this information, Metro Council authorized five short-term, non-system licenses (NSL) in December 2016 that allowed the licensees to transport waste to the Columbia Ridge Landfill until June 30, 2017. The Metro Council also authorized the Chief Operation Officer (COO) to subsequently direct each licensee to use another alternate landfill if necessary to better serve the public and minimize disruption to the solid waste system. In February 2017, after receiving information about a signed two-year agreement between Waste Management and Republic Waste, the COO amended each of these non-system licenses to authorize the use of Coffin Butte Landfill as a disposal option as authorized by Metro Council. This agreement and the resulting redirection of the Metro region's Riverbend flow were fully phased in on April 1, 2017. Metro Council will consider extending these five NSLs until December 2018 in June 2017.

Waste Management staff also indicated in the December 6, 2016 Metro Council work session that the company does not intend to pass on the increased transportation or disposal costs related to redirecting flow from Riverbend to Metro region customers for a period of two years.

Impacts of Proposed Policy

This proposed landfill capacity policy would go into effect on January 1, 2020 in order to align with other significant changes in Metro's management of the solid waste disposal system. If the DEQ does not authorize Waste Management to expand Riverbend, then this ordinance would have little, if any, direct impacts on services or customer rates. If DEQ authorizes expansion, then this ordinance may likely have some impacts on rates. It is difficult to predict those impacts, because after that date and the expiration of the 90 percent flow guarantee to Waste Management-owned landfills, the Metro region's waste is expected to be able to flow to any properly authorized landfill.

ANALYSIS/INFORMATION

1. Known Opposition

In early 2016, Waste Management, the Westside Economic Alliance and the Washington County Board of Commissioners indicated their opposition to the policy as drafted, which included the

prospect of immediate implementation. Even with the delayed implementation to January 1, 2020 and the changes that Waste Management has made on its own to divert Metro region waste from Riverbend, staff would expect these parties will still be opposed to this Metro action.

Legal Antecedents

Any change to the Metro Code requires an ordinance of the Metro Council.

2. Anticipated Effects

Effective January 1, 2020, no person may deliver waste generated in the Metro region to any new landfill or limited capacity landfill.

3. Budget Impacts

There are no expected budget impacts associated with the adoption of this ordinance.

RECOMMENDED ACTION

Staff recommends adoption of Ordinance 17-1401.