



Photo taken at St Johns Landfill

Waste Prevention & Environmental Services

Regional Waste Plan Progress Report

January 2023

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

Follow oregonmetro



Metro Council President

Lynn Peterson

Metro Councilors

Ashton Simpson, District 1

Christine Lewis, District 2

Gerritt Rosenthal, District 3

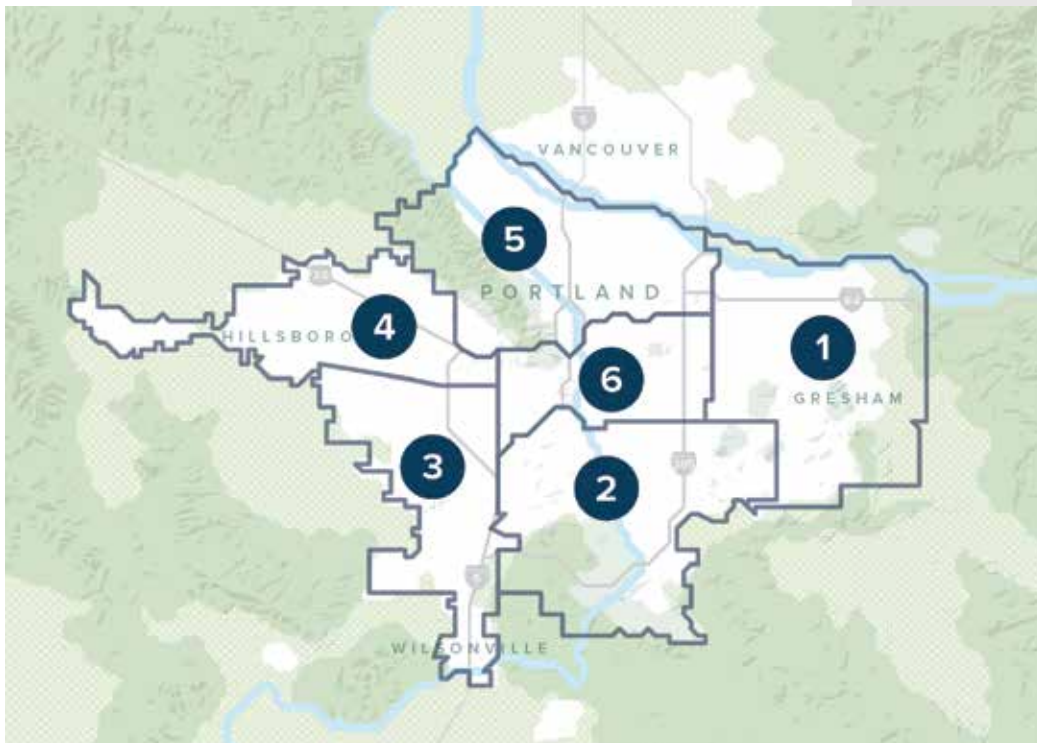
Juan Carlos González, District 4

Mary Nolan, District 5

Duncan Hwang, District 6

Auditor

Brian Evans



Introduction

The [2030 Regional Waste Plan](#) is both a vision for greater Portland’s garbage and recycling system and a blueprint for achieving that vision. It was created in partnership with cities, counties, local businesses and community leaders to set direction for how we manage and improve the system between 2019 and 2030.

From the community-driven process that created the plan to the goals and actions in it, the plan acknowledges past and present inequities across the garbage and recycling system and is designed to address these inequities by building a more inclusive system. The plan includes a regional call-to-action for a more proactive approach to reducing negative impacts on human health, climate and the environment caused from the full life cycle of a product and considering solutions for both consumers and producers.

True success of the Regional Waste Plan relies on partnerships built on trust and mutual respect. Three years in, the work to implement the plan continues to elevate collaboration between Metro, city, county and state governments, community-based organizations and private sector service providers.

Navigating the plan and progress report

The Regional Waste Plan sets out goals in five areas of work. Goals in each area focus on addressing the impacts of materials – from production to disposal – and addressing community needs within the garbage and recycling system. Action items within each goal represent concrete steps being taken to help reach the goal. More information on goal areas and the full list of goals and actions within each goal can be found on the following pages of this report.

Goal Areas	Pages
Shared prosperity	6 - 9
Product design and manufacturing	10 - 11
Product consumption and use	12 - 14
Product end-of-life management	15 - 21
Disaster resilience	22 - 24

The Regional Waste Plan evaluates progress toward each goal by monitoring the status of action items and by measuring indicators over time. Indicators at the goal level measure on-the-ground outcomes of programs, policies or investments linked to each goal. Key indicators are broad, long-term metrics that demonstrate progress overall. A full list of indicators can be found in the appendix. More information on actions and indicators can be found in the first [Regional Waste Plan Progress Report](#).

This report is the second in a series of annual progress reports and covers the year 2021. It is a streamlined version that highlights overall progress on actions and indicators as well as positive impacts and opportunities for improvement within each goal area. For each goal, the report provides a progress update on actions and shares success stories. It then presents results for the indicators selected for this progress report.

Executive Summary

Greetings,

We live in a place where people care deeply about protecting our lands and waters, conserving resources, keeping people healthy and ensuring that everyone has access to the range of opportunities that contribute to our quality of life. There is a strong connection between our ability to achieve these values and the decisions made about managing waste.

Three years ago, our region adopted the 2030 Regional Waste Plan, an exciting and ambitious blueprint for how our region plans for and manages the impacts of the products we use and when we throw them away. This innovative plan in many ways is unique in our nation, just like our garbage and recycling system operates like no other. It is the result of a community-driven process that centered racial equity, collaboration and partnership.

In the pages that follow, we report out the many accomplishments achieved this past year to move this Plan forward. These are not Metro's successes alone to celebrate, but rather ones that we share with our local government, community and industry partners. Together, we ensured that dumped waste is quickly cleaned up and that we are keeping hazardous products out of landfills. We worked to improve systems for recycling and recovery. We provided culturally responsive education in schools and communities about the connections between consumer products, people and nature. We also worked to advance more equitable collection standards and services to meet the needs of all residents.

We recognize there is still much work to be done. I am grateful for and humbled by the energy, innovation and commitment of the many people that work hard every day to make our communities and region a great place to live today and for generations to come.

Sincerely,

Marta



Marta McGuire, Ph.D. (she/her)
Director, Waste Prevention & Environmental Services

Progress on all actions



Actions advancing racial equity



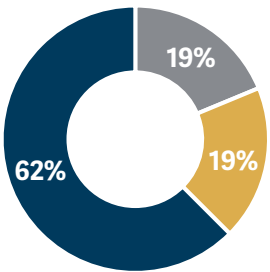
 On track or Completed  Not started  In process but facing obstacles

2021 Snapshot of Goal Area Progress

Shared Prosperity

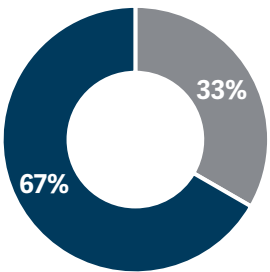
The greater Portland area increased the representation of people of color in engagement, planning and leadership opportunities. Funding for regional cleanup and reuse, repair and waste reduction programs centered racial equity. Efforts to remove systemic barriers to participation, like language support, continued. Metro, local governments and service providers also made progress on workforce equity goals, incorporating “good jobs” provisions into contracts and regulatory instruments. Work not yet started includes establishing a living wage and benefits standard for the solid waste industry and a career pathways strategy for all solid waste occupations. Data collection, training and engagement that took place in 2021 will support future efforts to address these actions.

Goal Area Status



Product Design and Manufacturing

In 2021, Metro, cities and counties participated in committees and work groups supporting the development and implementation of the statewide Plastic Pollution and Recycling Modernization Act (RMA). They also successfully advocated for legislation establishing a statewide mattress recycling program and began work on product stewardship legislation for other materials. Work not yet started includes development of incentives for green manufacturing techniques for products and packaging and advocacy for legislation reducing use of toxic building materials. Work to implement the RMA will help guide future work on these actions.



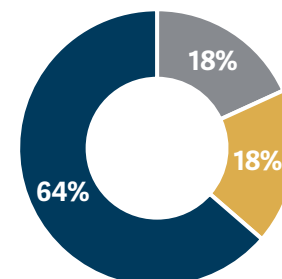
■ Not started ■ In process but facing obstacles ■ On track or Completed



Product Consumption and Use

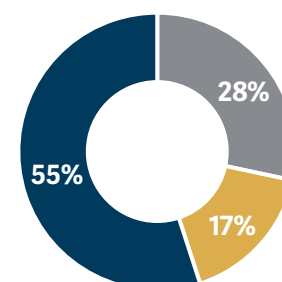
Goal Area Status

In 2021, Metro, cities and counties continued youth and community education about products' environmental impact and waste reduction through school-based programs, social media, online tools and apps. They advanced efforts to provide culturally responsive education and outreach. Work not yet started includes promoting procurement and policies that reduce single-use products and prioritize purchase of products with low environmental and human health impacts.



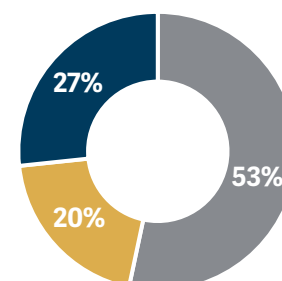
Product End-of-Life Management

In 2021, Metro and local governments activated partnerships with community organizations and businesses to share resources and expand the region's access to services for reuse and repair, bulky waste collection, cleanup of dumped trash and hazardous waste collection. Regional work continued to implement collection service standards and education, including the roll out of an improved signage system for containers at multifamily properties. Washington County worked toward a reduced rate program for garbage collection (introduced in 2022). Work on a number of actions is still gearing up, such as regulatory tools for promoting reuse, accessible collection of bulky waste and consistent solid waste fees across the region. Planning of engagement and research to inform new systems for facilities, regularly occurring bulky waste collection and markets for recycling and reuse began in 2021 and will support future work to address these actions.



Disaster Resilience

In 2021, work focused on establishing partnerships between Metro, local governments and community organizations as the foundation for developing regional frameworks for emergency management response and recovery. These include strategies to maximize access to critical solid waste infrastructure during disruptions and agreements with service providers to ensure rapid response during emergencies. There is additional work to be done on creating a regional database of, and strategies for, infrastructure capabilities and vulnerabilities as well as prioritizing reuse and recycling of disaster debris.



Indicators Snapshot

Indicators measure the impact of the plan over time. Key indicators demonstrate overall performance and goal indicators measure progress toward the plan's goals. In 2021, many indicators have baseline data established to compare future years of data against. Where data is available, this second progress report also shows the direction indicators are trending.

		2021 Data	Change since baseline year	Progress to goal
Key Indicators	Annual tons of waste generated	2.61M tons	↑	-
	Youth reached through education programs	6,160 students 3,120 BIPOC	↓ ↑	- +
	Median wage in Metro's solid waste workforce	\$27.60	↑	+
	Greenhouse gas consumption based emissions	41M MTCO₂e (2015)	Not updated in 2021	
	Multifamily properties with adequate collection	32%	Not updated in 2021	
	Recycling contamination	9% Single family (2015) 21% Multifamily (2017) 14% Commercial (2019)	Not updated in 2021	
Goal Indicators	Diversity in Metro's garbage and recycling internship program	88% BIPOC 100% Women	Baseline only	
	Diversity in solid waste committees	50% BIPOC 55% Women	Baseline only	
	Temporary workers in Metro's solid waste workforce	21%	Baseline only	
	Diversity in Metro's solid waste workforce	33% BIPOC 36% Women	↑ ○	+ -
	Priority materials collected by a product stewardship program	3.4%	↑	+
	Online interactions with education resources	1,126,450	↑	+
	Dumped garbage in most impacted communities	663 tons 59% sites in equity focus areas	↑ ↓	- +
	Private facilities with rates at or near Metro's transfer station fees (varies by waste type)	14%-57% Collection companies 0%-17% Self-haul	Baseline only	
	Recycling materials sent to Oregon or other domestic markets	76%	↑	+
	Jurisdictions with disaster debris plans	42%	○	-

Increase
 Decrease
 No change
 Progress made
 No progress made

Sources for individual indicators can be found in the indicator section of this report on pp 25-33.

Shared Prosperity

Goal Area Progress

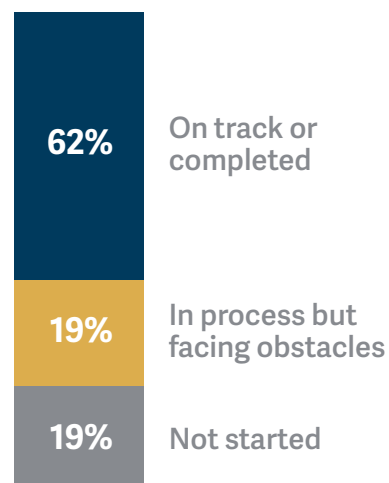
Summary

This area of work is addressing barriers faced by communities of color and those who have been disproportionately impacted by the garbage and recycling system. Through the goals and actions in this section, Metro and local governments are making progress toward a future where all people have equitable access to the benefits of the garbage, recycling, reuse and repair economies.

2021 highlights include:

- Oregon Green Schools activates climate and sustainability leadership by providing an inclusive network and resources for students, schools and communities. City of Gresham redesigned their Oregon Green Schools board recruitment process to better incorporate equity.
- Washington County provided language support to members of the community applying to advisory committees at the local and state levels.
- Metro's Investment & Innovation Grant Program awarded roughly \$2 million to businesses and organizations with creative ideas for reducing waste and advancing equity.

4 Goals | 16 Actions



Regional Refresh Fund

Launched in 2021, Metro's Regional Refresh Fund supports community-led efforts to promote livability and increase garbage and recycling service equity in the Metro region by providing flexible, low-barrier funding for immediate cleanup needs in underserved communities.

Nonprofits, public agencies, schools and business district associations can request up to \$5,000 in funding per cleanup project or event. As one example, Woodlawn Neighborhood Association organized a two-day event that combined bulky waste collection, neighborhood litter pick-up and document shredding followed by a celebration.

“ We saw it as a community-building opportunity. A way to support local businesses, an easy and low-cost or free way for neighbors to get rid of trash, and to work together to beautify the neighborhood. **”**

- Rick Reynolds
Woodlawn Neighborhood Association

Goal 1

Increase engagement of youth and adults historically marginalized from garbage and recycling decision-making by enhancing civic engagement and leadership opportunities.

Action		2020 Status	2021 Status
1.1	Increase representation of historically marginalized community members, including youth, on advisory committees, such as Metro and local government solid waste advisory committees		
1.2	Evaluate and refine a public sector paid internship program to increase engagement of youth and adults in garbage and recycling careers and decision-making, with an emphasis on communities of color and other marginalized communities.		
1.3	Partner with organizations to engage youth in leadership opportunities for social, economic and environmental issues related to garbage and recycling.		

■ Not started ■ In process but facing obstacles ■ On track ■ Completed

Youth Internship and Leadership Program

[Metro's garbage and recycling internships](#) provide young people with a supportive and professional learning community to explore careers in garbage and recycling, with an emphasis on youth of color and youth from other historically marginalized communities. The program uses a two-year cohort model focused on youth development, amplifying youth voices and supporting youth as bridges between Metro and their communities. This is a paid internship opportunity for youth ages 16-20 that runs three days per week in the summer with the opportunity to continue with reduced hours during the school year.

“My favorite moments of this internship have been the extensive exposure to the multiple career options that Metro has to offer. As an intern I have had the opportunity to shadow and learn from people whose jobs are not typical jobs you learn about at school. Being exposed to these new series of jobs has helped me on the journey of figuring out what kind of work I want to do in the future.”

- Nayely Interian, Intern Alumni



Goal 2

Increase the percentage of garbage and recycling system revenue that benefits local communities and companies owned by people of color and other historically marginalized groups.

Action		2020 Status	2021 Status
2.1	Develop Metro and local government procurement policies to increase the amount of spending on solid waste-related services that goes to locally owned companies, with an emphasis on minority-owned and woman-owned businesses.		
2.2	Implement strategies in consultation with community organizations that can be adopted by local governments to ensure greater racial equity in the ownership and management of collection service providers.		
2.3	Utilize grant programs to invest in businesses and non-profit organizations to strengthen regional efforts around reducing waste, making better use of the waste that is produced and helping foster economic opportunities for communities of color and others who have historically been left out of the garbage and recycling system.		

Goal 3

Ensure that all jobs in the garbage and recycling industry pay living wages and include good benefits.

Action		2020 Status	2021 Status
3.1	Establish a living wage and benefits standard for the lowest-paid positions in the solid waste industry and update the standard on a regular basis.		
3.2	Incorporate "good jobs" provisions regarding wages, benefits, workforce diversity and career pathways into public sector solid waste investments, operations contracts, franchises, licenses and other procurement and regulatory instruments.		
3.3	Conduct baseline and regular follow-up studies of wages and benefits in the greater Portland area's solid waste sector to inform "good jobs" provisions.		
3.4	Reduce the use of temporary and contract workers in the region's solid waste industry		
3.5	Evaluate the use of Metro employees to fully operate Metro-owned transfer stations		

Goal 4

Increase the diversity of the workforce in all occupations where people of color, women and other historically marginalized communities are underrepresented.

Action		2020 Status	2021 Status
4.1	Implement a workforce development and readiness program for garbage and recycling industry jobs.		
4.2	Develop a career pathways strategy that aims to increase the diversity of workers in all solid waste occupations.		
4.3	Conduct baseline and regular follow-up studies of workforce diversity in the regional garbage and recycling industry, including an assessment of barriers to hiring and retaining people of color, women and other historically marginalized groups.		
4.4	Work with private garbage and recycling service providers and community-based organizations to design and implement programs that address safety, bullying and harassment in the workplace throughout the solid waste industry.		
4.5	In partnership with community-based organizations, create workforce development programs within the reuse sector that focus on people with barriers to employment.		

Not started In process but facing obstacles On track Completed



Product Design and Manufacturing

Goal Area Progress

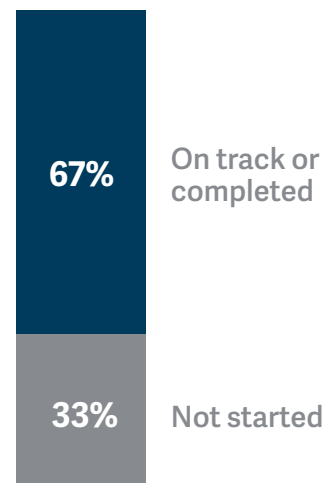
Summary

Through this goal area, we are working to influence the design and manufacturing of products and packaging by advocating for changes in public policy. The goal is for manufacturers to become more responsible for the impacts of their products. The actions focus not only on reducing the amount of waste, but also shifting what's in it.

2021 highlights include:

- Metro, cities and counties supported the State of Oregon's Plastic Pollution and Recycling Modernization Act (2021) and participated in various committees, taskforces and meetings related to the legislation. The new law is designed to increase responsible recycling. It will make recycling easier, expand access to recycling services, upgrade the facilities that sort recyclables and create environmental benefits while reducing social and environmental harms, such as plastic pollution.
- Washington County staff participated as an appointee on the Truth in Labeling Taskforce, which delivered a report to the legislature in 2022 on misleading labeling about the recyclability of products.

1 Goal | 6 Actions



Successful legislative advocacy for mattress recycling

Metro and local jurisdictions worked to support a new law establishing a statewide [mattress recycling program](#). Senate Bill 1576 (2022) requires mattress manufacturers to help establish a program that will make it easy for consumers to recycle their unwanted mattresses. The law aims to increase mattress recycling, establish new convenient locations in every county for residents to drop off their mattresses, reduce illegal dumping and create recycling-sector jobs. The program will be funded by a small assessment collected at retail sales of mattresses.

“Historically in Oregon, unwanted mattresses that were still highly recyclable ended up in landfills. Now, we can establish systems to more thoughtfully reuse or recycle those mattresses - benefiting our environment and our communities. I am excited to see this work move forward to create mattress stewardship programs statewide.”

- Anna Kurnizki
Executive Director, Community Warehouse

Goal 5

Reduce the environmental and human health impacts of products and packaging that are made, sold, used or disposed in Oregon.

Action		2020 Status	2021 Status
5.1	Advocate for legislation that minimizes chemicals of concern in products and packaging and requires the disclosure of product chemical data to consumers.		
5.2	Assist the Oregon Health Authority in implementing the 2015 Oregon Toxic-Free Kids Act, which requires manufacturers of children's products sold in Oregon to report products containing high-priority chemicals of concern.		
5.3	Partner with the State of Oregon to provide incentives to manufacturers for developing sustainable manufacturing techniques, including green chemistry, for products and packaging sold in Oregon.		
5.4	Advocate for product stewardship legislation and other policy approaches that can achieve the greatest reduction in environmental and human health impacts from products and packaging made, used or disposed in the region.		
5.5	Advocate for legislation that would require building products sold and used in Oregon to be free of highly toxic materials.		
5.6	Advocate for standards for high-impact products, including phase-outs or bans.		

 Not started  In process but facing obstacles  On track  Completed



Product Consumption and Use

Goal Area Progress

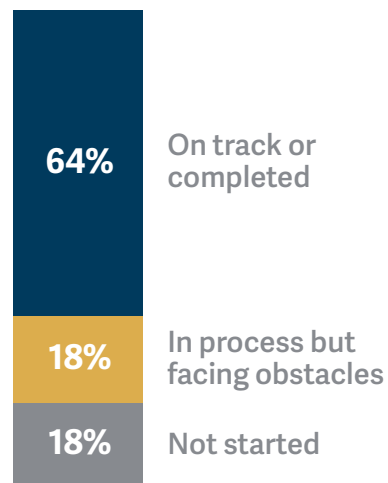
Summary

Goals in this area focus on reducing environmental and health impacts of what we buy. Actions emphasize education and policy efforts to reduce impacts and support better purchasing choices. Education prioritizes culturally responsive efforts, with programs and services implemented in partnership with community organizations to reach historically marginalized groups. Policy actions in this area provide safer, lower-risk products and reduce the use of single-use items.

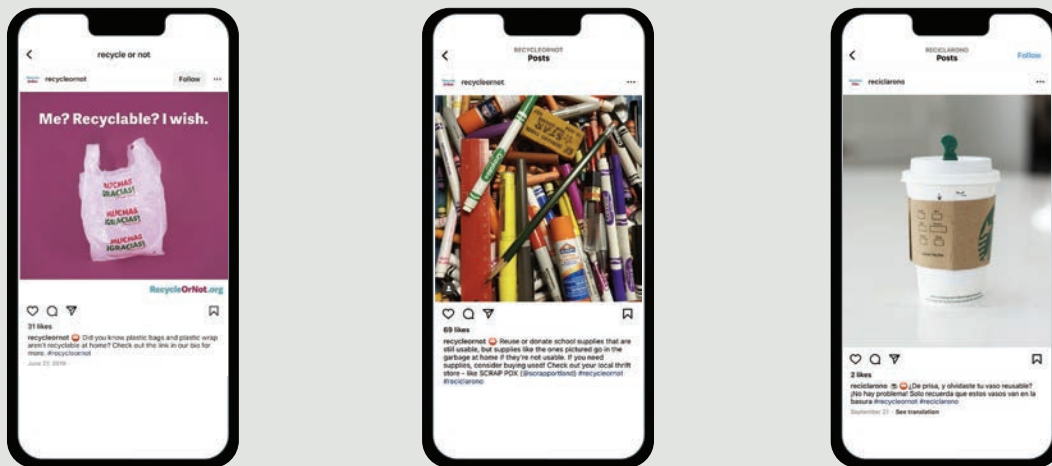
2021 highlights include:

- Clackamas County partnered with the Lake Oswego School District to pilot the Oregon School Food Share Guide, which helped the school district as they established a donation relationship with their onsite food pantry, Hunger Fighters.
- City of Portland participated in the Pacific Coast Food Waste Commitment, which includes many local partner businesses and several pilot projects for food waste reduction.
- Washington County and City Cooperative provided collection calendars, their multifamily recycling guide, and other tools in their Safe Harbor languages: Arabic, Chinese (simplified and traditional), Farsi/Persian, Japanese, Khmer/Cambodian, Korean, Russian, Somali, Spanish, Tagalog/Filipino and Vietnamese.
- City of Beaverton provided residents and businesses with tips to reduce their use of single-use products through social media posts, newsletter articles, website resources and in-person engagement.

2 Goals | 11 Actions



Recycle or Not is a community resource created by Metro and local government partners. This program works to reduce waste and protect the environment by sharing information about how to recycle right. In 2021, the Recycle or Not Instagram site had 7,000 followers! Posting information and photos of confusing items helps to reduce "wish cycling" and contamination in the region. In April, KGW news aired a segment regarding general residential recycling which included information on common mistakes and local tools and resources.



Reduce product environmental impacts and waste through educational and behavioral practices related to the prevention and better purchasing choices.

Action		2020 Status	2021 Status
6.1	Provide culturally responsive and developmentally appropriate school-based education programs about the connections between consumer products, people and nature.		
6.2	Provide culturally responsive community education and assistance about the connections between consumer products, people and nature.		
6.3	Provide and increase accessibility to education and tools to help residents and businesses reduce their use of the single- use products with the greatest negative environmental impacts.		
6.4	Partner with communities of color and others to increase awareness about high-risk chemical products, reduce their use and decrease people’s exposure to them.		
6.5	Assist households and businesses in the adoption of practices that prevent the wasting of food and other high-impact materials.		
6.6	Support implementation of Oregon State University’s (OSU) SolvePestProblems.org as a primary tool for education and resources on integrated pest management.		
6.7	Implement recognition programs for business efforts to prevent waste and minimize environmental impacts of the products they purchase.		

■ Not started ■ In process but facing obstacles ■ On track ■ Completed

Goal 7

Reduce product environmental impacts and waste through policies that support prevention practices and better purchasing choices.

Action		2020 Status	2021 Status
7.1	Implement procurement policies for Metro and local governments that prioritize the purchase of products and services with low environmental and human health impacts.		
7.2	Implement policies that will reduce the use of single-use products such as single-use plastic bags.		
7.3	Advocate for the reclassification of high-risk nonagricultural pesticides to restricted use status in Oregon.		
7.4	Implement policies and programs that lead to construction of buildings that use fewer resources, including improvements to Oregon Reach Code and baseline building codes to address material selection preferences and restrictions, incentives for space-efficient homes and removal of barriers to adopting lower impact materials.		

■ Not started ■ In process but facing obstacles ■ On track ■ Completed



Product End-of-Life Management

Goal Area Progress

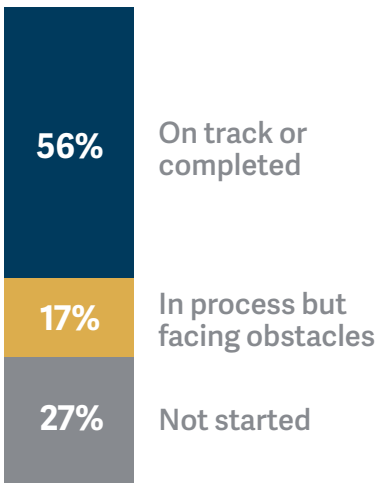
Summary

While the ultimate goal is to prevent waste to begin with, the Portland region still needs a system that safely and conveniently manages products at the end of their useful life. The goal is to ensure that the programs and services not only protect human health and the environment, but that they do so in a way that meets the needs of all residents and all communities today and into the future.

2021 highlights include:

- Clackamas County hosted four repair fairs in Estacada, Lake Oswego, Sandy and West Linn. The county also participated in the Regional Repair Fair workgroup to share resources and lessons learned among different groups engaged in repair efforts.
- Local government partners provided bulky waste collection events across the region. Gresham, Fairview and Troutdale organized centralized drop-off events or routine pick up. Unique features in each jurisdiction included complimentary collection for multifamily residents in Fairview, collection of bicycles and pet supplies for reuse in Troutdale and swapping of durable goods in partnership with Trash for Peace in Gresham.
- Metro partnered with Growing Gardens to provide Spanish and English language healthy homes and natural gardening classes. This partnership includes racial equity training for volunteers.
- City of Beaverton created a streamlined garbage and recycling enclosure design review process for businesses and multifamily complexes within the Allen Boulevard District.
- Metro's RID Patrol continued providing cleanup services of dumped garbage on public lands. The City of Portland also coordinated similar efforts, including work by its Homelessness and Urban Camping Impact Reduction Program, Portland Parks and a partnership with SOLVE.




9 Goals | 60 Actions



Goal 8

Increase the reuse, repair and donation of materials and consumer products.

Action		2020 Status	2021 Status
8.1	Support efforts to ensure that surplus edible food desired by agencies serving communities experiencing hunger in the region is made available to them.		
8.2	Implement strategies to increase the salvage of building materials for reuse, without increasing exposure to toxics.		
8.3	Advocate for research-informed changes to building codes and other regulations to increase use of reused and deconstructed materials.		
8.4	Expand the collection of reusable items at public and private transfer stations, in partnership with reuse and repair organizations.		
8.5	Invest in neighborhood-scale reuse and repair services and infrastructure.		
8.6	Support implementation of Oregon DEQ's Reuse, Repair and Extended Product Lifespan Strategic Plan.		

 Not started  In process but facing obstacles  On track  Completed

Investment and Innovation Grants supports projects like reducing wood waste

The Investment and Innovation (I&I) grant program funds for-profit businesses, nonprofit organizations, and universities and colleges for new or expanded efforts to prevent waste and make better use of discarded materials through reuse and repair, composting and recycling.

Sankofa Lumber launched in 2019 with an ambitious business mission to process and supply reclaimed wood waste to construction and manufacturing markets at a commercial scale. Finding sustainable solutions for discarded wood is challenging in the Metro region, with few opportunities for large-scale reuse. With support from an I&I grant, Sankofa worked with local haulers, construction firms, and sales distribution partners to streamline supply and processing logistics. This allowed Sankofa to capture a high volume of framing lumber and other clean wood products for commercial-scale reuse.

Valerie Carey, Sankofa's owner and founder, has worked most of her life in a white male-dominated construction industry. As a woman of color, she prioritizes hiring members of underserved communities in order to provide valuable skills and hands-on work experience needed in a range of high-paying green-collar jobs.

“The program is a great way for public funds to be invested in things that are important to all of us – economic development, the creation of green jobs, environmental justice. It offers a really local solution to materials management, and it is responsive to the types of waste generated here in the greater Portland region.”

- Valerie Carey
Sankofa Lumber

Goal 9

Increase knowledge among community members about garbage, recycling and reuse services.

Action			
9.1	Provide culturally responsive education and assistance for garbage, recycling and reuse services to residents and businesses.		
9.2	Utilize Metro's Recycling Information Center to serve all residents and businesses in the region as a clearinghouse for prevention, reuse, recycling and disposal information.		
9.3	Ensure that community education and volunteer development courses, such as Master Recycler, are relevant, accessible and culturally responsive to all communities.		

Goal 10

Provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs for all users.

Action		2020 Status	2021 Status
10.1	Provide comprehensive collection services and supporting education and assistance for source-separated recyclables, source-separated food scraps and garbage, in compliance with state, regional and local requirements, including the Regional Service Standard, Business Recycling Requirement and Business Food Waste Requirement in Metro Code.		
10.2	Implement minimum service levels or performance standards for all collected materials for multifamily and commercial tenants.		
10.3	Implement regional standards for collection container colors, signage and other related informational materials for single-family, multifamily and commercial services.		
10.4	Provide convenient, accessible and equitable collection of hazardous waste from households and Conditionally Exempt Generators, prioritizing communities with greatest need.		
10.5	Provide regularly occurring bulky waste collection service, with particular emphasis on multifamily communities and lower-income households.		
10.6	Establish standards for collection areas for existing and newly constructed multifamily properties to ensure residents have adequate access to garbage, recyclables and food scraps collection containers.		
10.7	Partner with community health organizations to expand options for collection of hypodermic needles and other types of medical waste, prioritizing individuals with the greatest barriers to service.		
10.8	Advocate for statewide legislation or implement regional policies to increase the types of products and packaging for which manufacturers and retailers provide environmentally sound, convenient and accessible take-back programs.		

Community engagement for multi-family service improvements

Community Services and Education staff are leading the implementation of applying new regional garbage and recycling decals and signage at multifamily properties. The goal is to partner with organizations (Junk-It Removal, Trash for Peace and PSU's Community Environmental Services) to remove and replace old signage with new ones at over 6,000 multifamily properties by December 2023. Decals and signage design were based on findings from Metro's 2018-19 recycling behavior research that showed leading with visuals, strong color contrast and wayfinding for easier sorting. Designs and translations were then consulted and approved by community partners Trash for Peace, Centro Cultural and Environmental Promoters. Local government staff were instrumental along the way in the design criteria and process. Once decal designs were finalized, staff developed accompanying educational materials that mirror the design and followed design principles for consistency.



Goal 11

Address and resolve community concerns and service issues.

Action		2020 Status	2021 Status
11.1	Provide cultural competence training to customer service representatives at Metro, local governments and collection service providers.		
11.2	Improve feedback loops between haulers, local governments and Metro to address collection service issues for households and businesses.		
11.3	Provide inclement weather notifications to customers in multiple languages and through a variety of media.		
11.4	Provide services to clean up illegal dumps on public property, prioritizing communities with greatest need.		
11.5	Research the root causes that contribute to illegal dumping and how they can be addressed.		
11.6	Implement garbage and recycling collection services for people experiencing homelessness.		
11.7	Evaluate the need to expand and improve access to public collection containers to reduce litter and illegal dumping		

Goal 12

Manage all garbage and recycling operations to reduce their nuisance, safety and environmental impacts on workers and the public.

Action		2020 Status	2021 Status
12.1	Minimize the health and safety impacts of solid waste operations on employees, customers and neighboring communities, with particular focus on low-income communities and communities of color, and identify methods for repairing past harm.		
12.2	Implement consistent and enforceable nuisance and safety standards for all solid waste facilities within the system.		
12.3	Implement environmental and safety standards for all on-road and off-road solid waste fleet vehicles.		
12.4	Implement sustainability practices in the operation of public and private solid waste facilities to reduce energy use, utilize renewable energy, reduce equipment emissions, maximize the use of safe alternatives to toxic materials and achieve other environmental objectives.		
12.5	Regulate collection of solid waste materials by collectors not otherwise regulated by local governments and illegal dumping.		
12.6	Regulate facilities accepting garbage, recycling, food scraps, yard debris and other solid waste generated from the region to advance progress toward achieving this plan's goals.		
12.7	Require post-collection material recovery for marketable materials that will advance progress toward achieving this plan's goals and targets.		
12.8	Evaluate on a continuing basis, the need to regulate different types of solid waste facilities not covered under current Metro regulation based on their actual and potential impacts on human health, the environment and neighboring communities. These facilities include, but are not limited to, dismantlers, wood waste grinding operations, landscapers, sludge processors, and specific or single material recyclers.		

Goal 13

Invest in communities that receive garbage and recyclables from Metro region so that those communities regard solid waste facilities as an asset.

Action		2020 Status	2021 Status
13.1	Expand the host community enhancement program to: <ul style="list-style-type: none"> include all solid-waste-handling facilities that impact neighboring communities; increase funding; prioritize diversity, equity and inclusion elements in grant funding criteria. 		
13.2	Implement annual volunteer projects and collection/recycling events in neighborhoods affected by solid waste facilities.		
13.3	Require each solid waste facility to work toward a good neighbor agreement with its host		
13.4	Evaluate Community Benefit Agreements as a potential tool for garbage and recycling facilities to invest in host communities.		

Goal 14

Adopt fees for all services that are reasonable, responsive to user economic needs, regionally consistent and well understood.

Action		2020 Status	2021 Status
14.1	Implement transparent and consistent annual rate-setting processes for all collection service providers.		
14.2	Implement transparent and consistent annual rate-setting processes for all facilities.		
14.3	Establish fees across the region that are consistent for like services.		
14.4	Implement a low-income rate assistance program for residential collection services.		
14.5	Evaluate alternative models for collection, processing and transfer services to identify which would deliver the best environmental, financial, efficiency and equity outcomes		
14.6	Implement strong financial performance reporting standards to provide greater certainty on the financial viability of facilities serving the Metro region.		
14.7	Require that local governments annually provide information to residents about the components of their garbage and recycling collection rate.		

Goal 15

Improve the systems for recovering recyclables, food scraps and yard debris to make them resilient to changing markets and evolving community needs.

Action		2020 Status	2021 Status
15.1	Implement regionally consistent contamination reduction efforts to improve material quality, including education, sorting instructions, collection equipment changes, and customer feedback methods		
15.2	Regularly assess the list of recyclable materials collected in the residential and business programs in the region relative to end-markets, life cycle environmental benefits, community needs and forecasting of future materials in the waste stream.		
15.3	Develop public-private partnerships to expand local markets for priority recyclable materials, with an emphasis on minority- owned and other business owners from historically marginalized groups.		
15.4	Fund investments to improve the performance of material recovery facilities through collection fees and/or other mechanisms.		
15.5	Facilitate the permitting of composting facilities to process mixed residential yard debris and food scraps, while ensuring minimal impacts on neighboring communities.		
15.6	Implement stronger linkages between recycling collection programs and material recovery facilities through processing performance standards, supply agreements, regulatory oversight or other means.		
15.7	Identify and implement changes to recycling collection programs and material recovery facility operations to meet the specifications of a broad range of markets.		
15.8	Advocate for statewide policies or implement regional policies that create a preference, incentive or requirement for use of recycling end-markets in Oregon and the Northwest.		
15.9	Advocate to expand the statewide bottle bill program to include additional containers		
15.10	Evaluate whether a policy to increase garbage tip fees would further incentivize waste prevention and recovery without harming ratepayers or providing revenue windfalls to transfer station operators.		

Not started
 In process but facing obstacles
 On track
 Completed

Washington County works to design reduced rate program for garbage and recycling services - the first kind in Oregon

Starting January 1, 2023, unincorporated Washington County community members living at or below 185% of the federal poverty level who subscribe to garbage and recycling service from one of the county's nine franchised companies will be eligible for a new reduced rate. Reduced rate program participants will have their garbage and recycling bills cut by 75%, which means the standard 32-gallon per week garbage and recycling service will cost just \$7 per month.

“Ensuring that essential services provided by the county are accessible to all community members is a top priority for our board. Since this board adopted the county's first equity resolution in 2020, we have been working to build new systems and remove barriers that have negatively impacted our historically underserved neighbors. This reduced rate program for garbage and recycling services is an exciting step forward.”

- Kathryn Harrington
Washington County Board Chair

Goal 16

Maintain a system of facilities, from smaller recycling drop-off depots to larger full-service stations, to ensure equitable distribution of and access to services.

Action		2020 Status	2021 Status
16.1	Locate garbage transfer stations and allocate material tonnage to them in a way that benefits the public, emphasizing geographic equity, access to service and a reduction in environmental and human health impacts.		
16.2	Locate recycling and food scraps transfer and recovery facilities to best benefit the public relative to geographic equity and access to service, and to reduce environmental and human health impacts.		
16.3	Improve interagency and community collaboration on siting and authorizing proposed solid waste facilities to reduce potential impacts on neighboring communities.		
16.4	Maintain public ownership of facilities to ensure that a range of services are accessible to residents at equitable and affordable fees.		
16.5	Evaluate the feasibility of establishing a publicly owned facility in Washington County to accept and transfer garbage, recycling, food scraps, household hazardous waste and other materials.		
16.6	Expand and improve access to services provided at Metro South Transfer Station.		
16.7	Implement the Metro Transfer System Configuration policy.		

Not started In process but facing obstacles On track Completed

Disaster Resilience

Goal Area Progress

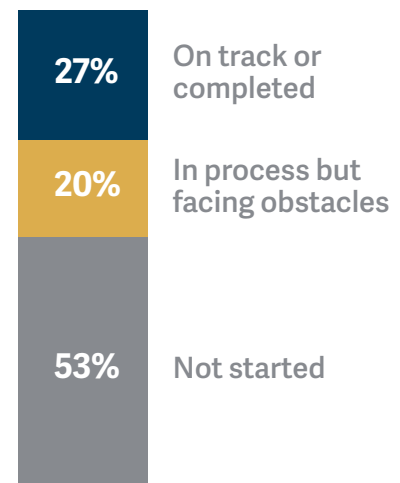
Summary

The region's garbage and recycling system must be resilient and prepared to recover quickly after a disaster, and the recovery process should minimize harmful impacts to local communities. The goals and actions ensure the region will be ready to implement the debris operations before a disaster happens.

2021 highlights include:

- Cities of Beaverton, Gresham, Hillsboro, Portland and Troutdale as well as Clackamas, Multnomah and Washington Counties, and the Tualatin Valley Water District participated in the Disaster Preparedness work group in collaboration with Metro.
- In 2021, Metro initiated an update to Metro's Disaster Debris Management Plan.

3 Goals | 15 Actions



Goal 17

Effectively coordinate public and private partners in planning for the impact of disasters on the solid waste system.

Action		2020 Status	2021 Status
17.1	Develop a regional solid waste emergency management response and recovery framework in partnership with local governments and community organizations that prioritizes those most vulnerable in a disaster.		
17.2	Conduct periodic exercises to test and practice the implementation of disaster debris plans.		
17.3	Develop a coordinated preparedness and response messaging program that is accessible and culturally responsive.		
17.4	Develop a database of existing public and private solid waste infrastructure capabilities that can be integrated with other public databases.		

Goal 18

Ensure routine garbage and recycling collection, processing, transport and disposal operations can be restored quickly following a system disruption.

Action		2020 Status	2021 Status
18.1	Implement strategies to maximize access to critical solid waste infrastructure during disruptions.		
18.2	Implement requirements for solid waste system service providers to prepare and maintain emergency operations and continuity of operations plans.		
18.3	Prioritize the use of the current solid waste infrastructure for the processing of normal garbage and recycling, rather than for disaster debris, following a debris-generating incident.		
18.4	Develop disaster resiliency standards for the design and construction of new facilities or when existing facilities are renovated.		
18.5	Develop engineering and financing strategies to facilitate the seismic retrofit of existing public and private solid waste infrastructure.		
18.6	Conduct periodic assessments of solid waste system facilities for vulnerabilities to different hazards.		

 Not started  In process but facing obstacles  On track  Completed

Partnering for disaster resilience

The Solid Waste Disaster Preparedness Workgroup began meeting in mid-2021. This workgroup is tasked with guiding the implementation of Regional Waste Plan goals focused on resilience and preparedness in the solid waste system. The group is composed of both solid waste staff and emergency management staff from the counties and larger cities in the greater Portland area. The group's work focuses on two areas: coordinating regional planning for management of disaster debris, and planning for continuity of operations for the region's solid waste system following a disaster.

“The Solid Waste Disaster Preparedness group brings local governments together to plan for regional natural disaster response and recovery. Implementing climate resiliency strategies will ensure our system is prepared to provide essential services during extreme weather events.”

- Shannon Martin
Solid Waste & Sustainability Manager, City of Gresham

Goal 19

Plan disaster debris response operations to expedite the clearance and removal of debris, making the best use of locally-based services and materials and maximizing recovery.

Action		2020 Status	2021 Status
19.1	Identify and pre-authorize debris management sites throughout the region.		
19.2	Develop incentives for debris management contractors to prioritize purchasing services and materials from locally owned companies, with an emphasis on minority-owned and woman-owned businesses.		
19.3	Develop agreements and contracts with service providers and partner jurisdictions to ensure rapid mobilization of regional and out-of-region resources during emergency response operations.		
19.4	Develop strategies for the safe reuse, recycling and disposal of materials following a debris-generating incident.		
19.5	Create incentives or requirements for debris management contractors to collect and separate debris materials for reuse and recycling.		

■ Not started ■ In process but facing obstacles ■ On track ■ Completed



Key Indicators

The 2030 Regional Waste Plan includes a robust measurement framework to evaluate progress towards the plan's vision and goals. The framework allows Metro and local governments to demonstrate the positive impacts the plan's activities are having on the region, highlight opportunities for improvement and evaluate which programs and projects are helping the region achieve its desired outcomes.

Key indicators are linked to the values in the plan and demonstrate overall performance. Goal indicators help measure progress towards each of the plan's goals.

This report covers 16 indicators in total. It includes 11 indicators reported previously, and tracks progress on 8 of those. It also establishes baseline data for five additional indicators, which will be used to compare progress against in future years.

Key Indicators

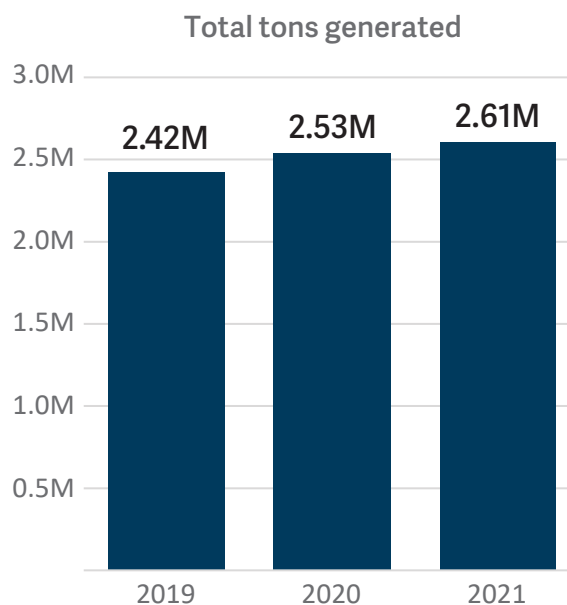
Annual tons of waste generated

Plan value: Conserve natural resources

This indicator measures the total amount of waste materials generated by people and businesses each year in all of Clackamas, Multnomah and Washington counties. It includes garbage, as well as materials collected for recycling, composting and energy recovery.

In 2021, the region generated an estimated 2.61 million tons of waste materials. This represents an increase of almost 8 percent compared to the baseline year. Of all the waste generated in 2021, 53% was disposed mostly in landfills, with a small percentage going to incinerators. The rest (47%) was recovered for recycling, composting or producing energy.

To fulfill the 2030 Regional Waste Plan value of conserving natural resources, this indicator should decline or stay the same over time.



Source: Oregon Department of Environmental Quality (ODEQ), Metro (2021 estimates)

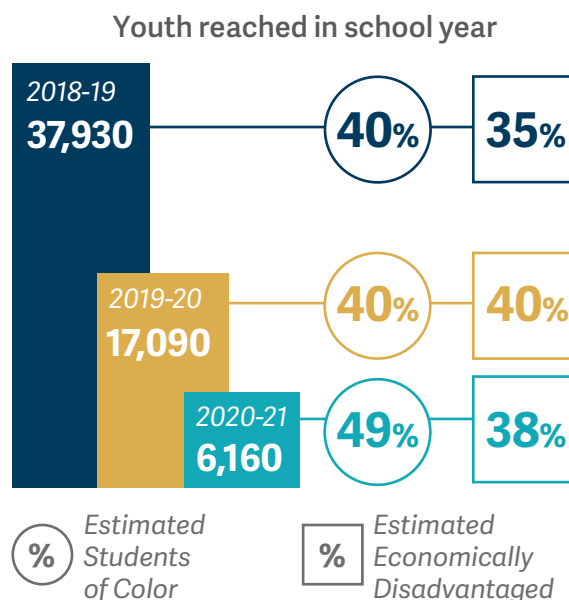
Youth reached through education programs

Plan value: Advance environmental literacy

The COVID-19 pandemic led to cancellation of in-person waste reduction programming for part of the 2019-20 school year and all of 2020-21. Program staff adapted their curriculum to be delivered virtually through remote presentations, videos and kits for teachers and communities.

Though fewer than pre-pandemic years, 2019-20 and 2020-21 school-based programming by Clackamas County and Metro served many students in the region and maintained, if not grew, its reach to underserved communities. Future reports will return to tracking in-school and Outdoor School waste prevention education programming offered by Metro and partner agencies.

Source: Metro, Clackamas County



Median wage in Metro's solid waste workforce

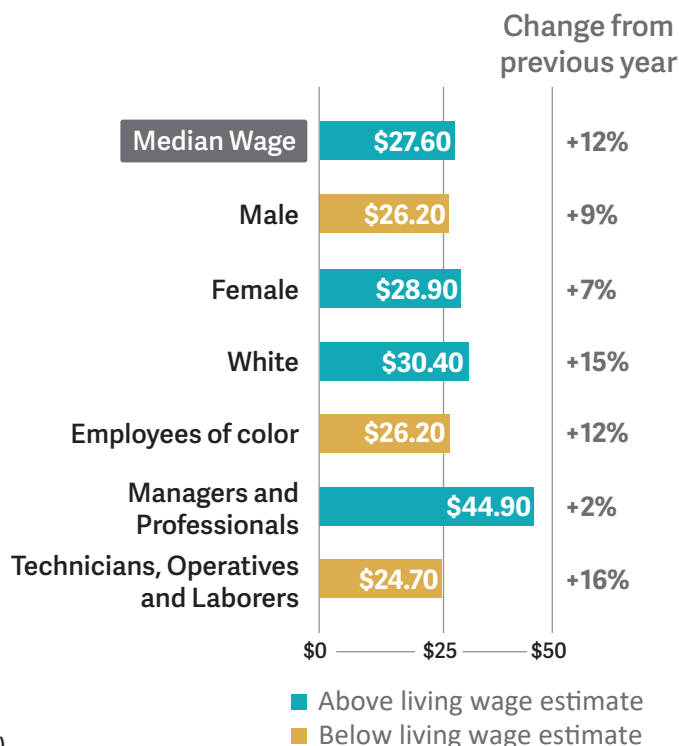
Plan value: Foster economic well-being

Between 2020 and 2021 the median wage rose by \$3.00, from \$24.60 to \$27.60.

Compared to the living wage estimate* for a household that has two working adults and two children (\$26.90 in 2021), 49% of workers earned less than this standard in 2021. This represents an increase from 45% in 2020 (when the living wage estimate was \$23.70). Workers earning below this standard tend to be employees of color and hold frontline positions.

The goal is for the median wage of employees of color and the lowest paid workers to be at or above a standard living wage for the Metro region.

Source: Metro, Recology

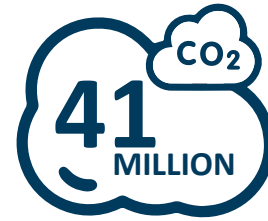


* Glasmeier, Amy, Massachusetts Institute of Technology (2022). Living Wage Calculator, available at livingwage.mit.edu.

Greenhouse gas consumption based emissions

Plan value: Protect and restore the environment and promote health for all

This indicator was not updated this year and is showing the baseline data from 2015. It tracks the estimated emissions generated locally, nationally and internationally as a result of the goods and services consumed by people in the Metro region. Most of these emissions (71%) are not generated in the region. The majority (99%) of emissions are generated when we make, consume and use materials and products; managing products at the end of their useful lives accounts for a very small fraction of emissions.



Metric tons of carbon dioxide equivalent (MT CO₂e) in 2015

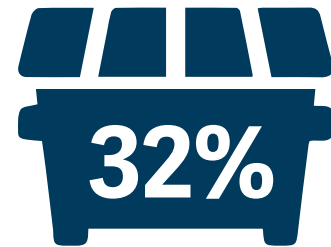
Source: Consumption-Based Greenhouse Gas Emissions Inventory for the Metro Region. Oregon Department of Environmental Quality (2018)

Multifamily properties with adequate collection services

Plan value: Provide excellent service and equitable system access

This indicator is showing the baseline data from the previous progress report. It tracks the share of apartment and condominium homes in the greater Portland area with adequate garbage and recycling collection services. Adequate service is defined as meeting the Multifamily Regional Service Standard (RSS), which was updated in 2020 for the first time since it was established almost 30 years ago. Providing adequate garbage and recycling services at multifamily homes is important because it allows for more equitable access to services for all residents of the region.

For this indicator meeting the RSS is defined as providing 20 gallons per apartment unit per week for both garbage and recycling and 1 gallon per apartment per week for glass collection.



Properties with adequate services in 2021

Source: Metro, Multifamily Garbage and Recycling Services Study (2021)

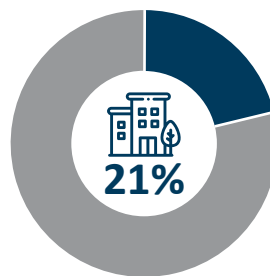
Recycling contamination

Plan value: Ensure operational resilience, adaptability and sustainability

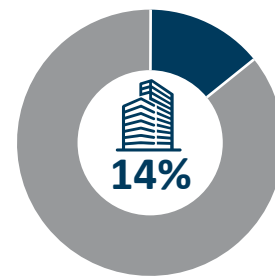
This indicator is showing the baseline data and tracks recycling contamination by sector. These sectors are: single family homes; multifamily apartment and condominium homes; and the commercial sector (which includes businesses and institutions such as hospitals and schools). The contamination rate ranges from 9-21% with the multifamily sector having the highest contamination rate.



Single Family (2015)



Multifamily (2017)



Commercial (2019)

Source: Metro, Regional Waste Characterization Studies

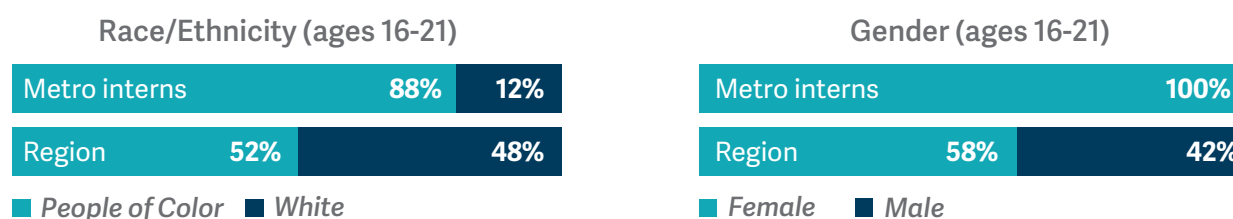
Goal Indicators

Diversity in Metro's garbage and recycling internship program

Goal 1: Increase engagement of youth and adults historically marginalized from garbage and recycling decision-making by enhancing civic engagement and leadership opportunities.

In 2021, this indicator covers the Metro garbage and recycling Youth Internship and Leadership program, a paid internship opportunity for youth ages 16-21. The program focuses on exploring careers in garbage and recycling, engaging youth voices and building community, with emphasis on reaching youth of color.

Almost all participants in the Metro program in 2021 (the baseline year for this indicator) identified as youth of color and all identified as female. The program is more diverse than the Metro region overall.



Source: Metro, American Community Survey (2020)

Diversity in solid waste committees

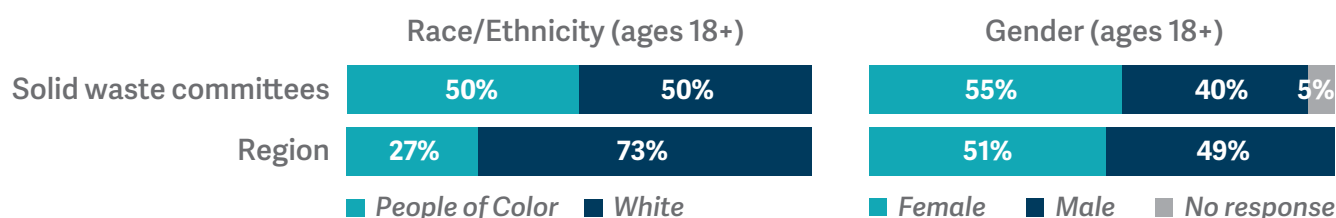
Goal 1: Increase engagement of youth and adults historically marginalized from garbage and recycling decision-making by enhancing civic engagement and leadership opportunities.

In 2021, this indicator covers two solid waste advisory committees in the Metro region:

- The Regional Waste Advisory Committee, comprised of community, government and industry representatives, advises the Metro Council on implementation of the Regional Waste Plan.
- Washington County's Garbage and Recycling Advisory Committee assists the Board of Commissions in ensuring safe, equitable, economical and efficient collection, storage, transportation and disposal of garbage and recycling. The committee consists mainly of representatives of the public.

People of color represent 50% of membership on the two committees, combined, and women, about 55%. These ratios are higher than the Metro region population overall, where people of color represent 27% of adults (ages 18+) and women, 51%.

Increasing the share of people of color and women on solid waste advisory boards means greater representation of historically marginalized voices in decision-making on the regional garbage and recycling system.



Source: Metro, Washington County, American Community Survey (2020)

Temporary workers in Metro's solid waste workforce

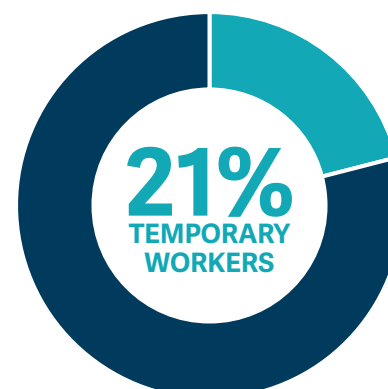
Goal 3: Ensure that all jobs in the garbage and recycling industry pay living wages and include good benefits.

In 2021, about 1 in 5 solid waste workers at Metro (or Metro's contractor) were temporary or variable hour employees (meaning, they don't have a set schedule and are eligible for fewer benefits than regular workers, who are hired for a budgeted position). Temporary workers were more likely to identify as people of color (40%) and female (48%) than Metro employees overall (33% identify as people of color and 36% as female).

Among temporary workers at Metro, 95% earned less per hour than a living wage estimate for a household that has two working adults and two children (\$26.90 in 2021*).

The goal for this indicator is to limit the share of temporary workers in the solid waste workforce and to ensure temporary positions with good wages and benefits are available for people who want them, along with the opportunity to become regular employees.

* Glasmeier, Amy, Massachusetts Institute of Technology (2022). Living Wage Calculator, available at livingwage.mit.edu.



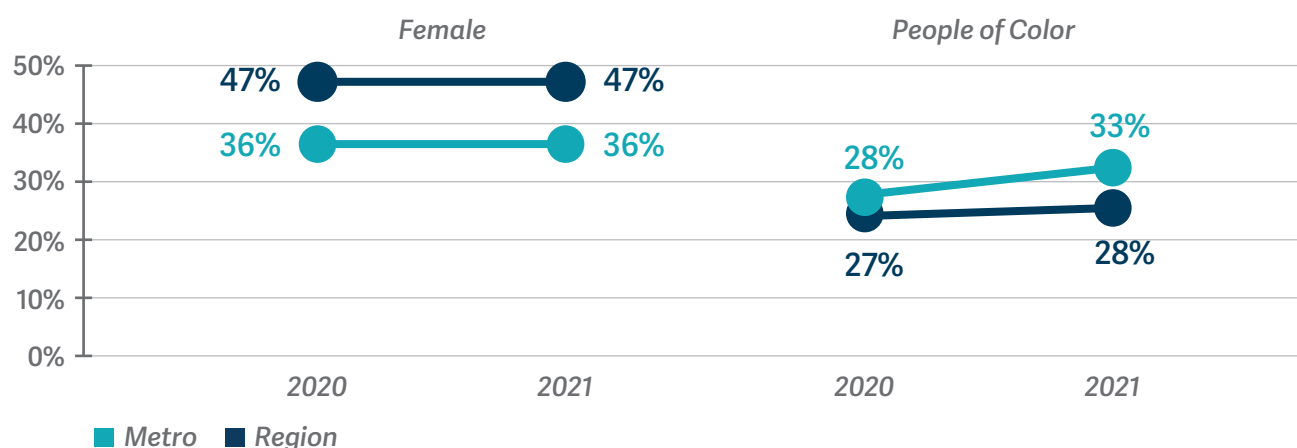
Sources: Metro Waste Prevention and Environmental Services, Recology; Data as of June 2021

Diversity in Metro's solid waste workforce

Goal 4: Increase the diversity of the workforce in all occupations where people of color, women and other historically marginalized communities are underrepresented.

Compared to the regional workforce overall, people of color are slightly overrepresented in Metro's solid waste workforce, while women are underrepresented.

People of color continue to be overrepresented in frontline positions (37%) compared to managerial and professional positions (24%). The share of people of color in managerial and professional positions did rise in 2021 compared to the previous year (from 19% to 24%).



Source: Metro Waste Prevention and Environmental Services, Recology, American Community Survey (2020)

Priority materials collected by a product stewardship program

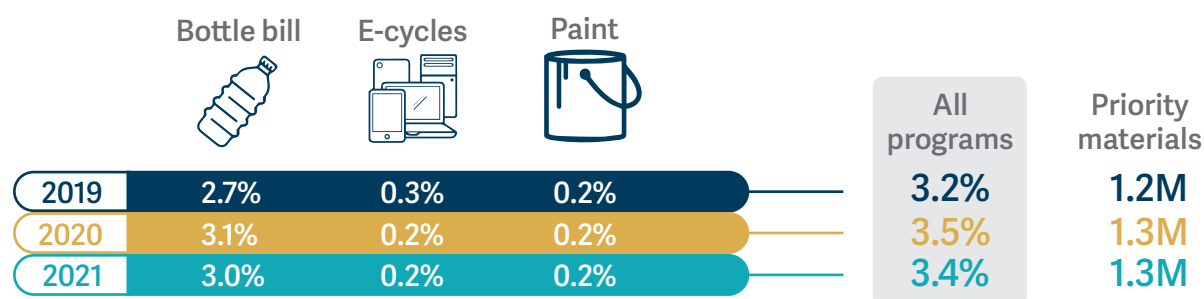
Goal 5: Reduce the environmental and human health impacts of products and packaging that are made, sold, used or disposed in Oregon.

Product stewardship programs seek to ensure that those who design, manufacture, sell and use products take responsibility for reducing the negative environmental and health impacts of those products and their packaging.

Under these programs, producers are assigned financial responsibility for managing products at the end of their useful life and provided incentives for reducing product impacts through better design and manufacturing processes.

For many years, Oregon has had product stewardship programs for three types of products. The Bottle Bill (1971) covers most beverage containers. The E-Cycles program (2009) covers televisions, computers and monitors. The paint program (2009) covers architectural paint. During 2019-2021, these programs accounted for around 3% of all waste generated in the Metro tri-county area (in terms of weight) that can be considered priority materials for product stewardship programs. That amount is equivalent to about 6,000 garbage trucks full of waste.

Share of priority materials collected by a product stewardship program



Priority materials are those in the garbage and recycling streams that are being or could be managed under a product stewardship program. Excludes food scraps, yard debris, wood waste, medical waste and construction debris like rocks, dirt, concrete and bricks.

Sources: Oregon Beverage Recycling Cooperative, Manufacturers Recycling Management, National Center for Electronics Recycling, PaintCare, Oregon Department of Environmental Quality, Metro. Estimates of priority materials generated in the Metro watershed for 2021 produced by Metro.

One important limitation of this indicator is that it is based on the weight of materials, which does not capture the environmental impact of the materials covered. Safely managing hazardous products like paint, electronic devices and medicines through product stewardship programs can help protect the environment and human health and lead to more and safer recycling.

Since 2019, the Oregon legislature has passed laws creating three additional product stewardship programs. The Recycling Modernization Act will create a program where producers of packaging, paper products and food serviceware will cover the cost of improving the state's recycling infrastructure for those materials.

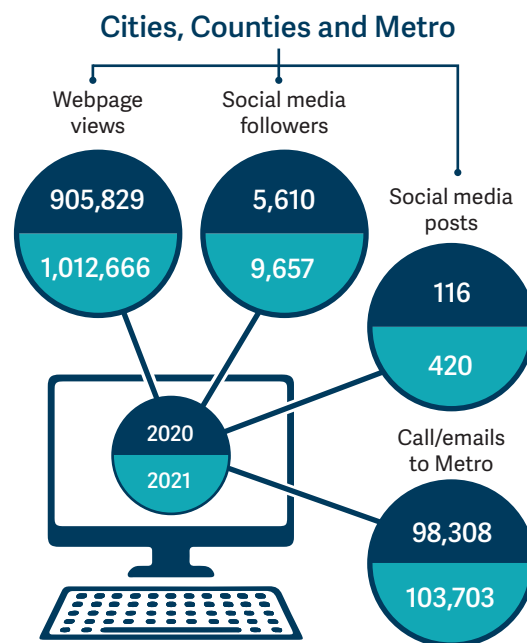
The other new product stewardship programs are for mattresses (2022) and prescription and over-the-counter medicines (2021). As these programs are implemented, data on materials processed through the programs will be added to this indicator.

Garbage, recycling and reuse education

Goal 9: Increase knowledge among community members about garbage, recycling and reuse services.

Cities, counties and Metro share information with people and businesses about the garbage, recycling and reuse services available throughout the region. The education is provided in a variety of ways, including social media, websites, email, phone, outreach events and visits. For this indicator, use of these education resources is measured in terms of regional web traffic, social media interaction and hotline use.

Metro and local governments are working to provide culturally responsive and relevant education and outreach. One example is the regionally developed Recycle or Not community resource (Reciclar o No in Spanish), which provides accessible and culturally relevant information on what can go in the recycling bin, and engages participants to share ideas for reduce and reuse. In 2021, the resource had a total of 24,094 webpage views and 7,894 Instagram followers.



2020 combines data from Metro and Recycle or Not; 2021 combines data from Metro, Recycle or Not, Washington County (2021 only). Data from other counties and cities will be added over time.

Dumped garbage in most impacted communities

Goal 10: Provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs of all users.

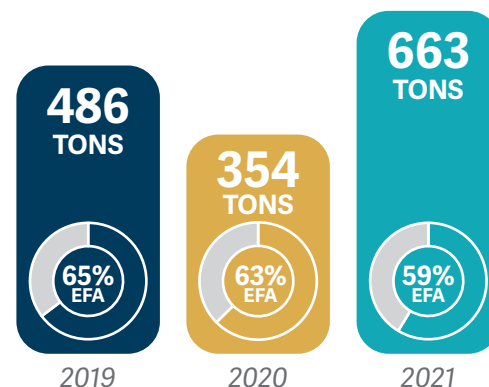
Metro's Regional Illegal Dumping (RID) program cleans up dumped garbage reported on public property. Data on the dumped garbage collected by RID crews are indicative of the scale of dumped garbage in the Metro region overall and on communities disproportionately impacted by it.

This indicator tracks the total tons of dumped garbage within RID crew service areas. It also monitors the percentage of sites cleaned up by RID that occur in equity focus areas (EFA), as one measure of impacted communities. EFAs represent communities with a higher than average density of people of color, people with limited English proficiency or people with incomes equal to or less than 200% of the federal poverty level.

In 2021, the tons of dumped garbage documented through the RID program increased compared to pre-pandemic levels (2019), with a decrease in 2020 when the pandemic reduced available cleanup resources. Over the past three years, the majority of sites that RID crews cleaned up were located in EFAs.

Cleaning up dumped garbage is a priority of Metro and local jurisdictions, with resources dedicated to expanding cleanup efforts in 2021 and 2022. Over the long term, however, the goal of this indicator is to see a decrease in the amount of dumped garbage collected in the region as a reflection of adequate garbage, recycling and reuse services.

Annual tons cleaned up by RID crews and % of sites occurring in EFAs



Source: Metro

Solid waste facility rates

Goal 14: Adopt rates for all services that are reasonable, responsive to user economic needs, regionally consistent and well understood.

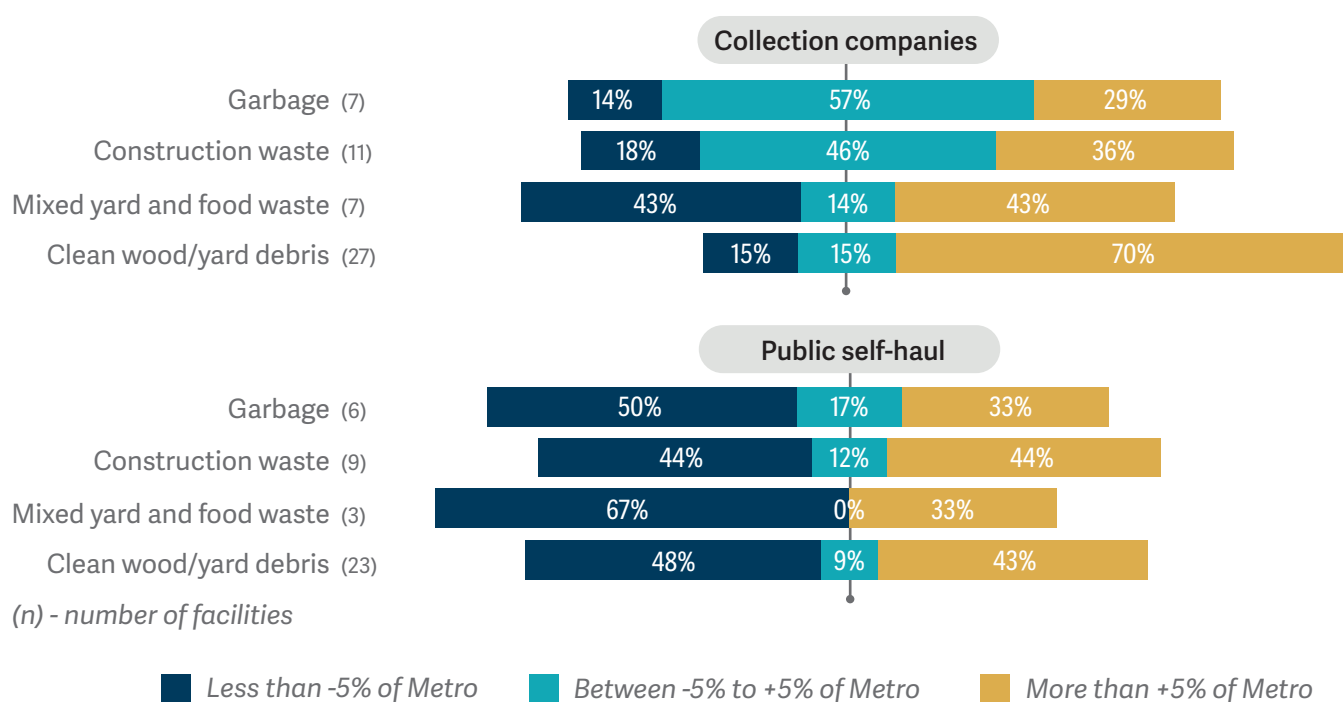
This indicator tracks the rates charged to collection companies and public customers who self-haul garbage and other waste to a solid waste facility. It compares rates charged at private facilities that receive waste from the Metro region, including transfer stations, material recovery facilities and compost facilities, to the region's two publicly owned facilities (Metro Central and Metro South). It identifies the share of facilities with rates that are within 5% of Metro's transfer station fees for four major material types.

This indicator is based on data reported by private solid waste facilities to Metro. Rates of private facilities are measured using the transactions reported by each facility over the course of the year. The charges for each facility are compared to what a Metro transfer station would charge for the same transaction. For facilities that do not report charges to Metro, their posted rate for each material type was compared to Metro's.

As of 2021, rates charged by facilities are not consistent across the region. For garbage and construction waste loads received from collection companies, around half of private facilities charge rates within 5% of Metro's. Fewer than 20% of facilities taking organics (food and yard waste), clean wood and yard debris fall within that range. Looking across material streams, a third or more of facilities charge more than 5% higher than Metro's transfer station fees. Considering self-haul customers, only a small portion of facilities accepting these loads have rates that are within 5% of Metro's.

The following shows the percentage breakdown of private facilities based on how much they charged to collection companies and public self-haul customers compared to Metro from July 2021 to June 2022.

Private facilities compared to Metro facilities based on charges to collection companies and public






Source: Metro




Recycling materials sent to Oregon and other domestic markets

Goal 15: Improve the systems for recovering recyclables, food scraps and yard debris to make them resilient to changing markets and evolving community needs.

In 2021, an estimated 76% of all recyclable materials collected from homes and businesses in the Metro region was sold to markets in the U.S. This is 8 percentage points higher than in the 2019 baseline year.

There are wide variations in destination markets depending on the materials. All glass and most metal and cardboard went to domestic markets in 2021. In contrast, most plastic and paper are exported. Compared to 2019, the share of plastic exports increased in 2021 (from 58% to 64%). Almost half of those plastic exports went to Canada, while the rest was shipped abroad, mostly to Asian countries. Paper exports remained the same as in 2019; almost all paper exports in 2021 went to Asian countries.

									
	Cardboard			Paper			Plastic		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
All U.S. Markets	82%	81%	87%	42%	52%	42%	41%	37%	36%
Oregon	30%	25%	31%	9%	5%	2%	4%	3%	3%
Exports	18%	19%	13%	58%	48%	58%	59%	63%	64%

									
	Metal			Glass			All materials		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
All U.S. Markets	96%	98%	99%	97%	100%	100%	68%	73%	76%
Oregon	91%	87%	66%	76%	72%	72%	32%	28%	29%
Exports	4%	2%	1%	3%	0%	0%	32%	27%	24%

Source: Metro

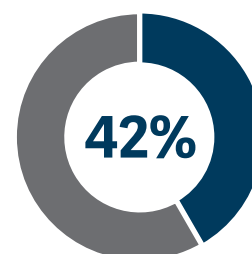
Disaster resilience planning

Goal 17: Effectively coordinate public and private partners in planning for the impact of disasters on the solid waste system.

This indicator counts the number of local governments in Clackamas, Multnomah and Washington counties that have adopted a disaster debris management plan.

The 15 cities and counties that have disaster debris management plans accounted for 73% of the population in Clackamas, Multnomah and Washington counties.

15 complete plans
out of 36



Source: Metro, Washington County







APPENDIX

Plan indicators

The plan includes a robust measurement framework to evaluate progress toward its vision and goals. This will allow Metro and local governments to demonstrate the positive impacts the plan's activities are having on the region, highlight opportunities for improvement and evaluate which programs and projects are helping the region achieve its desired outcomes.

Key indicators

Key indicators communicate the overall trajectory of progress to a broad audience. They draw from the plan's values and demonstrate overall performance. A number of the key indicators are new measures that would require investment to implement.

VALUE	KEY INDICATOR	LEAD AGENCY	STATUS
	Greenhouse gas emissions associated with the products and services consumed in the Metro region (Environment and Health value)	Metro	In progress
	Annual tons of waste generated (Resource Conservation value)	Metro	In progress
	Number, geographic location and demographics of youth reached through education programs (Environmental Literacy value)	Metro	In progress
	Share of multifamily communities with adequate collection services (Service Excellence and Equity value)	Metro Cities Counties	Investment needed
	Recycling contamination by sector (Operational Resilience value)	Metro	Investment needed
	Median wage in the waste management industry by race, ethnicity and gender (Economic Well-Being value)	Metro Cities Counties	Investment needed

Goal indicators

Indicators at the goal level are designed to measure the progress of specific programs, policies or investments that are linked to attaining the 2030 Regional Waste Plan's goals. A number of the goal indicators will also inform the key indicators.

GOAL	INDICATOR	LEAD AGENCY	STATUS
Goal 1: Increase engagement of youth and adults historically marginalized from garbage and recycling decision-making by enhancing civic engagement and leadership opportunities.	Number and demographics of youth and adults participating in solid waste internship or leadership programs	Metro	Investment needed
	Demographics of committee members serving on Metro and local government solid waste advisory boards	Metro Cities Counties	Investment needed
Goal 2: Increase the percentage of garbage and recycling system revenue that benefits local communities and companies owned by people of color and other historically marginalized groups.	Share of solid waste spending that goes to locally owned, minority-owned and woman-owned businesses and to community organizations.	Metro Cities Counties	Investment needed
Goal 3: Ensure that all jobs in the garbage and recycling industry pay living wages and include good benefits.	Median wage in waste management industry by race/ethnicity, gender and occupation type	Metro Cities Counties	Investment needed
	Share of solid waste workforce that is temporary workers	Metro Cities Counties	Investment needed
Goal 4: Increase the diversity of the workforce in all occupations where people of color, women and other historically marginalized communities are underrepresented.	Share of solid waste work force that is people of color and women	Metro	Investment needed
Goal 5: Reduce the environmental and human health impacts of products and packaging that are made, sold, used or disposed in Oregon.	The number of children's products with chemicals of concern that are sold in the region	Oregon Heath Authority	Investment needed
	Share of priority products covered in Oregon by a product stewardship framework	Metro	Investment needed

GOAL	INDICATOR	LEAD AGENCY	STATUS
Goal 6: Reduce product environmental impacts and waste through educational and behavioral practices related to prevention and better purchasing choices.	Number, geographic location and demographics of youth reached through school-based education programs (Key Indicator 3)	Metro	In progress
	Annual tons of waste generated (Key Indicator 2)	Metro Oregon DEQ	In progress
Goal 7: Reduce product environmental impacts and waste through policies that support prevention practices and better purchasing choices.	Environmental impacts associated with high-impact products and product categories purchased by Metro and local governments	Metro Cities Counties	Investment needed
Goal 8: Increase the reuse, repair and donation of materials and consumer products.	Growth in sales and/or employment in the reuse sector	Metro	Investment needed
Goal 9: Increase knowledge among community members about garbage, recycling and reuse services.	Metro and local government calls, web hits and community survey responses	Metro Cities Counties	Investment needed
Goal 10: Provide regionally consistent services for garbage, recyclables and other priority materials that meet the needs of all users.	Tons of illegally dumped waste overall and in the most impacted communities	Metro Cities Counties	In progress
	The environmental impacts associated with the recovery rate for the Metro wasteshed	Metro Oregon DEQ	Investment needed
Goal 11: Address and resolve community concerns and service issues.	Share of Metro, local government and solid waste service providers that have gone through cultural competency training	Metro Cities Counties	Investment needed
Goal 12: Manage all garbage and recycling operations to reduce their nuisance, safety and environmental impacts on workers and the public.	Tons of key pollutants, including particulates and CO2 emissions, from on-road and off-road solid waste fleet vehicles	Metro Cities Counties	In progress
	Number of worker injuries that occur at solid waste facilities	Metro	In progress
Goal 13: Invest in communities that receive garbage and recyclables from the Metro region so that those communities regard solid waste facilities as assets.	Share of community enhancement grant dollars awarded to projects that benefit marginalized communities	Metro	Investment needed

GOAL	INDICATOR	LEAD AGENCY	STATUS
Goal 14: Adopt rates for all services that are reasonable, responsive to user economic needs, regionally consistent and well understood.	Share of solid waste facilities with rates that fall within 5% of the tip fee charged at publicly owned facilities for each material type (garbage, mixed dry waste, etc.)	Metro	In progress
	Share of jurisdictions that offer a low-income rate assistance program for residential collection services	Metro Cities Counties	In progress
Goal 15: Improve the systems for recovering recyclables, food scraps and yard debris to make them resilient to changing markets and evolving community needs.	Share of the region's recoverable materials, by material type, that is sent to markets in Oregon and the U.S.	Metro	Investment needed
	Contamination rates for in-bound and out-bound recyclables at source-separated Material Recovery Facilities located in the region	Metro	Investment needed
Goal 16: Maintain a system of facilities, from smaller recycling drop-off depots to larger full-service stations, to ensure equitable distribution of, and access to, services.	Geographic proximity: Of cities/county urbanized areas to facilities that accept garbage, recyclables, food scraps and other curbside materials; Of the population, by geographic area, to services for household hazardous waste and other prioritized, non-curbside materials	Metro Cities Counties	In progress
Goal 17: Effectively coordinate public and private partners in planning for the impact of disasters on the solid waste system.	Establishment of Metro, County and City plans that delineate jurisdictional roles in managing disaster debris	Metro	Investment needed
Goal 18: Ensure routine garbage and recycling collection, processing, transport and disposal operations can be restored quickly following a system disruption.	Capacity and geographic distribution of solid waste facilities that meet seismic standards	Metro	Investment needed
Goal 19: Plan disaster debris response operations to expedite the clearance and removal of debris, making the best use of locally-based services and materials and maximizing recovery.	Capacity and geographic distribution of pre-authorized debris management sites	Metro	Investment needed