



Metro



2030 Regional Waste Plan

Equity, health and the environment

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.

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Plan adopted by Ordinance No. 19-1431 on March 7, 2019.

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Table of contents

Foreword from the Metro Council President	3
Introduction	4
Navigating the plan.....	7
Definitions	8
A new approach to managing waste.....	10
Addressing the full life cycle.....	11
The life cycle of products and materials	12
The garbage and recycling system	14
Leading with equity.....	16
Environmental impacts of products and materials	18
Measuring environmental impacts	19
Reducing our impact.....	22
Economic footprint	24
Economic impact.....	25
System revenue	26
Legal foundation and policy guidance	28
Overview.....	29
Legal foundation.....	29
Policy guidance	30
Creating the plan	34
Planning process.....	35

Values, principles and vision.....	42
Overview.....	43
Values.....	44
Principles.....	45
Vision.....	47
 Goals and actions.....	 48
Overview.....	49
Navigating the action tables.....	50
Shared prosperity.....	52
Product design and manufacturing.....	60
Product consumption and use.....	64
Product end-of-life management.....	70
Disaster resilience.....	94
 Measuring progress.....	 102
Plan Indicators.....	103
 Implementation, compliance and amendments.....	 108
Overview.....	109
Roles and responsibilities.....	110
Oregon statutory requirements.....	112
Requirements for local governments.....	113
Plan implementation.....	116
Plan oversight.....	119
 Appendices.....	 120
Acknowledgments.....	122
Waste reduction program.....	124
Key solid waste laws.....	138
Glossary of terms.....	142

March 2019

To the residents of the greater Portland area,



On behalf of the Metro Council, I am pleased to share with you the 2030 Regional Waste Plan: Equity, health and the environment. The plan is extraordinary for its potential to make a meaningful impact on our region and for the degree to which it reflects the needs and aspirations of members of our community who haven't historically had a strong voice in the development of environmental plans, policies and programs.

There are three key things I'd like you to take away from this plan. The first is equity and, quite simply, it's the foundation upon which the plan will succeed or falter. The plan's values, principles, goals and some 40 specific actions are directed at achieving a paradigm shift that equitably shares outcomes to communities of color and other historically marginalized groups. These outcomes relate to

leadership, education, services and, critically, an equitable distribution of the garbage and recycling system's economic benefits.

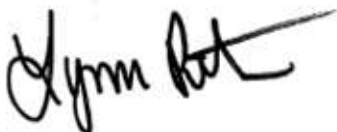
The second is scope. The plan encourages us to think beyond waste – the stuff we choose to recycle, compost or put in a landfill. Instead, it challenges us to think about reducing environmental and health impacts of products during all phases of their manufacturing, use and disposal. This is a really exciting and challenging opportunity for us to do good work as consumers, influencers, advocates, voters and decision-makers.

The third is change. We have to change how we do things if we are going to have a more just and equitable community and if we are to make our contribution to reducing the impacts of climate change. The greenhouse gas emissions associated with the products we use are a huge portion of our region's total emissions. The plan lays out actions to address these.

While all of us in greater Portland own a piece of this plan, I want to acknowledge the 4,000 local residents, eight community-based organizations and many others who devoted time, thought and energy to providing their thoughts on our community's needs and aspirations. I'm thrilled and humbled by this level of engagement, and I and my colleagues on the Metro Council recognize our obligation to follow through on the commitments made in this plan.

Ultimately, a plan is just a plan unless we do something with it. So, let's get to work.

Sincerely,



Lynn Peterson
Metro Council President



Introduction

We live in a place where people care—about protecting the environment, conserving resources, keeping people healthy and ensuring that everyone has what they need to thrive.

There's a strong connection between our ability to achieve these values and our decisions about managing waste, especially when we think beyond garbage trucks and recycling bins.

Our regional waste system is more than recycling services and garbage facilities. It encompasses the entire life of the products we use, from design to production to use, until they go to a recycler, landfill or thrift store. Garbage, recycling and related sectors make up a significant part of the Portland region's economy, employing thousands of people and generating more than \$537 million in economic activity each year. Garbage and recycling have a substantial impact on the environment, too: the products we purchase, use and throw away are responsible for more than 35 percent of the region's greenhouse gas emissions that come from consumption activities.

Over the years, a collaborative approach to planning for the future has helped make greater Portland one of the most livable areas of the country. The 2030 Regional Waste Plan continues that tradition—and builds on it, with a focus on equity, health and the environment.

Everyone should be able to enjoy the benefits of our growing region. Currently, not everyone can. A long history of discrimination in law, policy and practices has left communities of color out of the economic benefits of the garbage and recycling system while burdening them with disproportionate harmful impacts. In contrast to past planning efforts, this plan acknowledges racial equity as the backbone of good governance, addressing disparities that people of color experience related to Metro's policies, programs and services.

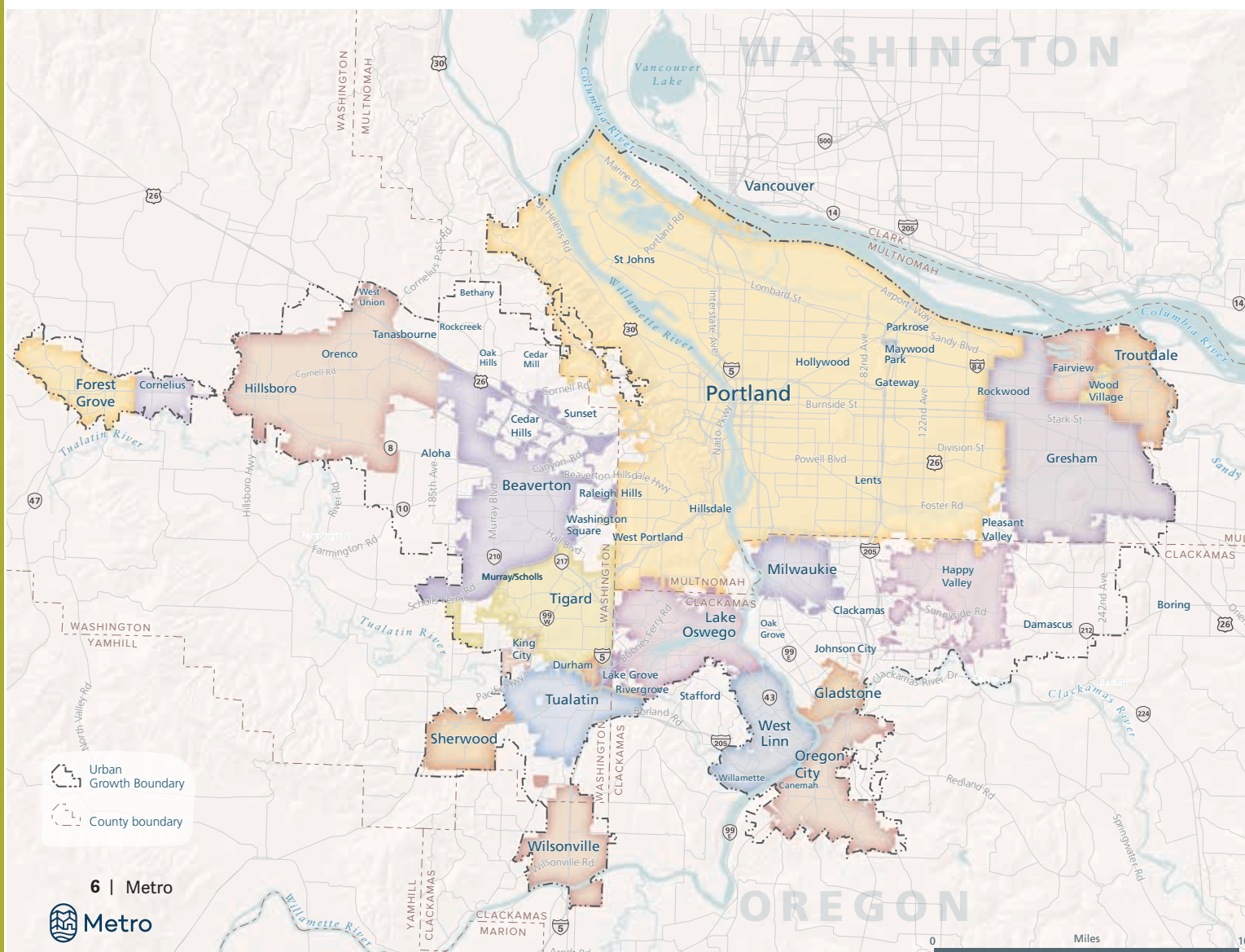
Equity shows up throughout this plan, from the community-driven process that created it to the goals and actions designed to correct past wrongs and build a more inclusive future.

At a time when climate change and pollution are threatening people and the environment, we must grapple with the fact that these global problems are linked to our patterns of consumption and our growing demands for materials. The products we produce, purchase, use and throw away have impacts locally and globally, and not just when we dispose of them.

The plan is a policy document that sets direction across the 12 years the plan will be in effect. The plan's goals and actions provide specific guidance for reducing the impacts of products throughout their lives, during design and manufacture, when we buy and use them and when we throw them away. The plan also provides direction for ensuring the region's garbage and recycling system is resilient and prepared to recover quickly after a disaster.

As the regional solid waste authority, Metro has the responsibility to ensure that all solid waste generated in the region is managed in a manner that protects public health and safety and safeguards the environment. All programs, services and facilities related to solid waste management and disposal are addressed by the plan, including waste reduction, collection, transfer and disposal. This plan is designed to address the changes and challenges we face and to provide opportunities to innovate, invest and continue our efforts to protect people and quality of life in the region.

In collaboration with city, county, state, community and business leaders, Metro will use the 2030 Regional Waste Plan as greater Portland's blueprint to respond to the complex and interrelated challenges we face.



Navigating the plan

Values, principles and vision (page 42)

The foundation of the plan, the values, principles and vision will guide how Metro and our partners manage and improve the garbage and recycling system.

Goals and actions (page 48)

The 19 specific goals and 108 related actions will enable the region to achieve its vision by 2030. The goals and actions are grouped into five categories:

- Shared prosperity
- Product design and manufacturing
- Product use and consumption
- Product end-of-life management
- Disaster resilience

Measuring progress (page 102)

Specific indicators will be used to measure progress over time.

Implementation (page 108)

Metro is responsible for coordinating and participating in various efforts to implement the plan and assess its performance. Several approaches will be used to implement the actions of the plan. Each action is assigned a lead agency—the primary entity responsible for implementation and reporting progress.

Definitions

The plan: The entire 2030 Regional Waste Plan.

Life cycle system: The multiple interconnected stages of a product's life, from raw material extraction to design and production to recycling into something new, and the impacts the product has at each stage of its life.

Garbage and recycling system: All the programs, services and facilities that enable residents and businesses to safely, and with the highest environmental benefit, get rid of their discarded items when they no longer have use for them. Metro, cities and counties oversee and manage garbage, recycling and composting services. The system also includes organizations and businesses that provide donation, reuse and repair services to reduce the amount of materials going to the landfills.

From Metro's Strategic Plan to Advance Racial Equity, Diversity and Inclusion:

Racial equity: When race can no longer be used to predict life outcomes, and outcomes for all groups are improved.

Historically marginalized: Groups that have been denied access and/or suffered past institutional discrimination in the United States.

Inclusion: The degree to which diverse individuals are able to participate fully in the decision-making process within an organization or group. While a truly "inclusive" group is necessarily diverse, a "diverse" group may or may not be "inclusive."

Diversity: The variance or difference among people. This variance includes race, ethnicity, gender, age, religion, nationality, language preference, socioeconomic status, disability, sexual orientation, gender identity and others. These differences are tied to a variety of other aspects of diversity such as experience, work styles, life experience, education, beliefs and ideas.

People of color and communities of color: For the purposes of this plan, communities of color are Native Americans, African Americans, Asian Americans and Pacific Islanders, Latinos or Hispanics and immigrants and refugees who do not speak English well, including African immigrants, Slavic and Russian-speaking communities and people from the Middle East.





A new approach to managing waste

Addressing the full life cycle

Our regional waste system is more than recycling services and garbage facilities. It encompasses the entire life of the products we use, from design to production to use, until they go to a recycler, landfill or thrift store.

This Regional Waste Plan addresses the entire life cycle of products. The goals and actions are designed to not only improve the way we manage materials at the end of their life, but also to reduce harmful impacts by intervening earlier. There's opportunity to improve how we design and produce products, extract raw materials from the earth, make purchasing decisions and use what we buy. The traditional garbage and recycling system, which handles products and packaging after we are done with them, is just one part of this larger system.

This life cycle approach can result in healthier people and a healthier planet. It can improve access to high-quality services and information, no matter where you live. It can help you decide what to buy or where to get rid of an item you are done using. It can also lessen the negative health and environmental impacts from the materials and products we use every day.

The life cycle of products and materials

1 Product design and manufacturing

What it involves:

- Extracting natural resources from the earth by mining, drilling, forest harvesting or other methods
- Designing products and selecting what goes into them
- Producing or manufacturing products
- Transporting and distributing products

Ways to reduce harmful impacts:

- Design products to use fewer newly extracted natural resources and more recycled materials
- Design products to include safer chemicals and materials
- Design products to be more durable, reusable and recyclable
- Use fewer materials when making products and packaging them
- Use less energy or cleaner energy sources throughout the process
- Share responsibility for reducing impacts among everyone involved with a product across its life cycle

2 Product consumption and use

What it involves:

- The purchasing decisions of people, companies and institutions
- The use of products by individuals and businesses

Ways to reduce harmful impacts:

- Provide consumers with the tools and education needed to make informed decisions
- Ensure better access to sustainable products
- Implement policies to restrict or limit the sale of, or access to, products with high impacts to human health and the environment.

3 Product end-of-life management

What it involves:

The people, facilities, companies, non-profits and government agencies that handle recyclables and garbage

The activities involved in waste management, including collection, recycling and processing, transfer, transportation and disposal

The reuse community, which adds life to reusable goods like clothes, appliances and lumber

Ways to reduce harmful impacts:

Promote and provide more opportunities for people to safely reuse and repair products

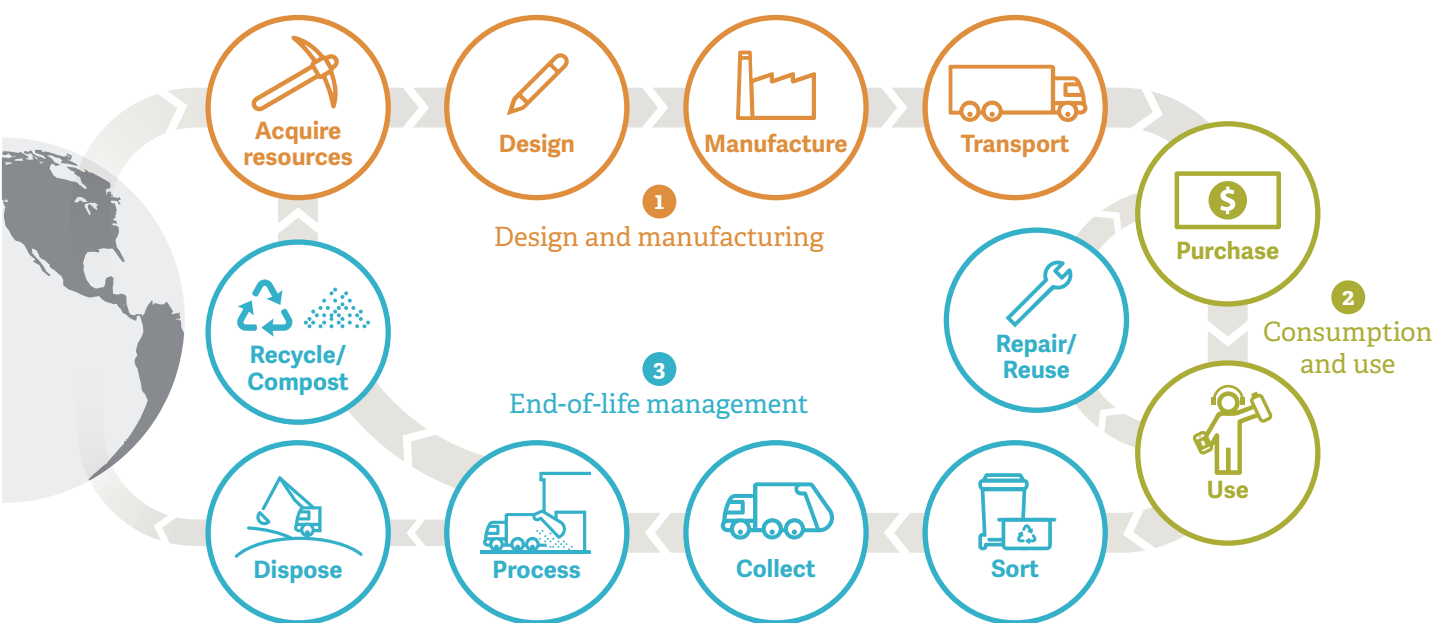
Provide options for donating reusable products before throwing them away

Support efforts to ensure that grocery stores and similar places can safely donate edible and nutritious surplus food to agencies serving people experiencing hunger

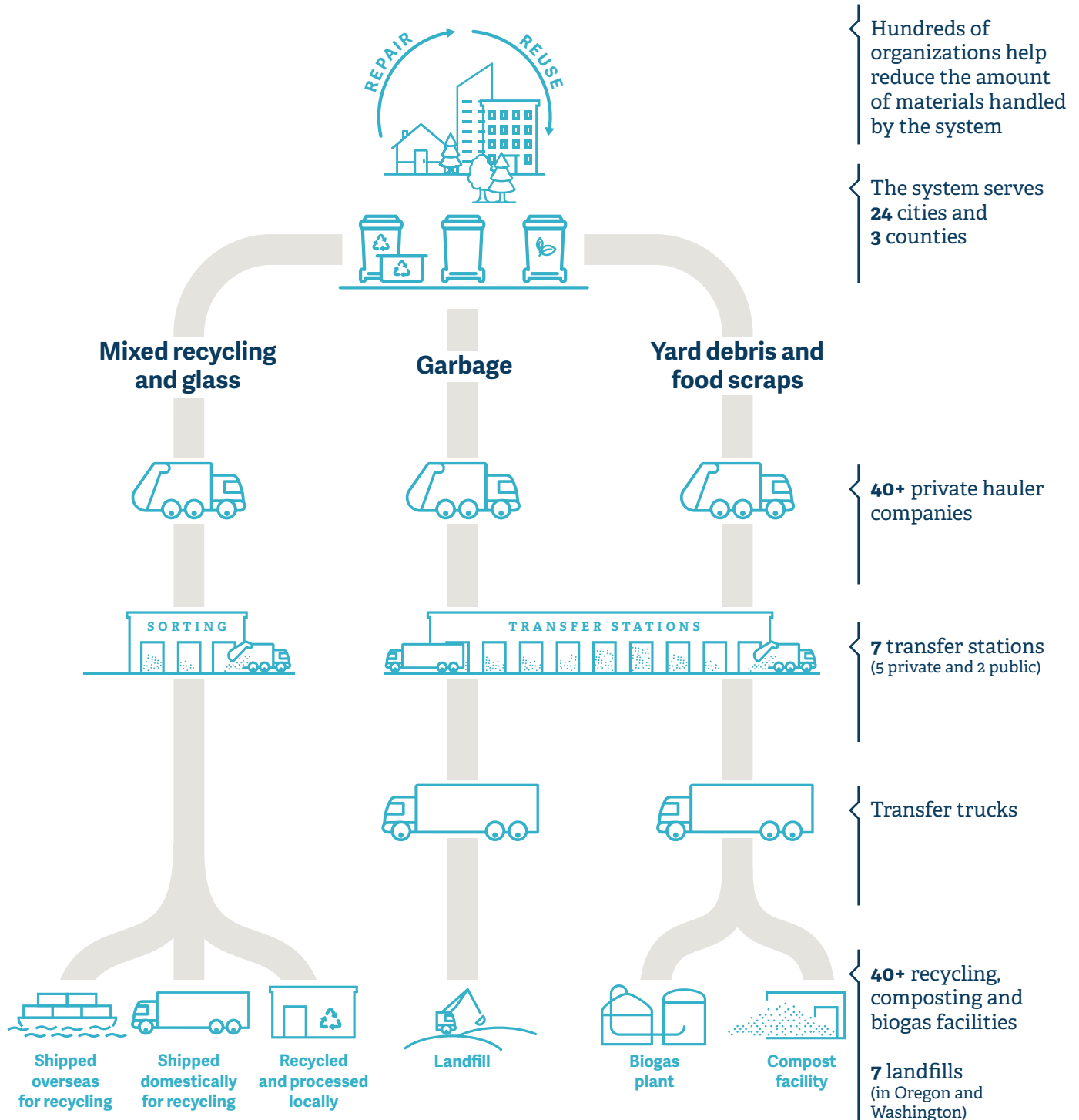
Improve options for people to reduce their garbage by providing services such as building deconstruction, recycling and composting for homes and businesses

Foster greater recycling by strengthening markets and collection programs

Ensure that facilities provide benefits to their communities, not just burdens



The garbage and recycling system



Our regional garbage and recycling system handles products and packaging at the end of their useful life. The system includes:

Repair and reuse

Hundreds of organizations in the Portland region help residents, businesses, schools and others extend the life of their products by repairing them or getting them reused, instead of thrown away.

Collection

Residents, businesses, schools and other institutions produce recyclables, food scraps, yard debris and garbage and separate these into different containers. More than 40 private haulers then collect these materials. City and county governments determine which haulers may serve their communities and, in most cases, the rates those haulers can charge their customers.

Transfer

The seven transfer stations serving the region accept garbage, yard debris and food scraps and consolidate these materials for transfer to landfills and composting and biogas facilities. Some transfer stations may pull out large recyclables, like scrap metal or cardboard, from the garbage and recycle it. Five of the region's transfer stations are privately owned and Metro owns the Metro Central facility in northwest Portland and the Metro South facility in Oregon City. The Metro facilities also accept household hazardous waste from the public and certain businesses.

Recycling

Haulers deliver the recyclable materials they collect to sorting facilities where workers and machines separate plastic, paper and metals. The sorted materials are then sold to other companies for recycling locally or for shipping to other parts of the country or overseas. Glass is taken to a separate facility in Portland for sorting and processing. In addition, different facilities will sort and process construction materials, like wood, metal and concrete, for recycling.

Composting and biogas production

Trucks from the transfer stations transport yard debris and food scraps to composting and biogas facilities, although in some cases haulers take yard debris directly from generators to composting facilities. These facilities turn materials into compost, a high value soil amendment for agricultural and individual customers. At biogas plants, food scraps are turned into biogas through a process called anaerobic digestion. The biogas is used to generate electricity or natural gas. Biogas plants also produce liquid fertilizer as a by-product and a solid material that can be composted.

Disposal at landfills

Seven landfills located across Oregon and Washington receive the Portland area's garbage. One of these landfills, which only accepts non-putrescible material, is located in Washington County. The rest are outside the region, with many located east of the Cascades.

Leading with equity

Our region is stronger when everyone has access to financial prosperity, a healthy environment and the range of opportunities that allow us to thrive.


But unfortunately, a long history of exclusionary and discriminatory policies has harmed communities of color in the Portland metropolitan region. As a result, communities of color currently experience the worst economic and social outcomes of any demographic group.

Within the garbage and recycling system, inequities appear in a variety of ways, including:

- The garbage and recycling industry tends to lack diversity in the workforce—except in the job categories that pay the lowest wages.
- Procurement processes for solid waste operations contracts often include barriers to participation for minority-owned and woman-owned small businesses.
- Communities of color experience barriers to accessing Metro's recycling information, education services and household hazardous waste services.
- People of color own few of the businesses that run our region's system.

Metro, cities and counties are committed to creating the conditions that allow everyone to enjoy the benefits of our growing region. With our programs, policies and services, we are working to make this a great place for everyone—today and for generations to come.

To ensure an inclusive process from the start, Metro convened an Equity Work Group to ensure that racial equity was incorporated into the plan. The work group participated in each phase of the process, working alongside staff in drafting elements of the plan. Metro and eight community-based organizations also organized discussions to learn how residents envision the future of the garbage and recycling system. These discussions informed many of the actions in this plan.



"My experience has been enlightening. I have been inspired by Metro's willingness to take risks and promote transformational change."

Juan Carlos Gonzalez,
Equity Work Group member



HOW EQUITY IS INCORPORATED IN THE 2030 REGIONAL WASTE PLAN

This plan includes a variety of elements to eliminate barriers and advance racial equity, diversity and inclusion.

- Equity is called out specifically in the set of values.
- The principles provide a framework for key equity considerations to guide plan implementation.
- 40 actions focus directly on advancing equity and reducing disparities.



Environmental impacts of products and materials

Measuring environmental impacts

When people think about reducing waste, they often think about what happens when they throw something away. Can I recycle this box? Are these food scraps compostable? It's important to manage waste at the end of a product's life by reusing, recycling or composting, but intervening earlier can have a larger impact on human health and the environment.

For most products and materials, we can achieve the most environmental benefit by producing them more sustainably, with fewer natural resources, less-toxic materials and less-polluting processes.

Metro and others involved in solid waste management have typically measured the environmental impact of what we produce, consume and throw away by looking at the amount and types of items that show up in the recycling, composting and garbage.

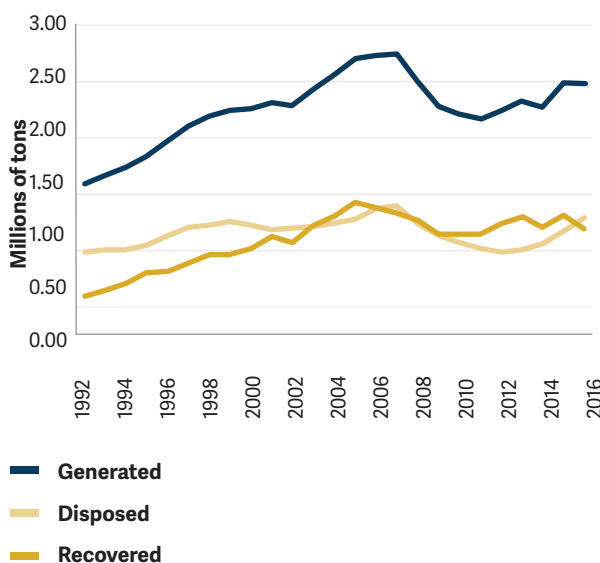
Historically, two main indicators have been used to help understand how much waste we are recycling and how much we are throwing away. The recovery rate is the percentage of all discarded materials and products that do not go to a landfill or incinerator. These materials are either recycled, anaerobically digested, composted or, in the case of wood waste, burned to produce energy. A higher recovery rate is associated with a reduction in environmental impacts due to the benefits of recycling, anaerobic digestion and composting, and, to a lesser extent, energy recovery.

Oregon and the Metro region also measure tons of waste generated. This is the total amount of materials and products thrown away in a given year. It includes all garbage, but also the materials sent to recycling, composting and energy recovery facilities. When this number decreases, it is associated with lower environmental impacts since it implies that, overall, the region is consuming fewer goods—at least by weight. It indicates that people and businesses may be wasting less food, reusing and repairing more goods or buying products that have less packaging.

These are not perfect measures of the environmental impact of materials and products because they only measure the weight of what we throw away, not the actual environmental impact. For example, the impact of one pound of discarded batteries, in terms of the greenhouse gas emissions and other toxics associated with making them, is likely to be much greater than the impact of one pound of yard debris.

THE METRO REGION'S WASTE, 1992-2016

Millions of tons of waste generated, disposed and recovered.



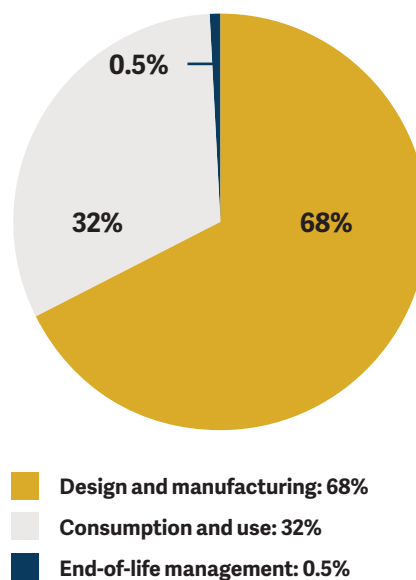
Note: Waste generated is equal to waste disposed at landfills and incinerators, plus waste recovered through recycling, composting and energy conversion methods.
Source: Oregon Department of Environmental Quality (multiple years). Oregon Material Recovery and Waste Generation Rates Report.

The focus on the end of a product's life provides an incomplete picture of how we're affecting the environment and how we can reduce our impact. In this plan, to align with a new focus on the full life cycle of products and materials, we are assessing our environmental impact in a more comprehensive way: by looking at the greenhouse gas emissions and other environmental and health impacts associated with products and materials throughout their life, from production to disposal.

Through this lens, a different picture emerges. In the Metro region, 99 percent of greenhouse gas emissions related to consumption are generated when we make, consume and use materials and products. End-of-life management, on the other hand, accounts for less than one percent.

GREENHOUSE GAS EMISSIONS FROM PRODUCTS, MATERIALS AND SERVICES

In 2015, the Metro region generated 41 million metric tons of greenhouse gas emissions from the products and materials we bought, used and threw away and the services we used.



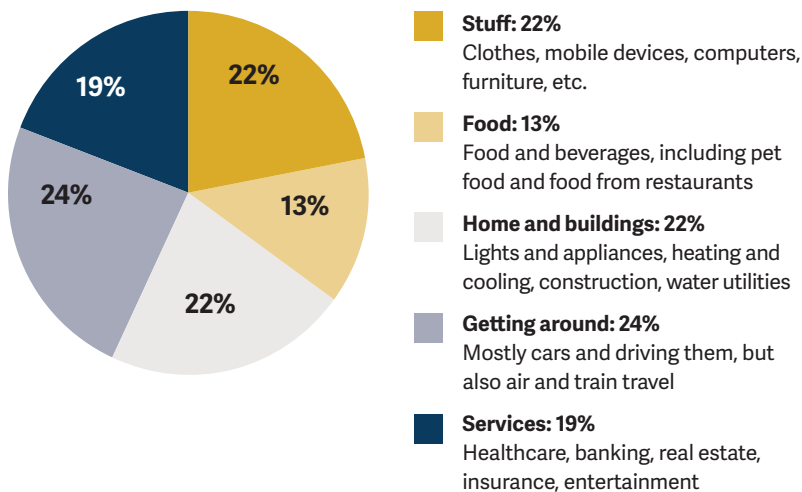
Note: The figures in this chart do not add up to 100% due to rounding.
Source: Oregon Department of Environmental Quality (2018). 2015 Consumption-Based Greenhouse Gas Emissions Inventory for the Metro Region.

When we produce and consume goods and services, our actions and decisions impact the environment, both locally and globally.

In 2015, the goods and services we consumed in the tri-county area (Clackamas, Multnomah and Washington counties) generated about 41 million metric tons of greenhouse gas emissions. Businesses making and selling products and providing services here in the Metro region generated 29 percent of these emissions. Of the remaining emissions, 48 percent were generated in other parts of the United States and 23 percent in other countries. These emissions contribute to climate change globally and affect everyone on the planet.

The region's emissions come from a variety of goods and services, from food to transportation, legal advice to construction. Services like haircuts involve materials and products that impact the environment, such as computers and hair products. Getting around in cars and other forms of transportation generates emissions, too, as does building houses and commercial structures and providing them with power, heat, cooling, water and other services.

GREENHOUSE GAS EMISSIONS FROM THINGS WE PURCHASE



Source: Oregon Department of Environmental Quality (2018). 2015 Consumption-Based Greenhouse Gas Emissions Inventory for the Metro Region.

Reducing our impact

Environmental benefits result from changes throughout a product's life cycle.

Making a new product or providing a service requires the use of materials and energy. Raw materials must be extracted from the earth and products must be made and then transported to wherever they will be sold and used. Some of the materials used to make products are toxic and can harm people and the environment.

By buying products that have less packaging, fewer toxic materials and an overall lower impact on the environment, we can make a big impact. However, our decisions as consumers are only part of the picture. Manufacturers must also contribute by making changes in product design and in the resources and processes used to make new products.

Reusing and repairing materials and products decreases impacts on the environment by preventing or delaying the purchase of new items.

Recycling and composting also reduce the environmental impacts of buying and using goods and food. By providing companies with materials to make new products, recycling lowers the need to extract and process virgin materials and lowers the energy expended, and the accompanying greenhouse gas emissions, when the products are manufactured.

RECYCLING BENEFITS

In 2017, the Metro region's recycling and composting efforts reduced greenhouse gas emissions by about 1.5 million tons.



A FOCUS ON FOOD

Food and food waste clearly illustrate the environmental and social implications of how we manage materials. Food production and preparation require significant resources, including farmland, clean water and air, labor, energy, fertilizers and pesticides. Yet millions of tons of food are wasted each year. In fact, about 40 percent of the food produced in the United States is never eaten.

In 2016, food made up a big portion of what the Metro region sent to landfills—about 16 percent of all garbage. At the same time, Oregon consistently ranks among the top states in the nation for “food insecurity,” which occurs when people have inconsistent access to safe, nutritious food.

One of the most effective ways to reduce the environmental impact of our food system is to prevent food waste. Strategies to reduce waste include purchasing only what we are likely to eat,

storing food properly and using up everything that we buy.

Even when we plan and prepare food carefully, there will still be surplus food. Food banks, pantries and meal sites that serve communities experiencing hunger can take some donations of edible and nutritious food from places like grocery stores. Metro can support their efforts by helping to ensure that surplus food is supplied safely and efficiently. If surplus food is not suitable for human consumption, it can sometimes be used to feed animals on farms.

When preventing food waste is not possible, other methods can help reduce some of the environmental impacts of food production. When food waste ends up at a landfill, it generates methane—a powerful greenhouse gas that contributes to climate change. Alternatives include composting food waste to create nutrient-rich soil amendments or processing food waste to generate energy.





Economic footprint

Economic impact

The garbage and recycling system creates jobs, supports families, spurs economic activity and strengthens industries. When residents and businesses in the Metro region pay for garbage and recycling services, their payment has direct and indirect impacts on our region's economy, totaling more than \$537 million in economic activity each year. This investment pays salaries, purchases goods and services and boosts local businesses.



DIRECTLY SUPPORTS

The workers, companies and government agencies that collect garbage and recyclables and transfer and transport garbage to landfills.

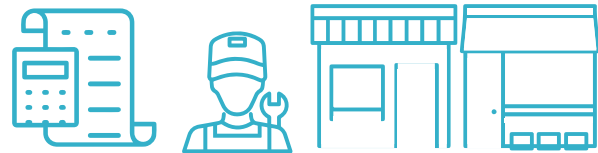
The facilities that separate and process materials for recycling and composting.

The staff in cities and counties that provide education and technical assistance to households and businesses on waste prevention, reuse, recycling and composting.

RESULTING IN

 **1,800 jobs**

 **\$278 million in local economic activity, including \$91 million in wages and benefits**



INDIRECTLY SUPPORTS

Local businesses that supply the services and materials the garbage and recycling system needs to operate, such as office paper, accounting services and truck repair.

Local businesses where workers employed by garbage and recycling companies and government agencies spend a portion of their wages.

RESULTING IN AN ADDITIONAL

 **1,900 jobs**

 **\$259 million in local economic activity, including \$102 million in wages and benefits**

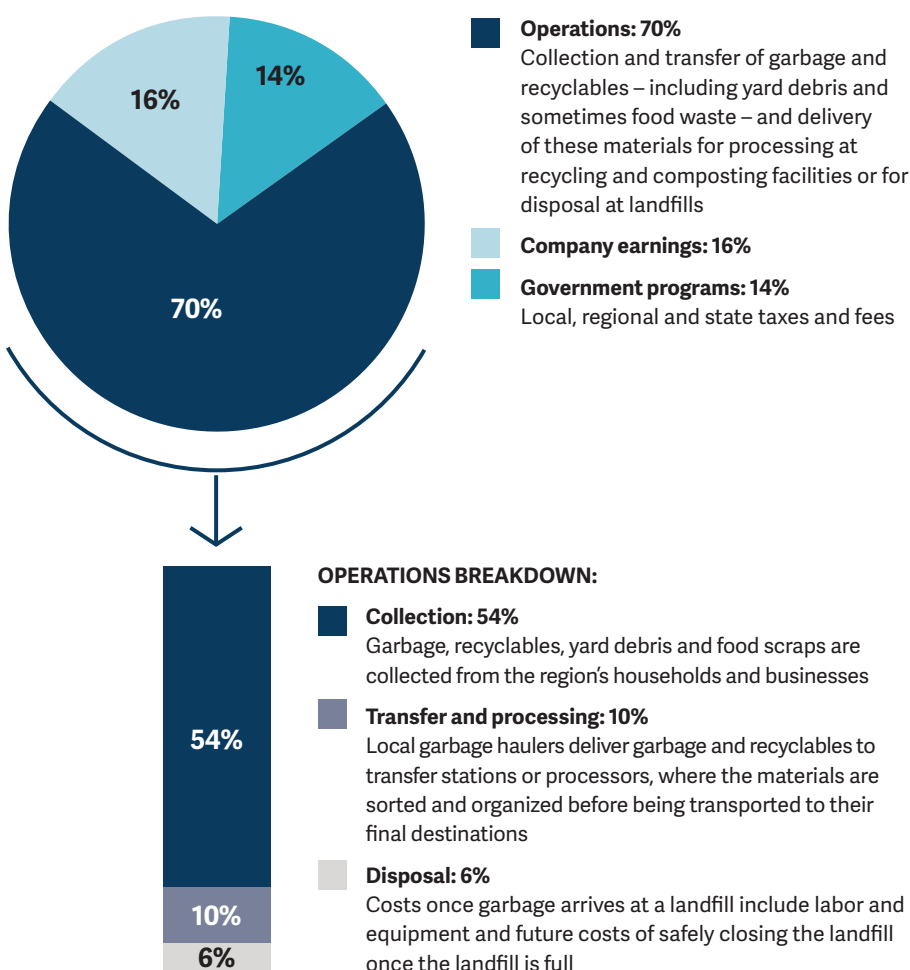
System revenue

In general, investments in recycling leverage higher economic benefits than investments in disposal.

Recycling converts waste materials into valuable raw materials, creating additional manufacturing jobs and strengthening manufacturing industries. The money we each pay for garbage and recycling services keeps garbage trucks operating and supports a robust recycling system. Residents and businesses in the Portland metropolitan region pay about \$287 million a year for garbage and recycling services.

\$287 MILLION A YEAR

WHERE GARBAGE AND RECYCLING FEES GO



Source: Metro (2018). Solid Waste Economic Analysis.



Currently, the economic benefits of the garbage and recycling system are distributed inequitably, with few high-paying jobs going to people of color, women or others who've historically been left out. Metro is committed to reversing these inequities with actions inspired by the requests of local communities. Learn more in the Shared prosperity section on page 52.



Legal foundation and policy guidance

Overview

This plan is built on a strong foundation of values and principles, developed in partnership with communities throughout the region.

The plan framework, coupled with the broad authorities of Metro and local governments to manage the solid waste system, allow for significant action over the 12 years the plan will be in effect. The plan's goals and actions set policy direction throughout the life of the plan. It's a living document that will guide us toward a healthier, more resilient and more equitable system. The plan applies to all cities and counties within the Metro jurisdictional boundary.

Legal foundation

The Metro Charter, the Oregon Constitution and Oregon statutes grant Metro broad authority for planning, managing and overseeing the regional solid waste system.

Regional authority

In 1987, the Metro Council designated solid waste as an area and activity appropriate for a functional plan (Metro Ordinance 87-740). With this action, it recognized the complexity of managing a regional waste system that serves two dozen cities, portions of three counties, over a million residents, thousands of businesses and many solid waste service providers. A regional plan provides a unified blueprint to coordinate all parties and to bring the parts of the system together into a well-functioning whole.

Previous waste plans

Metro has adopted three solid waste system plans to date. The plan is updated about every 10 years to meet the needs of our changing region and align with state and federal guidance.

History of regional waste plans

Metro has adopted three regional solid waste management plans since the Metro Council's 1987 designation of solid waste as an area appropriate for a functional plan. The plans were adopted in 1988, 1995 and 2008.

Policy guidance

A range of local, state and federal policies, plans and strategies provided direction as we shaped this plan.

Protecting the environment and human health: The traditional solid waste hierarchy—reduce, reuse, recycle—recognizes that managing municipal solid waste is one part of a broader strategy for reducing the environmental and human health impacts associated with the production, use and end-of-life management of products.

A “life cycle” approach: Since adopting the 2008 Regional Solid Waste Management Plan, Metro and the federal and state governments have adopted new policy guidance that expands the approach for managing materials. Instead of focusing solely on the end of a product’s life, they focus on a product’s full life cycle, from production to disposal. This approach identifies impacts and actions across the life of materials and products as they move through the economy.

Advancing equity: To address the barriers experienced by people of color, the Metro Council adopted the Strategic Plan to Advance Racial Equity, Diversity and Inclusion in June 2016. This plan sets five goals for advancing regional equity:

- Convene and support regional partners to advance racial equity
- Meaningfully engage communities of color
- Hire, train and promote a racially diverse workforce
- Create safe and welcoming services, programs and destinations
- Prioritize resource allocation that advances racial equity

To accomplish these goals, this plan concentrates on eliminating the disparities that people of color experience, especially in areas related to Metro’s policies, programs, services and destinations. This strategic direction allows Metro the opportunity to make a difference in the lives of disadvantaged communities while also improving the region’s quality of life.

BUSINESS

7 FARM

DIVERSE VEGETABLES

AND SUSTAINABLE



POLICY GUIDANCE

The development of the plan's values and principles was informed by a range of plans and guidance documents, including those listed below.

Regional Desired Outcomes

Metro's six desired outcomes for the region.

Equity Strategy

Metro's Strategic Plan to Advance Racial Equity, Diversity and Inclusion.

National Materials Management Strategy

Environmental Protection Agency's Sustainable Materials Management Plan.

Oregon 2050 Vision

Oregon state vision and action framework for sustainable materials management.

Oregon Toxics Reduction Strategy

State strategy aimed at keeping toxics out of the environment.

Oregon Environmental Literacy Plan

Plan that ensures students become lifelong stewards of environment and community.

METRO'S SIX DESIRED OUTCOMES

Metro's six desired outcomes for the region:

Vibrant communities

People live and work in vibrant communities where they can choose to walk for pleasure and to meet their everyday needs.

Economic prosperity

Our children and their children benefit from the region's sustained economic competitiveness and prosperity.

Safe and reliable transportation

People have safe and reliable transportation choices that enhance their quality of life.

Environmental leadership

The region is a leader in sustainability and minimizing contributions to climate change.

Clean air and water

Current and future generations enjoy clean air, clean water and healthy ecosystems.

Fairness and equity

The benefits and burdens of growth and change are distributed fairly and equitably.





OREGON 2050 VISION

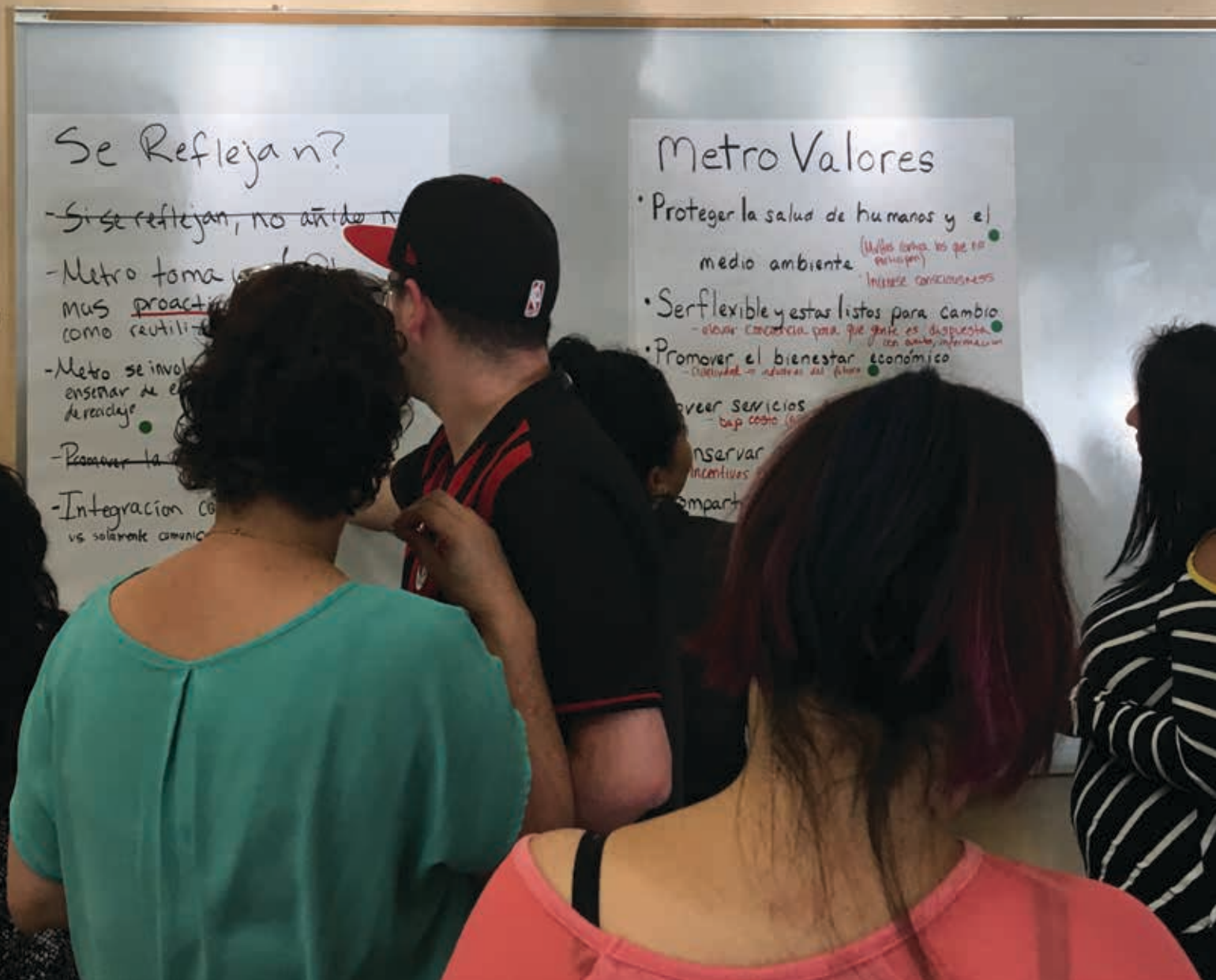
The 2050 Vision for Materials Management describes a future in which Oregonians live within the limits of their sustainable share of the world's natural resources. In 2050:

Recognizing that Earth's resources are finite, Oregonians live within the limits of our sustainable share of the world's natural resources.

We take into account the full impacts of materials throughout their life cycle.

We use renewable resources at levels that can be sustained in perpetuity while maintaining the resiliency of natural systems.

All Oregonians have access to the knowledge, capabilities, resources and services required to use materials responsibly.



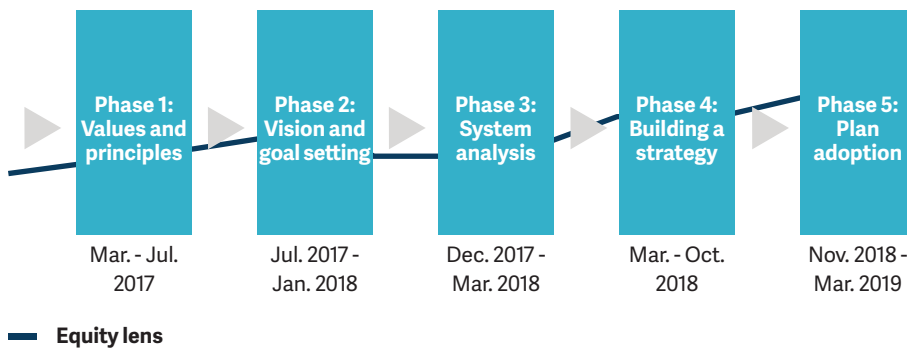
Creating the plan

Planning process

From spring 2017 to fall 2018, Metro collaborated with local communities to create a Regional Waste Plan that reflects the values and priorities of people across the region.

Work to create the draft plan involved many participants – including community groups, local governments, industry and non-profit organizations and Metro. The process occurred in five major phases.

5 PHASES OF PLAN DEVELOPMENT



EQUITY LENS

Applying an equity lens means asking questions or prescribing a process in order to counteract policies and practices that maintain inequities.

Phase 1: Values and principles

Developed and committed to a shared set of values and principles.

The first phase created the values and principles that are the foundation of this plan. Existing policy guidance influenced this process—as did public surveys, community discussions and the application of an equity lens.

In summer 2017, Metro started to work closely with culturally specific, community-based organizations and to start conversations with people Metro had not reached in the past. All were from communities in the three counties that had been negatively impacted by the garbage and recycling system but have had the least influence in shaping it—people of color, new immigrants and refugees, people with limited English proficiency, families on low incomes living close to garbage and recycling facilities, elders, youth and people with disabilities.

During hours of discussions and tours of facilities, people shared their experiences of the system—what worked for them, what didn't, what mattered most to them and which changes they desired. Metro listened, learned and gathered ideas to shape a plan for the future.



ABOUT THE EQUITY WORK GROUP

From the start, Metro recognized that only an inclusive process would result in a plan that prioritizes equity. Metro formed the Equity Work Group to put equity front and center during the development of the plan and throughout implementation.

The seven members of the work group had extensive expertise and experience working with communities of color and other historically marginalized communities. The work group participated in each phase of the process, working alongside staff in drafting elements of the plan. During the first phase, after reviewing the plan's values, the Equity Work Group developed the plan's principles to guide equity considerations from planning to implementation.

Throughout this process, Metro was intentional about building mutual capacity and developing authentic, lasting partnerships. Metro staff helped work group members expand their knowledge and understanding of the garbage and recycling system. And the work group helped the Metro team become more responsive to community concerns and understand a variety of perspectives.

Equity Work Group members

Andre Bealer, National Association of Minority Contractors, Oregon Chapter

Emma Brennan, Oregon Tradeswomen, Inc.

Marilou Carrera, referred by Oregon Health Equity Alliance

Juan Carlos Gonzalez, referred by Centro Cultural de Washington County

Pa Vue, referred by Asian Pacific American Network of Oregon (APANO)

Rob Nathan, referred by Coalition of Communities of Color

Tommy Jay Larracas, referred by OPAL Environmental Justice Oregon



Phase 2: Vision and goal setting

Identified a vision and set goals for the future.

Phase 2 developed the plan's vision and goals, setting the priorities for the garbage and recycling system over the next ten years. This involved visualizing future scenarios and considering the tradeoffs associated with different paths forward.

To build on the community discussions held in the first phase, Metro conducted a series of engagements to inform the development of the vision and goals:

- A planning workshop involving more than forty individuals, including Equity Work Group members and Metro and local government staff.
- An online survey, which gathered input and ideas from nearly 4,000 community members to help shape future priorities.
- Three leadership forums co-led by Metro and local community-based organizations at which more than 120 people shared ideas and discussed future priorities for the garbage and recycling system. The forums were hosted by Immigrant and Refugee Community Organization, The Rosewood Initiative and Centro Cultural de Washington County.
- A technical forum where more than 60 stakeholders active in some element of the garbage and recycling system provided input on the draft vision and goals.
- A review of the draft vision and goals by the Equity Work Group, local government solid waste directors, Metro Solid Waste Alternatives Advisory Committee and Metro Policy Advisory Committee.

Phase 3: System analysis

Analyzed the system to identify where the region is today relative to the desired future.

Phase 3 established an understanding of where the region is today relative to the vision for the future. To do this, Metro compiled and summarized existing data on different aspects of the garbage and recycling system. This included developing descriptions of existing programs, policies and infrastructure, current opportunities and challenges facing the system. This information helped develop a framework to measure progress. By revealing how to bridge the current reality with the desired future, it also informed the plan's actions.

FROM COMMUNITY ENGAGEMENT TO IMPACTFUL ACTIONS

To inform the development of the Regional Waste Plan, Metro convened a series of engagements with communities of color and other historically marginalized communities around greater Portland.

Metro, eight community-based organizations and a cohort of more than 100 community members participated in multiple discussions over more than a year about the future of garbage and recycling. At these events, interpreters facilitated the participation of people who spoke Spanish and Russian.

The actions inspired by these conversations span across the garbage and recycling system, from jobs in garbage to information about recycling.

What Metro heard and learned

- Residents were frustrated with differences in access to, quality of and availability of services.
- Many people wanted to recycle and to protect the environment, but had challenges, like cost, a lack of bins and space (especially to dispose of large items), frequency of collection, inability to compost at apartments and accommodations for age and abilities.
- There was confusion about services and how the system works, and information was lacking for people from diverse cultures and age groups.
- People were concerned about impacts to human health and the environment, such as noise, odors and air and water pollution.
- There were concerns about a lack of diversity in the workforce and opportunities for people of color in the industry.

The organizations

Center for Diversity and the Environment

Centro Cultural de Washington County

Constructing Hope

Immigrant and Refugee Community Organization

Momentum Alliance

North by Northeast Community Health Center

The Rosewood Initiative

Trash for Peace



Phase 4: Building a strategy

Developed actions to move us closer to the region's vision.

Phase 4 developed an action plan to close the gap between the current condition of the garbage and recycling system and the vision for the system's future. To accomplish this, Metro assembled eight technical work groups and partnered with local communities to identify and draft the actions. The work groups were made up of representatives from local governments, garbage and recycling facility operators, reuse organizations, garbage haulers, community organizations and others with a particular interest in the system. More than 60 people participated on the work groups. They focused on:

Quality service	Garbage and recycling operations
Education and information	Reduce, reuse and repair
Good jobs	Healthy products
Economic prosperity	Disaster preparedness and resiliency

The work groups, facilitated by Metro staff, met over the course of three months, including a final forum that gathered all the work groups together to review the draft actions for further improvements. Metro also sought input on the draft actions from the community, specifically people who had participated in earlier phases. More than 100 local residents reviewed the draft actions to prioritize the changes they most wanted to see in the system. The small group conversations were conducted simultaneously in Russian, Spanish and English, with Metro staff facilitating and taking notes. Participants focused on the areas that they had identified as most important to them including: garbage and recycling operations, services, education and jobs and economic opportunities. Following the community conversations, Metro staff further refined the draft actions in coordination with the Equity Work Group, Metro Council and local government partners.

Phase 5: Plan adoption

Finalized draft plan for Metro Council review.

The fifth and final phase focused on finalizing and adopting the plan. Metro released the draft plan for public review and feedback from mid-November through mid-December 2018. Engagements in the public comment period included:

- Four community briefings with community groups about the plan with an explanation about the Metro Council decision-making process
- Two public forms for individuals interested in reviewing the draft plan and providing comments in-person
- Making briefing materials and information about the plan available online

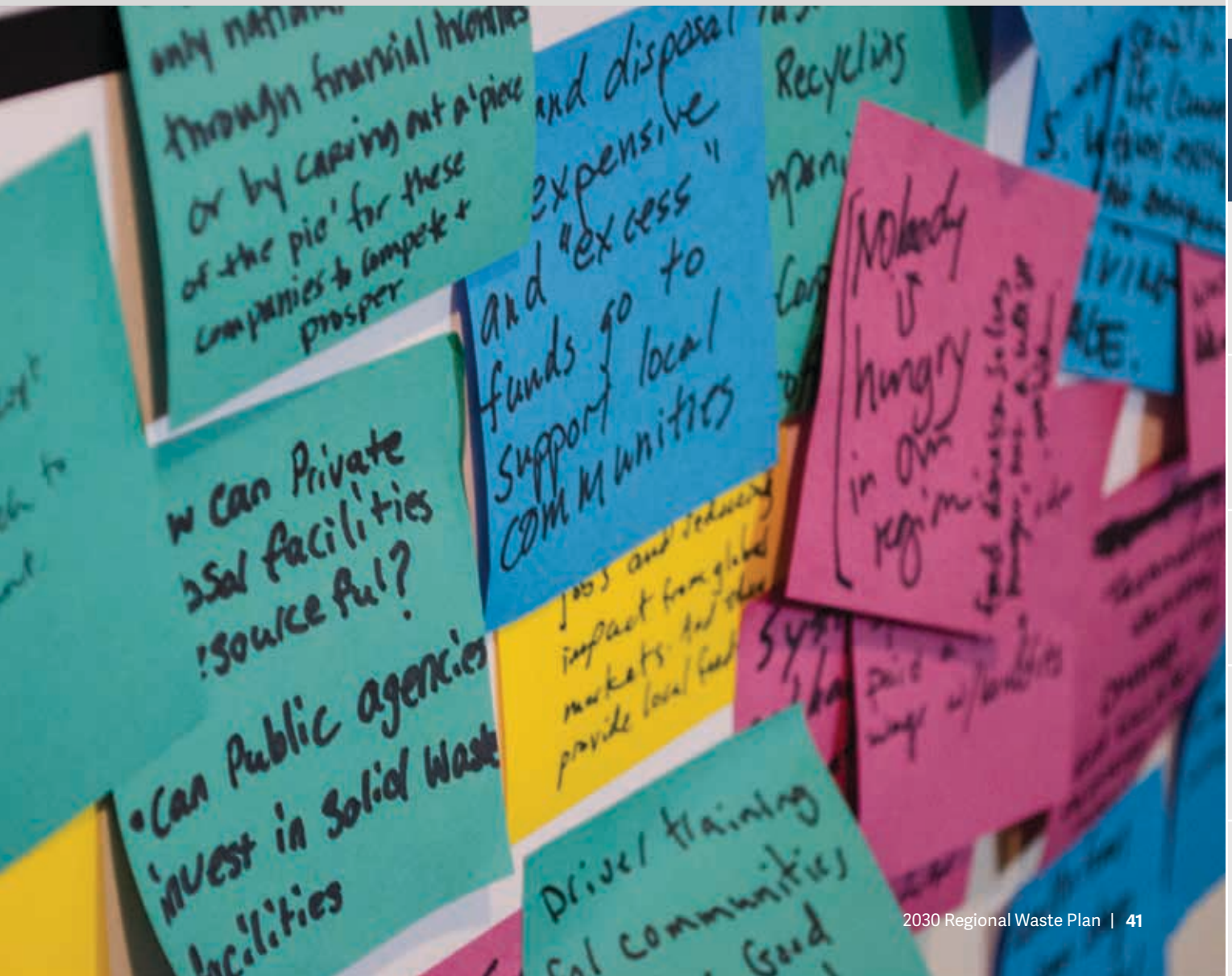
Staff summarized all the comments received during this time in a public comment report, as well as noting the changes to the draft plan made in response to the comments. The Solid Waste Alternatives Advisory Committee and Metro Policy Advisory Committee also reviewed the draft plan to provide input to the Metro Council prior to the council's legislative hearings to consider final adoption of the plan.

ABOUT THE TECHNICAL WORK GROUPS

To develop the actions in this plan, Metro convened eight technical work groups with representatives from local governments, community-based organizations, non-profit organizations, advocacy organizations, haulers, and facility operators.

The work groups met in spring 2018. Work group members reviewed the information produced as part of the system analysis to evaluate where we are today relative to our vision and goals. Then, they worked together, sharing their perspectives on the garbage and recycling system to identify actions to achieve our desired future.

Each work group met up to four times, including a final session that brought all of the groups together for a comprehensive look at the goals and actions. Their work was shared at a community gathering with people who had participated in earlier phases of the process. This allowed community members to see whether the actions reflected their input and to prioritize the changes they most want to see.





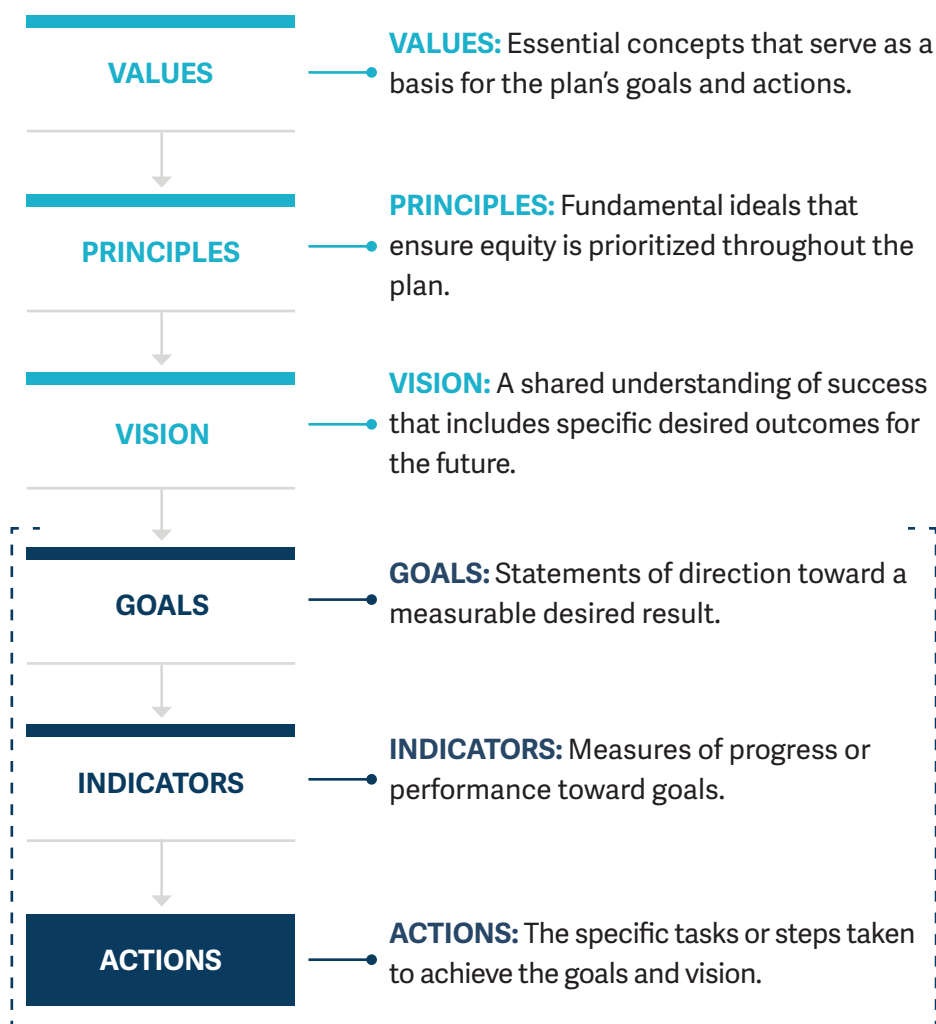
Values, principles and vision

Overview

With equity considerations front and center, participants developed values, principles and a vision to serve as the plan's foundation. Existing guidance—including regional, state and federal policies and plans regarding waste management, recycling, toxics and other related environmental programs—also informed these core concepts.

FROM IDEALS TO ACTIONS

The values, principles and vision inspire and inform the concrete actions that Metro and local governments will implement as part of this plan.



Values

The values serve as a basis for the plan's goals and actions and will guide implementation.



PROTECT AND RESTORE THE ENVIRONMENT AND PROMOTE HEALTH FOR ALL

- Ensure that current and future generations enjoy clean air, water and land.
- Lead efforts to reduce impacts of climate change and minimize release of toxins in the environment.



CONSERVE NATURAL RESOURCES

- Reduce the amount of energy, water and raw materials needed to make products.
- Manage materials to their highest and best use (reduce, reuse, recycle).



ADVANCE ENVIRONMENTAL LITERACY

- Facilitate life-long environmental learning for youth and adults.
- Increase knowledge of natural systems, and the human impacts on them, in order to foster civic responsibility and community empowerment.



FOSTER ECONOMIC WELL-BEING

- Promote inclusive prosperity and living well for all residents of the region.
- Increase access to economic opportunities for all communities.



ENSURE OPERATIONAL RESILIENCE, ADAPTABILITY AND SUSTAINABILITY

- Maintain a regional system that is safe and responsive to changing conditions to ensure long-term viability.
- Prepare for recovery after natural disasters.



PROVIDE EXCELLENT SERVICE AND EQUITABLE SYSTEM ACCESS

- Ensure that high-quality and good-value programs, services and facilities are equitably accessible to all.

Principles

This plan provides Metro and local governments a powerful opportunity to advance racial equity, diversity and inclusion.

The following principles were developed by the Equity Work Group in collaboration with Metro staff. Their purpose is to help address historical and disproportionate impacts of the waste system on marginalized communities and to define how the plan may advance racial equity.

Community restoration

Take action to repair past harms and disproportionate impacts caused by the regional solid waste system.

In practice, this means:

- Acknowledging historical impacts passed from generation to generation within communities.
- Actively including communities that have been historically marginalized from decision-making processes.
- Equitably distributing costs and benefits, taking into account historical and system impacts.
- Valuing indigenous and cultural knowledge about using resources sustainably.
- Committing to building a greater awareness of equity among providers of garbage and recycling services.

Community partnerships

Develop authentic partnerships and community trust to advance the plan's vision. In practice, this means:

- Prioritizing historically marginalized communities within the delivery of programs and services.
- Expanding voice and decision-making opportunities for communities of color.
- Supporting resilient community relationships by creating ongoing opportunities for leadership development.

Community investment

Emphasize resource allocation to communities of color and historically marginalized communities. In practice, this means:

- Making investment decisions in partnership with communities.
- Investing in impacted communities and youth through education and financial resources.
- Eliminating barriers to services and employment.



"I'm excited to see [the 2030 Regional Waste Plan], a project on which I've dedicated a lot of hard work and time, become a real tangible part of the Metro region's operations. There is satisfaction in knowing that our group has had a positive influence on how governments, businesses and communities interact to create positive outcomes for all."

Andre Bealer,
Regional Waste Plan Equity
Work Group member

Vision

The 2030 Vision identifies the desired future for the garbage and recycling system and specific outcomes for managing and reducing the impacts of products consumed in the region. The goals and actions are designed to close the gap between today and this desired future.

Economic prosperity

Innovation, investments and partnerships support a thriving garbage, recycling, reuse and repair economy that benefits local communities.

Good jobs

All garbage and recycling industry jobs pay living wages and provide opportunities for career advancement. All occupations in the industry reflect the diversity of our local communities.

Education and information

Everyone has the culturally responsive, age-appropriate information and educational resources needed to make purchasing and disposal decisions that will protect their health and the environment.

Healthy products

Companies and consumers share responsibility for reducing the harmful impacts of products and packaging on public health, climate, air quality, waterways and wildlife throughout the entire life cycle of products.

Reduce, reuse and repair

Reduce, reuse, repair and donation are mainstream practices accessible to all, creating economic opportunity and building community self-reliance.

Quality service

Garbage and recycling services meet the needs of all people and all communities.

Garbage and recycling operations

From trucks to facilities, our garbage and recycling system is safe for workers and the public, minimizes pollution of air, soils and water, and is financially sustainable.

Preparedness and resilience

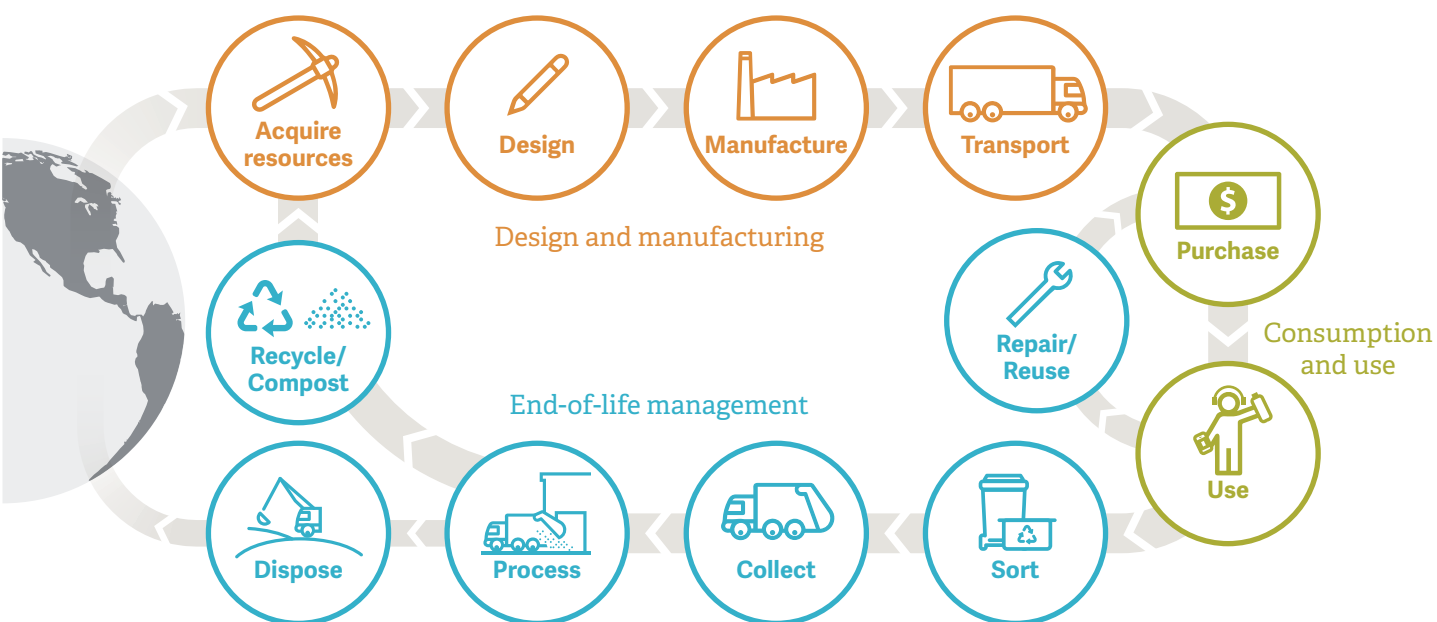
The region's garbage and recycling system is resilient and prepared to recover quickly from disruptions like natural disasters, while minimizing harmful impacts to the most affected communities.



Goals and actions

Overview

The goals of the plan focus on addressing the impacts of materials—from production to disposal—and closing the gap between today’s reality and the region’s vision for the future. This involves taking action at every stage of the product life cycle and addressing community needs within the garbage and recycling system.



The plan identifies goals and actions in five areas of work:

- Shared prosperity
- Product design and manufacturing
- Product consumption and use
- Product end-of-life management
- Disaster resilience

The goals in each area identify what the region would like to achieve by 2030. Each goal has an associated set of actions to be undertaken by Metro and local governments. The actions were developed by work groups made up of representatives from Metro, local governments, garbage and recycling facility operators, haulers, topical experts, community organizations, equity work group members and others with a particular interest in the system and shaped by community input.

Navigating the action tables

The action tables define key elements associated with each action, such as which agency is the lead agency implementing the action.

Lead agency

Successful implementation of the actions will require collaboration and coordination among Metro, local governments, community-based organizations and private sector service providers. Many of the actions will be co-led by Metro and local governments in partnership with community. To assist with implementation and accountability, the plan identifies lead agencies for each action, either Metro or cities and counties, or a combination of both. The lead agencies are the primary entities responsible for implementing the action and reporting on progress.

Implementation approach

Metro is responsible for coordinating implementation of the plan and assessing plan performance. Cities, counties and Metro are responsible for leading or participating in implementation of the actions. Actions to “implement” a project or program assume preliminary steps such as planning, budgeting and collaboration and later steps such as monitoring and evaluation.

Metro, in collaboration with local governments, will develop multi-year work plans to prioritize implementation of the actions. These plans will include estimates of the financial and staff resources needed to complete the work.

The approaches identified for each action in the action tables are preliminary ones. Additional approaches may be used based on development of the action and the lack of inclusion of a particular approach in no way implies that it may not be considered or used in the future.

Several approaches will be used to implement the actions. One or more implementation approaches is identified for each action.

Legislative agendas: State-level public policy priorities identified by Metro and/or local government elected bodies.

Partnership agreements: Agreements to implement partnerships by Metro, city, county and/or state agencies, and agreements between Metro or local governments with non-profit and community-based organizations.

Metro and/or local government code and authorizations: Formal actions taken through code amendments, administrative reviews, licenses, franchises and other instruments.

Regional work groups: Regional work groups convened by Metro to assist in developing programs and activities to achieve the goals and actions of the plan.

Grants: Investments in non-profit and for-profit organizations to achieve the goals and actions of the plan.

Existing programs: Actions may be associated with existing program plans and partnerships implemented by Metro, city, county and state agencies.

E

Advancing equity

Actions with the greatest opportunity to advance racial equity are identified with the “E” icon. The Equity Work Group was primarily responsible for making this designation.



New actions

Each action is either new or in progress. New actions are labeled with this icon.



Directive actions

The plan includes both directive and non-directive actions. Directive actions are those that are binding on local governments and typically set forth in Metro Code, Chapter 5. Existing and potential directive actions are labeled with this icon in the tables on the following pages. New directive actions will be developed in consultation with local governments and go through Metro’s legislative approval process.



Shared prosperity

GOALS ADDRESSED:

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

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.

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

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



The garbage and recycling system generates significant economic benefits for the Metro region through jobs, programs and services, materials and construction contracts, spending at local businesses and more. But those benefits aren't shared equitably among all people in the region.

This area of work aims to address 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 aim to make progress toward a future where all people have equitable access to the benefits of the garbage, recycling, reuse and repair economies.






Goal 1:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
1.1	Increase representation of historically marginalized community members, including youth, on advisory committees, such as Metro and local government solid waste advisory committees.	Metro Cities Counties	Code and authorizations	  
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.	Metro Cities Counties	Existing programs	  
1.3	Partner with organizations to engage youth in leadership opportunities for social, economic and environmental issues related to garbage and recycling.	Metro Cities Counties	Existing programs	  
 Highest potential to advance equity		 New	 Directive action	









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.

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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.	Metro Cities Counties	Code and authorizations	
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.	Cities Counties	Code and authorizations	
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.	Metro	Grants	
 Highest potential to advance equity		 New	 Directive action	

Goal 3:



















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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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.	Metro Cities Counties	Code and authorizations	
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.	Metro Cities Counties	Code and authorizations	
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.	Metro	Regional work groups	
3.4	Reduce the use of temporary and contract workers in the region’s solid waste industry.	Metro	Regional work groups Code and authorizations	
3.5	Evaluate the use of Metro employees to fully operate Metro-owned transfer stations.	Metro		
 Highest potential to advance equity  New  Directive action				



Goal 4:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
4.1	Implement a workforce development and readiness program for garbage and recycling industry jobs.	Metro	Partnership agreements	  
4.2	Develop a career pathways strategy that aims to increase the diversity of workers in all solid waste occupations.	Metro	Partnership agreements	  
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.	Metro	Regional work 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.	Metro	Partnership agreements	  
4.5	In partnership with community-based organizations, create workforce development programs within the reuse sector that focus on people with barriers to employment.	Metro Cities Counties	Partnership agreements	  
 Highest potential to advance equity		 New	 Directive action	



Product design and manufacturing

GOALS ADDRESSED:

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

Today, the design and manufacturing of products and materials is driven primarily by market forces, resulting in processes and products that can harm the environment or impact human health.

Through this goal area, we will be working to influence the design and manufacturing of products and packaging by advocating for changes in public policy.

The goal of the highly collaborative actions in this new area is for manufacturers to become more responsible for the impacts of their products. There's potential to create healthier products every step of the way, from natural resource extraction to manufacturing processes to decisions about materials and packaging.







The actions focus not only on reducing the amount of waste, but also shifting what's in it. We are working to reduce or eliminate chemicals of concern and highly toxic materials, elevating human health and preventing environmental damage.

Many Oregon, Washington and California public and private organizations are known for leadership in this area. With the Bottle Bill, Oregon E-Waste, PaintCare and Oregon's Toxic-Free Kids Act, city, county, Metro and state governments, together with public interest organizations, demonstrated they can collaborate to push forward policy changes to address producer responsibility and make products safer for people and the environment.

Equity initiatives take a leading role, too. By emphasizing equity at the government and community level, we aim to implement reforms that serve all, with a focus on historically marginalized communities, including communities of color.


Goal 5:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
5.1	Advocate for legislation that minimizes chemicals of concern in products and packaging and requires the disclosure of product chemical data to consumers.	Metro Cities Counties	Legislative agendas	
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.	Metro	Partnership agreements	
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.	Metro	Legislative agendas	
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.	Metro Cities Counties	Legislative agendas	
5.5	Advocate for legislation that would require building products sold and used in Oregon to be free of highly toxic materials.	Metro Cities Counties	Legislative agendas	
5.6	Advocate for standards for high-impact products, including phase-outs or bans.	Metro Cities Counties	Legislative agendas	

 Highest potential to advance equity

 New

 Directive action



WHAT ARE CHEMICALS OF CONCERN?

Through the Toxic-Free Kids Act, Oregon has designated 66 chemicals as “high-priority chemicals of concern for children’s health.” These chemicals are shown to be harmful to children, and manufacturers are required to disclose when certain products marketed toward children contain them. When Metro refers to chemicals of concern in this plan, it is usually in reference to this list. In some instances, we may use the lists of chemicals of concern created by other states, the federal government or another entity.



Product consumption and use

GOALS ADDRESSED:

Goal 6: Reduce product environmental impacts and waste through educational and behavioral practices related to prevention and better purchasing choices.

Goal 7: Reduce product environmental impacts and waste through policies that support prevention practices and better purchasing choices.

As consumers, the decisions we make about what to buy and how to use the things we purchase affect our health and the environment.

While the 2030 Vision identifies a future where everyone has access to information they need to make purchasing decisions that will protect their health and the environment, there are challenges to achieving this vision. Products sold in Oregon are produced around the globe. The prices of products do not reflect the environmental impacts of making them. Information about a product's environmental and health impacts can be difficult to access and understand. Sustainable products are not always affordable or equitably available.

Goals in this area focus on reducing the environmental and health impacts of what we buy. The actions emphasize education and policy efforts to reduce those impacts and support better purchasing choices. Education will prioritize culturally responsive efforts, with programs and services designed and delivered in partnership with community organizations to reach historically marginalized groups. Policy actions in this area aim to provide safer, lower-risk products and reduce the use of single-use items that harm the environment and create problems for the recycling system.

SHARING KNOWLEDGE

Metro and local government education programs reach tens of thousands of people every year with information about how to reduce waste.

In 2016:

- Youth education programs reached over 45,000 students
- The Recycling Information Center and Find-a-Recycler online tool served 60,000 callers and 107,000 web visitors








WHAT IT MEANS TO BE CULTURALLY RESPONSIVE

Culturally responsive services are designed to be respectful toward and relevant to the beliefs, practices, culture and language of diverse people and communities. Cultural responsiveness requires systems, organizations, professions and individuals to gain new knowledge and cultivate new capacities.




Goal 6:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
6.1	Provide culturally responsive and developmentally appropriate school-based education programs about the connections between consumer products, people and nature.	Metro	Existing programs Partnership agreements	
6.2	Provide culturally responsive community education and assistance about the connections between consumer products, people and nature.	Metro Cities Counties	Existing programs Partnership agreements	
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.	Metro Cities Counties	Existing programs Partnership agreements	
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.	Metro	Partnership agreements	
6.5	Assist households and businesses in the adoption of practices that prevent the wasting of food and other high-impact materials.	Metro Cities Counties	Existing programs	
6.6	Support implementation of Oregon State University's SolvePestProblems.org as a primary tool for education and resources on integrated pest management.	Metro	Existing programs	
6.7	Implement recognition programs for business efforts to prevent waste and minimize the environmental impacts of the products they purchase.	Cities Counties	Existing programs	

 Highest potential to advance equity

 New

 Directive action



SINGLE-USE PRODUCTS
















Single-use products are used only once before they are thrown away or recycled. These items are things like plastic bags, straws, coffee stirrers, soda and water bottles and most food packaging.



Plastic bags are found in recycling carts across the region but are not recyclable through home programs. Plastic bags jam up sorting machinery at processing facilities, increasing the cost of converting recyclables into new products.

Goal 7:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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.	Metro Cities Counties	Code and authorizations	  
7.2	Implement policies that will reduce the use of single-use products such as single-use plastic bags.	Metro Cities Counties	Code and authorizations	  
7.3	Advocate for the reclassification of high-risk nonagricultural pesticides to restricted use status in Oregon.	Metro	Legislative agendas	  
7.4	Implement policies and programs that lead to the 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.	Metro Cities Counties	Existing programs	  
 Highest potential to advance equity		 New	 Directive action	



Product end-of-life management

GOALS ADDRESSED:

Goal 8: Increase the reuse, repair and donation of materials and consumer products.

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

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

Goal 11: Address and resolve community concerns and service issues.

Goal 12: Manage all garbage and recycling operations to reduce their nuisance, safety and environmental impacts on workers and the public.

Goal 13: Invest in communities that receive garbage and recyclables from the Metro region so that those communities regard solid waste facilities as assets.

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

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

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.

Every year, the greater Portland region disposes of more than 1 million tons of garbage and recovers more than 1 million tons of food scraps, yard trimmings and recyclables.

The system that handles these materials and transports them to their final destinations is vast and complex, encompassing services from garbage trucks to food banks to recycling facilities and landfills, involving governments, private businesses and not-for-profit organizations.

The region has developed a highly effective recovery and disposal system over the last 30 years. But with a growing population, changes in how and what we consume, historical and current impacts of the system on neighborhoods and the dynamic nature of global markets for recyclables, it's time for new thinking and new work.

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.

EXTENDING THE LIFESPAN OF PRODUCTS AND MATERIALS

Today, the region has a growing network of reuse and repair initiatives, organizations and businesses. They range from salvage and reuse operations for construction site materials to neighborhood repair fairs that help residents fix items rather than discard and replace them.






















To strengthen and increase this reuse infrastructure, Metro and local governments need to increase investment in these services and advocate to formalize what are now informal and voluntary practices. Actions 8.2-8.6 provide multiple strategies for improving opportunities to reuse, repair and otherwise extend the life of products.

Nearly 20 percent of the region's disposed waste is generated by the constructing, remodeling and demolishing of structures.



Goal 8:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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.	Metro Cities Counties	Partnership agreements Grants	  
8.2	Implement strategies to increase the salvage of building materials for reuse, without increasing exposure to toxics.	Metro	Partnership agreements Grants	  
8.3	Advocate for research-informed changes to building codes and other regulations to increase use of reused and deconstructed materials.	Metro Cities Counties	Legislative agendas	  
8.4	Expand the collection of reusable items at public and private transfer stations, in partnership with reuse and repair organizations.	Metro	Partnership agreements	  
8.5	Invest in neighborhood-scale reuse and repair services and infrastructure.	Metro Cities Counties	Partnership agreements Grants	  
8.6	Support implementation of Oregon Department of Environmental Quality's Reuse, Repair and Extended Product Lifespan Strategic Plan.	Metro Cities Counties	Partnership agreements	  
 Highest potential to advance equity  New  Directive action				









Robust waste reduction education and outreach programs have been in place since formal recycling collection programs began in the region over 30 years ago.

Metro and local governments have used a wide variety of methods and materials to help residents and businesses understand and get the best use out of our garbage and recycling system, yet we have found that many communities are not receiving the information they need—most notably communities of color and residents for whom English is not their primary language.

A key focus throughout this plan is to develop strong partnerships with community organizations and utilize non-traditional means for engaging with the region's community members.


Goal 9:


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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
9.1	Provide culturally responsive education and assistance for garbage, recycling and reuse services to residents and businesses.	Metro Cities Counties	Regional work groups Existing programs	<div>E</div> <div> </div>
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.	Metro	Existing programs	<div>E</div> <div> </div>
9.3	Ensure that community education and volunteer development courses, such as Master Recycler, are relevant, accessible and culturally responsive to all communities.	Metro Cities Counties	Partnership agreements	<div>E</div> <div> </div>

E

 Highest potential to advance equity

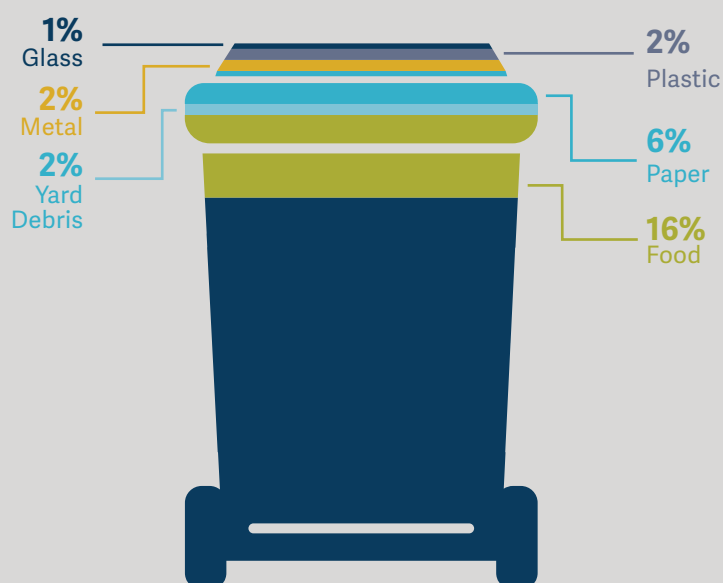
 New

 Directive action

WHAT'S STILL IN THE TRASH THAT CAN BE RECYCLED?

Much of what's put in garbage cans in the greater Portland area could be recycled or composted.

Source: Oregon Department of Environmental Quality (2017). 2016/2017 Oregon Solid Waste Characterization and Composition Study.



IMPROVING SERVICE FOR MULTIFAMILY HOUSEHOLDS

It's important that collection services are consistent and reliable for everyone. That's not the case for many of the region's residents who live in apartments, condominiums and other multifamily communities.

Metro conducted a study in 2017 of recycling and garbage services at multifamily properties. The main findings were:

1. There is inadequate access for residents to mixed recycling and glass recycling service at many multifamily sites. There aren't enough collection containers, they aren't conveniently located, and they aren't collected frequently enough.
2. Collection containers are inconsistent in size, color and labeling, and that is confusing to the people who use them.
3. As a result of the conditions above, the recyclables put out for collection are highly contaminated with non-acceptable materials.
4. Bulky waste is inadequately managed.







These findings are reflected in actions 10.2 – 10.6.

More than 50% of people living in rental apartments move every year. This is one reason why it's important to have a simple, intuitive and consistent system for separating and collecting garbage and recyclables.





Goal 10:




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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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.	Cities Counties	Code and authorizations	
10.2	Implement minimum service levels or performance standards for all collected materials for multifamily and commercial tenants.	Metro Cities Counties	Code and authorizations	
10.3	Implement regional standards for collection container colors, signage and other related informational materials for single-family, multifamily and commercial services.	Metro Cities Counties	Code and authorizations	
10.4	Provide convenient, accessible and equitable collection of hazardous waste from households and Conditionally Exempt Generators, prioritizing communities with greatest need.	Metro	Existing programs Partnership agreements	
10.5	Provide regularly occurring bulky waste collection service, with particular emphasis on multifamily communities and lower-income households.	Cities Counties	Code and authorizations	
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.	Metro Cities Counties	Code and authorizations	

Goal 10:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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.	Metro	Partnership agreements	
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.	Metro Cities Counties	Legislative agendas	

 Highest potential to advance equity  New  Directive action

Approximately 36,000 tons of items that could be recycled at home, including paper, plastic bottles, aluminum cans and glass containers, are disposed in garbage carts each year. Recycling these materials would reduce the same amount of greenhouse gas emissions as taking 22,000 passenger vehicles off the road.



BENEFITS AND HISTORY OF CURBSIDE RECYCLING

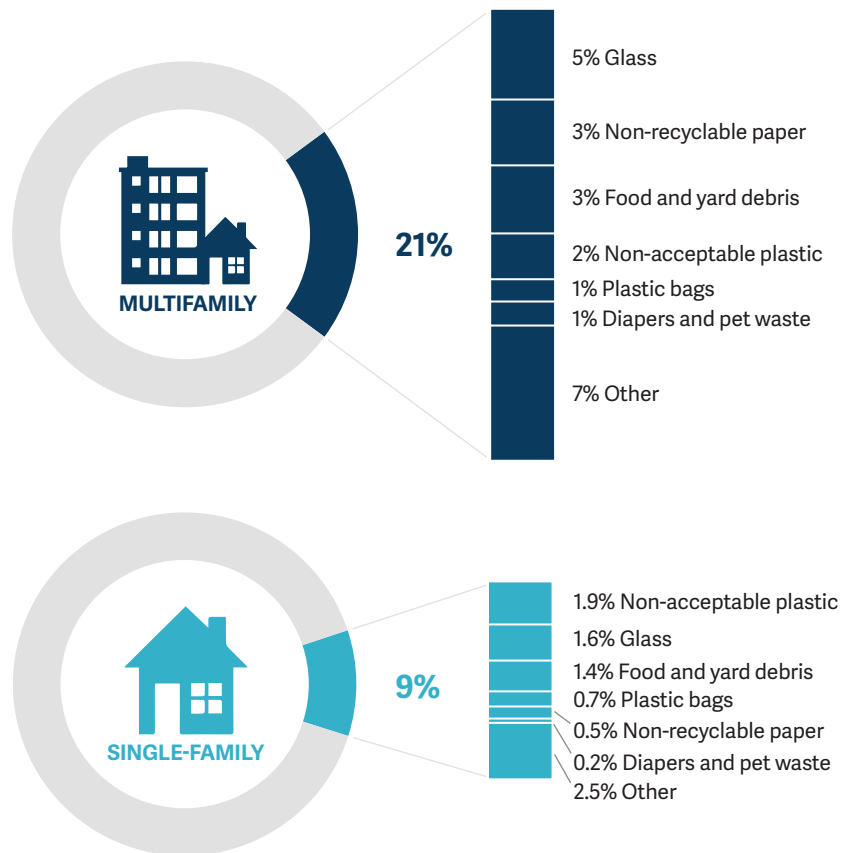
Recycling saves energy, reduces air and water pollution, reduces greenhouse gases and conserves natural resources. Curbside collection of recyclables makes recycling convenient. This service has been a key element of recycling programs in the region since 1983, when the Oregon Opportunity to Recycle Act required communities throughout the state to provide curbside collection. Within the region, weekly recycling collection is the service standard for single-family households. Recycling makes it possible to use materials that would otherwise go to the landfill to make thousands of products. A successful recycling system depends on the quality of material collected at the curb.



KEEPING IT SEPARATED

Many of the materials people put in their recycling bins don't belong there. Known as contamination, these non-recyclables can cause problems for the entire system because contaminated recycling is harder to sell.

Non-recyclables in recycling bins, by home type.



Source: Metro (2017). Multifamily Recycling Report. Metro (2015). Single-family Recycling and Waste Composition Studies

CLEANING UP ILLEGAL DUMPING

Metro's Regional Illegal Dumping (RID) Patrol cleans up items dumped on public lands, sidewalks, alleys and waterways.

In 2017, the RID Patrol collected 440 tons of trash at 3,500 dump sites across Clackamas, Multnomah and Washington counties

Top items collected:

1,973 tires

994 mattresses











555 couches

491 shopping carts










Goal 11:





Address and resolve community concerns and service issues.

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
11.1	Provide cultural competence training to customer service representatives at Metro, local governments and collection service providers.	Metro Cities Counties	Partnership agreements	
11.2	Improve feedback loops between haulers, local governments and Metro to address collection service issues for households and businesses.	Cities Counties	Regional work groups	
11.3	Provide inclement weather notifications to customers in multiple languages and through a variety of media.	Cities Counties Metro	Code and authorizations	
11.4	Provide services to clean up illegal dumps on public property, prioritizing communities with greatest need.	Metro Cities Counties	Existing programs	
11.5	Research the root causes that contribute to illegal dumping and how they can be addressed.	Metro	Regional work groups	
11.6	Implement garbage and recycling collection services for people experiencing homelessness.	Metro Cities Counties	Partnership agreements	
11.7	Evaluate the need to expand and improve access to public collection containers to reduce litter and illegal dumping.	Metro Cities Counties	Regional work groups	
 Highest potential to advance equity		 New	 Directive action	

Goal 12:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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.	Metro Cities Counties	Code and authorizations Regional work groups	
12.2	Implement consistent and enforceable nuisance and safety standards for all solid waste facilities within the system.	Metro	Code and authorizations	
12.3	Implement environmental and safety standards for all on-road and off-road solid waste fleet vehicles.	Metro Cities Counties	Partnership agreements Code and authorizations	
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.	Metro	Regional work groups Code and authorizations	
12.5	Regulate collection of solid waste materials by collectors not otherwise regulated by local governments.	Cities Counties	Code and authorizations	
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.	Metro	Code and authorizations	
12.7	Require post-collection material recovery for marketable materials that will advance progress toward achieving this plan's goals and targets.	Metro	Code and authorizations	

ACTIONS TO BE COMPLETED BY 2030	LEAD AGENCY	IMPLEMENTATION APPROACH	
<p>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.</p>	Metro	Code and authorizations	<div>E</div>  
<div>E</div> Highest potential to advance equity	 New	 Directive action	



The operation of garbage and recycling facilities generates environmental, health, economic and social impacts. While it's necessary to have a range of facilities to manage what we throw away, they are often located in communities that have been historically excluded from decisions about where the facilities go and that have the fewest resources and least ability to advocate for improvement or change.

A focus of this plan is investing in and regulating these facilities to help them to be community assets rather than burdens. This involves minimizing the health and safety impacts through modernization, sustainability practices and maintenance of consistent operating standards.

COMMUNITY ENHANCEMENT GRANTS

Across the Portland metropolitan area, Metro community enhancement grants give a boost to neighborhoods affected by waste facilities. From 1986 to 2017, these grants invested more than \$5 million in neighborhoods in Forest Grove, Gresham, Portland, Oregon City, Sherwood, Troutdale and Wilsonville. These investments will continue in the coming years.







Grant projects have included:

- Developing environmental education projects for at-risk youth
- Providing low-cost, volunteer based, shopping and delivery service for seniors and people with disabilities
- Removing ivy and restoring habitat in Forest Park
- Installing fire escapes at senior centers
- Producing summer concert programs in local parks
- Planting trees around community parks and main street boulevards in industrial areas



Goal 13:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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 and prioritize diversity, equity and inclusion elements in grant funding criteria. 	Metro	Code and authorizations	  
13.2	Implement annual volunteer projects and collection/recycling events in neighborhoods affected by solid waste facilities.	Metro	Partnership agreements Grants	  
13.3	Require each solid waste facility to work toward a good neighbor agreement with its host community.	Metro	Code and authorizations	  
13.4	Evaluate Community Benefit Agreements as a potential tool for garbage and recycling facilities to invest in host communities.	Metro	Regional work groups	  
 Highest potential to advance equity		 New	 Directive action	








WHAT DO GARBAGE AND RECYCLING COLLECTION RATES INCLUDE?

- Collection trucks and drivers
- Reloading of garbage from route trucks to long-haul trucks
- Garbage disposal in landfills
- Recyclables processing
- Recyclables markets
- Yard debris processing
- In some cases, food waste processing
- Government waste reduction and garbage system planning, education and oversight
- Some general government services



Goal 14:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
14.1	Implement transparent and consistent annual rate-setting processes for all collection service providers.	Cities Counties	Existing programs Code and authorizations	
14.2	Implement transparent and consistent annual rate-setting processes for all facilities.	Metro	Existing programs Code and authorizations	
14.3	Establish rates across the region that are consistent for like services.	Metro Cities Counties	Regional work groups Code and authorizations	
14.4	Implement a low-income rate assistance program for residential collection services.	Cities Counties	Regional work groups Code and authorizations	
14.5	Evaluate alternative models for collection, processing and transfer services to identify which would deliver the best environmental, financial, efficiency and equity outcomes.	Metro Cities Counties	Regional work groups	
14.6	Implement strong financial performance reporting standards to provide greater certainty on the financial viability of facilities serving the Metro region.	Metro	Code and authorizations	
14.7	Require that local governments annually provide information to residents about the components of their garbage and recycling collection rate.	Metro	Partnership agreements	



Highest potential to advance equity



New



Directive action

Goal 15:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
15.1	Implement regionally consistent contamination reduction efforts to improve material quality, including education, sorting instructions, collection equipment changes, and customer feedback methods.	Metro Cities Counties	Regional work groups	
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.	Metro Cities Counties	Regional work groups	
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.	Metro	Partnership agreements Grants	

























BUILDING A RESILIENT RECYCLING SYSTEM

Recyclables are commodities that are sold to manufacturers (also known as “markets”) across the United States, North America and the world. These markets fluctuate, and that can have a big impact on recycling collection programs in the Portland area.

A key goal of this plan is to increase the region’s ability to adapt to market fluctuations and to ensure that the materials collected are of the highest quality. This will build resilience in the recycling system.

Strategies include:

- Implementing regionally consistent efforts to keep garbage out of recycling bins
- Assessing what we collect to ensure we’re creating the most environmental benefits and addressing community needs
- Building capacity to process yard debris and food scraps locally
- Investing in facilities that receive and sort recyclables to improve their performance
- Advocating for incentives to strengthen Oregon end-use markets

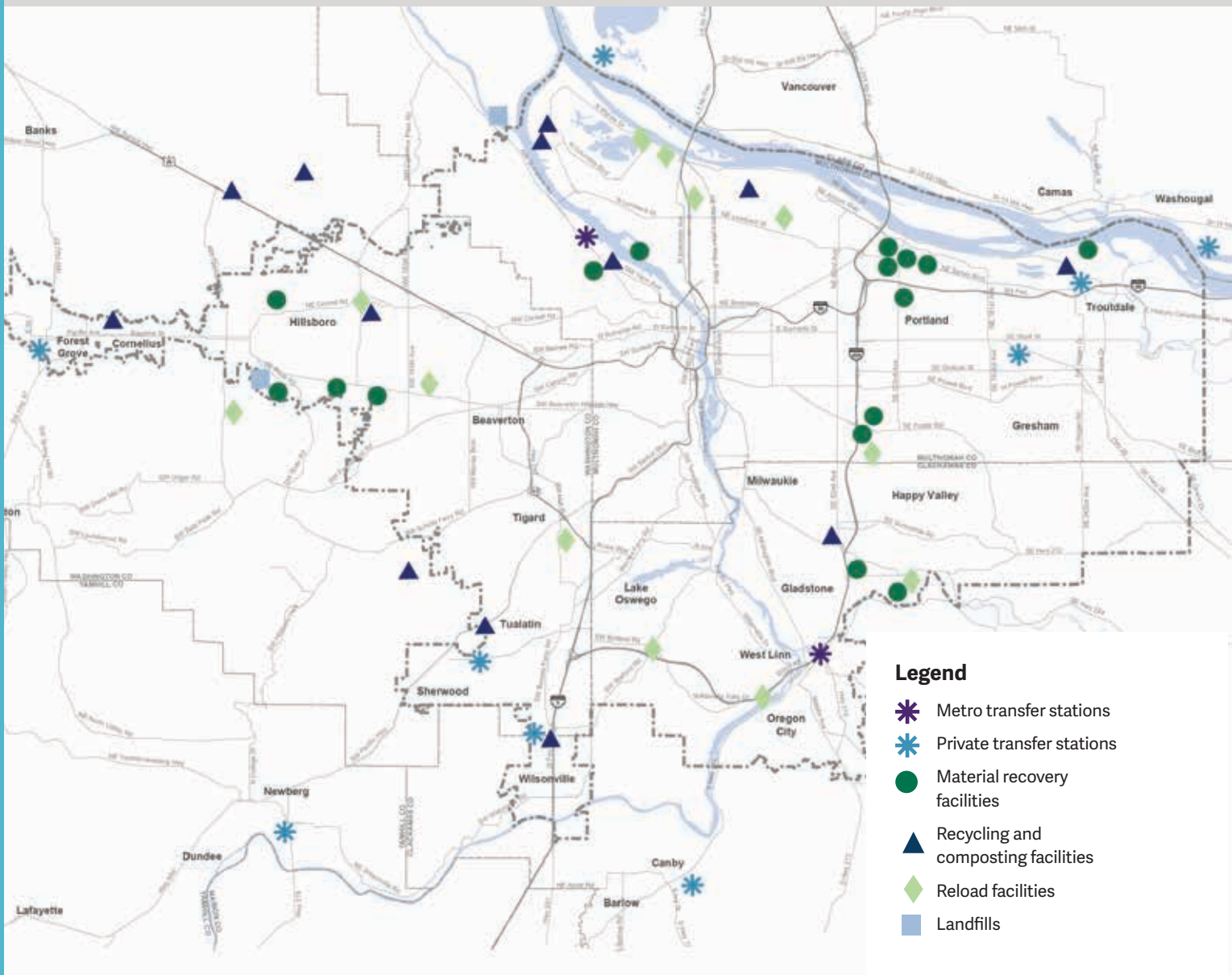
ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
15.4	Fund investments to improve the performance of material recovery facilities through collection rates and/or other mechanisms.	Metro Cities Counties	Existing programs Grants	  
15.5	Facilitate the permitting of composting facilities to process mixed residential yard debris and food scraps, while ensuring minimal impacts on neighboring communities.	Metro Cities Counties	Regional work groups Code and authorizations	  
15.6	Implement stronger linkages between recycling collection programs and material recovery facilities through processing performance standards, supply agreements, regulatory oversight or other means.	Metro Cities Counties	Code and authorizations	  
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.	Metro Cities Counties	Regional work groups Code and authorizations	  
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.	Metro Cities Counties	Legislative agendas	  
15.9	Advocate to expand the statewide bottle bill program to include additional containers.	Metro Cities Counties	Legislative agendas	  
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.	Metro	Regional work groups	  
 Highest potential to advance equity		 New	 Directive action	

REDUCING THE IMPACTS OF NEW FACILITIES

There is inconsistent access to all of the region's garbage and recycling services, in part because facilities were developed to suit the region's needs many years ago. Today, facilities are not always located where they are most needed, nor are they scaled to meet community needs.








This plan emphasizes locating new garbage, recycling, food scraps and household hazardous waste facilities where they'll provide the best

benefit to the public while minimizing environmental and human health impacts to their neighbors. The plan also looks to expand and improve access to services at existing public and private facilities. Changes to existing facilities and planning for new ones should start with early engagement with the most-affected communities.



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.

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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.	Metro	Code and authorizations	
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.	Metro	Code and authorizations	
16.3	Improve interagency and community collaboration on siting and authorizing proposed solid waste facilities to reduce potential impacts on neighboring communities.	Metro	Regional work groups	
16.4	Maintain public ownership of facilities to ensure that a range of services are accessible to residents at equitable and affordable rates.	Metro	Code and authorizations	
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.	Metro Cities Counties	Regional work groups	
16.6	Expand and improve access to services provided at Metro South Transfer Station.	Metro	Existing programs	
16.7	Implement the Metro Transfer System Configuration policy.	Metro	Code and authorizations	



Highest potential to advance equity



New



Directive action



Disaster resilience

GOALS ADDRESSED:

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

Goal 18: Ensure routine garbage and recycling collection, processing, transport and disposal operations can be restored quickly following a system disruption.

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.

From earthquakes to landslides to fires, the Metro region is vulnerable to disasters, both natural and human-caused. Disasters threaten people's safety, and they also have the potential to generate large amounts of debris: building debris, trees and plants, hazardous waste and other matter.

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. By planning how to manage both disaster debris and regular garbage and recyclables in a manner that protects public health and safety and safeguards the environment, the region will be better prepared to respond to and recover from a major incident.

The Disaster Debris Management Plan adopted by Metro in 2018 is designed to work in collaboration with local partners' disaster debris plans to provide guidance on how to manage and coordinate debris operations and system disruptions. The goals and actions in the 2030 Regional Waste Plan ensure the region will be ready to implement the debris operations before a disaster happens.

The actions focus on:

Coordinating effectively with partners

Preparing to restore routine garbage and recycling services following a disruption

Planning to expedite the removal of debris in a way that makes the best use of local services and maximizes recovery

WHY IS IT IMPORTANT TO PLAN FOR DISASTER DEBRIS?



WITHOUT A PLAN

- Debris on streets, in homes
- No sorting
- Regular garbage system overwhelmed
- Clean-up may take years
- Threats to health and safety



WITH A PLAN
















- Process for removing debris
- Debris management sites supplement regular system
- Clean-up is faster, more efficient
- Coordination with local partners



A worst-case-scenario earthquake with a magnitude of 9.0 could create over 17 million tons of debris from damaged buildings. That's more than 7 times the total waste generated by the Metro region in 2016.

Goal 17:










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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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.	Metro Cities Counties	Regional work groups	  
17.2	Conduct periodic exercises to test and practice the implementation of disaster debris plans.	Metro Cities Counties	Regional work groups Partnership agreements	  
17.3	Develop a coordinated preparedness and response messaging program that is accessible and culturally responsive.	Metro Cities Counties	Regional work groups Partnership agreements	  
17.4	Develop a database of existing public and private solid waste infrastructure capabilities that can be integrated with other public databases.	Metro	Partnership agreements	  
 Highest potential to advance equity		 New	 Directive action	



Goal 18:









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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
18.1	Implement strategies to maximize access to critical solid waste infrastructure during disruptions.	Metro Cities Counties	Regional work groups Partnership agreements	
18.2	Implement requirements for solid waste system service providers to prepare and maintain emergency operations and continuity of operations plans.	Metro Cities Counties	Regional work groups Code and authorizations	
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.	Metro Cities Counties	Partnership agreements	
18.4	Develop disaster resiliency standards for the design and construction of new facilities or when existing facilities are renovated.	Metro	Regional work groups Code and authorizations	
18.5	Develop engineering and financing strategies to facilitate the seismic retrofit of existing public and private solid waste infrastructure.	Metro	Regional work groups	
18.6	Conduct periodic assessments of solid waste system facilities for vulnerabilities to different hazards.	Metro	Regional work groups	
 Highest potential to advance equity  New  Directive action				



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.

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
19.1	Identify and pre-authorize debris management sites throughout the region.	Metro Cities Counties	Partnership agreements	
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.	Metro	Partnership agreements	
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.	Metro Cities Counties	Partnership agreements	
19.4	Develop strategies for the safe reuse, recycling and disposal of materials following a debris-generating incident.	Metro	Regional work groups Partnership agreements	
19.5	Create incentives or requirements for debris management contractors to collect and separate debris materials for reuse and recycling.	Metro Cities Counties	Partnership agreements	
 Highest potential to advance equity		 New	 Directive action	









Measuring progress

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

Baseline data and targets

As of the date of adoption of this plan, all of the indicators need additional work to develop baseline and evaluation methodologies. This work will be completed within the first two years of plan implementation, after which Metro, in consultation with local governments and community partners, will establish targets for each indicator.

Progress reports

On an annual basis, Metro will report on the status of each action and whether it has been implemented. Reporting on the key and goal indicators will occur at least every three years.





Implementation, compliance and amendments

INDEX:

Overview

Roles and responsibilities

Oregon statutory requirements

Requirements for local
governments

Plan implementation

Plan oversight

Overview

Responsibility for implementing the 2030 Regional Waste Plan is shared by Metro and city and county governments in the region.

The actions in the plan will be carried out by these agencies in collaboration with the Oregon Department of Environmental Quality, for-profit garbage and recycling companies and non-profit organizations involved in different areas of the system.

This section describes roles and responsibilities, requirements and implementation and compliance approaches included in the 2030 Regional Waste Plan.

Roles and responsibilities

State level

The Oregon Department of Environmental Quality (DEQ) has several roles in the region's garbage and recycling system. Through the 2050 Materials Management Vision and Framework for Action, the DEQ establishes an overall strategy for statewide efforts to reduce the environmental and health impacts from products made, purchased, used and disposed. The DEQ also guides and enforces solid waste statutes, approves local waste reduction plans, provides technical assistance and grants and measures statewide progress toward goals.

Regional level

Metro is responsible for overall solid waste planning and management in the region. As noted above, Metro develops and administers the Regional Waste Plan and shares responsibility with cities and counties for implementing the plan's actions. Metro is also responsible for ensuring that it and local governments meet statutory waste reduction program requirements. In addition to its programmatic work to reduce the impacts of products and their waste, Metro looks out for the public's interests by regulating privately owned garbage and recycling facilities. It also operates full-service waste transfer stations, provides collection services for household hazardous waste, operates a paint recycling facility and monitors and maintains two closed landfills in the region.

Local level

Cities and counties in the region manage the collection programs that provide recycling, yard debris, food waste and garbage collection services to single-family and multifamily residents and to businesses and institutions. They also provide waste prevention, reuse and recycling education and technical assistance to support the collection programs and help residents and businesses reduce the environmental impacts of the products they buy, use and dispose. These activities must, at minimum, comply with state laws and the Regional Waste Plan. Counties also play a significant role in disaster event planning and response.

Private sector

Businesses make and sell products and are identified in this plan as having responsibilities related to reducing the environmental and human health impacts of their products and in managing these items at the end of their use. In addition, for-profit businesses and non-profit organizations play significant roles in the region's garbage and recycling system. Hauling companies provide collection services to residents and businesses, primarily through franchises, permits or other instruments from cities and counties. Private companies also own and operate solid waste transfer stations, material sorting facilities for source-separated recyclables and mixed construction waste, operations that convert recyclables into new products, composting and anaerobic digestion facilities and landfills. Non-profit and for-profit organizations provide important reuse and repair services, as well as tools to support waste prevention efforts.

Community-based organizations

Community-based organizations played a critical role in the development of the 2030 Regional Waste Plan by partnering with Metro to engage communities that were historically marginalized from garbage and recycling system planning and decision-making processes. They will also have important responsibilities in implementation of the plan. Many of the actions associated with partnership agreements include roles for community-based organizations in the development, implementation and evaluation of regional projects and programs in collaboration with Metro and local governments.



Oregon statutory requirements

State law requires Metro, cities and counties to implement a series of waste prevention, reuse and recycling programs under the Opportunity to Recycle Act (Oregon Revised Statutes Chapter 459A and Oregon Administrative Rules Chapter 340-090). The state designates Metro as the compliance reporting agency for the region's three-county area. Local jurisdictions provide data to Metro to assist with this annual responsibility. If a city or county is out of compliance with a state requirement, Metro will work with that jurisdiction to resolve the issue. If it can't be satisfactorily resolved, Metro will ask DEQ to assist in addressing the matter.





Requirements for local governments

The actions included in this plan represent work that will be new for Metro and local governments, as well as activities that were already initiated, but not completed, and ongoing work that has been in place for years. The vast majority of the actions represent guidance to Metro and local governments, rather than requirements. There is a small set of actions, however, that involve existing or potential specific legal requirements on local governments. These requirements are primarily directed at ensuring that comprehensive and consistent recycling and garbage services are provided across the region, together with education, information and technical assistance programs for residents and businesses about waste prevention, reuse and recycling.

New requirements for local governments, or changes to existing requirements, that result from actions in the 2030 Regional Waste Plan will be developed in consultation with local governments and will go through the regular Metro Council legislative process, which includes consultation with advisory committees and opportunities for public comment. New requirements for local governments may be incorporated into Metro Code or Metro administrative rules. The actions that represent current or new requirements for local governments are included in the tables below and labeled with a directive action icon.













Goal 10:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
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.	Cities Counties	Code and authorizations	
10.2	Implement minimum service levels or performance standards for all collected materials for multifamily and commercial tenants.	Metro Cities Counties	Code and authorizations	







Goal 10 (cont.):

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
10.3	Implement regional standards for collection container colors, signage and other related informational materials for single-family, multifamily and commercial services.	Metro Cities Counties	Code and authorizations	  
10.5	Provide regularly occurring bulky waste collection service, with particular emphasis on multifamily communities and lower-income households.	Cities Counties	Code and authorizations	  
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.	Metro Cities Counties	Code and authorizations	  
 Highest potential to advance equity		 New	 Directive action	







Goal 12:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
12.3	Implement environmental and safety standards for all on-road and off-road solid waste fleet vehicles.	Metro Cities Counties	Partnership agreements Code and authorizations	  
 Highest potential to advance equity		 New	 Directive action	

Goal 14:

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

ACTIONS TO BE COMPLETED BY 2030		LEAD AGENCY	IMPLEMENTATION APPROACH	
14.7	Require that local governments annually provide information to residents about the components of their garbage and recycling collection rate.	Metro	Partnership agreements	  
 Highest potential to advance equity		 New	 Directive action	

The existing requirements for local governments are outlined in Chapter 5.10 of Metro Code¹ and the associated Metro administrative rules. They are:

Regional Service Standard (Metro Code 5.10.210 to 5.10.240)

Establishes minimum recycling service standards and education and outreach programs that local governments must implement for businesses and for single-family and multifamily households.

Business Recycling Requirement (Metro Code 5.10.310 to 5.10.350)

Requires each local government to adopt an ordinance to require businesses within its jurisdiction to separate recyclable materials such as paper, cardboard, and glass and plastic bottles and jars, and to provide recycling collection containers and educational materials.

Business Food Waste Requirement (Metro Code 5.10.410 to 5.10.470)

Requires local governments to adopt code language to require specified food-generating businesses in their jurisdiction to separate their food waste from garbage.

1. Metro Code, available online at www.oregonmetro.gov/metro-code.

Plan implementation

Metro is responsible for coordinating implementation of the plan and assessing plan performance.

Cities, counties and Metro are responsible for leading or participating in implementation of the actions. Several different approaches, described below, will be used to implement the actions. In the action tables in the Goals and actions section of the plan (page 48), one or more implementation approaches are identified for each action and Metro and/or cities and counties is indicated as the lead.

Legislative agendas: State-level public policy priorities identified by Metro and/or local government elected bodies.

Partnership agreements: Agreements between Metro and local governments, and between Metro or local governments with non-profit and community-based organizations.

Metro and/or local government code and authorizations: Formal actions taken through code amendments, administrative reviews, licenses, franchises and other instruments.

Regional work groups: Regional work groups convened by Metro to assist in developing programs and activities to achieve the goals and actions of the plan.

Grants: Investments in non-profit and for-profit organizations to achieve the goals and actions of the plan.

Existing programs: Actions may be associated with existing program plans and partnerships implemented by Metro, city, county and state agencies.

Work plans

Implementation of the actions will be coordinated through the regional and local work plans listed below.

Regional work plans

Metro, in collaboration with local governments, will develop multi-year work plans to prioritize implementation of the plan's actions. These work plans will include estimates of resources needed to complete the work that will inform Metro and local governments in budgeting and resource allocation.

Annual Waste Reduction Program

The Annual Waste Reduction Program is a collaborative effort between local governments and Metro. The Program consists of: (a) annual work plans developed by Metro and local governments; and (b) annual reports submitted by local governments to Metro describing the progress made in implementing the program.

Over the life of this plan, the Annual Waste Reduction Program will serve as the primary means for developing and implementing many of the actions and for meeting statutory waste reduction requirements. The program will act as an implementation tool for the multi-year regional work plans and be implemented through intergovernmental agreements. The agreements will require compliance with Metro Code and statutory requirements for local governments in the Opportunity to Recycle Act (ORS 459A). The agreements currently incorporate:

Regional Service Standard

Business Recycling Requirement

Business Food Waste Requirement

Residential Waste Reduction Education

Business and Institutional Waste Reduction Education and Technical Assistance

Recycle at Work Program

Household Hazardous Waste and Toxics Education Programs

Contamination Reduction Education Plan

Work associated with new actions in the 2030 Regional Waste Plan may be incorporated into the Annual Waste Reduction Program intergovernmental agreements.

Compliance

Ensuring compliance with the state and Metro requirements on local governments is accomplished through the Compliance Procedures section in Metro Code Chapter 5 and associated administrative rules, and through intergovernmental agreements between local governments and Metro used to implement waste reduction programs.

Amendments

The Regional Waste Plan is written to allow sufficient flexibility for its implementation to allow for adjustments without needing to amend or revise the plan itself. Measurements of regional progress and monitoring and evaluation of goal areas and actions will help determine if significant mid-course corrections are required to achieve the plan's objectives.

In addition to ongoing monitoring, a five-year review will determine whether major revisions are needed. Revisions that necessitate changes to the plan will follow the amendment process outlined in Chapter 5 of Metro Code.



Plan oversight

Several formal bodies will oversee implementation of the plan.

Metro Council

Metro's seven-member directly elected council will oversee plan implementation, provide direction on the development of programs and policies, and make final decisions on any plan actions that require Metro legislative action to be enacted. Metro staff will report to Council annually on the implementation of the 2030 Regional Waste Plan actions and every two to three years on progress toward the plan's key measurement indicators.

Committee on Racial Equity (CORE)

The committee serves as a critical component of Metro's efforts to advance racial equity by providing oversight of Metro's implementation of its Strategic Plan to Advance Racial Equity, Diversity and Inclusion. CORE will provide input to the Metro Council, Metro staff, MPAC and the Regional Waste Plan Implementation Committee on the development and evaluation of the plan's equity-related actions.

Metro Policy Advisory Committee (MPAC)

The committee is comprised of members representing cities, counties, special districts and the public. Three Metro Councilors also participate as non-voting liaisons. MPAC's role in implementation of the 2030 Regional Waste Plan will be to advise the Metro Council on proposed policies that would place requirements on local governments.

Regional Waste Plan Implementation Committee

The committee will be newly formed following adoption of the Regional Waste Plan. Its membership is expected to include representatives of local governments, community organizations, environmental advocacy organizations, system users, topical experts and industry. The committee is expected to provide input on development of the programs and policies that implement the plan's actions and advise the Metro Council and Metro Chief Operating Officer on legislative and administrative actions they will consider related to plan implementation.



Appendices

Appendices table of contents

Acknowledgments.....	122
Waste reduction program	124
Key solid waste laws	138
Glossary of terms	142

Acknowledgments

Metro thanks the following community members, organizations and staff for their contributions in developing the 2030 Regional Waste Plan.

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Dan Blue, Roy Brower, Molly Chidsey, Jennifer Erickson, Penny Erickson, Rosalynn Greene, Carl Grimm, Sara Kirby, Matt Korot, Marta McGuire, Luis Sandoval, Joel Sherman, Paul Slyman, Laura van der Veer and Molly Vogt

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Immigrant and Refugee Community Organization
Momentum Alliance
North by Northeast Community Health Center
The Rosewood Initiative
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Waste reduction program

Introduction

Under Oregon state law (ORS 459.055), any jurisdiction sending more than 75,000 tons of solid waste per year to a permitted disposal site, including landfills in exclusive farm use zones, is required to prepare a waste reduction program for review and approval by the Oregon Department of Environmental Quality (DEQ).

This appendix describes the elements of the 2030 Regional Waste Plan that make up the waste reduction program and demonstrate the region's compliance with specific statutory requirements in ORS 459.055(3) and corresponding administrative rules (OAR 340-091-0070(3)). With over 1 million tons of garbage sent to Oregon landfills, the Metro region is subject to the statutory waste reduction program requirements.

The 2030 Regional Waste Plan is a blueprint to guide investments in the Metro region's solid waste system and reduce the environmental and health impacts of products from manufacturing to disposal. The plan is intended to move the Metro region toward a sustainable materials management approach that identifies and addresses impacts across the full life cycle of materials and products. This shift is based on recent changes in policy guidance at the federal and state levels, including the adoption of the 2050 Vision and Action Framework for Materials Management in Oregon by the Environmental Quality Commission and implemented by DEQ.

The plan also marks another shift in the region's approach to waste management by incorporating actions that will advance progress toward meeting the goals of Metro's Strategic Plan to Advance Racial Equity, Diversity and Inclusion. This plan focuses on eliminating the disparities that people of color experience, especially in those areas related to Metro's policies, programs and services.

The regional waste reduction program

The statutorily required waste reduction program for the Metro region consists of the 2030 Regional Waste Plan actions outlined in Table A1 of this appendix and the requirements for local governments outlined in Metro Code Chapter 5' and the corresponding administrative rules.

The goals and actions in the regional waste reduction program described in this appendix are aimed at reducing the total amount of waste generated by businesses and residents of the Metro region.

The waste reduction program also includes actions to decrease the toxicity of products and materials sold, used and disposed in the greater Portland area.

In 2016, the Metro region generated a total of 2.4 million tons of waste, of which 48 percent was recovered and the rest (1.3 million tons) was sent for disposal. Waste generation in recent years has remained below a peak of 2.7 million tons in 2007. The actions in the 2030 Regional Waste Plan are intended to help the region achieve the statutorily established voluntary goal of 64 percent recovery by 2025.

Oregon statutory requirements for local governments

All local jurisdictions in the Metro region are required to comply with the waste reduction provisions set forth in state law (ORS 459A.005 to 459A.010 and OAR 340-090-0030 to 340-090-0050). Metro has been designated by the state as the compliance reporting agency for the region's three-county area. Local jurisdictions provide data to Metro to assist with this annual responsibility.

As part of their annual reporting, local jurisdictions must provide documentation indicating they are fully implementing the general requirements and program elements specified in the Opportunity to Recycle Act (ORS 459A.005 to 459A.008 and OAR 340-090-0030 to 340-090-0042).

As in previous years, Metro will continue to review annual reports for compliance with state law. If a city or county is out of compliance with statutory requirements, Metro will work with that jurisdiction to resolve the issue. If it can't be satisfactorily resolved, Metro will ask DEQ to assist in addressing the matter.

Regional Waste Plan requirements for local governments

The actions in the 2030 Regional Waste Plan include work that will be new for Metro and local governments, as well as activities that were already initiated, but not completed, and ongoing work that has been in place for years.

The vast majority of the actions represent guidance to Metro and local governments, rather than requirements. There is a set of actions, however, that represents existing or potential specific requirements on cities and counties within Metro's geographic area of authority. These requirements are primarily directed at ensuring that comprehensive and consistent recycling and garbage services are provided across the region, together with education, information and technical assistance programs for residents and businesses about waste prevention, reuse and recycling.

New requirements for local governments, or changes to existing requirements, that result from actions in the 2030 Regional Waste Plan will be developed in consultation with local governments and will go through the regular Metro Council legislative process, which includes consultation with advisory committees and opportunities for public comment. New requirements for local governments may be incorporated into Metro Code or Metro administrative rules.

1. Metro Code, available online at www.oregonmetro.gov/metro-code.

The actions of the 2030 Regional Waste Plan that represent current or new requirements for local governments are labeled with a directive action icon in Table A1, with fuller descriptions immediately below for the existing requirements that are in Metro Code Chapter 5.10:

Regional Service Standard (Metro Code 5.10.210 to 5.10.240)

Establishes minimum recycling service standards and education and outreach programs that local governments must implement for businesses and for single-family and multifamily households.

Business Recycling Requirement (Metro Code 5.10.310 to 5.10.350)

Requires each local government to adopt an ordinance to require businesses within its jurisdiction to separate recyclable materials such as paper, cardboard, and glass and plastic bottles and jars, and to provide recycling collection containers and educational materials.

Business Food Waste Requirement (Metro Code 5.10.410 to 5.10.470)

Requires each local government to adopt code language to require specified food-generating businesses in its jurisdiction to separate their food waste from the garbage.

Program implementation and enforcement

Metro is responsible for coordinating implementation of the plan and assessing plan performance. Cities, counties and Metro are responsible for leading or participating in implementation of the actions. Actions provide direction, including to develop, implement or evaluate specific programs or initiatives.

Actions with direction to implement programs or initiatives assume that implementation will require planning, budgeting and evaluating. Several different approaches will be used to implement the actions. These are identified in the action tables in the Goals and actions section of this plan (page 48) and described below. Most of these implementation approaches are currently in place and have been operating for many years.

Regional Waste Plan: Implementation Approaches	
Legislative agendas	State-level public policy priorities identified by Metro and/or local government elected bodies.
Partnership agreements	Agreements between Metro and local governments, and between Metro or local governments and non-profit or community-based organizations.
Metro and/or local government code and authorizations	Formal actions taken through code amendments, administrative reviews, licenses, franchises and other instruments.
Regional work groups	Regional work groups convened by Metro to assist in developing programs and activities to achieve the goals and actions of the plan.
Grants	Investments in non-profit and for-profit organizations to achieve the goals and actions of the plan.
Existing programs	Actions may be associated with existing program plans and partnerships implemented by Metro, city, county and state agencies.

In addition to implementation mechanisms, each action in the 2030 Regional Waste Plan, including the waste reduction program actions, is also assigned a lead agency.

Metro, in consultation with local governments, will develop multi-year work plans to guide implementation of the actions. These work plans will include estimated resources needed to complete the work.

Metro will continue to enforce the Regional Waste Plan through Chapter 5 of the Metro Code and associated administrative rules, as well as through intergovernmental agreements (IGAs) with local governments.

Annual Waste Reduction Program

The Annual Waste Reduction Program is a collaborative effort between local governments and Metro. The Program consists of: (a) annual work plans developed by Metro and local governments; and (b) annual reports submitted by local governments to Metro describing the progress made in implementing the program.

Over the life of this plan, the Annual Waste Reduction Program will serve as the primary means for developing and implementing many of the actions in this plan and for meeting statutory waste reduction requirements. The program will act as an implementation tool for multi-year regional work plans and be implemented through intergovernmental agreements. The agreements will require compliance with Metro Code and statutory requirements for local governments in the Opportunity to Recycle Act (ORS 459A), and currently incorporate:

- Regional Service Standard
- Business Recycling Requirement
- Business Food Waste Requirement
- Residential Waste Reduction Education
- Business and Institutional Waste Reduction Education and Technical Assistance
- Recycle at Work Program
- Household Hazardous Waste/Toxics Education Programs
- Contamination Reduction Education Plan

Work associated with new actions in the 2030 Regional Waste Plan may be incorporated into the Annual Waste Reduction Program intergovernmental agreements.

Waste reduction goals and actions

This section outlines the goals and actions in the 2030 Regional Waste Plan that form part of the statutorily-required waste reduction program for the Metro region. The timetable for implementing these actions is 2019 to 2030.

As a whole, the goals and actions in Table A1 are intended to demonstrate compliance with the requirements in ORS 459.055(3) for the waste reduction program to provide for:

A commitment by Metro and other local governments in the region to reduce the volume of waste that would otherwise be disposed of in a landfill through techniques such as waste prevention, recycling, reuse, composting and energy recovery.

Energy efficient, cost-effective approaches for waste reduction.

Strategies that are commensurate with the type and volume of solid waste generated in the Metro region.

The statutory waste reduction program requirements in ORS 459.055(3)(B) also include the requirement to meet or exceed the waste prevention, reuse and recycling requirements in ORS 459.250 (providing a place for collecting source-separated recyclable materials at disposal sites) and ORS 459A.005 to 459A.085 (collectively referred to as the opportunity to recycle statutes).

While most of the opportunity to recycle requirements in ORS 459A are currently met through the existing requirements for local governments in Metro Code described in the previous section (page 126), the 2030 Regional Waste Plan also contains other actions that help Metro and other local governments in the region meet or exceed these requirements. These actions are identified in the **Waste prevention, reuse and recycling requirements** column of Table A1. This column lists the specific waste prevention, reuse and recycling statute(s) addressed by the action.

To demonstrate compliance with the waste reduction requirement in OAR 340-091-0070(3)(c), Table A1 also lists the waste streams that would be affected by each waste reduction action in the **Waste stream** column.

To assist with implementation and accountability, lead agencies – either Metro or cities and counties, or a combination of both – are defined for each action in Table A1. The lead agencies are the primary entities responsible for implementing the action and reporting on progress. Successful implementation will often require collaboration and coordination between Metro, local governments, community-based organizations and private sector service providers.

Table A1**Shared prosperity**

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

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
1.3 Partner with organizations to engage youth in leadership opportunities for social, economic and environmental issues related to garbage and recycling.	Metro Cities Counties	Household waste Food waste Hazardous material	

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.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
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.	Metro	Household waste Commercial waste Yard debris Food waste Demolition material Hazardous material	

Product design and manufacturing

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

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
5.1 Advocate for legislation that minimizes chemicals of concern in products and packaging and requires the disclosure of product chemical data to consumers.	Metro Cities Counties	Hazardous material	
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.	Metro	Hazardous material	
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.	Metro	Household waste Commercial waste Demolition material Hazardous material	

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.	Metro Cities Counties	Household waste Commercial waste Demolition material Hazardous material
5.5	Advocate for legislation that would require building products sold and used in Oregon to be free of highly toxic materials.	Metro Cities Counties	Demolition material Hazardous material
5.6	Advocate for standards for high-impact products including phase-outs or bans.	Metro Cities Counties	Household waste Commercial waste Demolition material Hazardous material

Product consumption and use

Goal 6: Reduce product environmental impacts and waste through educational and behavioral practices related to prevention and better purchasing choices.

Actions		Lead	Waste stream	Waste prevention, reuse and recycling requirements
6.1	Provide culturally responsive and developmentally appropriate school-based education programs about the connections between consumer products, people and nature.	Metro	Household waste Hazardous material	ORS 459A.007(2)(d)
6.2	Provide culturally responsive community education and assistance about the connections between consumer products, people and nature.	Metro Cities Counties	Household waste Hazardous material	ORS 459A.007(2)
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.	Metro Cities Counties	Household waste Commercial waste	ORS 459A.007(2)(a)
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.	Metro	Household waste Commercial waste	ORS 459A.007(2)
6.5	Assist households and businesses in the adoption of practices that prevent the wasting of food and other high impact materials.	Metro Cities Counties	Commercial waste Food waste	ORS 459A.007(2)
6.6	Support implementation of Oregon State University's SolvePestProblems.org as a primary tool for education and resources on integrated pest management.	Metro	Hazardous material	
6.7	Implement recognition programs for business efforts to prevent waste and minimize the environmental impacts of the products they purchase.	Cities Counties	Commercial waste	ORS 459A.007(1)(f)

Goal 7: Reduce product environmental impacts and waste through policies that support prevention practices and better purchasing choices.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
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.	Metro Cities Counties	Household waste Hazardous material	
7.2 Implement policies that will reduce the use of single-use products such as single-use plastic bags.	Metro Cities Counties	Household waste Hazardous material	
7.3 Advocate for the reclassification of high-risk nonagricultural pesticides to restricted use status in Oregon.	Metro	Household waste Commercial waste	
7.4 Implement policies and programs that lead to the 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.	Metro Cities Counties	Household waste Commercial waste	

Product end-of-life management


Goal 8: Increase the reuse, repair and donation of materials and consumer products.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
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.	Metro Cities Counties	Commercial waste Food waste	ORS 459A.007(2)(g)
8.2 Implement strategies to increase the salvage of building materials for reuse without increasing exposure to toxics.	Metro	Demolition material	ORS 459A.007(2)(f)
8.3 Advocate for research-informed changes to building codes and other regulations to increase use of reused and deconstructed materials.	Metro Cities Counties	Demolition material	
8.4 Expand the collection of reusable items at public and private transfer stations, in partnership with reuse and repair organizations.	Metro	Household waste Commercial waste	
8.5 Invest in neighborhood-scale reuse and repair services and infrastructure.	Metro Cities Counties	Household waste	ORS 459A.007(2)(e)-(f)
8.6 Support implementation of Oregon Department of Environmental Quality's Reuse, Repair and Extended Product Lifespan Strategic Plan.	Metro Cities Counties	Household waste Commercial waste	ORS 459A.007(2)(e)-(f)

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

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
9.1 Provide culturally responsive education and assistance for garbage, recycling and reuse services to residents and businesses.	Metro Cities Counties	Household waste Commercial waste Yard debris Demolition material Hazardous material	ORS 459A.005 to 459A.008
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.	Metro	Household waste Commercial waste Yard debris Demolition material Hazardous material	ORS 459A.007(2)(f)
9.3 Ensure that community education and volunteer development courses, such as Master Recycler, are relevant, accessible and culturally responsive to all communities.	Metro Cities Counties	Household waste Hazardous material	

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

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
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.	Cities Counties	Household waste Commercial waste Yard debris	ORS 459A.005 to 459A.008
10.2  Implement minimum service levels or performance standards for all collected materials for multifamily and commercial tenants.	Metro Cities Counties	Household waste Commercial waste Yard debris	
10.3  Implement regional standards for collection container colors, signage and other related informational materials for single-family, multifamily and commercial services.	Metro Cities Counties	Household waste Commercial waste Yard debris	
10.4 Provide convenient, accessible and equitable collection of hazardous waste from households and Conditionally Exempt Generators, prioritizing communities with greatest need.	Metro	Hazardous material	
10.5  Provide regularly-occurring bulky waste collection service, with particular emphasis on multifamily communities and lower income households.	Cities Counties	Household waste	
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.	Metro Cities Counties	Household waste	



Directive action

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.	Metro	Hazardous material
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.	Metro Cities Counties	Household waste Hazardous material

Goal 12: Manage all garbage and recycling operations to reduce their nuisance, safety and environmental impacts on workers and the public.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
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.	Metro	Hazardous material
12.7	Require post-collection material recovery for marketable materials that will advance progress towards achieving this plan's goals and targets.	Metro	Household waste Commercial waste Yard debris Demolition material

Goal 13: Invest in communities that receive garbage and recyclables from the Metro region so that those communities regard solid waste facilities as assets.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
13.2	Implement annual volunteer projects and collection/recycling events in neighborhoods affected by solid waste facilities.	Metro	Household waste Yard debris Hazardous waste

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

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
14.5	Evaluate alternative models for collection, processing and transfer services to identify which would deliver the best environmental, financial, efficiency and equity outcomes.	Metro Cities Counties	Household waste Commercial waste Yard debris Food waste Demolition material Hazardous material

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

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
15.1 Implement regionally consistent contamination reduction efforts to improve material quality, including education, collection equipment changes and customer feedback methods.	Metro Cities Counties	Household waste Commercial waste	ORS 459A.005 to 459A.008
15.2 Regularly assess the list of curbside recyclables collected in the region relative to end-markets, life cycle environmental benefits, community needs and forecasting of future materials in the waste stream.	Metro Cities Counties	Household waste Commercial waste	
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.	Metro	Household waste Commercial waste	
15.4 Fund investments to improve the performance of material recovery facilities through collection rates and/or other mechanisms.	Metro Cities Counties	Household waste Commercial waste	
15.5 Facilitate the permitting of composting facilities to process mixed residential yard debris and food scraps, while ensuring minimal impacts on neighboring communities.	Metro Cities Counties	Yard debris Food waste	
15.6 Implement stronger linkages between recycling collection programs and material recovery facilities through processing performance standards, supply agreements, regulatory oversight or other means.	Metro Cities Counties	Household waste Commercial waste	
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.	Metro Cities Counties	Household waste Commercial waste	
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.	Metro Cities Counties	Household waste Commercial waste	
15.9 Advocate for expansion of the statewide bottle bill program to include additional containers.	Metro Cities Counties	Household waste Commercial waste	
15.10 Evaluate whether a policy to increase garbage tip fees would further incentivize waste prevention and recovery, without harming ratepayers and providing revenue windfalls to transfer station operators.	Metro	Household waste Commercial waste Yard debris Food waste Demolition material Hazardous material	

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.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
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.	Metro	Household waste Commercial waste Food waste	
16.5 Evaluate the feasibility of establishing a publicly-owned facility in Washington County to accept and transfer garbage, recycling, food scraps and household hazardous waste and other materials.	Metro Cities Counties	Household waste Commercial waste Food waste Hazardous material	ORS 459.250 ORS 459A.005(1)(a)(A)
16.6 Expand and improve access to services provided at Metro South Transfer Station.	Metro	Household waste Commercial waste Hazardous material	ORS 459.250 ORS 459A.005(1)(a)(A)

Disaster resilience

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.

Actions	Lead	Waste stream	Waste prevention, reuse and recycling requirements
19.4 Develop strategies for the safe reuse, recycling and disposal of materials following a debris-generating incident.	Metro	Demolition material Hazardous material Disaster debris	
19.5 Create incentives or requirements for debris management contractors to collect and separate debris materials for reuse and recycling.	Metro Cities Counties	Demolition material Hazardous material Disaster debris	

Measuring and reporting on progress

The 2030 Regional Waste Plan includes a measurement framework to evaluate progress towards the plan's vision and goals (page 102). The measurement framework consists of six key indicators and many goal-level indicators. Five of the key indicators are directly related to the waste reduction program actions:

Relevant key indicators

Greenhouse gas emissions associated with the products and services consumed in the Metro region

Annual tons of waste generated

Number, geographic location and demographics of youth reached through education programs

Share of multifamily communities with adequate collection services

Recycling contamination by sector

Metro, cities and counties in the region will be responsible for collecting the necessary data for constructing the plan's indicators. To report on progress, Metro will produce an annual report on the implementation status of each action in the plan and a report at least every three years with updates of the key indicators and goals. In addition and in consultation with DEQ, Metro will meet its statutory reporting responsibilities by periodically reporting to the Environmental Quality Commission on the implementation of the waste reduction program.



Key solid waste laws

There are several state laws that help give perspective and direction to the activities in the 2030 Regional Waste Plan.

The Oregon Bottle Bill

1971 – First bottle bill in the United States.

The Oregon legislature passed the Oregon Bottle Bill in 1971 and it took effect on October 1, 1972. This bottle bill was the first of its kind in the nation. Its purpose was to reduce litter and divert all beer and carbonated beverage containers from the waste stream so that they could be reused or recycled. The bill requires that a refund be paid to any person who returns empty soft drink or beer bottles or cans to a retail store.

2011 – Bottle bill expansion

House Bill 3145 amended the Bottle Bill in 2011 to add all beverage containers to the list of containers covered under the law - except distilled liquor, wine, dairy or plant-based milk, meal replacement beverages and infant formula - beginning Jan. 1, 2018. The bill also allowed for an increase in the refund value from 5 to 10 cents per container.

The Oregon Opportunity to Recycle Act

1983 – First curbside recycling programs in Oregon

The Opportunity to Recycle Act, passed by the Oregon legislature in 1983, was ground-breaking legislation that required:

- Residential on-route (curbside) recycling collection in cities of 4,000 or more people.
- Recycling at solid waste disposal sites.
- Education and promotion programs designed to make all Oregonians aware of opportunities to recycle and the reasons for recycling.

Although Oregon already had an extensive recycling infrastructure, both private and public, before the passage of the act, the system was enhanced through this legislation. The recycling programs called for in the Opportunity to Recycle Act have been implemented throughout the state.

1991 – Setting recovery targets

In 1991, the Oregon legislature took recycling legislation a step further and passed the Oregon Recycling Act. Among other things, the Oregon Recycling Act established a recovery level goal of 50 percent by the year 2000. The Metro region was required to achieve a recovery level of 40 percent by 1995.

The Oregon Recycling Act also mandated the development of a statewide solid waste plan by 1994 and the performance of waste composition studies, and required cities with a population greater than 10,000 and the Metro area to implement certain waste reduction practices. Certain materials, such as whole tires and lead acid batteries, were banned from landfills. The act also specified

purchasing preferences by government agencies for materials with high percentages of recycled content and high degrees of reusability/recyclability.

Finally, the act established minimum recycled-content requirements for newsprint, telephone directories, glass containers and rigid plastic containers sold in Oregon.

1997 – 2 percent Credits for waste prevention

In 1997, the legislature passed a bill that enabled local governments to obtain credit for more than just their recycling programs. The program allowed 2 percent credits for wastesheds such as the Metro three-county area that have established and maintained programs in waste prevention, reuse and backyard composting. DEQ established guidelines and evaluation criteria for wastesheds that allowed them to earn up to 6 percent total credits toward their recovery goals for qualifying programs.

2001 – New state and watershed goals

In 2001, although most of the wastesheds in the state were meeting their individual required recovery goals, DEQ confirmed to the legislature that these accomplishments were nevertheless not going to produce a statewide recovery goal of 50 percent. The legislature responded with House Bill 3744 (amending ORS 459.010) that set a statewide recovery goal of 45 percent for 2005 and 50 percent for 2009 and adjusted individual watershed goals. Metro's goal became 62 percent by 2005 and 64 percent by 2009 (these rates could include any credits received under the "2 percent waste prevention credits" program).

The bill set out review procedures regarding the goal:

If a watershed does not achieve its 2005 or 2009 waste recovery goal, the watershed shall conduct a technical review of existing policies or programs and determine revisions to meet the recovery goal. The department shall, upon the request of the watershed, assist in the technical review. The watershed may request, and may assist the department in conducting, a technical review to determine whether the watershed goal is valid (ORS 450.010(6)(e)).

In addition, House Bill 3744 established statewide waste generation goals:

- By 2005, there will be no annual increase in per capita municipal solid waste generation;
- By 2009, there will be no annual increase in total municipal solid waste generation.

2015 – Updates to local government waste prevention, reuse and recycling programs

In 2015, the legislature passed Senate Bill 263 and made fundamental changes to the Opportunity to Recycle Act (ORS 459A). The bill revised material recovery and waste prevention goals and requirements for Oregon's municipalities and wastesheds.

In particular, the bill:

- Added four new options to the list of recycling programs cities and counties can choose to implement.
- Increased the total number of recycling programs cities and counties in the Metro region must implement.
- Added requirements for certain cities and counties to assess contamination levels in curbside recycling and to make plans and outreach programs to reduce contamination.

- Retired the voluntary waste prevention and reuse programs for wastesheds (the former “2 percent waste prevention credits” program introduced in 1997).
- Required larger cities and all cities within the Metro boundary to implement new waste prevention and reuse programs, replacing similar programs previously implemented under the 2 percent waste prevention credits program.
- Expanded recycling opportunities for people living in multifamily housing and for tenants of multi-tenant commercial buildings, effective July 1, 2022.

Senate Bill 263 also updated the statewide and wasteshed waste recovery goals and the state’s waste generation goals. For the Metro region, the waste recovery goal was revised and set to a 64 percent waste recovery rate by 2025, not including the waste prevention credits under the former “2 percent waste prevention credits” program. The bill also established that this goal was now voluntary and not enforceable by the Oregon Department of Environmental Quality.

For the state as a whole, the bill established the following goals:

- For waste generation,
 - » No annual increase in total waste generation by 2009
 - » By 2025, a decrease in total waste generation to 15 percent below 2012 levels, and to 40 percent below 2012 levels by 2050 and subsequent years
- For waste recovery,
 - » An overall material recovery rate of 52 percent by 2020 and 55 percent by 2025 and subsequent years
 - » For food waste, a recovery rate of 25 percent by 2020
 - » For plastic waste, a recovery rate of 25 percent by 2020
 - » For carpet waste, a recovery rate of 25 percent by 2025

The bill also mandated the development of alternative waste recovery rates based on energy use and possibly other environmental impact indicators such as greenhouse gas emissions, toxicity and water use. The alternative recovery rates are outcome-based indicators and represent a departure from using weight-based indicators as measures of progress towards meeting the state’s waste recovery goals.

Extended producer responsibility

2007 – Oregon e-cycles electronics program

In 2007, Oregon House Bill 2626 created a producer responsibility system for the management of obsolete electronics where manufacturers either provide collection and recycling for their e-waste or pay for a program that is contracted by the state. The legislation required safe, convenient and environmentally sound recycling of specific electronic devices and, as of January 2010, banned the disposal of such devices.

Since January 2009, the Oregon Department of Environmental Quality has implemented this legislation through the Oregon E-Cycles program. The program currently provides free recycling of computers, monitors, printers, keyboards, mice and TVs through a network of collection sites located throughout the state.

2009 – Paint stewardship program

In 2009, Oregon became the first state in the nation to enact legislation (House Bill 3037) requiring architectural paint manufacturers to implement a program to reduce waste, increase reuse and recycling and safely dispose of remaining unusable paint and other coatings. The program started as a pilot in 2010 and was made permanent by legislation in 2013.

Under the program, retailers of paint products collect a program fee from consumers for each container registered for sale in Oregon. The fee then goes back to manufacturers who pay a stewardship organization, PaintCare, to manage collections and provide outreach and education on how to buy the right amount, reuse and recycle paint and other coatings. PaintCare is a non-profit organization created by the paint industry.

Metro's solid waste obligations and authorizations under state law

In addition to the key solid waste laws described above, Metro has additional obligations and authorizations related to solid waste management for the Metro region. Oregon Revised Statutes (ORS) Chapter 459 covers solid waste management administration roles, disposal sites, hazardous waste management, enforcement and penalties. ORS 459A covers reuse and recycling program requirements in the state. Oregon Administrative Rules (OAR) Chapter 340 sets out implementation standards, reporting requirements, recovery rate goals, recovery rate calculation methods, etc. The following state law chapters and sections specifically pertain to the region's waste and toxicity reduction plans, policies and programs:

ORS 459.055 Prepare and adopt a waste reduction program.	ORS 459.345 Submit report to the Environmental Quality Commission on the implementation of the waste reduction program required by ORS 459.055.	ORS 459A.750 School curriculum and teachers' guide components.
ORS 459.250 Provide recycling collection at transfer stations or at more convenient locations.	ORS 459.413(1) Establish permanent household hazardous waste depots.	OAR Chapter 340, Division 90 Implementation standards and reporting requirements.
ORS 459.335 Authorizes Metro to use solid waste revenues for various solid waste activities, including those directly related to reducing the environmental impact of solid waste.	ORS 459.413(2) Encourage use of household hazardous waste collection services.	ORS 268.317(5)-(7) and 268.318 Solid waste regulatory authority.
ORS 459.340 Implement the waste reduction program required by ORS 459.055.	ORS 459A.005 to 459A.008 Implement waste reduction program elements.	ORS 268.390 Functional planning authority.
		ORS 459.095 Local government compliance with the Metro region's solid waste management plan, the 2030 Regional Waste Plan.

Glossary of terms

These definitions are provided to assist the reader and should not be construed as policies, goals or practices of the Plan, or as amendments to the Metro Code.

Anaerobic digestion – Anaerobic digestion is the natural process in which microorganisms break down organic materials. In this instance, “organic” means coming from or made of plants or animals. Anaerobic digestion happens in closed spaces where there is no air (or oxygen). The initials “AD” may refer to the process of anaerobic digestion or the built system where anaerobic digestion takes place, also known as a digester.

Bins – In the 2030 Regional Waste Plan the word “bins” is used to refer to all equipment used to collect garbage, mixed recycling and glass recycling at single-family, multifamily and commercial sites.

Bulky waste – Furniture such as sofas, chairs, dressers, televisions, mattresses, appliances and larger pieces of carpet and carpet pad; can include items not mentioned in this list that are too large to fit into bins.

Business – Any entity of one or more persons, corporate or otherwise, engaged in commercial, professional, charitable, political, industrial, educational, or other activity that is non-residential in nature, including public bodies and excluding businesses whose primary office is located in a residence.

Collection area - A designated area to collect garbage and/or recyclable materials on a multifamily or commercial site; sites may

have one or more garbage and recycling collection areas.

Collection service – A service that provides for collection of solid waste or recyclable material, or both. OAR 340-90-010.

Communities of Color – For the purposes of this plan, Communities of Color are Native Americans, African Americans, Asian Americans and Pacific Islanders, Latinos and Hispanics, and immigrants and refugees who do not speak English well, including African immigrants, Slavic and Russian speaking communities, and people from the Middle East. From Metro’s Strategic Plan to Advance Racial Equity, Diversity and Inclusion” (June 2016).

Community – All individuals who live, work, play or pray in the Portland metropolitan region. From Metro’s Strategic Plan to Advance Racial Equity, Diversity and Inclusion (June 2016).

Community Benefit Agreement - A legally binding contract (or set of related contracts), setting forth a range of community benefits regarding a development project and resulting from substantial community involvement. From Julian Gross, “Community Benefits Agreements: Definitions, Values, and Legal Enforceability” Journal of Affordable Housing Vol. 17:1-2 Fall 2007/Winter 2008.

Compost – The controlled biological decomposition of organic material or the product resulting from such a process. OAR 340-90-010.

Conditionally exempt generator (CEG) – Small businesses that generate small amounts of hazardous waste, as defined by state and federal law.

Consumption – The using of a resource, product or material. In the 2030 Regional Waste Plan, “consumption” typically refers to the stage in the life cycle of a product where it is acquired and used, following production but prior to end-of-life management. However, “consumption” in the context of the consumption-based greenhouse gas emissions inventory has a slightly different meaning, referring to the purchase of goods and services by households and governments, as well as business purchases that are classified as capital or inventory formation (economic final demand).

Consumption-based greenhouse gas emissions inventory – An estimate of the quantity of greenhouse gases contributing to climate change that are associated with consumption (economic final demand). A consumption-based inventory is sometimes contrasted with a territorial inventory. A territorial inventory estimates the emissions that physically originate within a community (e.g., Oregon). In contrast, many of Oregon’s consumption-based emissions occur in other states and countries, in the course of producing goods and services for consumption in Oregon.

Contaminants – Items found in the mixed recycling bin that are not recyclable curbside.

Culturally responsive services – Services that have been adapted to maximize the respect of and relevance to the beliefs, practices, culture and linguistic needs of

diverse consumer populations and communities. Cultural responsiveness thus requires knowledge and capacity at different levels of intervention: systemic, organizational, professional and individual. Adapted from Protocol for Culturally Responsive Organizations 2014, Curry-Stevens, Reyes and the Coalition of Communities of Color.

Culture – A social system of meaning and custom that is developed by a group of people to assure its adaptation and survival. These groups are distinguished by a set of unspoken rules that shape values, beliefs, habits, patterns of thinking, behaviors and styles of communication. Maguire, John, Sally Leiderman, and John Egerton (2000). A Community Builder’s Tool Kit – 15 Tools for Creating Healthy, Productive, Interracial/Multicultural Communities. Claremont, CA: The Institute for Democratic Renewal and The Project Change Anti-Racism Initiative.

Curbside collection – Programs where recyclable materials are collected at the curb for single-family units and at onsite depots for multi-family units.

Diversity – The variance or difference amongst people. This variance includes race, ethnicity, gender, age, religion, nationality, language preference, socioeconomic status, disability, sexual orientation, gender identity and others. These differences are tied to a variety of other aspects of diversity such as experience, work styles, life experience, education, beliefs and ideas. Honoring these differences while upholding our value for respect is central to our diversity philosophy. Metro (2012). Diversity Action Plan.

End-of-life – The point at which a product or material is no longer useful to the person possessing it and is either discarded or abandoned.

End-use markets – Outlets for materials such as post-consumer paper, which are manufactured into a finished product or materials such as scrap tires that are incinerated to recover energy.

Equity – Metro’s working definition of equity reads: “Our region is stronger when all individuals and communities benefit from quality jobs, living wages, a strong economy, stable and affordable housing, safe and reliable transportation, clean air and water, a healthy environment and sustainable resources that enhance our quality of life.

We share a responsibility as individuals within a community and communities within a region. Our future depends on the success of all, but avoidable inequities in the utilization of resources and opportunities prevent us from realizing our full potential.

Our region’s population is growing and changing. Metro is committed with its programs, policies and services to create conditions which allow everyone to participate and enjoy the benefits of making this a great place today and for generations to come.” Metro’s Equity Strategy Advisory Committee (2014).

Extended Producer Responsibility – A mandatory type of product stewardship that includes, at a minimum, the requirement that the manufacturer’s responsibility for its product extends to post-consumer management of that product and its packaging. There are two related features of EPR policy: (1) shifting financial and management responsibility, with government oversight, upstream to the manufacturer and away from the public sector; and (2) providing incentives to manufacturers to incorporate environmental considerations into the design of their products and packaging. Product Stewardship Institute.

Franchise –The authority given by a local government (including Metro) to operate a solid waste and recycling collection service, disposal site, processing facility, transfer station or resource recovery facility. Often includes the establishment of rates by the local government.

Garbage – A general term for all products and materials discarded and intended for disposal.

Generator – A person who last uses a material and makes it available for disposal or recycling. OAR 340- 90-010.

Good Neighbor Agreement - Negotiated agreements between an industry operator with local communities to alleviate negative environmental and public health impacts associated with industry operations. Adapted from: “Evaluating the use of good neighbor agreements in environmental and community protection,” 2004. University of Colorado Law School.

Hauler – The private company that provides solid waste collection services.

Historically marginalized – A limited term that refers to groups who have been denied access and/or suffered past institutional discrimination in the United States and, according to the Census and other federal measuring tools, includes African Americans, Asian Americans, Hispanics or Chicanos/ Latinos and Native Americans. This is revealed by an imbalance in the representation of different groups in common pursuits such as education, jobs, housing, etc., resulting in marginalization for some groups and individuals and not for others, relative to the number of individuals who are members of the population involved.

Other groups in the United States have been marginalized and are currently

underrepresented. These groups may include but are not limited to other ethnicities, adult learners, veterans, people with disabilities, lesbian, gay, bisexual and transgender individuals, different religious groups and different economic backgrounds. University of California, Berkeley (2015). Berkeley Diversity – Glossary of Terms.

Household hazardous waste (HHW) or hazardous waste – Any discarded, useless or unwanted chemical materials or products that are or may be hazardous or toxic to the public or the environment and are commonly used in or around households. Residential waste that is ignitable, corrosive, reactive, or toxic. Examples include solvents, pesticides, cleaners, and paints.

Inclusion - Inclusion refers to the degree to which diverse individuals are able to participate fully in the decision-making process within an organization or group. While a truly “inclusive” group is necessarily diverse, a “diverse” group may or may not be “inclusive.” Metro (2012). Diversity Action Plan.

Local governments – For the purposes of this document, a local government is defined as a city or county within the Metro boundary. Metro is also a local government.

Low income – A term typically defined for a person or family based on annual median income and household size. The definition of what a low income is varies across federal and state agencies and the different programs they administer, such as housing and food assistance programs. The 2015 Equity Baseline Report produced for Metro recommends defining low income as having an income at or below 60% of the Portland metropolitan area’s median family income. Whenever this standard is not possible to use, the report recommends defining low income as being at or below 200% the federal poverty level, which is a measure of income

issued every year by the U.S. Department of Health and Human Services. From Equity Baseline Workgroup (2015), Equity Baseline Report. Part 1: A Framework for Regional Equity.

Low-income populations – People, families, households and neighborhoods with low average incomes. Because of current socioeconomic status patterns, there is overlap between low-income populations and communities of color. However, a focus on low-income individuals/households does not substitute for a racial/ethnic justice focus.

Material recovery facility (MRF) – A solid waste management facility that separates materials for the purposes of recycling from an incoming, source-separated or mixed solid waste stream.

Material recovery or recovery – A type of resource recovery that is limited to manual or mechanical methods of obtaining material from solid waste that still has useful physical or chemical properties and can be reused, recycled, or composted for some purpose. Material recovery includes obtaining material from solid waste that is used in the preparation of fuel, but excludes the extraction of heat content or other forms of energy from the material. Metro Code 5.00.010.

Materials management – An approach to reduce environmental impacts by managing materials through all stages of their life. Materials management identifies impacts and actions across the full cycle of materials and products as they move through the economy— from raw material extraction to product design and manufacture, transport, consumption, use, reuse, recycling and disposal.

Mixed waste – Solid waste containing a variety of recyclable and nonrecyclable material.

Multifamily – Apartment and condominium buildings with five or more units; may also include retirement communities, dormitories, moorages and mobile home parks.

Non-putrescible waste – Commercial, residential or industrial solid waste that does not contain food wastes or other putrescible wastes. Non-putrescible mixed solid waste (also called dry waste) includes only waste that does not require disposal at a municipal solid waste landfill (also referred to as a general purpose landfill), as that term is defined by the Oregon Administrative Rules. This category of waste excludes source-separated recyclables.

Product stewardship – The act of minimizing the health, safety, environmental and social impacts of a product and its packaging throughout all lifecycle stages, while also maximizing economic benefits.

The manufacturer, or producer, of the product has the greatest ability to minimize adverse impacts, but other stakeholders, such as suppliers, retailers and consumers, also play a role. Stewardship can be either voluntary or required by law. Product Stewardship Institute.

Putrescible waste – Solid waste (other than uncontaminated or only slightly contaminated cardboard and paper products) containing organic material that can be rapidly decomposed by microorganisms, and which may give rise to foul-smelling, offensive products during such decomposition or which is capable of attracting or providing food for birds and potential disease vectors such as rodents and flies.

Race – A social construct that artificially divides people into distinct groups based on characteristics such as physical appearance (particularly color), ancestral heritage,

cultural affiliation, cultural history, ethnic classification and the social, economic and political needs of a society at a given period of time. Racial categories subsume ethnic groups. Maurianne Adams, Lee Anne Bell and Pat Griffin, editors. *Teaching for Diversity and Social Justice: A Sourcebook*. New York: Routledge.

Racial equity – When race can no longer be used to predict life outcomes and outcomes for all groups are improved. Adapted from Government Alliance on Race and Equity (2015). *Advancing racial equity and transforming government: A resource guide to put ideas into action*.

Recovery – See material recovery.

Recovery rate – The percent of total solid waste generated that is recovered from the municipal solid waste stream.

Recyclable material – Recyclable material means material that still has or retains useful physical, chemical or biological properties after serving its original purpose(s) or function(s), and that can be reused, recycled, or composted for the same or other purpose(s). Metro Code 5.00.010.

Recycling – Any process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity. OAR 340-90-010, ORS 459.005.

Reuse – The return of a commodity into the economic stream for use in the same kind of application as before, without change in its identity. OAR 340-90-010, ORS 459.005.

Service level - The volume of garbage, mixed recycling and glass recycling service provided to single-family, multifamily or commercial sites. In some cases, it also includes yard debris and food waste collection services.

Signage - Signage refers to stickers, decals, posters and signs posted on bins or in collection areas that directs users on how, or what, to place in the bins.

Solid waste - All putrescible and non-putrescible wastes, including without limitation garbage, rubbish, refuse, ashes, waste paper and cardboard; discarded or abandoned vehicles or parts thereof; sewage sludge, septic tank and cesspool pumpings or other sludge; commercial, industrial, demolition and construction waste; discarded home and industrial appliances; asphalt, broken concrete and bricks; manure, vegetable or animal solid and semi-solid wastes, dead animals; infectious waste; and other such wastes, including without limitation cleanup materials, commingled recyclable material, petroleum contaminated soil, special waste, source-separated recyclable material, land clearing debris and yard debris. This term does not include: (1) Hazardous wastes; (2) Radioactive wastes; (3) Materials used for fertilizer, soil conditioning, humus restoration or for other productive purposes or which are salvageable for these purposes and are used on land in agricultural operations and the growing or harvesting of crops and the raising of fowls or animals, provided the materials are used at or below agronomic application rates; or (4) Explosives. Metro Code 5.00.010.

Solid waste management – Prevention or reduction of solid waste; management of the storage, collection, transportation, treatment, utilization, processing and final disposal of solid waste; recycling, reuse and material or energy recovery from solid waste; and facilities necessary or convenient to such activities. ORS 459.005. Also see “Waste reduction hierarchy.”

Source-separated material – Material that has been kept from being mixed with solid waste by the generator in order to reuse or recycle that material.

Sustainable, sustainability, sustainable practices – Using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environmental, economic and community objectives. ORS 184.421(4).

Waste generator types are defined as follows:

- Commercially-hauled residential waste – generated from single- and multifamily housing units and hauled to disposal facilities in rear, side or front loaders, drop boxes or self-dumping trucks.
- Self-hauled residential waste – generated from single- and multifamily housing units and hauled to disposal facilities in autos, vans, pickup trucks and trailers attached to small vehicles.
- Business waste – generated from retail and wholesale businesses, offices, food and lodging businesses, food stores, education institutions and service-related businesses.
- Industrial waste – generated from manufacturing businesses, the construction and demolition industry (but not loads containing construction waste materials), agriculture and other industrial businesses.
- Construction and demolition waste – generated from residential, business and industrial sources containing mostly bricks, concrete, gypsum wallboard, land clearing debris, roofing and tarpaper, wood, insulation and other building materials.

Waste prevention – Reducing the amount of solid waste generated or resources used, without increasing toxicity, in the design, manufacture, purchase or use of products or packaging. Waste prevention does not include recycling or composting.

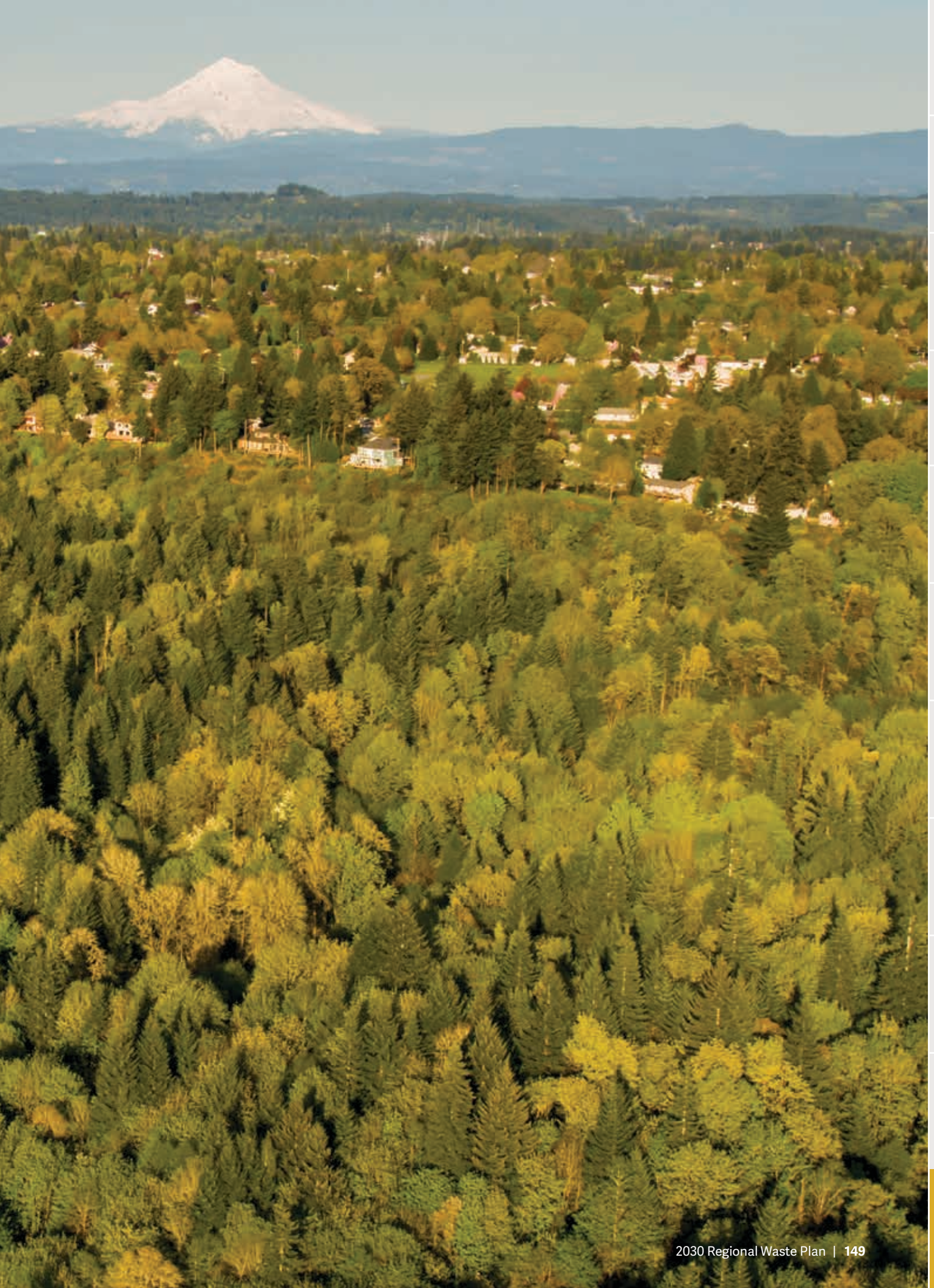
Waste reduction – A term used to encompass waste prevention, reuse and recovery; all practices that either prevent the generation of waste or divert it from landfill disposal.

Waste reduction hierarchy – An established state priority for managing solid waste in order to conserve energy and natural resources. The priority methods are as follows: reduce, reuse, recycle, compost, recover (energy), landfill.
ORS 459.015.

Waste stream – A term describing the total flow of solid waste from homes, businesses, institutions and manufacturing plants that must be recycled, burned or disposed of in landfills; or any segment thereof, such as the “residential waste stream” or the “recyclable waste stream.”

Wasteshed – Wastesheds are defined in Oregon law and, for the most part, correspond to individual Oregon counties. In the case of the greater Portland area, however, the “Metro wasteshed” includes all of Clackamas, Multnomah and Washington counties.

Yard debris – Vegetative and woody material generated from residential property or from commercial landscaping activities. Includes grass clippings, leaves, hedge trimmings, stumps and similar vegetative waste. OAR 340-90-010.





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