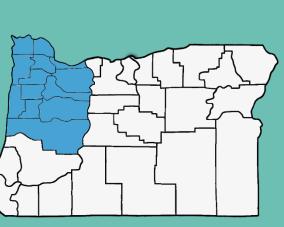
Sustainable Materials Management Plan Task Force

January 29. 2025



2025 SMMP TASK FORCE





AGENDA

9:00 am	Welcome
9:10 am	December Meeting Review
9:25 am	SMMP Subcommittee Outcomes: Guiding Questions Discussion
10:00 am	Solid Waste Management vs. Sustainable Materials Management, DEQ
10:10 am	Break
10:30 am	Subcommittee Breakout Groups
11:30 am	SMMP Task Force Communications
11:45 am	Next Steps and Action Items
12:00 pm	Adjourn







IN-PERSON HOUSEKEPING

- Emergency Exit: Please exit the room to the left and access the stairs through the door marked "Exit Only." Note: the door locks behind you.
- Restrooms: Exit the room to the right and the restrooms are located on the left side.
- Phones: Silence Phones and step out of the room if you need to use your phone.
- Questions: Use name tents to ask questions or make a comment.
- Discussions, questions, and comments will be taken from SMMP Task Force members. Guests, please use index cards and we will address comments as time allows.
- Wi-Fi: Open under Broadway Commons (no password).







VIRTUAL HOUSEKEEPING

- Recording is ON: for notes and public viewing on project website
- Mute: Please keep your volume off unless you are speaking
- Chat Box: Task Force members can use the chat function to ask questions or for tech help.
- Questions: Task Force members can use the raise hand feature for the facilitators to know if you have questions or comments.
- Public Attendees: Guests are muted and cannot use the chat. Please email Sean McGuire at sean.mcguire@bentoncountyor.gov with questions or comments.







GUIDING PRINCIPLES

- The work of the SMMP Task Force is regional in scope because impacts of waste management, positive and negative, are regional in nature and do not follow jurisdictional boundaries.
- The SMMP Task Force is working towards solutions rooted in sustainable materials management. (not only solid waste management).
- The SMMP Task Force will consider a broad range of sustainable materials management solutions.
- The Task Force will prioritize solutions that create, maintain, or improve access to the benefits sustainable materials management system and reduce negative impacts.
- The SMMP Task Force will use a systems change approach to regional solutions.



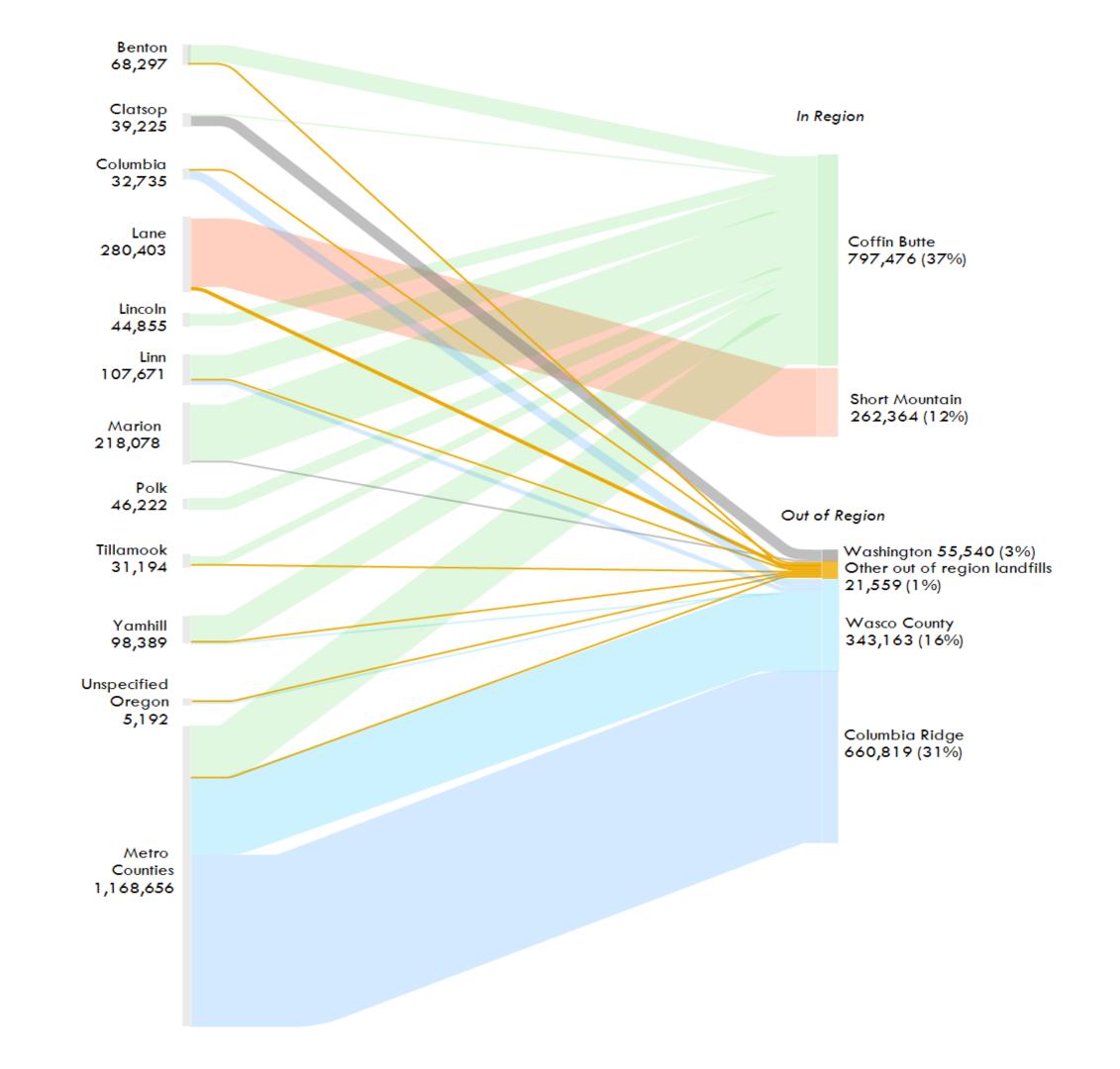




RESEARCH RECAP: WASTE FLOWS IN NW OR

- 48% of regional waste transported out of region.
- 37% of regional waste including Metro, delivered to Coffin Butte.

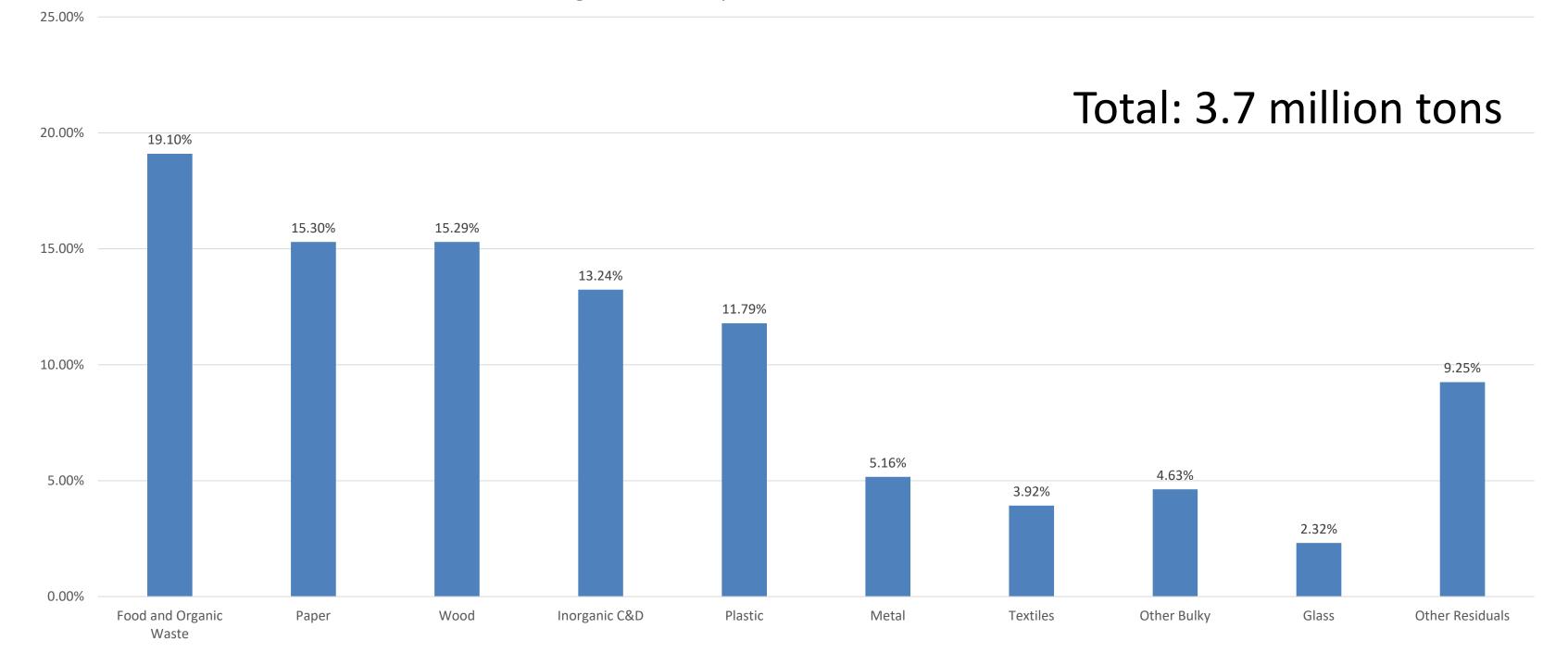




COMPOSITION OF MUNICIPAL DISPOSAL:

The largest three fractions of MSW are organics, plastics, and paper

Oregon Waste Composition

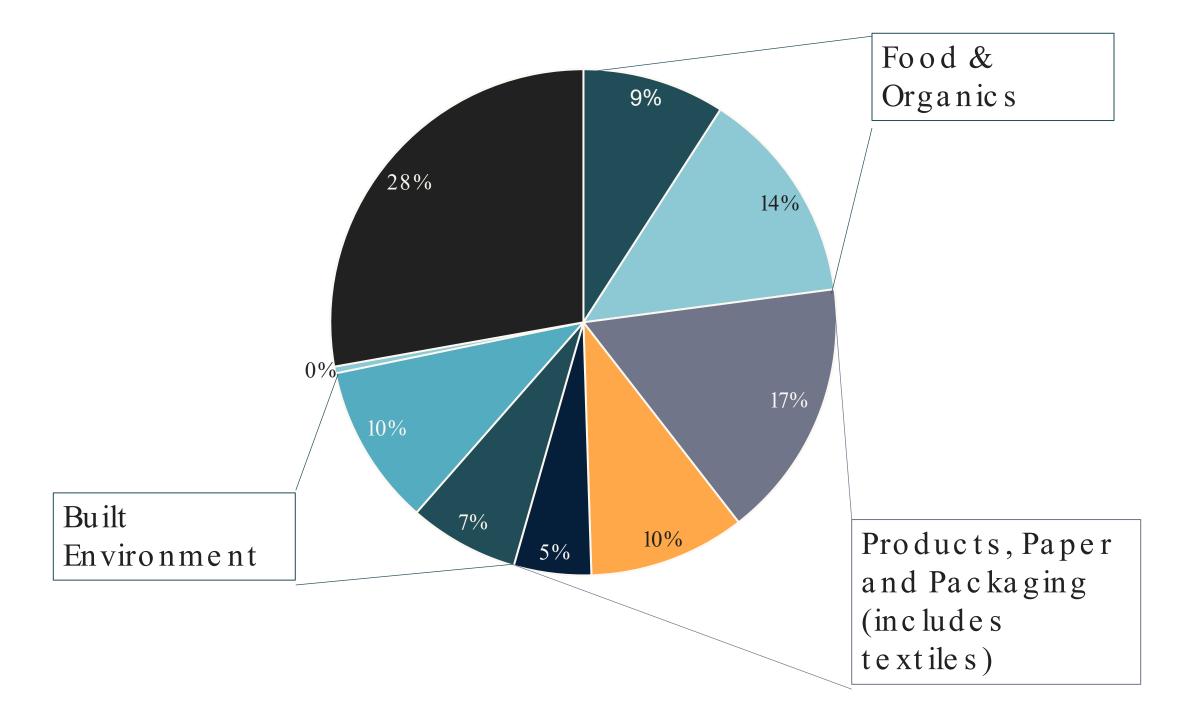


RECOVERY POTENTIAL

Highest Best Use Potential

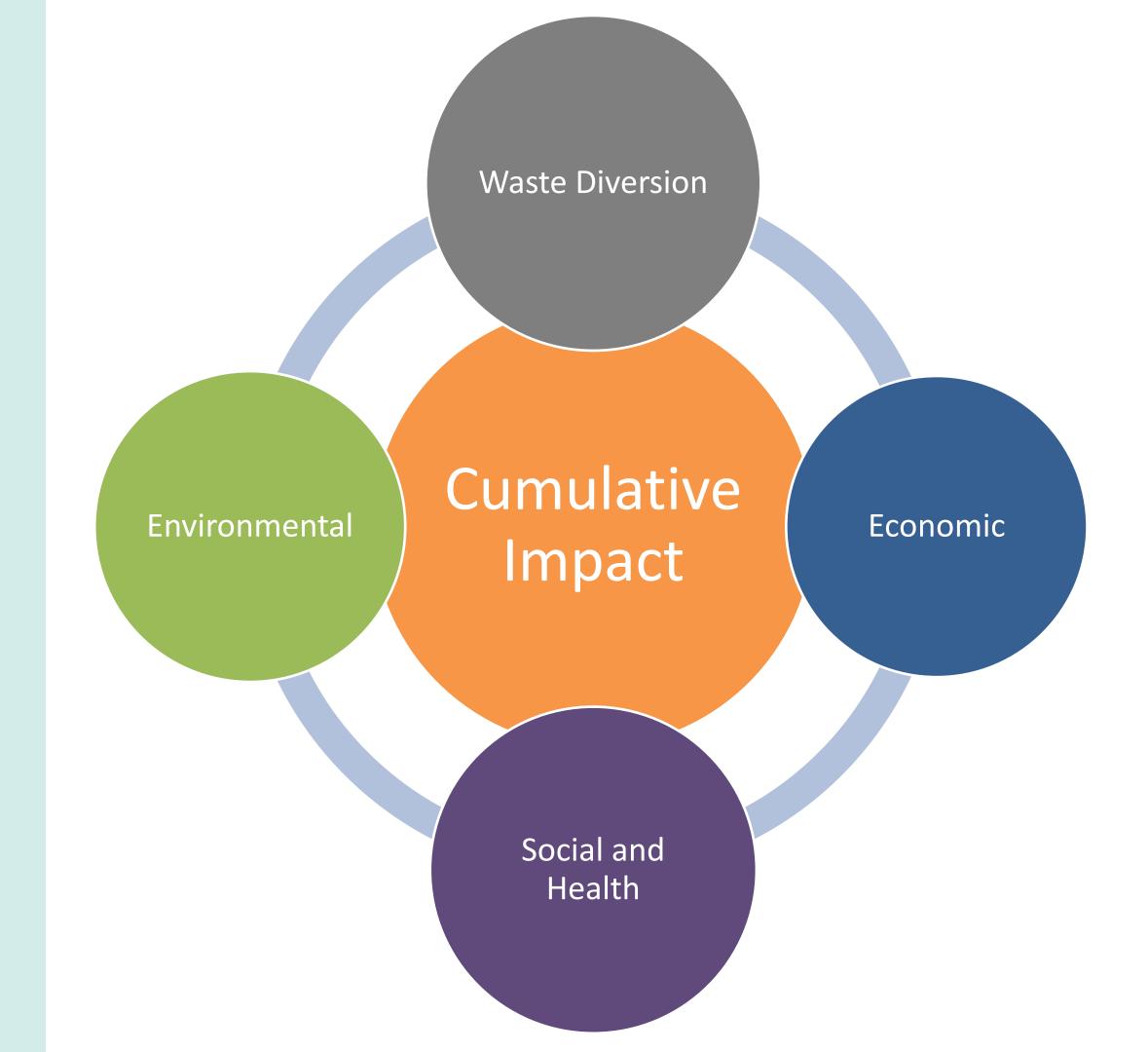


- Compost / Digestion
- Curbside Recyclable (PPP)
- Other Recyclable
- Product & Package Reuse
- C&D Reuse
- C&D Recycle
- Hazardous
- Disposal





BENEFITS & CONSEQUENCES FRAMEWORK







BENEFITS & CONSEQUENCES FRAMEWORK

Benefits & Consequences

Waste Diversion

- What is the potential to divert waste from landfill?
- What is the potential to prevent waste generation?
- Are the materials diverted/prevented a strategic priority (i.e. they are a big proportion of the waste stream or pose greatest threats to environmental or human health)?

Economic Outcomes

- Do economic benefits (such as job creation, economic development, or reduction of risks or clean up costs outweigh the costs (such as capital costs, operational costs, and potential future risks)?
- Is there a potential to send long term market signals that would change business or consumer behavior (such as reducing packaging or increase reuse)?

Human and social health

- What risks are posed to human health, and how do those risks compare with alternatives?
- Will all communities and groups have access to the benefits? Will any communities experience unique burdens?

Environmental health

- What are the benefits or risks for air quality, water quality, soil health?
- What is the potential to reduce the demand for virgin materials (through recovery, reuse, and recycling?
- Are there benefits for critical or sensitive materials or habitats?
- What are the associated climate emissions (relative to alternatives)?

BENEFITS & CONSEQUENCES FRAMEWORK

Benefits & Consequences

Waste Diversion

- What is the potential to divert waste from landfill?
- What is the potential to prevent waste generation?
- Are the materials diverted/prevented a strategic priority (i.e. they are a big proportion of the waste stream or pose greatest threats to environmental or human health)?

Economic Outcomes

- Do economic benefits (such as job creation, economic development, or reduction of risks or clean up costs outweigh the costs (such as capital costs, operational costs, and potential future risks)?
- Is there a potential to send long term market signals that would change business or consumer behavior (such as reducing packaging or increase reuse)?

Human and social health

- What risks are posed to human health, and how do those risks compare with alternatives?
- Will all communities and groups have access to the benefits? Will any communities experience unique burdens?

Environmental health

- What are the benefits or risks for air quality, water quality, soil health?
- What is the potential to reduce the demand for virgin materials (through recovery, reuse, and recycling?
- Are there benefits for critical or sensitive materials or habitats?
- What are the associated climate emissions (relative to alternatives)?



SUBCOMMITTEE MATRIX

CURRENT STATE

- Background
- Context
- Conditions
- Glossary & Definitions
- Examples and Case Studies

FUTURE STATE

- Desired Outcomes
- Success
- Tracking

Potential Strategies

- Public Sector
- Private Sector
- Community and NGO Initiatives

Benefits and Consequences

- Waste Diversion
- Economic Impacts
- Social and Human Health
- Environmental Impacts

Governance and operations

- Who needs to act?
- How can it be paid for?
- What is the next step?
- Why hasn't this happened already?

Recommendations

- What did we learn?
- Which strategies hold the most potential?





SUBCOMMITTEE GROUPS

Food / Organics

Built Environment Products & Packaging

Regional Solid Waste Management

- Intros
- Overview of Matrix relevant to Topic
- Current State brief (RRS)
- What else do you want to know for the CS?
- Lifecycle discussion
- Mapping out Subcommittee meetings and workflow

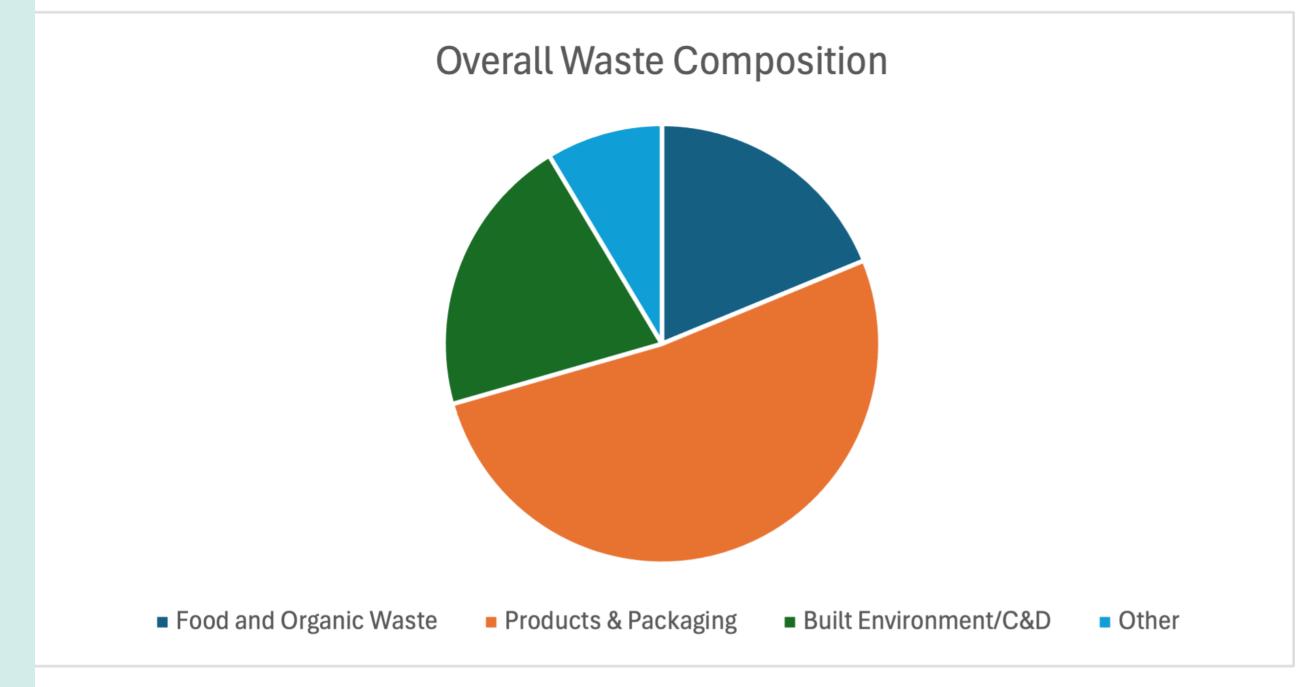
Non-Subcommittee TF members can join their topics of interest. Virtual TF members can join the topic breakout rooms to participate in the discussion.







SHARE OF WASTE COMPOSITION BY SUBCOMMITTEE



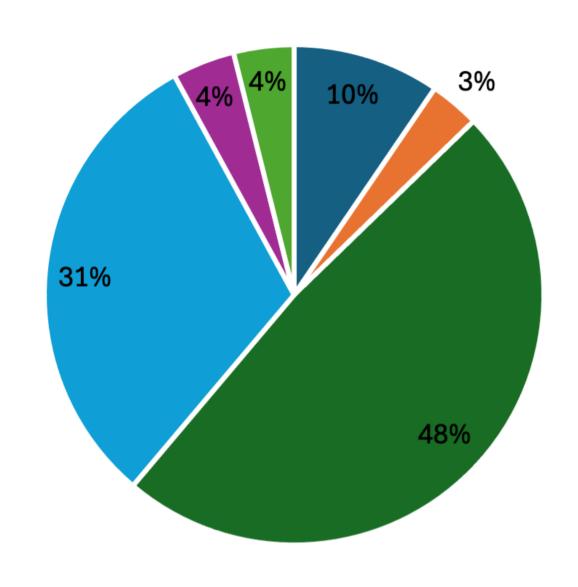






FOOD AND ORGANICS

Further Breakdown of Organics Composition



- Yard Debris Leaves and Grass
- Yard Debris All Prunings and Stumps
- All Edible Food
- All Non-Edible Food
- Compostable Other Organics
- Non-Compostable Other Organics





FOOD AND ORGANICS

Name	Description	Action Type	Diversion Considerations	Examples
Composting Culture Initiative	Delivers a series of innovative community programs designed to educate, engage, and empower Chicagoland residents. These initiatives bring the concepts of sustainable farming and waste management to life in tangible, accessible ways.	 Public Policy / Education and Outreach 	 Educating residents and businesses about the importance of food waste recycling Implementing innovative waste management solutions tailored to urban environments Fostering a culture of sustainability through community engagement and participatory programs 	• Chicago, IL
Food Recovery Mandate	Bans food scraps from landfills, requiring residents, businesses, and institutions to compost, donate food, or recycle organics. This supports curbside collection, backyard composting, and food donation to reduce waste and emissions.	• Policy	 Bans food scraps from landfills statewide Mandates that waste haulers offer curbside collection of food scraps and recyclables. Encourages food donation by businesses to reduce edible food waste. Promotes backyard composting through education and tools. 	• <u>Vermont</u>
Food Rescue, Community Gardens, and Composting	Non-profit/volunteer recovery and redistribution of edible foods people experiencing food insecurity.	Community Initiative	 Highest level of waste hierarchy (reduce/reuse) High priority material High community benefits Challenging logistics to scale 	• Food Rescue US

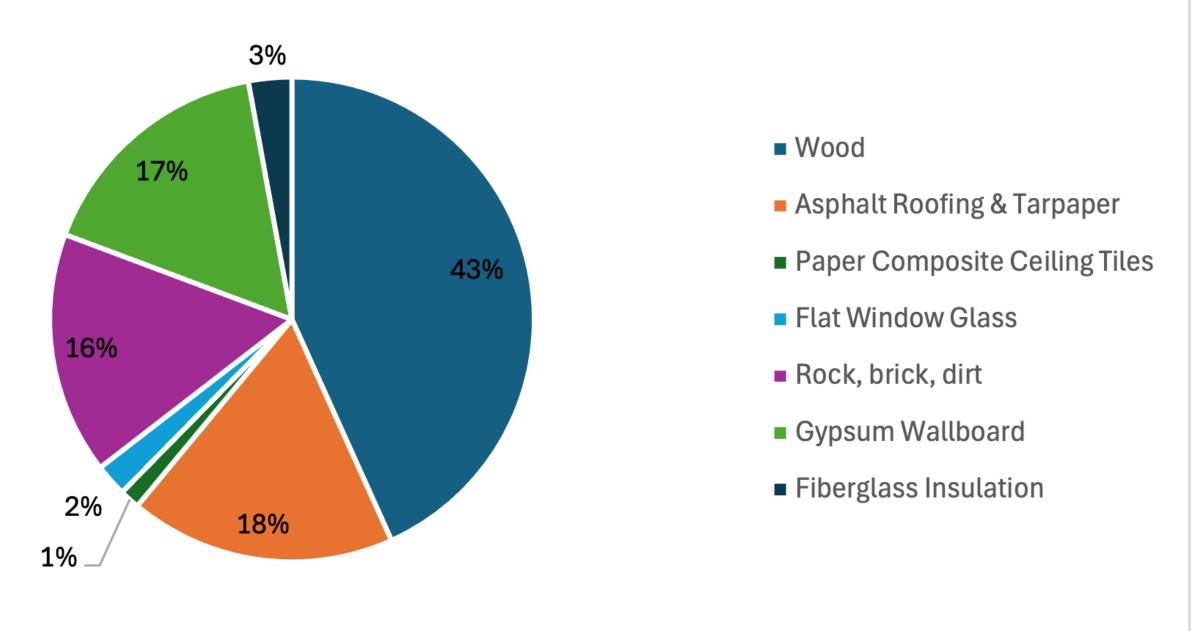
FOOD AND ORGANICS

Name	Description	Action Type	Diversion Considerations	Examples
Waste to Energy (Food and waste water treatment)	Use of anaerobic digestion to convert organic food waste to energy. Can also be used for other organic waste like yard waste and waste water treatment.	Public Policy	 Addresses a high priority material in the waste stream. Produces and energy source (though one with high GHG impacts). 	• Columbia Bio Gas
Dynamic Pricing	Reduced pricing for near-expiration items, to increase sales and reduce waste.	Private Sector Innovation	 Addresses a high priority material in the waste stream It raises social awareness and encourages mindful consumption 	• <u>Wasteless</u>
Biochar Production	Converts excess organic materials into a stable form of carbon that can be used to improve soil fertility, reduce greenhouse gas emissions, and sequester carbon for long-term environmental benefits.	Public or Private Sector Initiative	 Addresses a high priority material Energy intensive, and potential for contamination 	 Minneapolis, MN OSU Research
Home Composting Technology	Technology that makes home composting easy and can be used in multifamily living environments	 Public / Private Sector Partnership 	 Addresses a high priority material Expensive, but can be implemented with policy support 	<u>City of Tacoma partnership</u> <u>with Mill</u>



BUILT ENVIRONMENT

Built Environment Composition







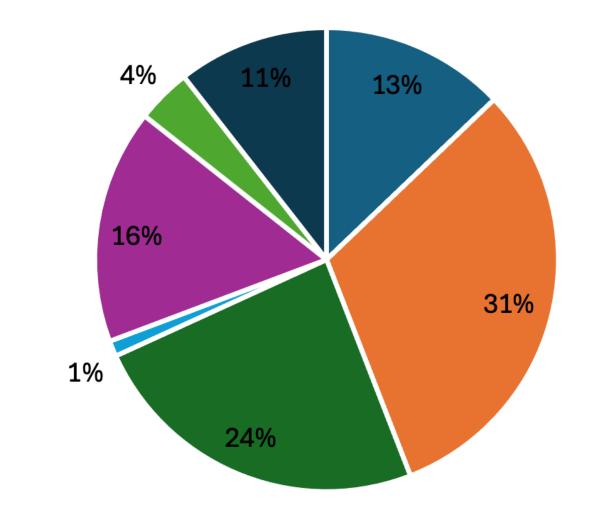
BUILT ENVIRONMENT

Name	Description	Action Type	Diversion Considerations	Examples
Deconstruction Ordinance	Require or incentivize building deconstruction and recovery of construction and building materials.	• Policy	 High potential impact on tonnage Highly visible to the public Potential for job creation and new business opportunity 	 Portland, OR Boulder, CO Boulder County, CO Vancouver, Canada
Premium, paid collection services	Business model that charges a premium for doorstep collection of materials that are not collected with regular curbside service.	Private Sector Innovation	 Can address challenging materials like large appliances (couches, dressers, etc.) Processing and end markets may be difficult to verify 	• Junk King
Job Site C&D Recycling Plan	A reuse, repurposing, and recycling plan can recover significant materials, helping builders reduce waste, conserve resources, lower disposal costs, save on new materials, earn revenue from recovered materials, and stay competitive on bids.	• Education	 Increased collection and self-hauling of recovered material to a recycling and/or solid waste processing facility Must hire a salvage company to recover job-site material that is reusable; or Must hire a recycling service provider. 	• South Carolina
C&D Solid Waste Management Plan	Solid Waste management plan that manages construction and demolition (C&D) waste by promoting reduction, reuse, recycling, and recovery	Public Planning	 Designs buildings for deconstruction and selecting reusable materials Establishes facilities to process C&D Waste and encourages market development for materials Implements recycling mandates and tracking systems for compliance 	• Connecticut



PRODUCTS AND PACKAGING

















Metal



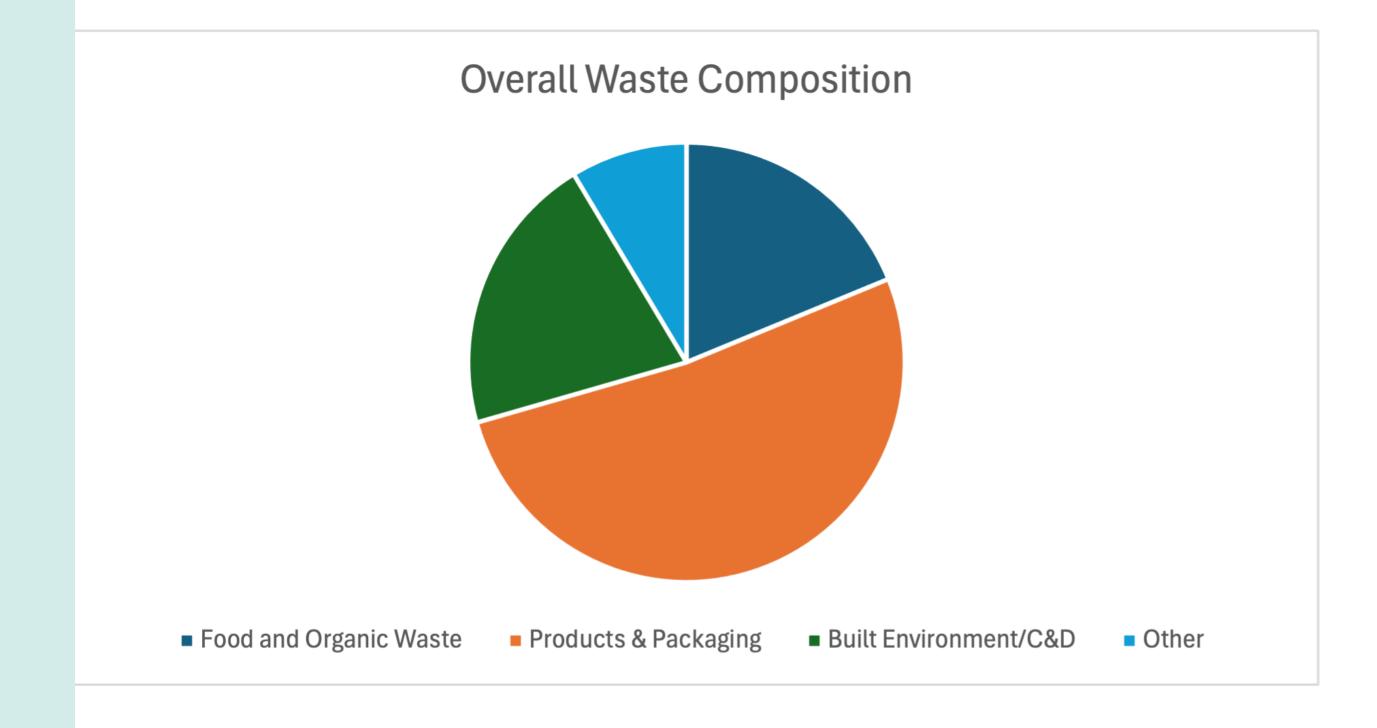


PRODUCTS & PACKAGING

Name	Description	Action Type	Diversion Considerations	Examples
Textile Landfill Outreach	Provides guidance on textile recovery and emphasizes that clean and dry textiles should not be disposed of as trash	Public Education	 Providing tools to help residents find textile collection bins, donation centers, and recyclers. Local outreach, including posters, flyers, and community events to raise awareness about textile recovery. 	• <u>Massachusetts</u>
Share and repair communities	Tool libraries, repair cafes, and zero waste advocacy	Community Initiative	 Highest level of waste hierarchy (reduce/reuse) Addresses some challenging materials (such as power tools with batteries). High community benefits. Challenging fore rural/remote communities. 	 South King Tool Library (WA) Portland Repair Cafes
Premium, paid collection services	Business model that charges a premium for doorstep collection of materials that are not collected with regular curbside service.	Private Sector Innovation	 Can address challenging materials such as plastics and white goods. Processing and end markets may be difficult to verify. 	• <u>Ridwell</u>
Reuse Ordinance	Require reusable food service ware in restaurants and cafeterias	• Policy	 Low impact on tonnage of waste. Highly visible to public. Addresses a challenging material stream. Diverts Single use food service ware and packaging. 	• Berkeley, CA
Public Purchasing Policy	Prohibit purchasing of single use products by public entity. AND/OR Require public contracts to demonstrate waste reductions efforts	• Policy	 Likely low impact on tonnage of waste. Highly visible to public. Can help stimulate markets and foster waste reduction efforts. 	 Portland, OR Boulder, CO



REGIONAL WASTE

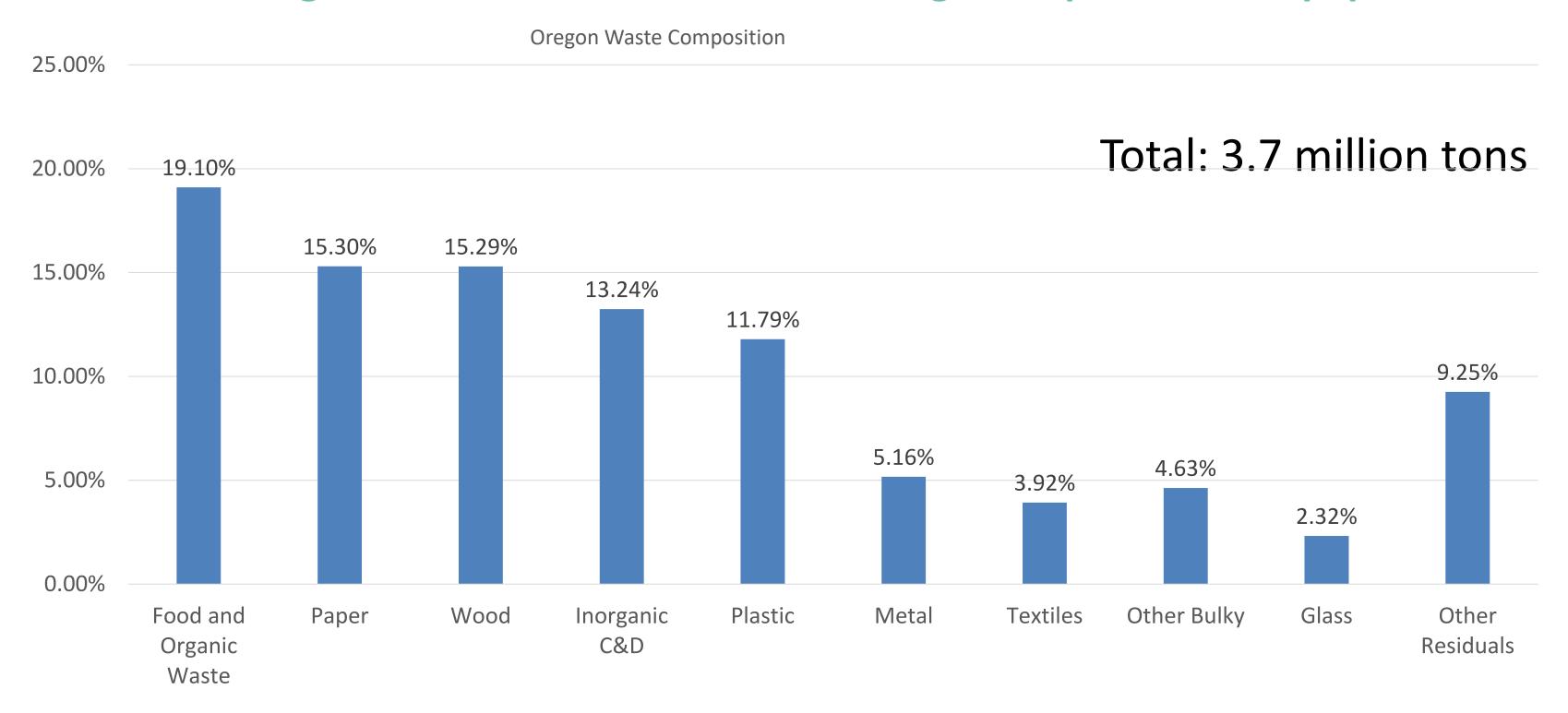






COMPOSITION OF MUNICIPAL DISPOSAL:

The largest three fractions of MSW are organics, plastics, and paper



REGIONAL WASTE

Name	Description	Action Type	Diversion Considerations	Examples
Mixed Waste MRF	The facility uses advanced technologies, including optical sorters and mechanical separators, to recover recyclable materials directly from mixed municipal solid waste. This innovative approach enhances recycling rates and reduces landfill reliance in the region.	Private Sector Innovation	 The facility uses advanced optical and mechanical sorting technologies to extract recyclables like plastics, metals, and paper directly from mixed waste, increasing diversion rates. Processing up to 1,000 tons of waste daily enables the facility to handle large-scale municipal waste while prioritizing diversion. 	• Republic Services
Juno Clave	This is a specialized system that sanitizes and separates waste materials like paper, plastics, metals, and food. These recovered materials are then returned to the economy for reuse. Juno's technology allows previously non-recyclable materials to be processed, contributing significantly to waste diversion and resource recovery.	Private Sector	 The ability to separate recyclable materials even when they have coatings or food contamination. The process recovers paper fibers, which can be repurposed into new products. By achieving up to 90% diversion, the facility contributes to sustainability by reintroducing materials into the circular economy. 	 Juno Technology Georgia Pacific
Clean Lane Resource Recovery Facility	This facility focuses on waste diversion through recycling, anaerobic digestion, and waste-to-energy technologies. The facility aims to reduce landfill dependency by converting waste into useful products	Public Private Partnership	 This facility reduces landfill use by separating organic and inorganic, sorting recyclables and recovering materials such as metals and paper and digesting the organic fraction to generate RNG. The facility emphasizes resource recovery, ensuring value is captured from MSW otherwise destined for landfills 	CleanLane Resource Recovery Facility
Advocacy	Non-profit and community-based organizations focused on waste reduction.	Community Initiative	 Can address a wide range of issues Potential for high levels of community engagement and education. 	 Waste Free Advocates Zero Waste McMinnville



SMMP TALKING POINTS





What is the SMMP Task Force

- The SMMP Task Force is a regional collaboration intended to identify opportunities to reduce waste and improve the recovery of valuable materials through sustainable materials management. The Task Force includes government employees, non-profit groups, and technical experts throughout northwest Oregon with experience and expertise in sustainable materials management.
- The Task Force has no official decision-making powers and seeks consensus. The Task Force will deliver a set of recommendations for consideration by governments, community members, and businesses that have the authority, interest, and resources to act on Task Force recommendations through the SMMP.

What is Sustainable Materials Management?

• In its 2050 Vision and Framework for Action, the Oregon Department of Environmental Quality shifted from "waste management" to a "materials management" approach. A waste management approach focuses on materials that have been thrown in the trash. In contrast, a sustainable materials management approach considers the entire life of materials from resource extraction to the design of products, transportation, use (and reuse), and end of life. A sustainable materials management approach seeks to make the best use of materials and to decrease impacts on human and environmental health through the full life cycle of materials.

What is an SMMP?

• A Sustainable Materials Management Plan (SMMP) can include many types of actions, such as public policies, community organizing and outreach, or business and economic development. For the purposes of the SMMP Task Force, the SMMP will include recommended interventions and solutions that will address impactful materials found in the waste system, which are building materials, food and organics, and products and packaging, in addition to regional waste management approach. The interventions and solutions will take human health and equity, environmental health, and economic development into account.

Why do we need a task force?

• Benton County recognizes that a sustainable materials management approach will have a greater impact at a regional scale. Benton County is home to the Coffin Butte Landfill, which accepts materials from many other counties. By engaging other counties in sustainable materials management planning, the region can decrease human and environmental impacts of materials management throughout the region.

How can I get involved?

• You can find meeting materials, reports, and relevant information at the SMMP Task Force website found at https://boc.bentoncountyor.gov/smmp-task-force. You will also find contact information to submit your perspectives and suggestions.

Thank You!

Next SMMP Task Force Meeting Wednesday, March 19, 2025

