

Plan Before the Ban

Evaluate to Get it Straight

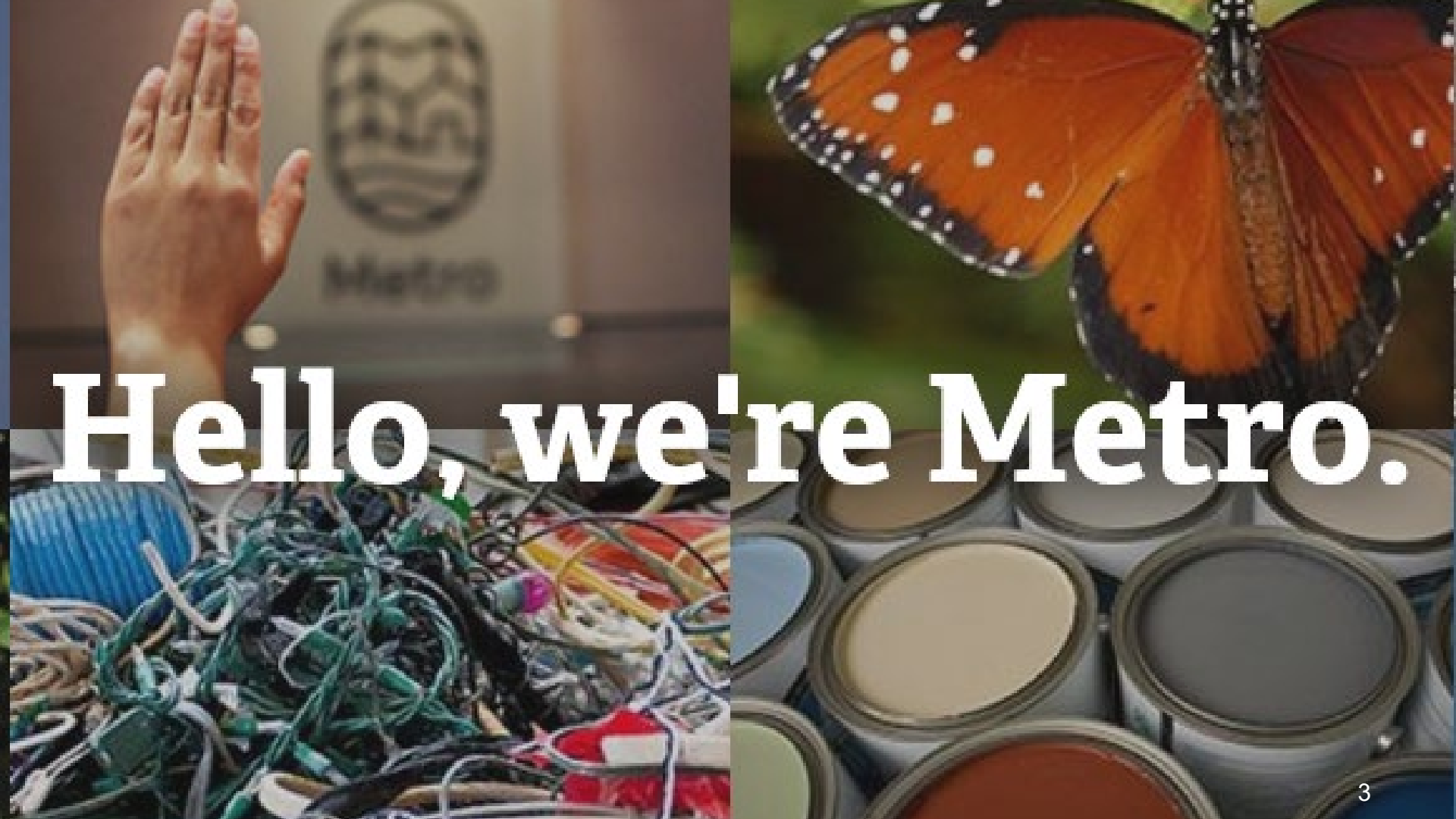
U.S. EPA Sustainable Materials Management
Web Academy Webinar

February 21, 2019



Overview

- Food Scraps Policy
- Plan Before the Ban
 - Generation Estimation Methodology
- Evaluate to Get it Straight
 - Evaluation System
 - Food Service Sector Characterization Study

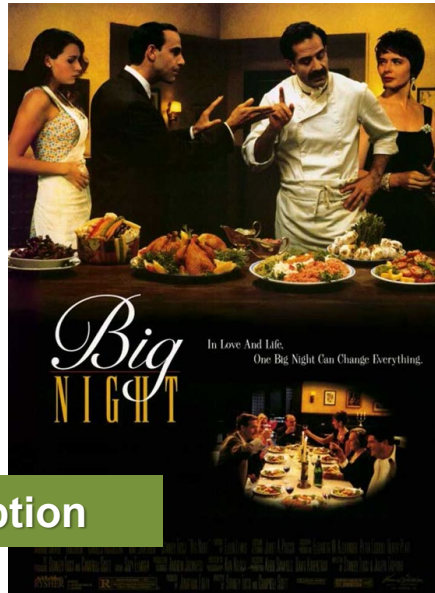


Hello, we're Metro.

Metro Food Waste Policy

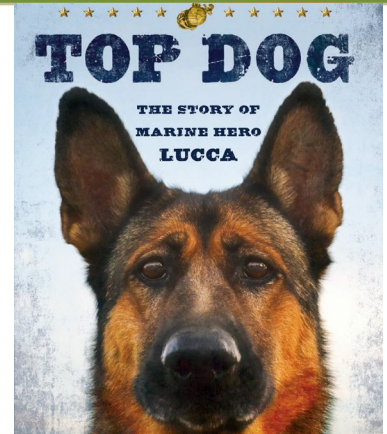
A Short History: The Hollywood Version

History



Council Adoption

Why Food Scraps?

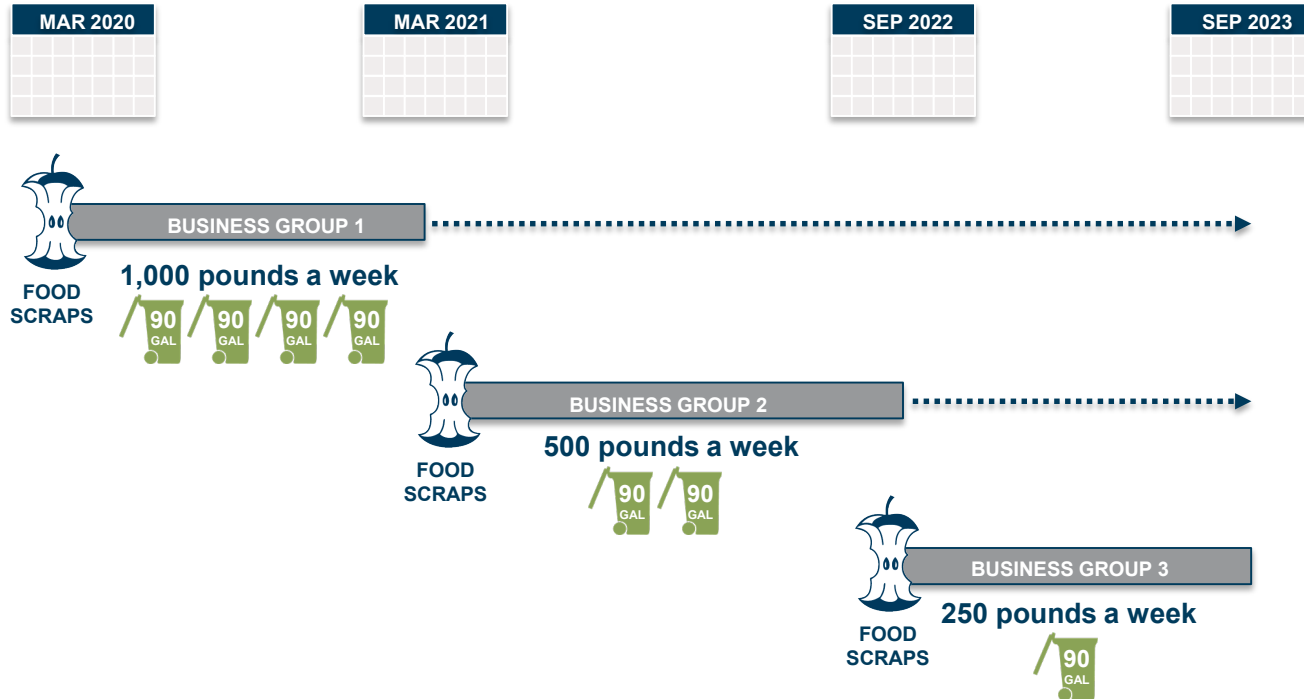


Food Waste Collection Requirement

- Ordinance 18-1418: requires local governments in the region to adopt mandatory commercial food scrap program by July 2019.
- Resolution 18-4864: commercial food scraps disposal prohibition legislation to Council for consideration in December 2019.



Implementation Timeline



Plan Before the Ban

How we cooked up
some numbers



Recipe: Food Scraps Generation Estimation

- Ingredients from available sources
 - NAICS codes
 - North American Industry Classification System
 - QCEW data
 - Quarterly Census of Employment and Wages
 - TPEPY factors
 - Tons per employee per year
- Yield
 - Food Waste Generation by Business Type

NAICS Codes

North American Industry Classification System

NAICS Range	Sector
721110 - 721120	Accommodations
611110 - 611310	Education
722310 - 722515	Food Service
424440 – 452910	Grocery
622110 - 623311	Health Care
922140 & 311111 – 312140	Other

QCEW Data

Quarterly Census of Employment and Wages

- Business Specific Information
 - NAICS Code
 - Business name and address
 - Total number of employees

TPEPY Factors

Tons-per-employee-per-year basis by business type

NAICS Code	TPEPY Rate
Accommodation	0.60
Education	0.15
Food Services	1.38
Grocery	2.00
Health Care	0.15
Other - Correctional Facilities	0.85
Other - Food Manufacturers	0.85

Food Waste Generation by Business Type

1. Identify business by NAICS Code
2. Match NAICS to QCEW data to identify number of employees
3. Multiply the number of employees by the appropriate TPEPY

Annual estimated tons food waste generated by business type

NAICS Code	Business Name	QCEW: # Employees		TPEPY		Generation Estimate
445110	Good Food Store	122	X	2.00	=	244 tons per year

Evaluate to Get it Straight

Data analysis to reach a goal



Food Scraps Evaluation System

Compliance monitoring
Performance monitoring
Evaluation of effectiveness



Compliance

- Compliance determined at site visit
 - 100% of non-participating businesses
 - 20% of participating businesses
- Goal
 - 100% of businesses in each Group have met the conditions for compliance by the end of the implementation period



Performance

- Observable Indicator
 - Tons recovered
- Evidence that indicates performance
 - Compare estimated recovery rate to actual recovery rate
- Goal
 - Collect 50% of estimated tons generated by businesses in each Group at the end of the implementation period



Food Scraps Evaluation Database

NAICS Code	Business	Estimated Pounds Per Week			Compliance	Donation	Prevention
		Group 1	Group 2	Group 3			
445110	Great Grocery	1220			X	X Food Bank	X Measurement
722513	Joes Diner			375			X Repurposing
622110	Hospital		775		X	X Pantry	

Compliance and Performance Report Sample

Quarterly report for Metro jurisdiction

2018 quarter 3

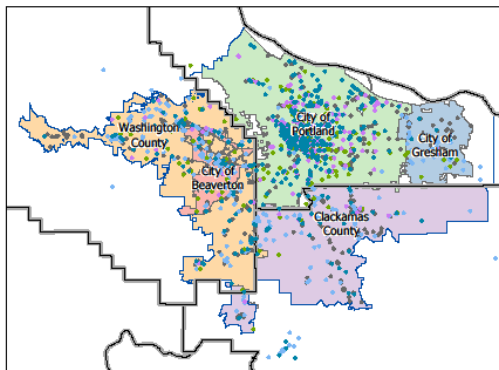
Number of new businesses this quarter: 3,253

Businesses in compliance

- Group 1 (515)
- Group 2 (269)
- Group 3 (281)
- Group 4 (410)

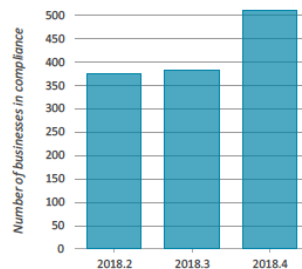
Businesses under requirement not in compliance (551)

- County boundary
- Metro boundary jurisdictions
- City of Beaverton
- City of Gresham
- City of Portland
- Clackamas County
- Washington County



Compliance over time

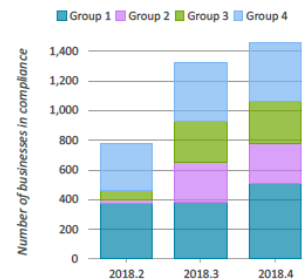
Businesses under regulation



Number of current waivers: 0

Number of expired waivers: 0

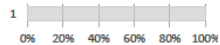
All businesses



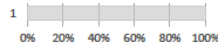
Diversification measures

Share of businesses under requirement this quarter that:

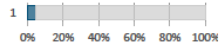
Have prevention measures



Have food donation program



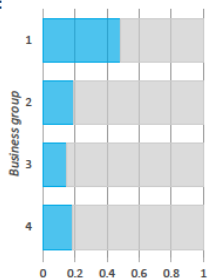
Have ag donation program



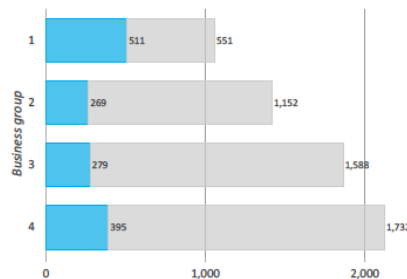
Businesses outside of Metro jurisdiction shown in map for verification but not included in statistics

Businesses in compliance this quarter

Share of businesses



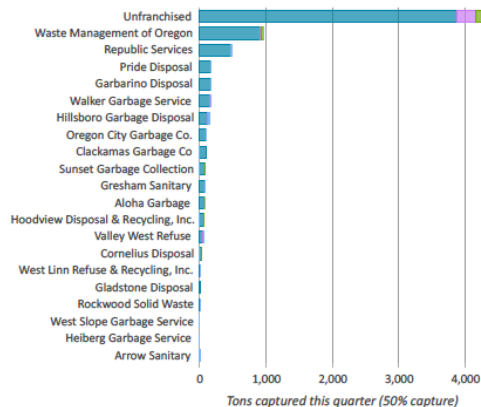
Number of businesses



T:\QCEW_17072_organics_CRM\foodscrap_project.aprx: Quarterly_Metro_report-map series

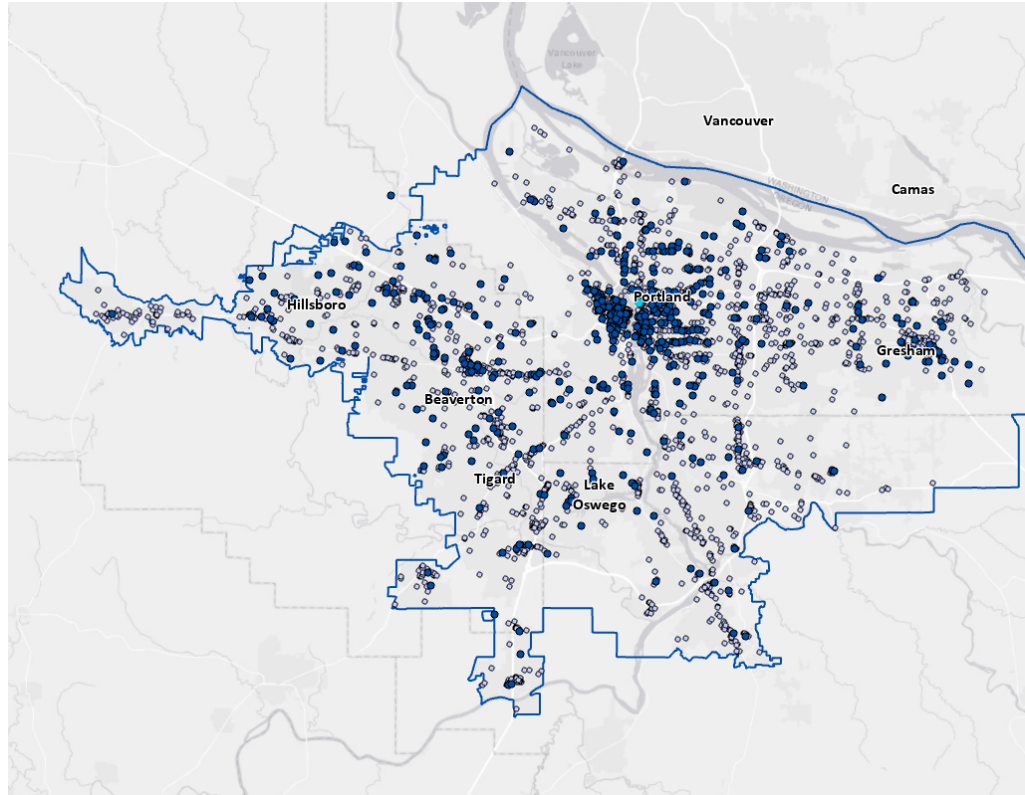
Tons captured by hauler

Group 1 Group 2 Group 3 Group 4



Tons captured this quarter (50% capture)

Generator Information



4 Food scrap producing businesses (1)

[OREGON CONVENTION CENTER](#)

Food scrap producing businesses - OREGON CONVENTION CENTER

Business name	OREGON CONVENTION CENTER
Address	777 NE MARTIN LUTHER KING
City	PORTLAND
State	OR
County	Multnomah
ZIP	
Metro business ID	fscrp10001923
Jurisdiction ID	1964
State ID	000133051500009
NAICS	722310
# of employees	206
Employee conversion rate	0.6773
Equivalent FTE	140
Food generation rate	1.38
Tons per week	3.715385
Food scrap bins present	0
Has adequate service	1
Tons this quarter	48.3
Tons captured	24.15
Tons not captured	24.15
Hauler Name	Waste Management of Oregon
Service notes	
Has prevention measures	0
Donates scraps	0
Farm/ Ag use	0
Compliance waiver	0
Waiver expiration	<Null>
Reason for waiver	
Date of notice of requirement	<Null>
Compliance group	1
Data source	Portland
Sector	Contractors

Refinement

Verify and adjust for
continuous
improvement



Food Services Sector Waste Characterization Study



Questions

Holly Stirnkorb

Holly.Stirnkorb@oregonmetro.gov

February, 2019

