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?

TOP DOG
THE STORY OF MARINE HERO LUCCA
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

BUSINESS GROUP 1
1,000 pounds a week
FOOD SCRAP

BUSINESS GROUP 2
500 pounds a week
FOOD SCRAP

BUSINESS GROUP 3
250 pounds a week
FOOD SCRAP

MAR 2020
MAR 2021
SEP 2022
SEP 2023
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

<table>
<thead>
<tr>
<th>NAICS Range</th>
<th>Sector</th>
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</thead>
<tbody>
<tr>
<td>721110 - 721120</td>
<td>Accommodations</td>
</tr>
<tr>
<td>611110 - 611310</td>
<td>Education</td>
</tr>
<tr>
<td>722310 - 722515</td>
<td>Food Service</td>
</tr>
<tr>
<td>424440 – 452910</td>
<td>Grocery</td>
</tr>
<tr>
<td>622110 - 623311</td>
<td>Health Care</td>
</tr>
<tr>
<td>922140 &amp; 311111 – 312140</td>
<td>Other</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>TPEPY Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>0.60</td>
</tr>
<tr>
<td>Education</td>
<td>0.15</td>
</tr>
<tr>
<td>Food Services</td>
<td>1.38</td>
</tr>
<tr>
<td>Grocery</td>
<td>2.00</td>
</tr>
<tr>
<td>Health Care</td>
<td>0.15</td>
</tr>
<tr>
<td>Other - Correctional</td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>0.85</td>
</tr>
<tr>
<td>Other - Food Manufacturers</td>
<td>0.85</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Business Name</th>
<th>QCEW: # Employees</th>
<th>TPEPY</th>
<th>Generation Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>445110</td>
<td>Good Food Store</td>
<td>122</td>
<td>2.00</td>
<td>244 tons per year</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>Business</th>
<th>Estimated Pounds Per Week</th>
<th>Compliance</th>
<th>Donation</th>
<th>Prevention</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Group 1</td>
<td>Group 2</td>
<td>Group 3</td>
<td></td>
</tr>
<tr>
<td>445110</td>
<td>Great Grocery</td>
<td>1220</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X Measurement</td>
</tr>
<tr>
<td>722513</td>
<td>Joes Diner</td>
<td></td>
<td></td>
<td>375</td>
<td></td>
</tr>
<tr>
<td>622110</td>
<td>Hospital</td>
<td></td>
<td></td>
<td>775</td>
<td>X</td>
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</tbody>
</table>
Compliance and Performance Report Sample
Refinement

Verify and adjust for continuous improvement
Questions

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