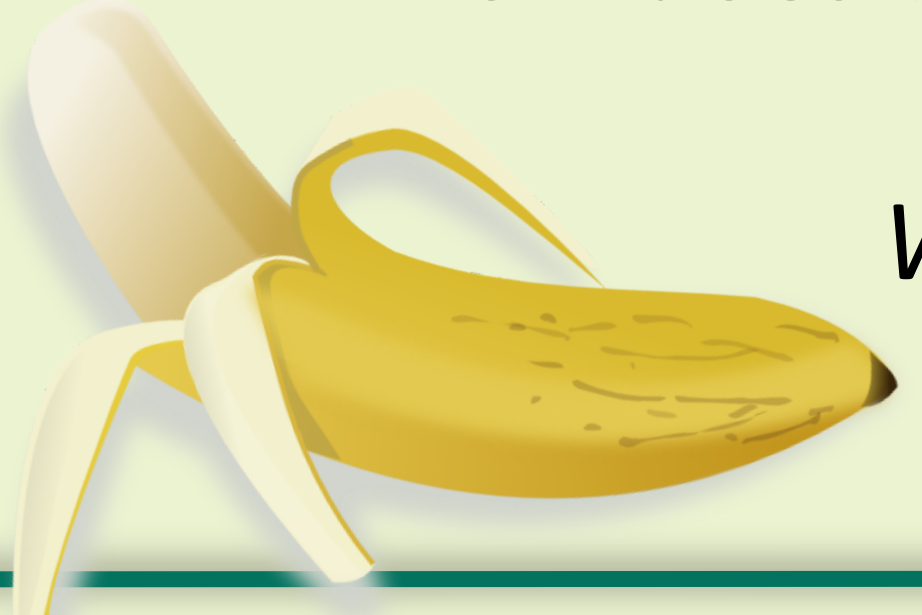


# Examining the Agents of Change in Restaurant Food Waste Diversion

*How does the increasing institutionalization of eating impact the broader goals of sustainable and socially equitable waste management?*

*How are Portland's food waste diversion programs perceived by those working in the restaurant industry?*

*What can and should be changed to work toward a more efficient and effective food waste diversion system in Portland?*



## BACKGROUND

## METHODOLOGY

## INTERVIEWS

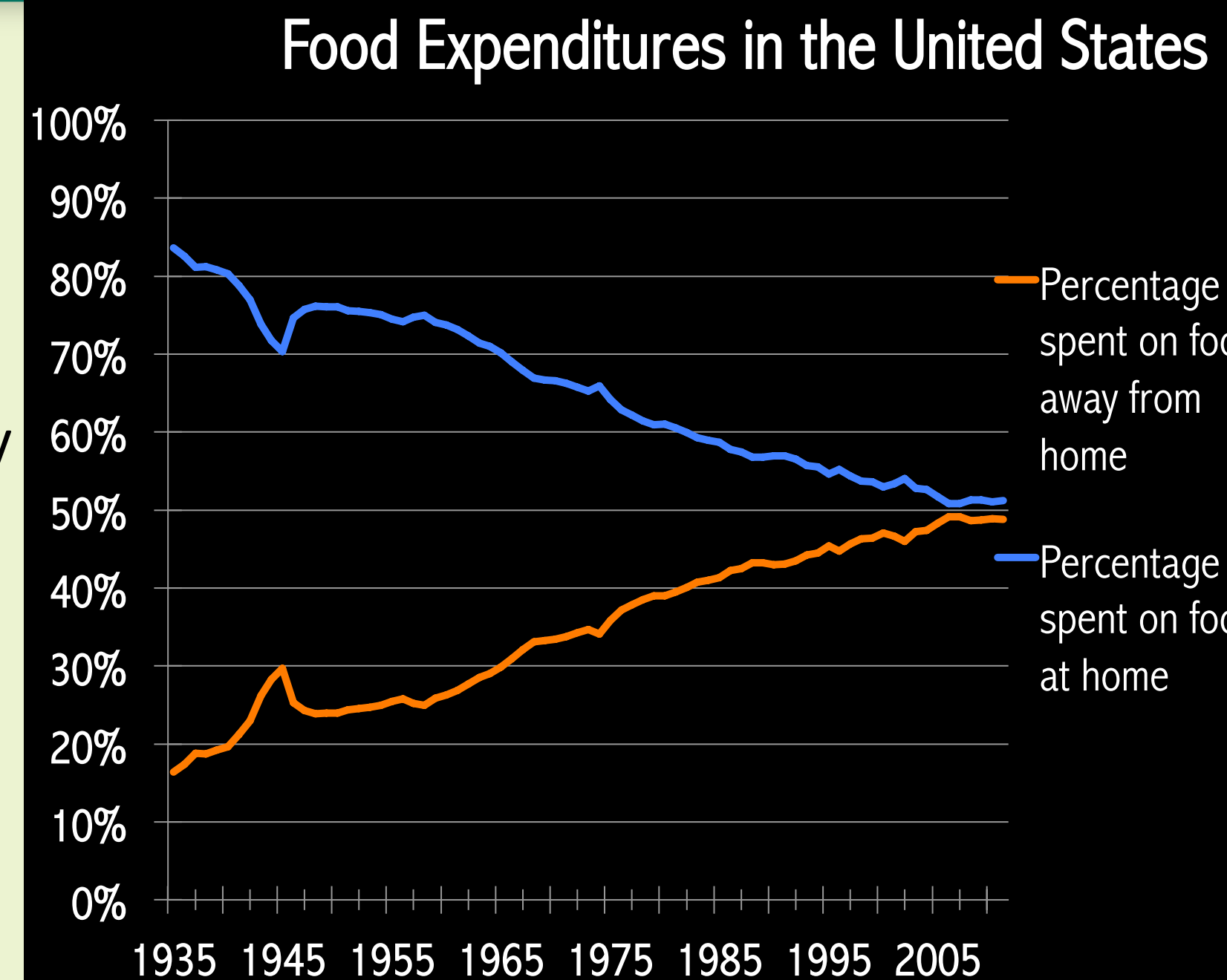
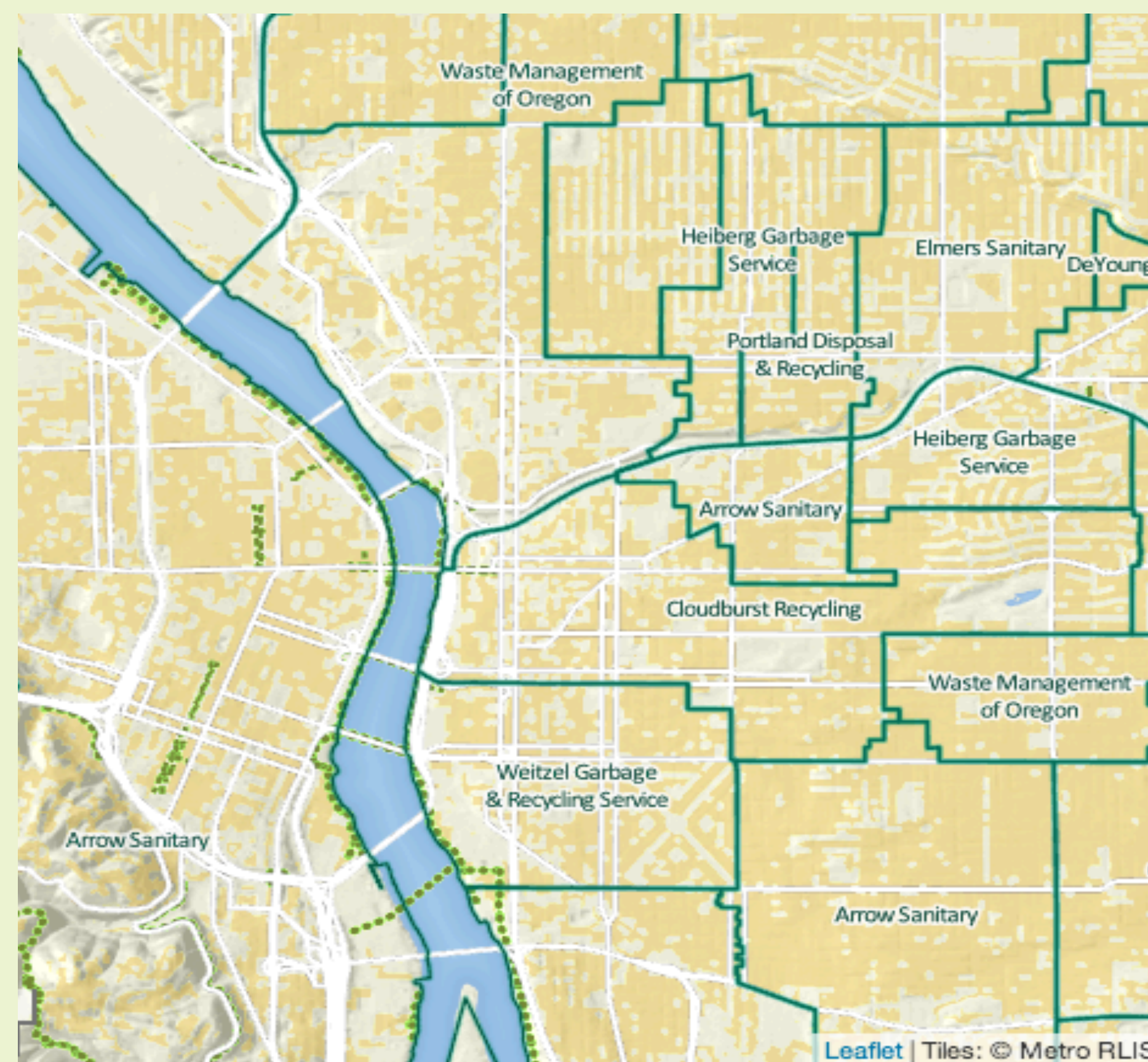
### Cultivating a Culture of Consumption

The Great Depression forced economists and policy-makers to reevaluate how low rates of unemployment and stable inflation could be reached and maintained. Keynes prescribed promoting spending rather than saving.<sup>1</sup>

Advertisements and other forms of new media increasingly encouraged Americans to buy new products, at the risk of not "keeping up with the Joneses."<sup>2</sup>

### Waste Management In Portland

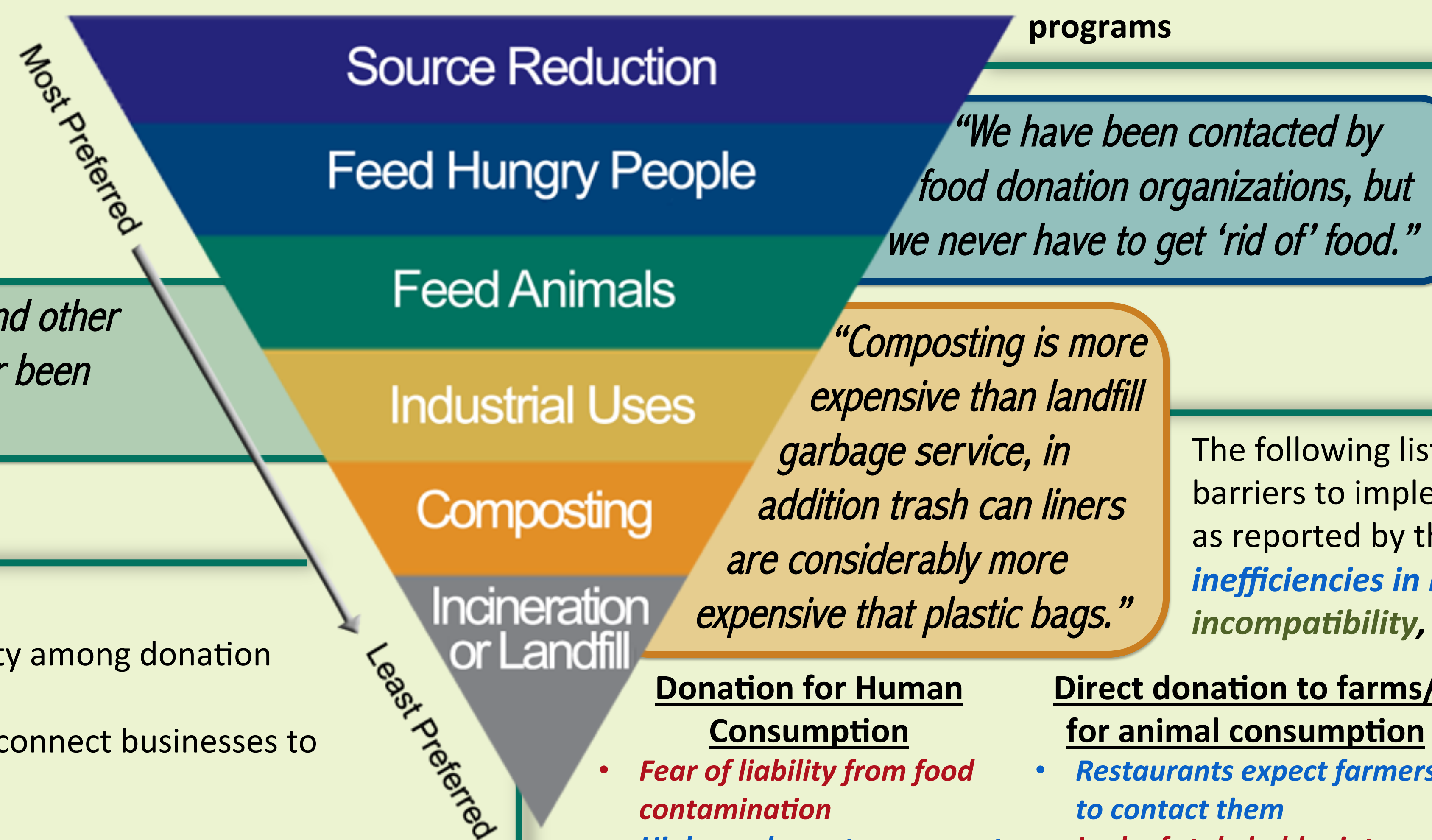
Below is a map of Portland showing the districts that each waste management utility company is responsible for.



### Food Waste in U.S. Restaurants Today

The U.S. EPA has developed the Food Recovery Hierarchy (shown below) to guide food waste diversion programs. Reducing the amount of food waste that goes to landfills saves space and saves resources and money when food can be donated or reused as compost.<sup>3</sup>

### Food Recovery Hierarchy



### Why Portland?

Portland is an ideal city to study food waste diversion, as it is quite socially and politically progressive, and has therefore taken on more waste diversion programs than many other U.S. cities. In this way, the programs that Portland implements set a precedent for other cities to follow (or not, depending on the effectiveness of each program).

### Data

I researched how much waste is produced in Portland, and how much is composted, recycled, and sent to the Arlington landfill.

### Interviews

I interviewed, called, and emailed people involved in the following sectors:

- Food donation programs
- Government agencies
- Restaurants and private food service facilities
- Overseers of waste diversion programs

### Donation Agencies

In Portland, there are donation agencies of a very wide variety of scales. I talked to people from the Oregon Food Bank, St. Vincent de Paul, and Urban Gleaners, as well as the Bon Appetit Waste Sustainability Manager.

### Government Agencies

The Portland Bureau of Planning and Sustainability, Metro, and Multnomah County are all involved with city food waste diversion, particularly by operating the "Cut Through the FOG" program and business outreach and education about waste diversion. As of May 1, 2015, businesses will no longer be able to compost non-food scraps, eliminating any economic justification for using biodegradable dinnerware and utensils.

### Restaurants

Most of the information I gathered from people working in the restaurant industry was either through informal conversations or via email. Three local independently owned restaurants responded, and I had conversations with several Subway employees.

*"As far as donations go, our only concern is where donations cross the line into liability issues."*

*"We have been contacted by food donation organizations, but we never have to get 'rid of' food."*



*"We have thought of utilizing customer plate waste and other food prep waste for livestock farmers, but have never been contacted, nor do we know how to make it happen."*

*"Composting is more expensive than landfill garbage service, in addition trash can liners are considerably more expensive than plastic bags."*

## RESULTS

The following lists represent a summary of the most pressing barriers to implementing strong food waste diversion programs, as reported by those mentioned above. **Financial barriers, inefficiencies in networking between people, logistical incompatibility, and material inconveniences**

*"In the City of Portland, food service companies are required to compost."*

## DISCUSSION

### Donation recommendations:

1. Establish even greater diversity of scale and variety among donation agencies to match with various business sizes
1. Employ a city-wide food donation coordinator to connect businesses to agencies, farms, and fuel producers

### Composting recommendations:

1. Coordinate policies between waste management companies. If the city requires composting, all utilities should offer composting programs for both businesses and residential areas.
2. Utility companies and BPS should communicate more effectively with businesses.

### Donation for Human Consumption

- Fear of liability from food contamination
- High employee turnover rate
- Incompatibility of schedules
- Lack of capital
- Inter-occupational drama
- Time constraints
- Packaging constraints

### Direct donation to farms/ for animal consumption

- Restaurants expect farmers to contact them
- Lack of stakeholder interest
- Difficulty establishing relationships
- Incompatibility of schedules
- Lack of capital
- Packaging

### Donation for other uses (ex. Biofuels, industrial)

- Difficulty establishing relationships
- Lack of donatable material (specificity in needs)
- Restaurants want oil users to contact them

### Composting

- Can ultimately be more expensive in terms of capital
- Limited availability of collection
- "Opt-in" composting system
- Prices set by utilities can be higher than for garbage
- Pests, odor, poor aesthetics
- Packaging

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2. Levenstein, Harvey A. *Paradox of plenty: a social history of eating in modern America*. Berkeley, CA: University of California Press, 2003.

3. Department of Environmental Quality. *2009-2010 Waste Composition Study*, n.d. <http://www.deq.state.or.us/lq/pubs/docs/sw/WasteComp2009TableA2.pdf>.

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