

Background and Purpose

Walton Sustainability Solutions Initiatives (WSSI) approached ASU’s Urban Sustainability Best Practices course led by Professor Nalini Chhetri in the School of Sustainability to examine regionalization and consolidation of green organic feedstock in the Phoenix area.

Regionalization and Consolidation

Regionalization: Refers to standardized services, facilities or equipment across an area

Feedstock: Waste materials as manufacturing inputs

Green Organics: Refers to both food and yard waste

Consolidation: Refers to aggregating feedstock into one or a few locations

Regionalization in Phoenix Metropolitan Area

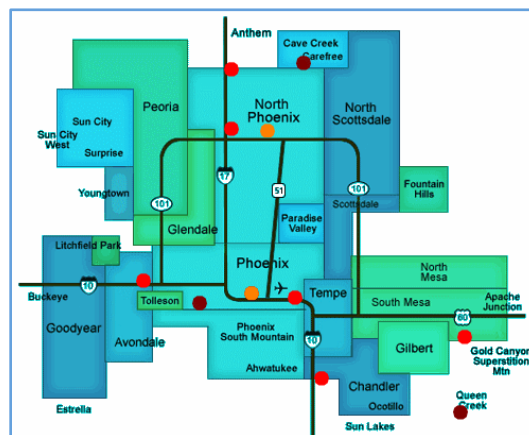
The chart below compares green waste recycling programs for the seven largest local cities in the Phoenix Metropolitan Area. As shown in the chart, only Phoenix, Mesa, and Tempe have dedicated green organics or yard waste curbside collection programs. Both Phoenix and Mesa sell their yard waste to Gro-Well for composting and resale. All cities accept different waste types under the green organics category and even yard waste is defined differently. In addition, all cities require different yard waste organization or packaging for curbside collection.

Recycling Programs by City				
	Curbside Bulk w/Green	Curbside Dedicated Green	Green Dropoff Locations	Green Waste Accepted
Phoenix	YES	YES (tan bin)	2	yard clippings and horse manure
Mesa	YES	YES (green barrel)	1	grass, leaves, plant trimmings, small tree branches/prunings
Chandler	YES	NO	1	tree trimmings and yard clippings
Glendale	NO	NO	0	none
Scottsdale	YES	NO	1	cut tree limbs, grass, leaves, palm tree skins, bark, wood panels, cacti (in bags & boxes)
Gilbert	YES	NO	2	bagged grass clippings, weeds, bagged leaves, brush, tree branches/cuttings
Tempe	YES	YES (3/yr)	2	tree trimmings and brush (tree limbs, branches, trunks and stumps), leaves, pine needles, small hedge clippings, cactus clippings (in bags & boxes)

Challenges

Our industry research found a number of potential challenges for the Phoenix area green organic waste regionalization and consolidation.

- The primary concern is the large area and high population density resulting in significant logistical difficulties. The distribution of local solid waste facilities is problematic.
- Local cities have different recycling goals and strategies and are at different implementation stages.
- Finally, finding dependable and profitable demand is extremely difficult.



Recommendations

Recommendation 1: Regionalizing and consolidating back-end composting/mulching and marketing operations and keeping collection and hauling local.

- Start small with a single neighboring city-partner
- City of Tempe is a good candidate because its yard waste collection program is limited to only 3 seasonal pickups per year.
- Alternatively, if a larger partner is desired, City of Mesa, with its 40,000 participating households, is a great initial partner.
- It is important to select what activities should be regionalized, which should be consolidated, and which should be left completely separate.

Recommendation 2: Single partner collaboration

- The objectives must center on significant cost savings and revenue increases.
- At least partial self-financing should be achieved from landfilling savings, tipping fees, and end-product sales.
- Initially, flexible and easy-to-exit contracting should be utilized to protect each partner's long-term interests.
- Contracts can always be extended or renewed while revising or cancelling them is usually difficult.