

Municipal Solid Waste Services: Overview & Case Study

Environmental Review Commission

Waste Working Group

February 10, 2016

Erin Wynia

Legislative Counsel

NC League of Municipalities

Ron Hargrove

Director

Winston-Salem/Forsyth
Utilities



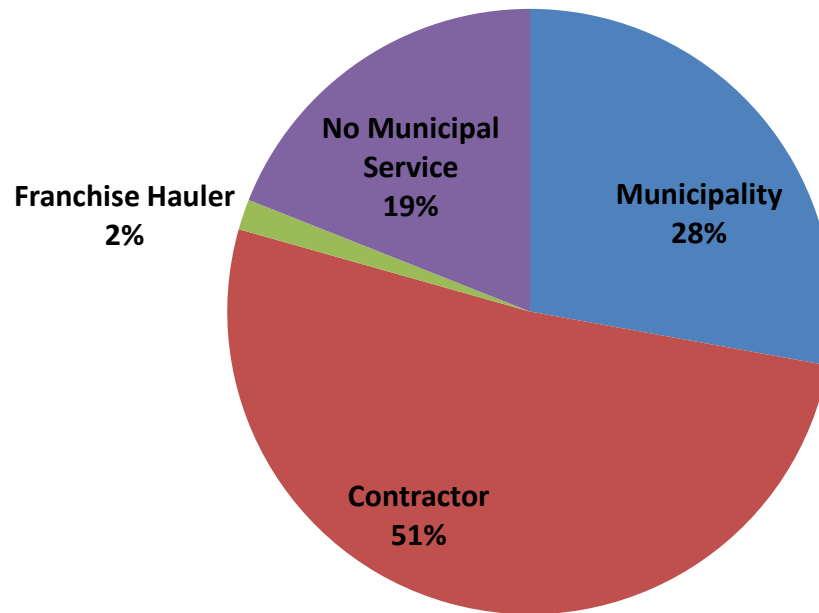
Agenda

- Statewide municipal solid waste services overview
- Funding solid waste services
- Winston-Salem/Forsyth Utilities case study
 - Scope of services
 - Financing services
 - Performance measures



Statewide Municipal Solid Waste Services Overview

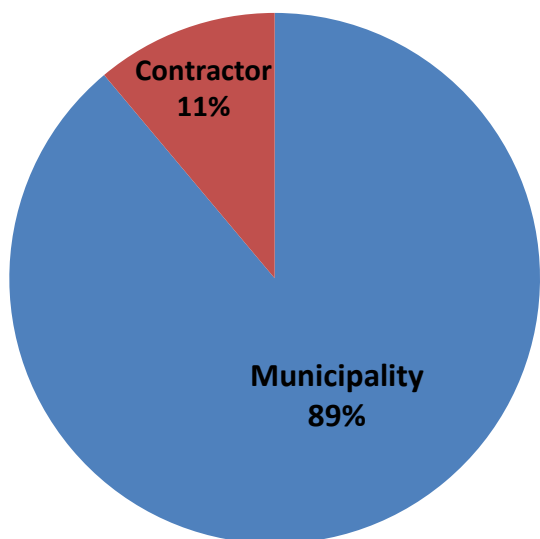
Who Collects Solid Waste in Municipalities?



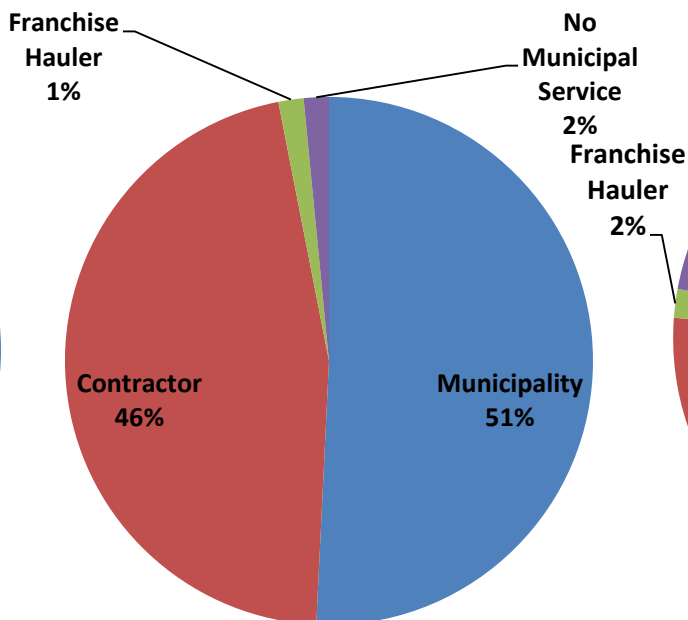
Statewide Municipal Solid Waste Services Overview

Who Collects Solid Waste in Municipalities?

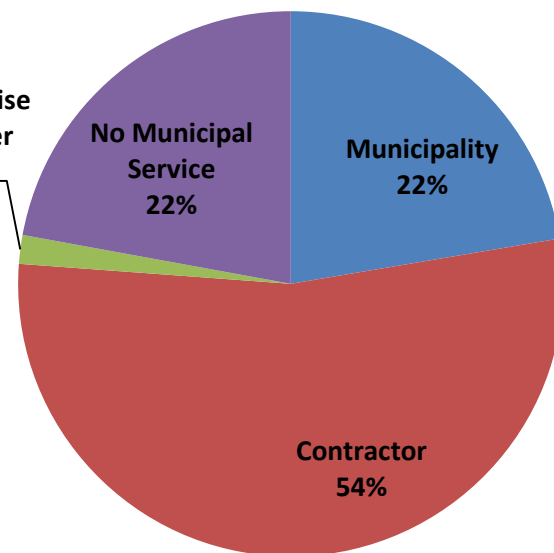
Cities Over 50,000



Cities Btw. 10-50,000

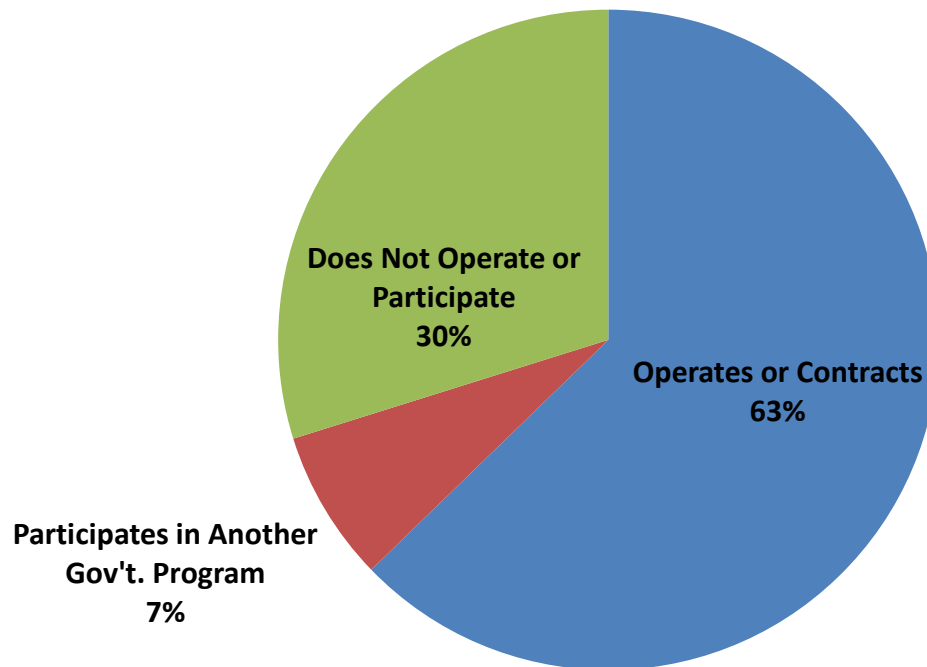


Cities Under 10,000



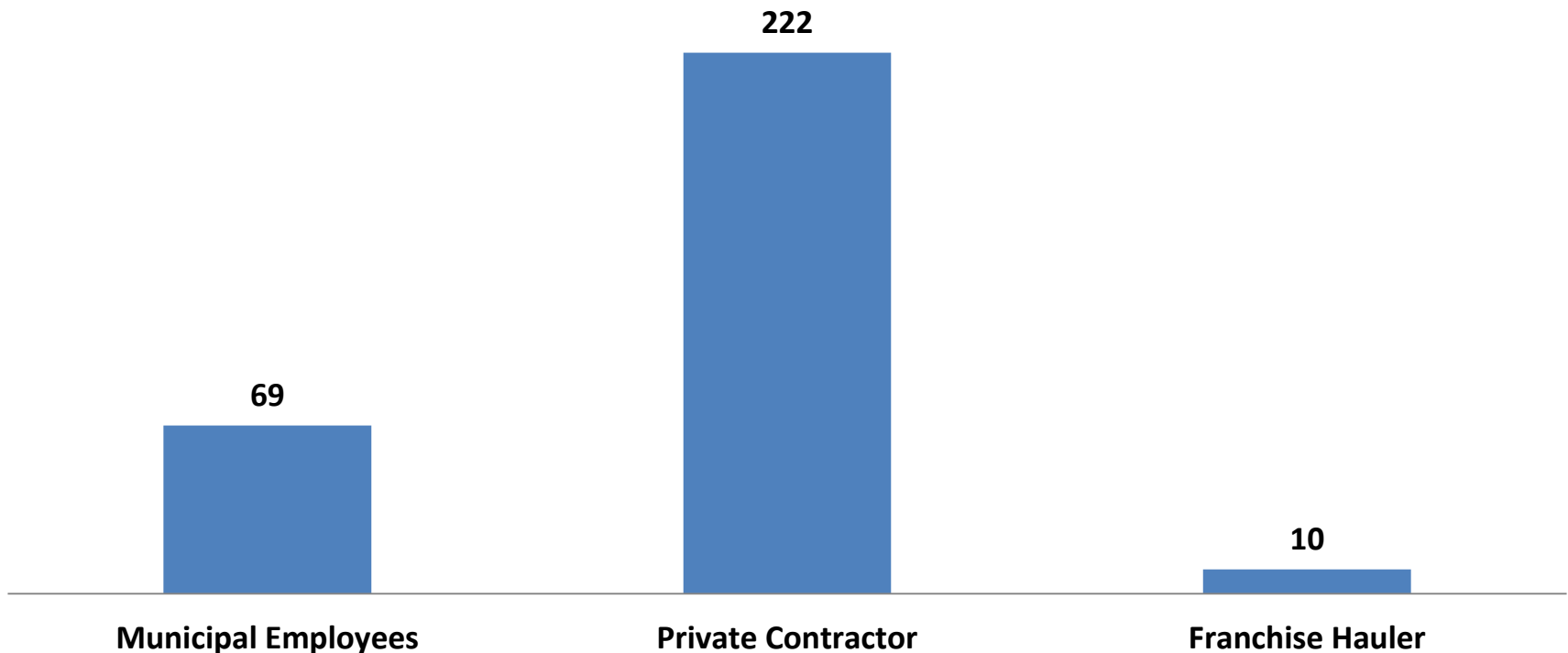
Statewide Municipal Solid Waste Services Overview

Does Your Municipality Have a Recycling Program?



Statewide Municipal Solid Waste Services Overview

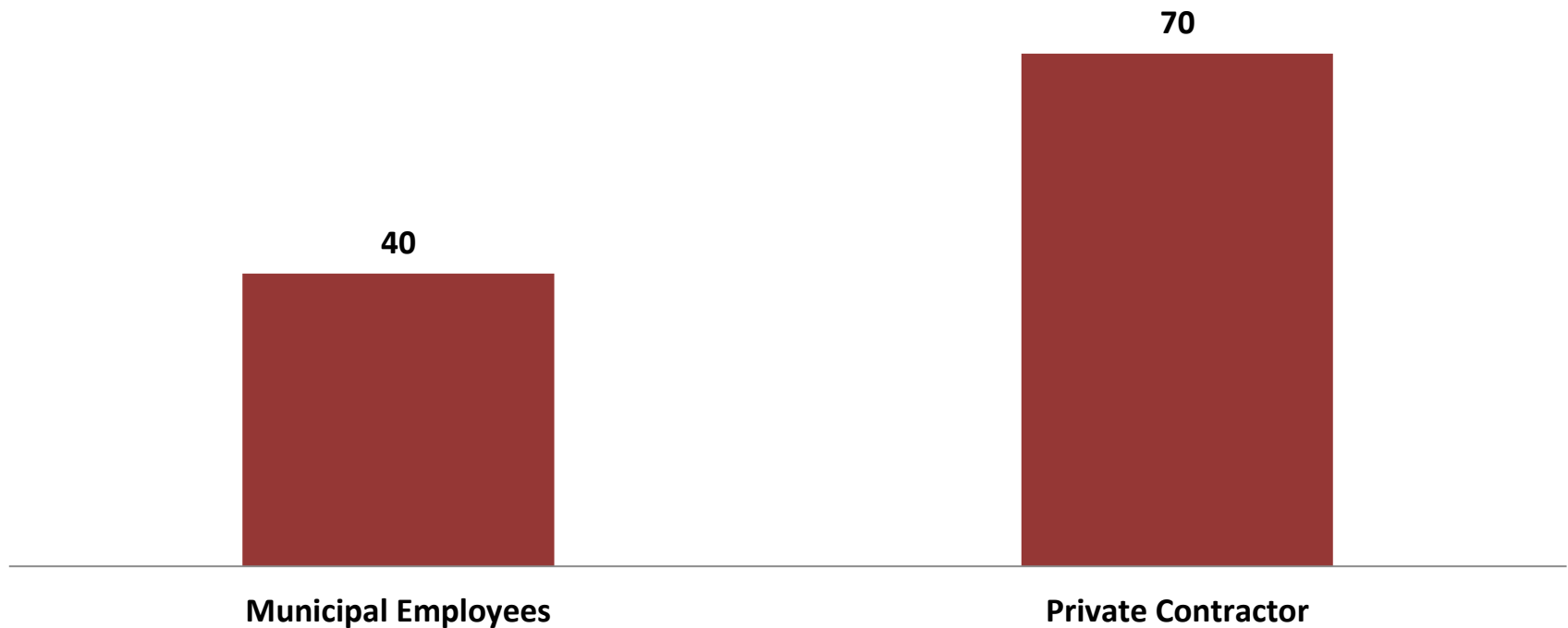
Who Collects Curbside Recyclables in Municipalities?



Note: 297 total municipalities with curbside recycling program

Statewide Municipal Solid Waste Services Overview

Who Collects Drop-Off Recyclables in Municipalities?



Note: 104 total municipalities with drop-off recycling program

Funding Solid Waste Services

- Typical funding sources
 - Property tax
 - Borrowing
 - Fees
- Cities have authority to charge a fee for solid waste collection, use of disposal facilities, and availability of disposal facilities (G.S. 160A-311, -314, -314.1)
- Limitations on enterprise fees
 - Total revenue cannot exceed collection costs
 - No charge is allowed if
 - Collection: property owner contracts with a private entity for collection service
 - Disposal: property owner does not use municipality's disposal facility
 - Availability: property owner receives disposal services from another public/private entity that provides the exact same service

Winston-Salem/Forsyth Utilities



Winston-Salem/Forsyth Utilities

Scope of Services

- City core business function
 - Residential refuse collection (71,738 tons/year)
 - 77,907 households served weekly
 - 1,656 bulk containers weekly
 - 13,450 yard waste carts weekly
 - Curbside brush collection monthly
 - Solid waste disposal (286,585 tons/year)
 - Municipal solid waste disposal facility serves Forsyth, Davie, Surry, Stokes, and Yadkin counties
 - Construction and demolition disposal facility (Forsyth)
 - Yard waste and leaf composting facilities (2 locations)
 - Household hazardous waste and electronics recycling
 - Scrap tire collection and processing
 - White goods collection and processing
- Additional service
 - Recycling: contracted via Waste Management, Inc.
 - 74,000 recycling households served biweekly
 - 3 drop-off recycling facilities for unincorporated areas

Winston-Salem/Forsyth Utilities

Financing of Services

- Residential refuse collection
 - Source of revenues FY15
 - \$14.47M taxes
 - \$2.81M fees (bulk containers, yard carts, recycling)
 - \$1.73M interdepartmental transfers
 - Equipment debt: \$1.57M
- Solid waste disposal (enterprise fund)
 - Source of revenues FY15
 - \$9.37M tip fees
 - \$1.27M intergovernmental transfers (City, County, State)
 - Total unrestricted fund balance: \$16.2M
 - Restricted fund balance (closure): \$16.1M
 - Bonded debt: \$11.9M (special obligation bonds)



Winston-Salem/Forsyth Utilities

Performance Measures

- Residential refuse collection

- 5,561 tons collected monthly
- Collection cost: \$88.40/ton
- 0.01% missed collection rate
- >99% service requests handled on first call

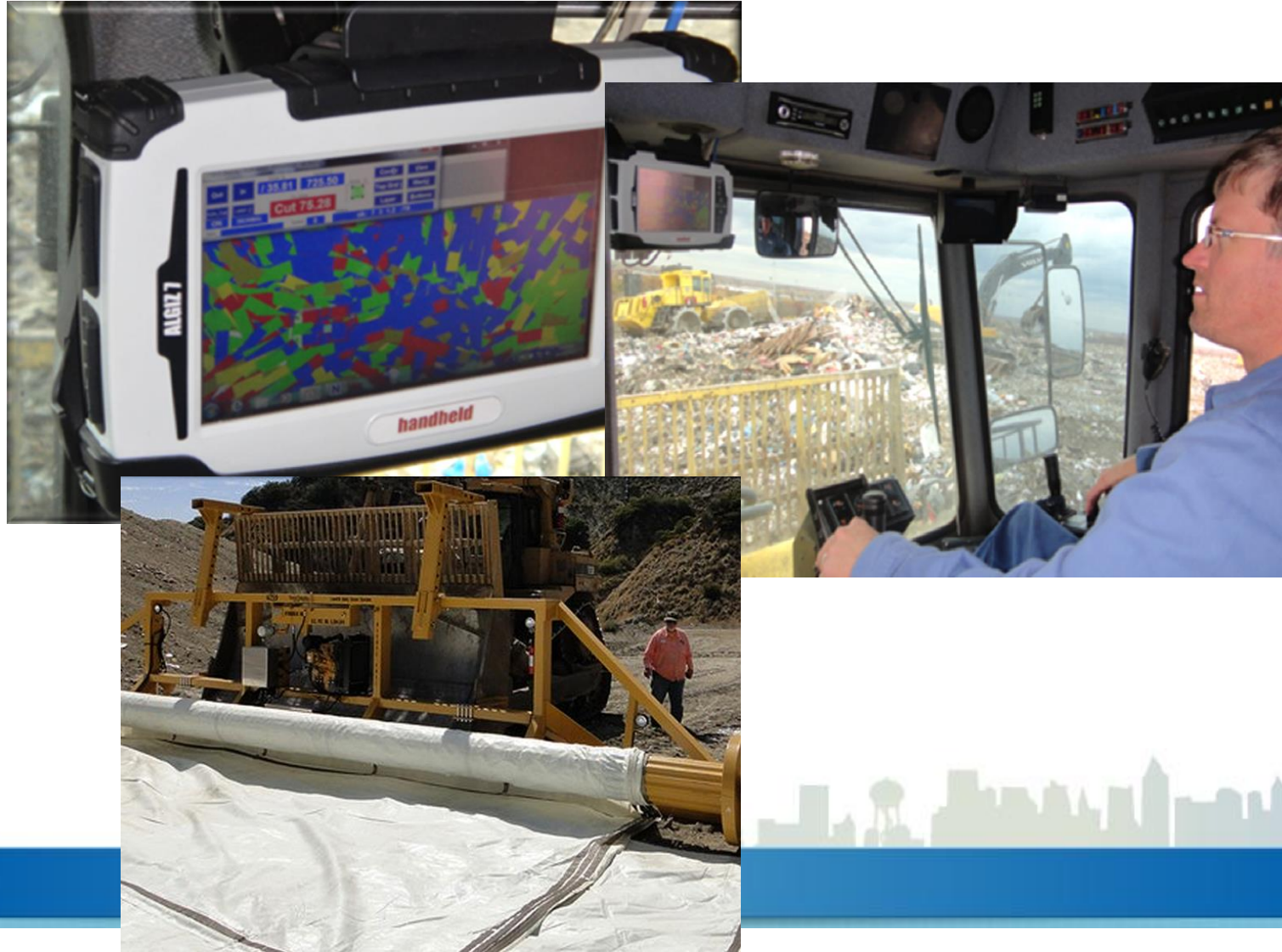
- Solid waste disposal

- Focused on efficiency and financial responsibility
- Density: measurement of landfill airspace (1,380 pounds/cubic yard)
- Full cost accounting study (\$33.87/ton)
 - Analyzes costs for each service area (cost/ton)
 - Includes operating, debt service, closure, and future capital cost
- Life-cycle projections to predict fund balance
 - Includes full costs, revenue projections



Winston-Salem/Forsyth Utilities

Efficiencies



Questions and Comments?

Erin Wynia

ewynia@nclm.org

O: 919-715-4126

M: 919-961-6108

Ron Hargrove

ronh@cityofws.org

O: 336-747-7312

