

Solid Waste Management

Options and Recommendations

A project of the Environmental Policy Advisory
Committee of PACOG

Purpose

- Give overview of considerations
- Show possible Courses of Action
- Report recommendations
- Address questions

Background

- Began Spring 2007
- 2010 Commission
- PACOG EPAC Involvement
- Research & Discussions
- Two components
 - Residential Waste Collection
 - Recycling Collection

Residential Waste Collection System Options

Collection of residential waste materials



Facts Bearing on Waste Collection Issue

- ◆ Waste is a growing problem
- ◆ Current waste hauler routes overlap, inefficient
- ◆ Residents are “stock-piling” waste
- ◆ Potential for communicable diseases
- ◆ Illegal dumping occurring
- ◆ Valuable recyclables are being lost

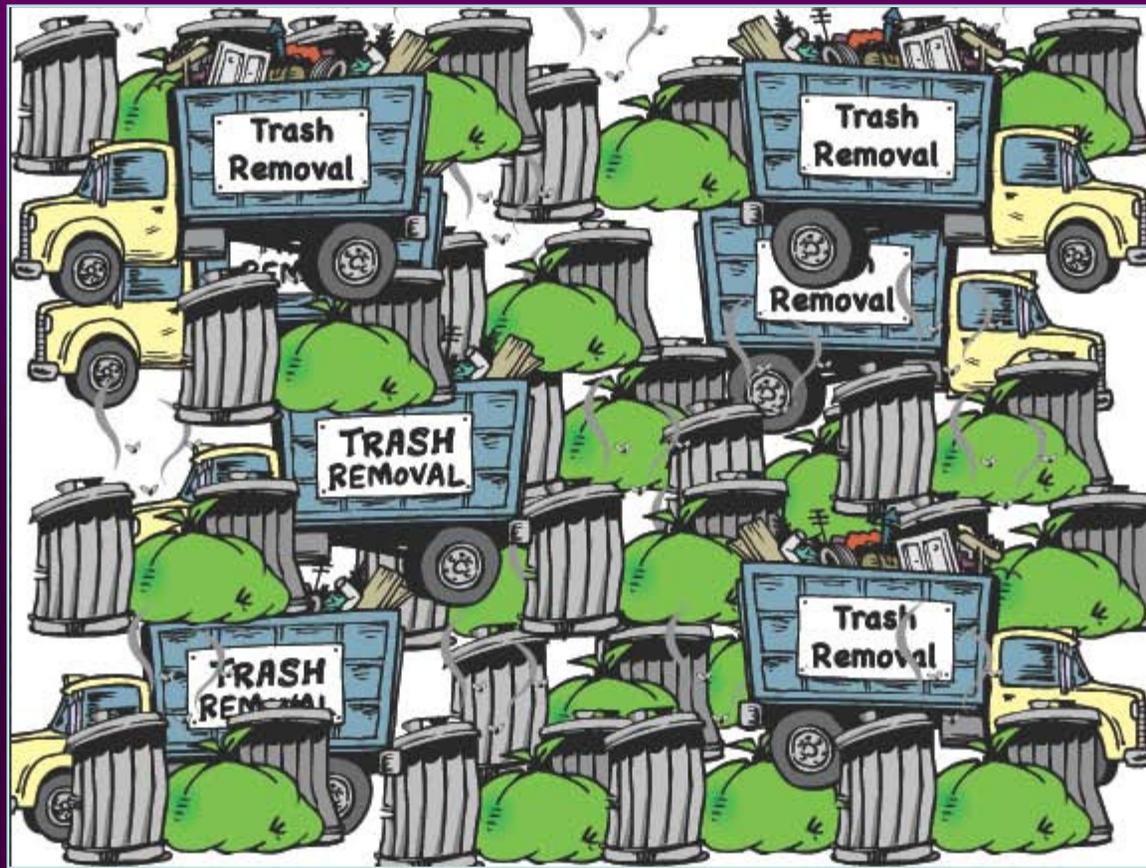
Assumptions on Waste Collection Issue

- ◆ Waste increases as population grows
- ◆ Increases fuel costs raise individual service costs
- ◆ More residences serviced lowers individual service costs
- ◆ Wear and tear on streets and alleys
- ◆ Improved waste management improves recycling efficiency

Courses of Action

for Waste Collection Issue

1. Status Quo
2. Mandatory Waste Collection Ordinance
3. Single Contracted Hauler
4. Multiple Contracted Haulers
5. City-Owned Operation



1. Status Quo

No change to the current situation

Advantages

Status Quo

- Easy to accomplish
- Nothing new to implement
- Existing private waste haulers protected

Challenges

Status Quo

- “Stock-piling” waste continues
- Streets and alleys continue to be over used, increases maintenance costs
- Difficult to implement efficient recycling





2. Mandatory Waste Collection Ordinance

Residential requirement to have waste service and requires haulers to use volume-based pricing

Mandatory Waste Collection Ordinance

Enact an ordinance requiring all residential properties to dispose of solid waste every 7 days at a minimum by commercially licensed waste hauler or by self-hauling.

Volume-based Pricing

- Pay-As-You-Throw Concept
- Included in licensing requirements
- Haulers offer customers various sized containers with varying prices
- Example:
 - Large (96 gallon)
 - Medium (64 gallon)
 - Small (32 gallon)



Advantages

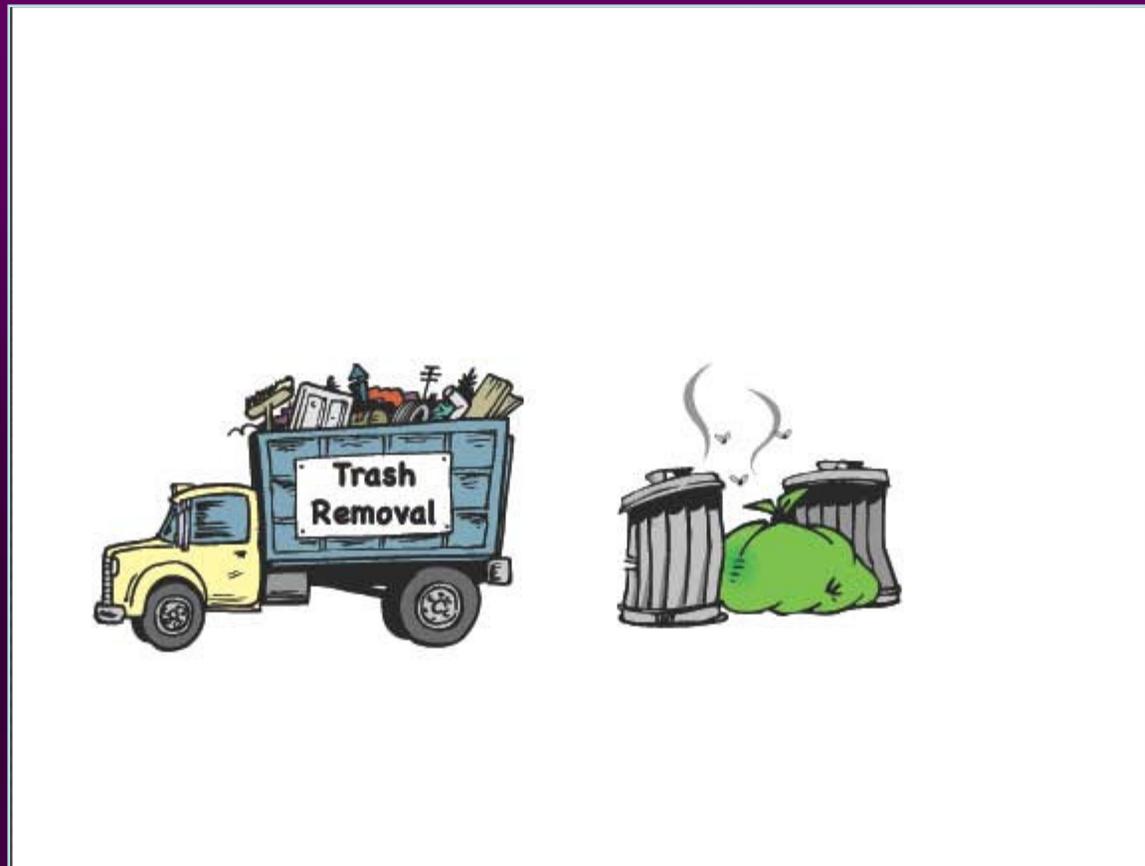
Mandatory Waste Collection Ordinance

- Expands customer base for existing haulers
- More timely removal of waste
- Improved neighborhood appearance
- Fewer costly neighborhood clean-ups
- Improved control of waste stream
- Improved recycling economics due to volume increase

Challenges

Mandatory Waste Collection Ordinance

- Streets and alleys continue to be over used, increases maintenance costs
- Difficult to monitor, manage and enforce



3. Single Contracted Hauler

Mandatory waste collection with one waste hauler

Advantages

Single Contracted Hauler

- One contract to administer
- Less city management
- Reduced traffic on streets and alleys, reduced cost in maintenance
- More efficient waste collection

Challenges

Single Contracted Hauler

- Potential to put existing waste companies out of business
- Competition limited to contract renewal periods
- Potential for monopolistic issues
- City must determine performance standards for level of service



4. Multiple Contracted Haulers

Mandatory waste collection with districted waste haulers

Advantages

Multiple Contracted Haulers

- ◆ Preserves existing local businesses
- ◆ Reduced traffic on streets and alleys, reduced cost in maintenance
- ◆ Reduced chance of monopolistic issues
- ◆ Applicable to City/County areas
- ◆ More efficient waste collection

Challenges

Multiple Contracted Haulers

- ◆ Multiple contracts to administer
- ◆ Increased City administration
- ◆ Need for greater understanding of legal parameters
- ◆ City must determine performance standards for level of service



5. City-Owned Operation

Mandatory waste collection with municipal waste hauler

Advantages

City-Owned Operation

- ◆ City control of service
- ◆ Reduced traffic on streets and alleys, reduced cost in maintenance
- ◆ More efficient waste collection
- ◆ Recycling program easier to implement

Challenges

City-Owned Operation

- No protection for existing waste haulers
- No serious competition to control prices
- Most extensive government involvement
- Capital investment of equipment

Recycling Collection System Options



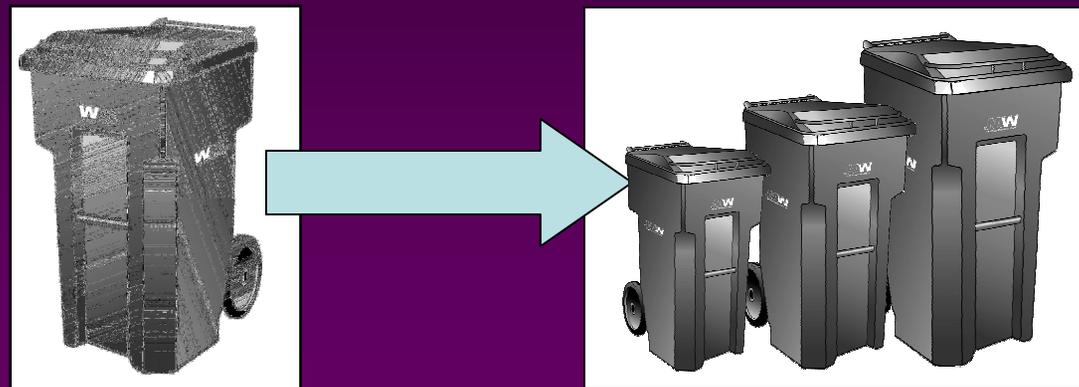
Collection and management of recyclable materials

Facts Bearing on Recycling Collection Issue

- Waste increases as population grows
- Pueblo does not have a comprehensive recycling program for residents
- People want economical and convenient choices
- Recycling opportunities are decentralized
- Environmental Coordinator Program was never intended to provide recycling services
- Recycling center is critical to success

Assumptions for Recycling Collection Issue

- Fuel costs rising
- Landfill cells nearing capacity
- Waste needs to be handled efficiently
- Community demand for recycling increasing
- Recycling operations will become more efficient
- Volume-based pricing would be implemented with Mandatory Waste Ordinance



Recycling: Courses of Action

1. Establish a Recycling Center

- a. Owned by government, operated privately
- b. Owned and operated by government
- c. Owned and operated privately with limited government financial support

2. Multiple Step Approach

Step 1: Conduct a waste audit

Step 2: Pass recycling and waste reduction goals

Step 3: Establish recycling center (see #1)

Step 4: Establish collection methods

- Mandatory Curbside Recycling Ordinance
- Satellite drop-off sites for urbanized rural areas



Recycling Center

1 a. Owned by government; operated by private contractor

Advantages

City owned; privately operated

- ◆ Some control over operations
- ◆ Convenience for residents and businesses
- ◆ Percentage of materials owned by City
- ◆ Material sales produce revenue
- ◆ Promotes economic development and jobs

Challenges

City owned; privately operated

- ◆ Upfront costs (public)
- ◆ Operating costs (private)
- ◆ Increased City administration



Recycling Center

1b. Owned and operated by government

Advantages

City owned and operated

- ◆ Control over operations
- ◆ All materials owned by City
- ◆ All material revenue goes to City
- ◆ Convenience for residents and businesses

Challenges

City owned and operated

- ◆ Upfront costs
- ◆ Operating costs
- ◆ Increased City administration



Recycling Center

1c. Owned and operated privately with limited government financial support

Advantages

Privately owned and operated

- ◆ Do not have to fund private operations
- ◆ Limited amount of staff time needed

Challenges

Privately owned and operated

- ◆ Materials not controlled by City
- ◆ Private business can choose to close or limit items accepted



Multiple Step Approach

4 Step process for recycling:

1. Waste Audit

2. Set Goals

3. Recycling Center

4. Collection methods

Advantages Multi-Step Approach

Waste Audit

- ◆ Greater understanding
- ◆ Creates baseline data

Recycling Goals

- ◆ Holds community accountable
- ◆ Helpful when writing grants

Recycling Center

- ◆ Control of materials
- ◆ Way to measure waste diversion
- ◆ Possible revenue
- ◆ Creates jobs

WHAT'S IN OUR GARBAGE?



Advantages (cont.) Multi-Step Approach

Collection Methods: Satellite Drop-off Sites

- ◆ Easier for rural areas
- ◆ Picked up less often



Collection Methods: Curbside Recycling Ordinance

- ◆ Diversion rates would increase
- ◆ Easily added to licensing
- ◆ Guaranteed stream flow
- ◆ Convenience



Challenges

Multi-Step Approach

- ◆ Financial costs for waste audit
- ◆ Haulers buy-in to reduction goals
- ◆ Upfront and operational costs for recycling center
- ◆ Increased City administration
- ◆ Containers managed privately or by government
- ◆ Financial investment in recycling containers
- ◆ Reporting of collected volumes
- ◆ Upfront costs for collection equipment

Recommendations by EPAC

Solid Waste

- ◆ Single-Contracted Hauler
 - ◆ Mandatory Waste Collection Ordinance
 - ◆ Volume-Based Pricing

Recycling

- ◆ Multiple-Step Approach
 - ◆ Waste Audit
 - ◆ Set Goals
 - ◆ Recycling Center (Public/Private)
 - ◆ Collection Methods

Overall Conclusions

- ◆ Follow Pueblo Integrated Waste Management Plan (2001)
- ◆ Improve waste management system
- ◆ Mandatory Waste Collection Ordinance and recycling center are crucial to a successful recycling program
- ◆ Ultimately, decision lies with elected officials