

Overview:

*South Carolina's Recycling Market
Development Advisory Council [RMDAC]*

And

New Mexico Recycling Coalition Recycling
Energy Stimulus Grant Project

October 4, 2012

Kristen Brown

Green Waste Solutions

843-241-3276

www.thewastesolution.com

www.getmyeco.com

Industry demand
for steady stream
of feedstock

Big business
need for 'Zero
Waste'
infrastructure

THE RECYCLING REVOLUTION

US economic
crisis/high
unemployment

Municipal
budget shortfalls

SC Recycling Industry Locations

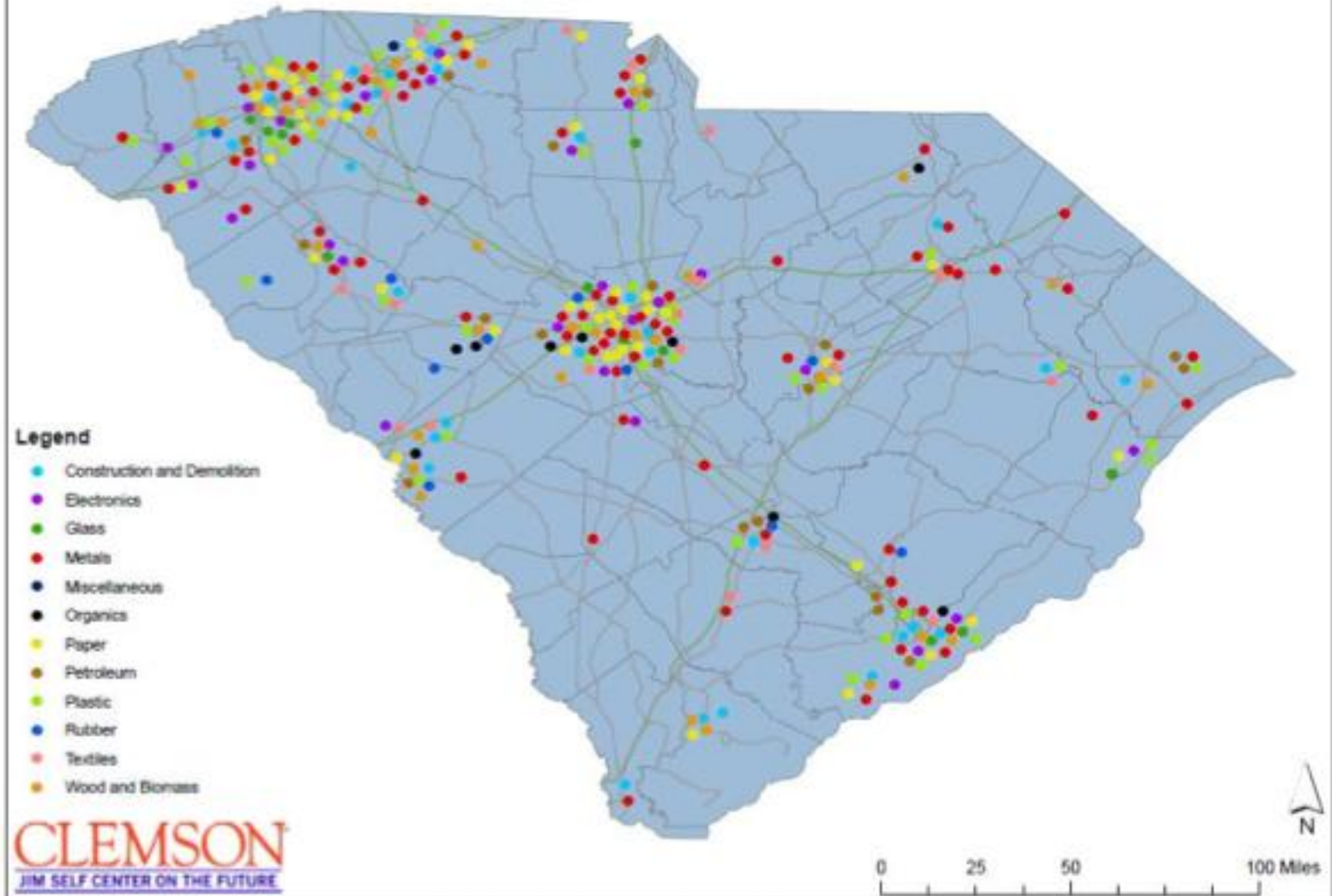
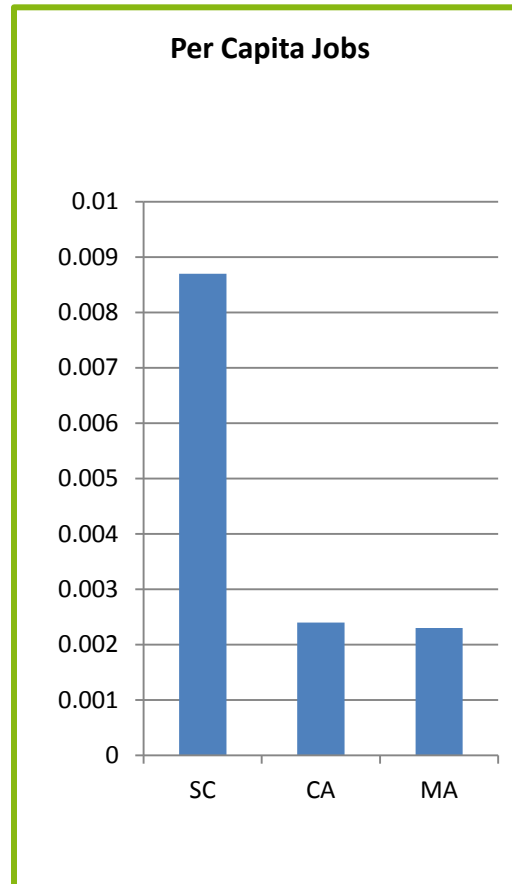
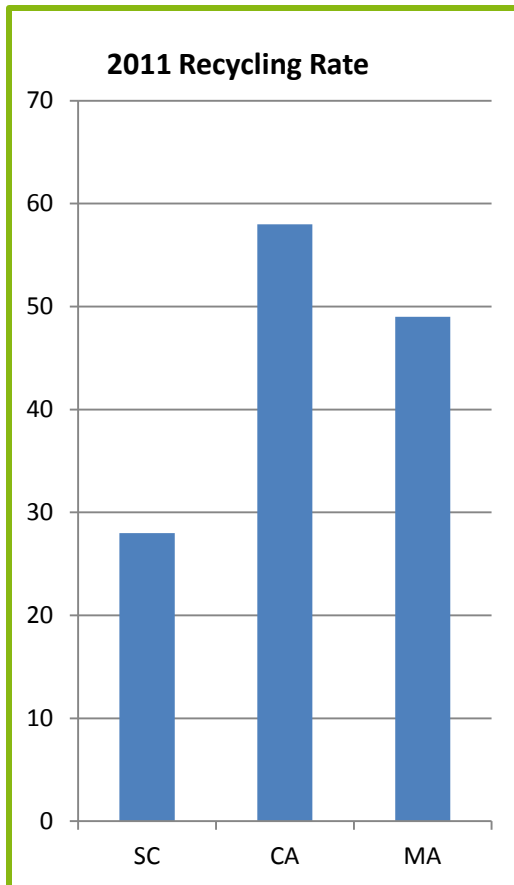


Figure 8: South Carolina Recycling Industry Locations

Large Industry Growth, Small Material Supply



Since 2006, over \$4 billion in investment by the recycling industry in SC with over 6,000 jobs

In 2011 the recycling industry announced \$333 million in capital investment, creation of over 800 jobs with 15 new or existing companies

Source: 2005 - SC Economic Impact Study, 2006 - CA Integrated Waste Management Board, 2009 - Massachusetts DEP

Background South Carolina Recycling Efforts

- Recycling Market Development Advisory Council [RMDAC]
 - Created by the Solid Waste Management Act 1991 - Supported by the Department of Commerce
 - 14 Governor appointed members
 - Mission: To grow the recycling industry ‘cluster’
- 2010 – Clemson University *‘Recycling Industry Cluster Plan’*
 - RMDAC - *New Carolina Council on Competitiveness - RIG
 - *Increase per capita income and competitiveness in SC – focus on key industry sector growth
 - Comprehensive Recommendations
 1. Communications
 2. Networks and Collaboration
 3. Leverage Infrastructure
 4. Business Development
 5. Research and Education
 6. Policy
 7. Organizational Development
- 2011 South Carolina Recycling Council (SCRC) – brand name Recyclonomics



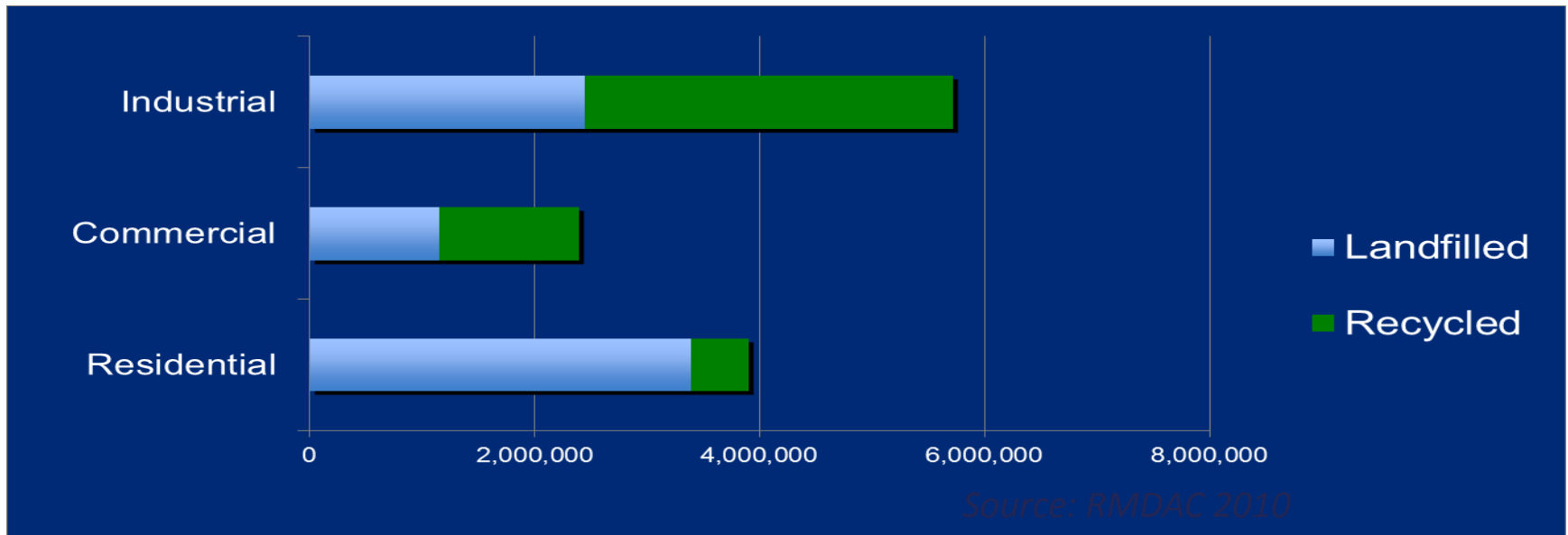
Collaboration



A collaborative effort by key stakeholders (government, the recycling industry, retailers, and consumer products) to rebrand recycling as an economic driver and increase the recovery of recyclable materials to SC markets.

70% recycling goal

Identifying Opportunities in SC



Source: RMDAC 2010

- **2011 - 348,000 tons** of recyclable materials were buried
- **\$12.5 Million** in wasted disposal fees
- **\$47 Million** in lost revenue for local government

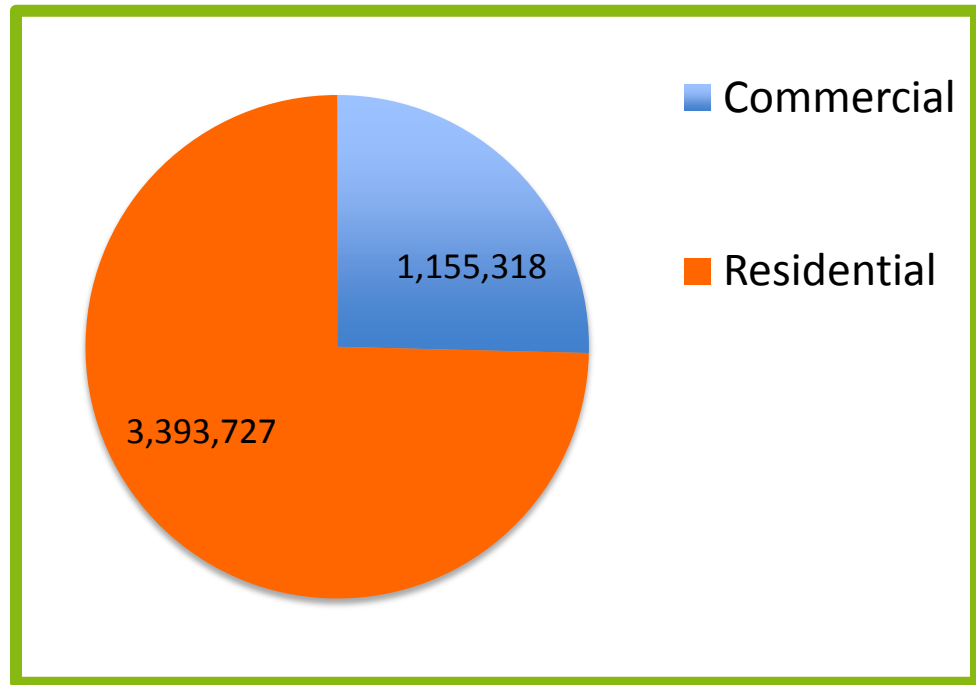
70% recycling rate would have a direct economic impact of \$3.7 Billion to the state of South Carolina

Residential Sector – Critical Sector

Waste Landfilled 2010

‘Success of the industry is highly dependent on the voluntary recycling decisions made in the home and in the business community. Voluntary systems, without the backing of strong policy or incentives will not be enough.

Recycling Industry Cluster Strategic Plan, 2010



How Can You Increase the Recovery of Materials?

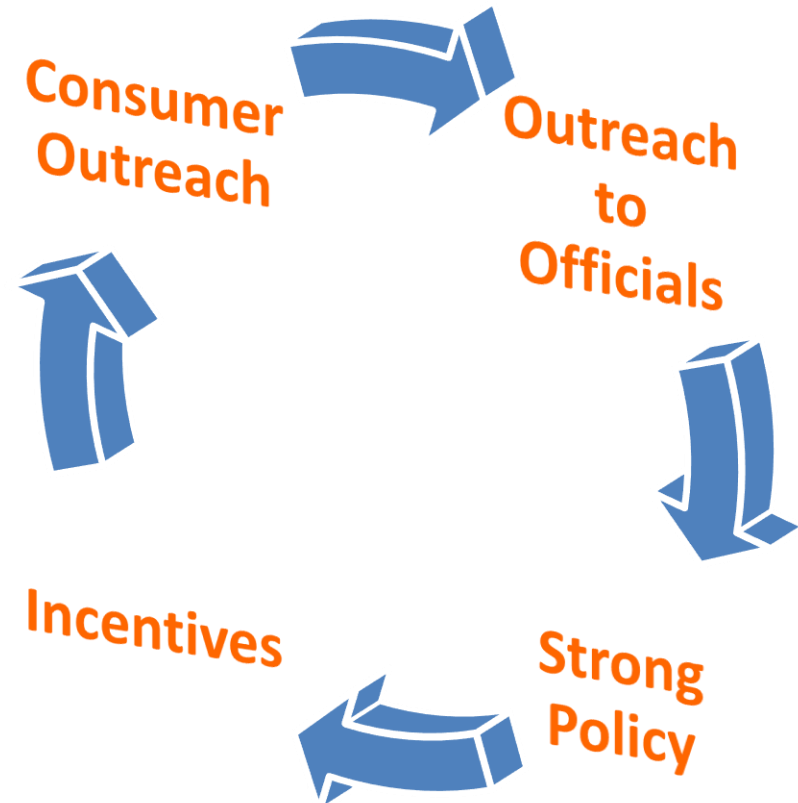
Collaboration and Action

Target:

- Elected Officials
- Businesses
- Consumers

Action:

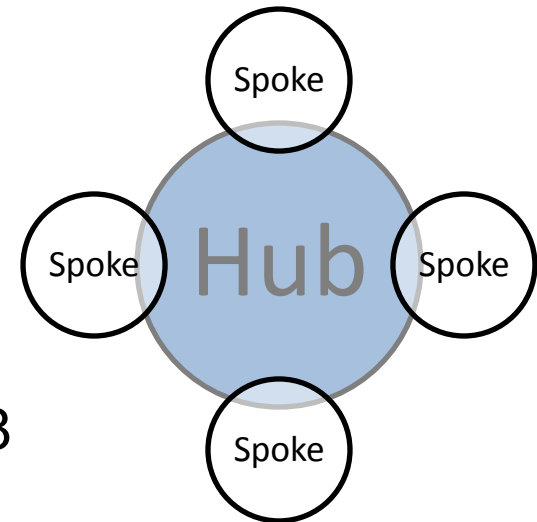
- Education and outreach to elected officials to demonstrate the need for policy and incentives
- Marketing and social media campaigns to engage consumers and businesses



Rural New Mexico Recycling Challenges

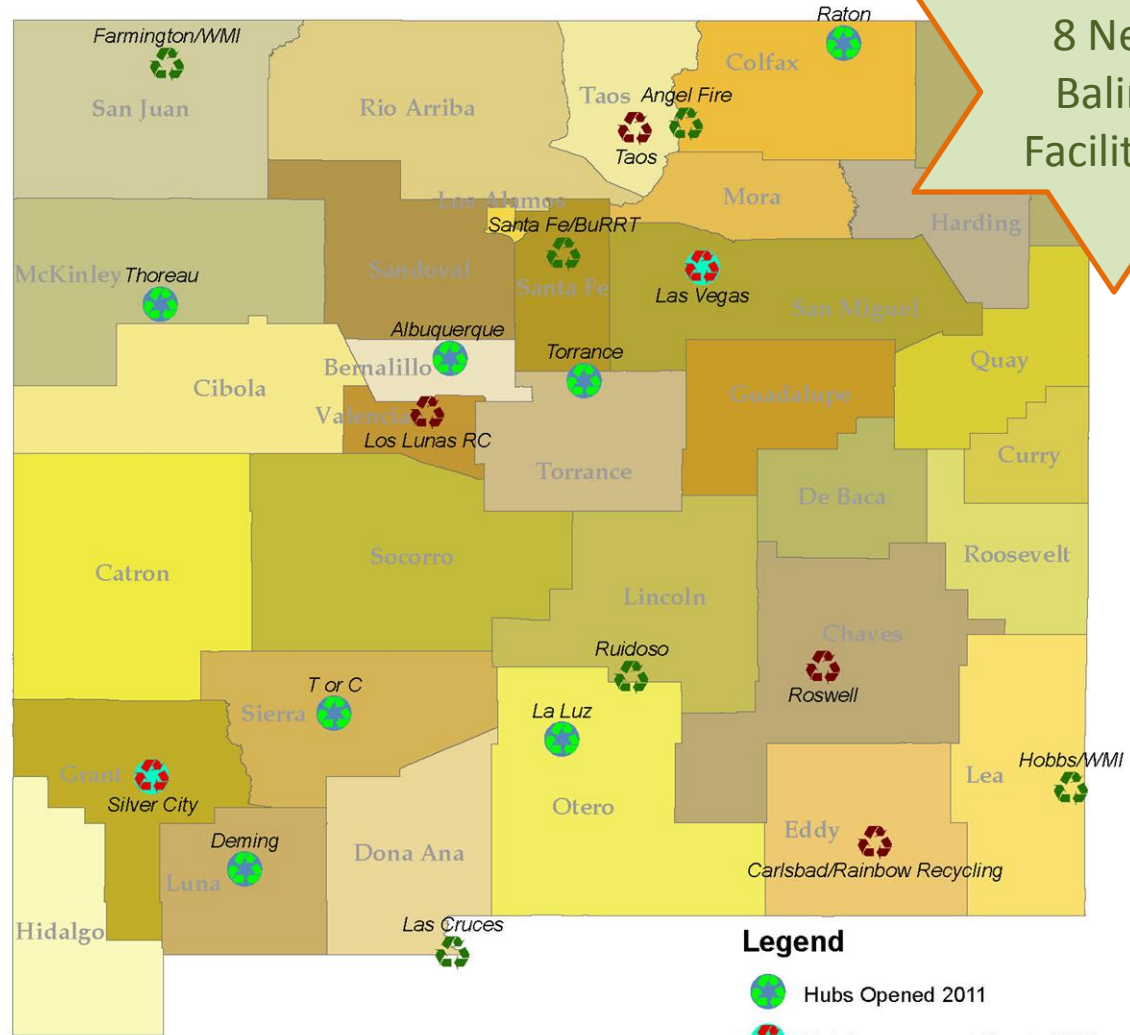


- 1.9 million people - 36th
- 5th largest state in size - 121,355 square miles
 - 15 people per square mile
- 2008-2013 focus on building infrastructure
- Initial mapping and rural recycling planning: USDA Rural Utility Solid Waste grant 2008-2010
- September 2010 - August 2013 funding via Dept of Energy Stimulus Funds \$2.8 Million
 - Hub and Spoke Infrastructure
 - Brochures/Signage/Education/Technical Assistance
 - PAYT education and outreach



New Mexico Hub and Spoke Recycling

8 New Baling Facilities!



Legend

- Hubs Opened 2011
- Hub Improvement Grants 2012
- Existing Hubs w/ Capacity
- Existing Hubs w/o Capacity

Strategic Development



Elements to New Mexico's Success

1. Hub and Spoke Program
 - Developing solid infrastructure
 - Framework for future infrastructure development
2. Education and Outreach
 - Consistent Signage
 - Co-Op
3. PAYT: critical strategy to increase material stream and support Hub and Spoke network – Residential & Commercial
4. Promote Policy that that drives recycling like PAYT
 - Outreach to legislature
 - Outreach to regional economic development
 - Outreach to municipal officials

Year	Rate	Annual Rate of Increase
2006	9.74%	
2007	10.96%	12.5%
2008	12.4%	13.1%
2009	14.6%	17.7%
2010	16.2%	11%
2011	20.72%	28%



Corrugated Cardboard

Cajas Corrugado



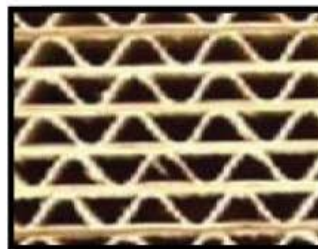
YES

**Corrugated
Cardboard
Brown Paper Bags**



*Cajas Corrugado
Bolsas de Papel Marrón*

[Adding 5,000 jobs to NM's Economy – report
released on November 15, 2012]



Please flatten boxes.
Se alpanar las cajas, por favor.



NO

**Boxboard Cartons
(cereal box, 6-pack)
Other Papers
Food Residue**



*Cajas de cartón delgado
(de cereal, galletas, etc.)
Otros Papeles
Restos de Comida*

Pay-As-You-Throw - Critical Part of Strategy

- Study ICF International 2010-2011:
 - ‘New Mexico Landfill Rate Analysis and Opportunities for Increased Diversion through Pay-As-You-Throw and Rate Incentives’*
 - Developed a better understanding of the waste stream and solid waste decision makers
 - Determined Imminent need and priorities
 - Created 3 over over-arching residential strategies
- Provided outreach and assistance through annual conference workshops, webinars, and in depth individual technical consultations
- Study ICF International 2012
 - ‘Adding 5,000 jobs to NM’s Economy’ A Plan to Increase Jobs Using Recycling-Based Pay-As-You-Throw and Economic Development’*
 - Report to be released on November 15,2012



PAYT Jobs Related Residential PAYT Implementation

Estimated Job Growth Through Implementation of Residential PAYT

	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
<i>New Mexico Status Quo 16.% recycling rate.</i>				
Recycling Collection	502	65	321	888
Recycling Processing	476	252	448	1176
Recycling Manufacturing	1083	1603	1766	4452
Reuse Remanufacturing	98	63	69	230
TOTAL	2159	1983	2604	6746
<i>Estimated NEW jobs through residential PAYT Implementation to 34.7% diversion rate.</i>				
Recycling Collection	755	98	363	1216
Recycling Processing	717	380	674	1770
Recycling Manufacturing	1630	2413	2657	6700
Reuse Remanufacturing	147	174	52	372
TOTAL	3249	3064	3745	10058
TOTAL	5408	5047	6348	16804

Preliminary draft findings – ‘Adding 5000 Jobs to New Mexico’s Economy’ released November 15, 2012 – ICF International – [actual report may vary from this preliminary number]

PAYT Jobs Residential and Commercial

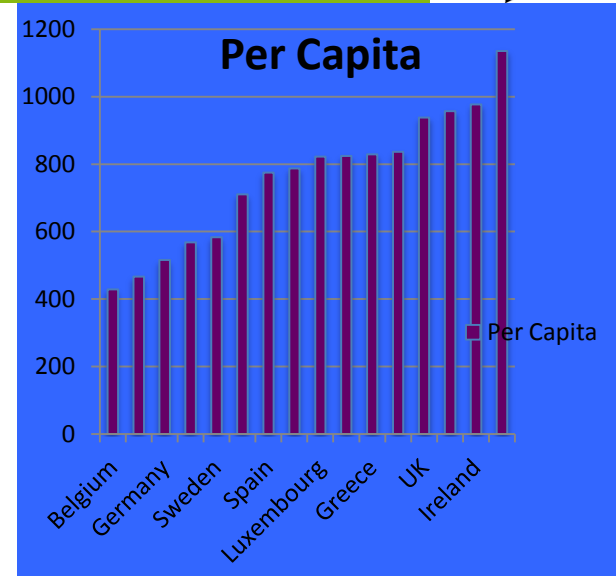
Estimated Job Growth Through Implementation of Residential and Commercial PAYT and achieving a 50% Recycling Rate				
	Direct Jobs	Indirect Jobs	Induced Jobs	Total Jobs
<i>New Mexico Status Quo 16% recycling rate.</i>				
Recycling Collection	502	65	321	888
Recycling Processing	476	252	448	1176
Recycling Manufacturing	1083	1603	1766	4452
Reuse Remanufacturing	98	63	69	230
TOTAL	2,159	1,983	2,604	6,746
<i>Estimated increase in jobs through residential and commercial PAYT Implementation to 50% diversion rate.</i>				
Recycling Collection	1,291	168	620	2,079
Recycling Processing	1,225	649	1,152	3,026
Recycling Manufacturing	2,787	4,125	4,543	11,455
Reuse Remanufacturing	252	297	88	637
TOTAL	5,555	5,239	6,403	17,197
TOTAL	7,714	7,222	9,006	23,943

Preliminary draft findings – ‘Adding 5000 Jobs to New Mexico’s Economy’ released November 15, 2012 – ICF International – [actual report may vary from this preliminary number]

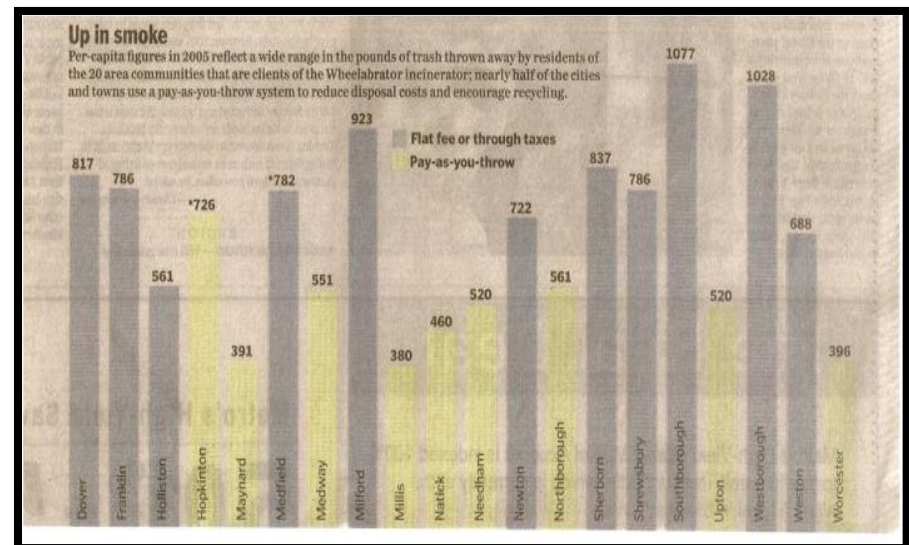
Personal Lessons Learned



- The only way to immediately and sustainably reduce residential waste is **PAYT**
- A consistent measurement metric is vital
 - Isolate the commercial sector from the residential sector and measure their growth separately
 - Use per capita disposal as benchmark



Source: Institute for Public Policy Research 2007



Boston Globe February 2007