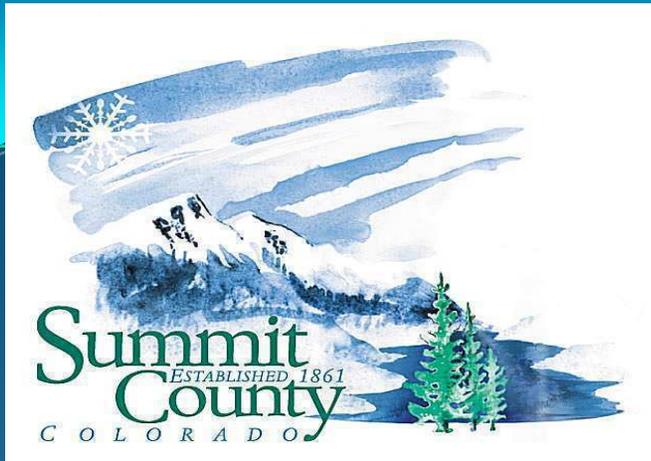




Kick-Off Meeting

April 25th

1. Opening Remarks (15 min) Thad
 - Defining the problem
 - Purpose of the Task Force
 - Introduction of Task Force members
 - Process and Ground Rules, Housekeeping
2. Background & Desired Outcomes (30 min) Thad
 - Short history
 - County goals and expected outcomes
3. Waste Diversion 101 - “Trashy” Myths (30 min) Laurie
4. Break – Q&A
5. Summit County “State of Affairs” (45 min)
 - Public Programs and services Kevin & Aaron
 - Private solid waste services Timberline
 - High Country Conservation Center services Jen
 - What’s working & what’s not Input from All
6. Groundwork for May Meetings (15 min) Thad
 - Prepare for May Zero Waste plan brainstorming
 - Zero Waste Vision Questions (handout)
 - Guidelines for Brainstorming session
 - Future meeting dates and times – Site visits and TF meeting
7. Adjourn



SUMMIT COUNTY ZERO WASTE TASK FORCE April 2012

Community Dilemma

“We’re funding our recycling and waste diversion programs with revenues from garbage at the same time we’re implementing programs to get rid of garbage.”



Goals of the Task Force

1. Develop recommendations for how our recycling and other solid waste and waste diversion programs should function
2. Recommend a means of paying for the programs we want
3. We need a solid waste/recycling management program that pays for itself in the long term without relying so heavily on trash revenue
4. Make recommendations on other areas of Solid Waste management that could be implemented county-wide while keeping the market vibrant

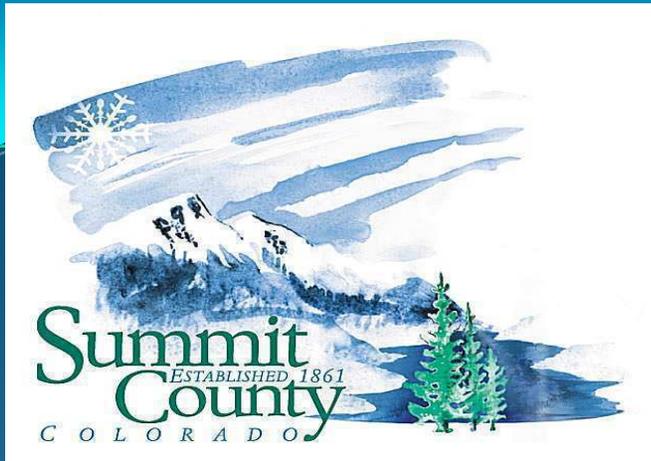


Summit
ESTABLISHED 1861
County
COLORADO

Introductions....

The Process

- Brainstorming to develop new models
- Consensus based decision making
- If you have something to say, please say it now!
- You represent your organization, so please discuss topics with them as we move along
- Be respectful of other opinions
- We will develop alternatives, then evaluate and refine as needed until we can all live with the recommendation
- Take the time that's needed, but with a goal of being finished by early August
- We all take ownership in the final recommendation!



Diversion Dilemma at the Summit County Resource Allocation Park (SCRAP)





Landfill Background

- Pre-County Operations - Informal “dump” on USFS property until the late 60’s
- Operated under USFS Special Use Permit until 1993
- County acquired land in 1994 from USFS along with requirement to clean it up
 - Continued the “dump” model early-on using contractor
 - Took over operation in 2004 to reduce environmental liability and create a modern Solid Waste facility



Early Landfill Efforts

- Reduce future taxpayer liabilities
- Protect the environment from toxic runoff
- Make up for the sins of the past by constructing liners, drainage, water treatment, etc.
- Extend landfill life
- Operate the landfill as an “enterprise fund” to provide for user fees to pay for services (sort of...)

Take care of our moral and fiscal responsibilities

Early Recycling Efforts

- SRP started by Tim McClure in 1976 as early recycling operations but had to shut down in 1983 due to lack of funding
- Reopened in 1989 by Bob & Rose Wentzell with one-day-per week drop-off centers
- HHW and electronics were done as annual drives during Town Clean Up Day
- Towns and County all donated – 75% of funding!
- \$180k of the \$250k budget came from the County



Notes from Carly Wier

Former Executive Director of SRP

Hi Thad!!

- Budget was \$250k in our heyday. Only 20-25% was ever made up from material sales
- We survived as a nonprofit through grants (including from all the Towns) -- and donations of cash AND goods (rent, equipment, tools, etc) from the local community.
- We paid our staff in karma and peanuts (I started in 1998 for \$8/hour) and drove trucks that wouldn't go in reverse. We got really creative at making do with little.
- SRP almost went under again in 2001 when the County stepped in with a last minute donation of \$180,000 that kept the doors open and the trucks rolling.
- The public was demanding more recycling, and due to the cost of the program the only way to increase diversion was for the County to take over operations.

Hope to see you soon,
Carly

Recent Developments

- August of 2005, Summit County Commissioners adopted a Zero Waste resolution to further reduce waste, promote recycling and increase landfill life
- Based on public vote, County began construction of the Material Recovery Facility (MRF) in 2005 and finished in 2006
- In Jan 2006, the County merged with Summit Recycling Project (SRP) and took over recycling operations from the non-profit.



What's at the SCRAP Now?

- MRF – traditional recycling materials
- Electronics and HHW collection
- Appliance recycling
- Pricing incentives to encourage more diversion – Wood chips, construction wood, slash, concrete, asphalt, etc
- High Country Composting Facility and green waste collection
- Help with “Zero Waste” programs for town events
- Public demand for more recycling
- New requirements for environmental protection



Commitment to Waste Reduction through Composting

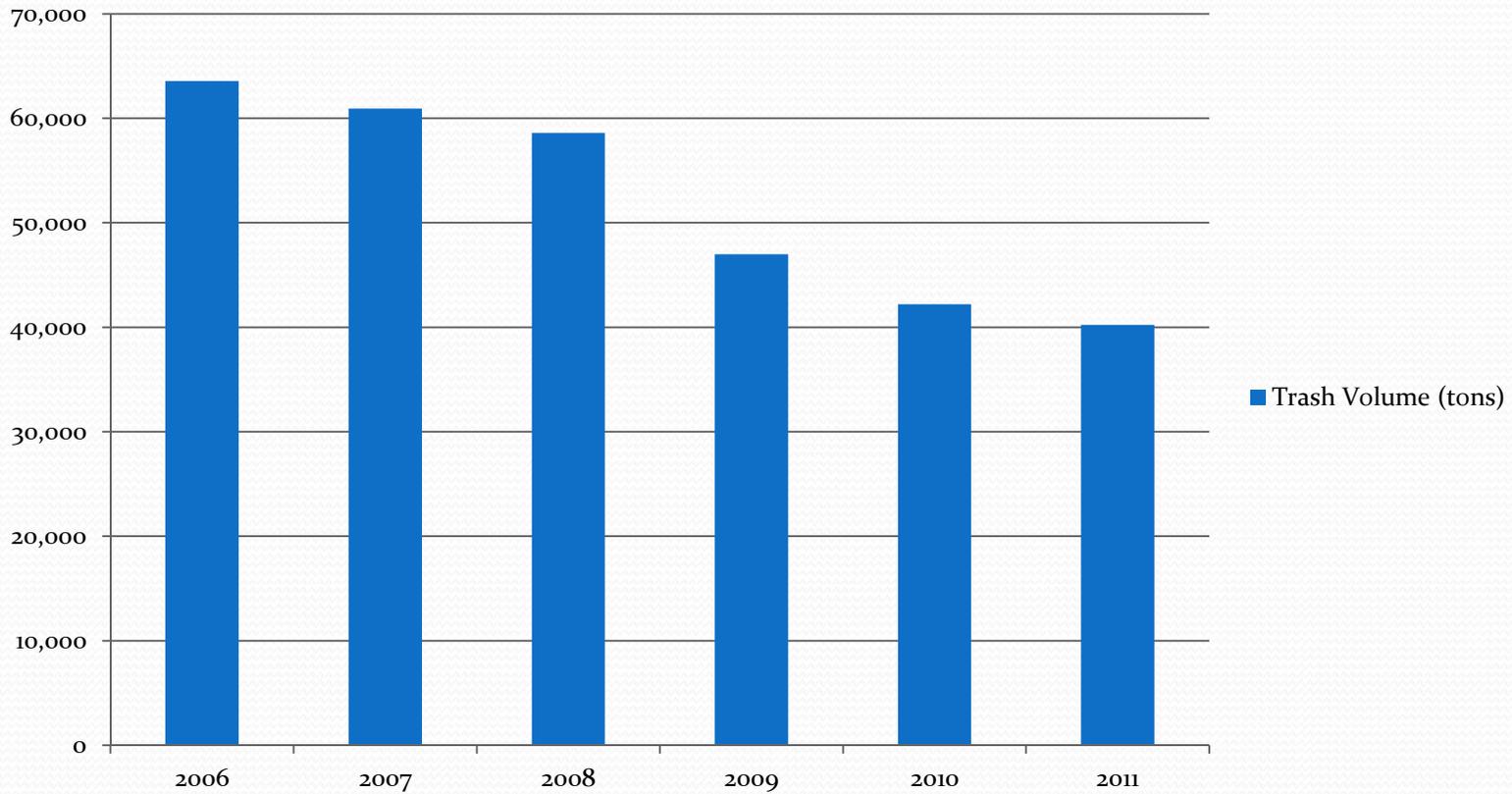
- Increased diversion of:
 - Wood from beetle kill and construction
 - Food waste
 - Biosolids from local wastewater plants
 - Non-recyclable paper waste
 - Yard waste
 - Manure
- Facility start up costs:
 - Over \$1M for site permitting, construction, grinder, material screening system and loader (grant from CDPHE for loader)
- Produces about 4-5,000 tons/year
- Programs now in every school, Vail Resorts, Mi Casa and others





The Dilemma

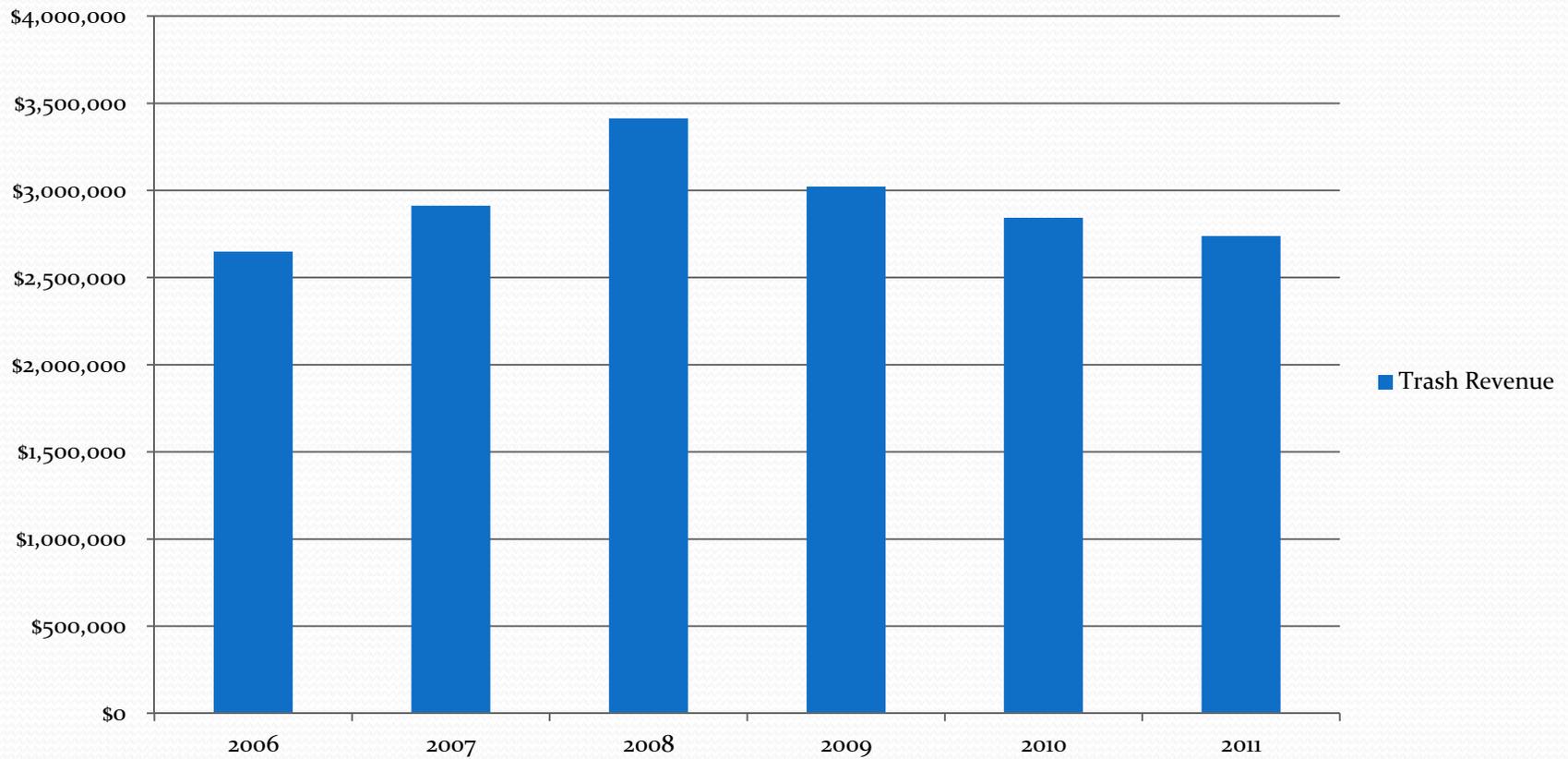
Trash Volume (tons)





Funding Dilemma

Trash Revenue



Catch 22

- Solid Waste / Recycling is an Enterprise, so BOCC can increase fees to cover costs. BUT...
↓
- Increasing tipping fees drives some haulers to use Front Range dumps
↓
- Less trash means less revenue
↓
- Less revenue creates the need for higher tipping fees....





New Paradigms Needed

- The economy accelerated what we hoped our recycling and composting programs would do – reduced our trash by 1/3
- Puts our solid waste and recycling programs at risk
- We need a solid waste/recycling management program that pays for itself in the long term without relying on trash revenue
- We have to find another funding source to pay for the programs and environmental protections we demand as a community!



A sustainable solid waste program must provide the revenues to achieve the broader goals of the community



Summary of the Issues

- Current revenues do not cover expenses
- More and more trash going to Front Range landfills where costs are cheaper – but public still demands more programs
- The BOCC can raise fees, but that only makes the problem worse – drives more trash to Front Range facilities
- Because it's easy and cheap to dump trash, recycling fees can't be high enough to pay for themselves

QUESTION: What can we do to change the paradigm and how can we make users pay the real cost of recycling?



Looking Ahead at Funding Challenges

Who pays for a Zero Waste world?



“How do we continue to pay for recycling programs with trash revenue when our goal is to get rid of trash?”

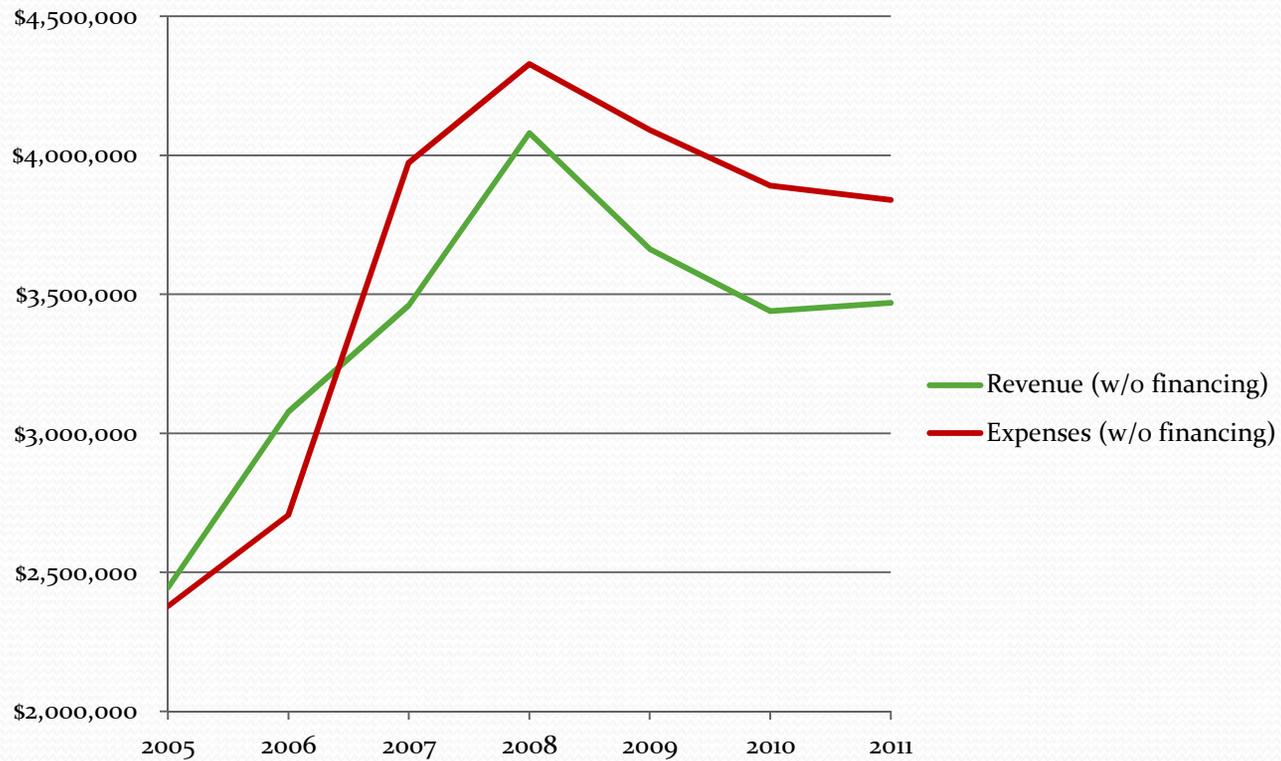


State of Affairs

- Big picture funding issues
- Tipping Fee Discussion
- Site Life Calculation



The Big Dilemma





2012 Tipping fees

Commercial compacted trash	\$60.00/ton
Loose tonnage	\$78.00/ton
Car Minimum 0-300 lbs	\$20.00
Truck Minimum 301-1000 lbs	\$35.00
Mobile Home	Call for pricing!



Tipping Fees Changes Last 10 Years

TIPPING FEES THRU THE YEARS \$/ ton

	LOOSE	COMPACTED	CARS	PICKUPS
2002	\$33.50	\$33.50	\$9.00	\$18.00
2003	\$33.50	\$33.50	\$9.00	\$18.00
2004	\$48.00	\$36.00	\$10.00	\$20.00
2005	\$48.00	\$36.00	\$10.00	\$20.00
2006	\$48.00	\$36.00	\$10.00	\$20.00
2007	\$58.00	\$46.00	\$15.00	\$25.00
2008	\$65.00	\$53.00	\$18.00	\$28.00
2009	\$74.00	\$57.00	\$18.00	\$30.00
2010	\$78.00	\$60.00	\$20.00	\$35.00
2011	\$78.00	\$60.00	\$20.00	\$35.00
2012	\$78.00	\$60.00	\$20.00	\$35.00



Surrounding County's Tipping Fees

Landfill	Tipping Fee		Out of County Accepted?	Tons Per Day (Avg)	Landfill Life (Years)
	Compacted Waste \$/Ton	C&D Waste \$/Ton			
Garfield County	58.00	58.00	116.00/Ton	200	51
Pitkin County	52.00	60.00	Yes	200	20-25
Milner (Routt)	18.90 *	16.65 *	Yes	450 cy	65
Eagle County	39.00	47.45	Yes	270	100+
South Canyon (Glenwood)	36.00	48.00	Yes	300	60/with BLM land swap
Lake County	50.00 ³	66.7 ⁴	Yes	300 cy	3-5
Grand County	88.40	88.40			
Average	48.90	55.03			
Summit County	60.00	78.00	Yes	150	44



2012 Tipping Fee Breakdown

Item	Annual Amount	% of Total Tipping fee	Portion of Average Tipping Fee
Capital assets acquisition	\$ 400,000.00	10.1%	\$ 6.97
COPs to bring landfill into compliance for water quality and drainage	\$ 260,000.00	6.6%	\$ 4.53
Recycling Shortfall	\$ 400,000.00	10.1%	\$ 6.97
Landfill operations & capital including closure and post-closure costs	\$ 2,900,000.00	73.2%	\$ 50.53



Remaining Landfill Life

KRW CONSULTING, INC.

March 30, 2012

Dear Mr. Byrne:

- Per your request, KRW Consulting has completed an estimate of the remaining life in the Summit County Landfill
- We assumed an annual growth rate in the landfill gate of 2.4 percent based on state demographer data
- We estimate that **the landfill will run out of airspace in 2056**

Sincerely,

Ted Alexander, PE



Summary

- Revenues are less than expenses
- Tipping fees are now becoming so high that it encourages out-of-county disposal, which reduces revenues further
- More environmental protections are being mandated due to new EPA regulation changes which are increasing the cost of operation
- We need a new model to provide the programs that the public demands while meeting our environmental protection requirements

Recycling Programs

- Drop Off Centers (Excellent Participation) FREE
- Curbside Collection (Recycling and Compost) Fees
- MRF – Materials Recovery Facility – Some Fees
- Electronics Collection (Fee Based) ERI - BAN
- HHW – Household Hazardous Waste (Fee Based)
- Event Recycling
- Recycled Oil Burners for Heat at MRF
- Trial Ski Program with SSIA



Recycling Budget Overview

- 2011 Recycling Budget = \$895,000
- \$450,00 is Labor, 50% of Budget Expenses
- Five Full Time Employees for Recycling Programs
- Remainder is Operating Expenses and Capital
- \$490,642 in Fees and Revenue
- \$400,000 Other County Funds



Current Goals

- Increase Volumes without Significantly Increasing Costs
- Increase Volumes of Highest Paying Commodities
- Manage Operating Costs
- Respond to Community Interests
- Cost Plus 10% on any new Fee Based Service
- Handle and Transfer Single Stream Recycling
- Support Local Zero Waste Initiatives



The life and times of the High Country Conservation Center

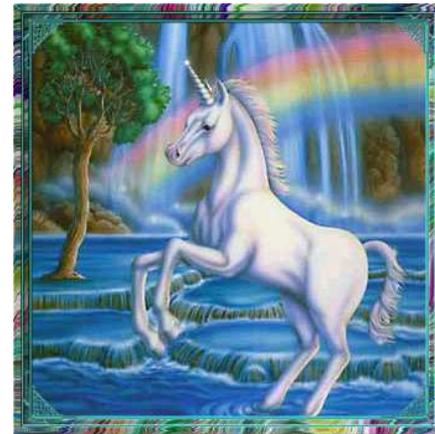


www.highcountryconservation.org



A Brief History

- Founded in 1976 as Summit Recycling Project
- Became High Country Conservation Center (HC3) in 2006 when County took on recycling operations
- Annual partnership agreement with County to perform waste reduction education
- Expanded services and expertise beyond recycling





Current Focus Areas

*Mission: To provide **practical** solutions for waste reduction and resource conservation for our mountain community.*

- Waste Reduction
- Energy Efficiency and Renewable Energy
- Green Building
- Sustainable and Local Food





Funding

- County (\$90k) and local towns
- Grants – both government and non-government
- Fee-for-services (energy audits, zero waste events, business programs)
- Individual donations and special events

2012 Budget is ~\$300k for all program costs and 4.5 staff



2012 Projects and Programs

- Waste Reduction Education
- Home/small business energy audits and ratings
- Sustainable business programs in Frisco, Breck and Silverthorne (30 businesses total)
- Summit County solar garden
- Community gardens in Breck and Frisco





Composting in the Schools

- All K-12 Summit School District Schools signed on!
- Reaches 3,000 students and 100 teachers
- 15 tons of food waste diverted...so far
- Kids love it and teach their parents





Zero Waste Events

- Frisco BBQ, Oktoberfest, ProCycling Challenge, Leadville Races (including 100MTB and Trail Run)
- Over 70% diversion at Frisco BBQ
- Provide volunteers and coordinate zero waste stations to separate recycling, food waste and trash
- Partner with County, which provides material hauling





Business Sustainability Programs

- Providing waste audits for 30 businesses in Frisco, Breckenridge and Silverthorne
- Comprehensive information to businesses on actionable ways to reduce waste





Waste Diversion Education

- SCRAP Tours for Schools
- Field hundreds of phone calls re: recycling and composting
- Master Mountain Composter workshop
- Zero waste party packs





HC3's Role on Task Force

Provide guidance on community-wide strategies
that will reduce waste

AND

Offer on-the ground
experience for programs
that work
(or don't...)



Jen Schenk, Executive Director
Jen Santry, Community Programs Director



TOP TEN TRASH MYTHS

April 25, 2012

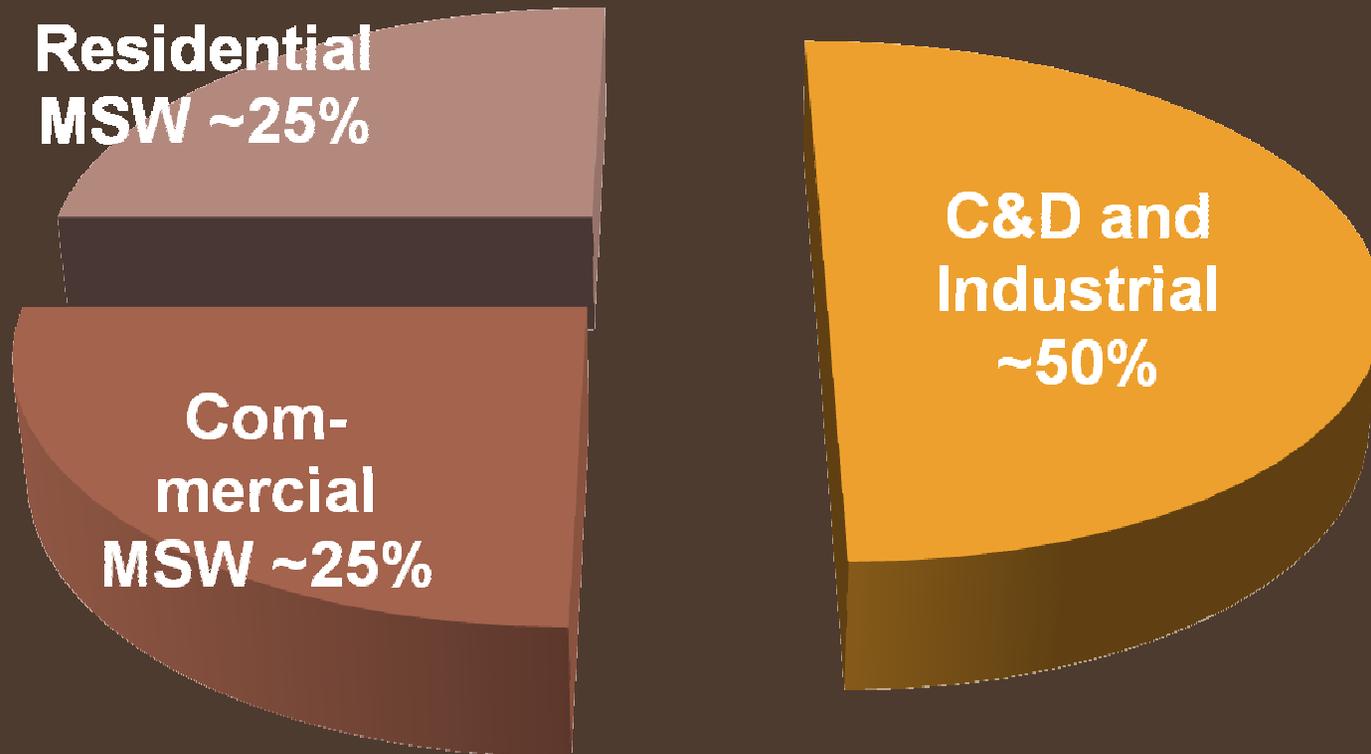
LBA ASSOCIATES, INC. & SUMMIT COUNTY

MYTH #1: WHAT COULD BE EASIER THAN MANAGING GARBAGE?

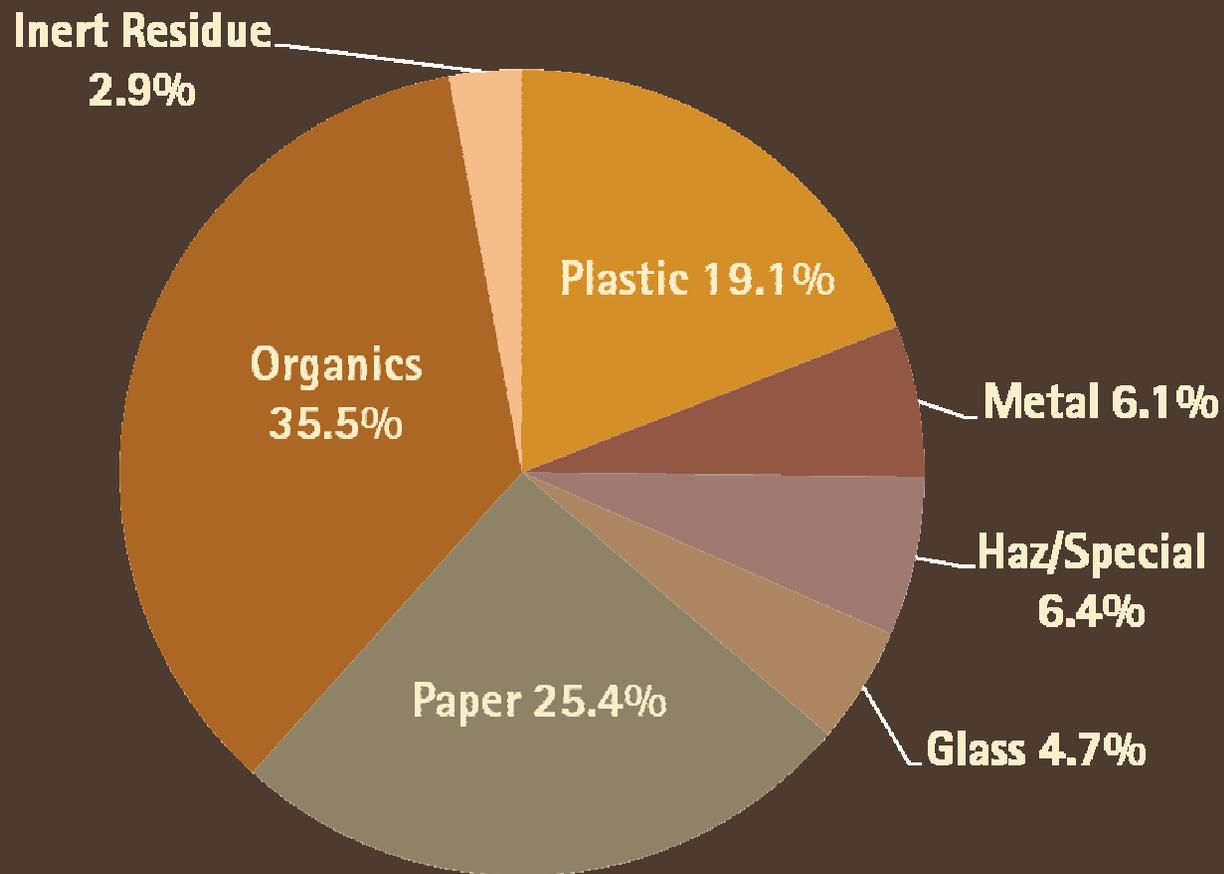




MYTH #2: MOST OF TONS ARE HOUSEHOLD TRASH

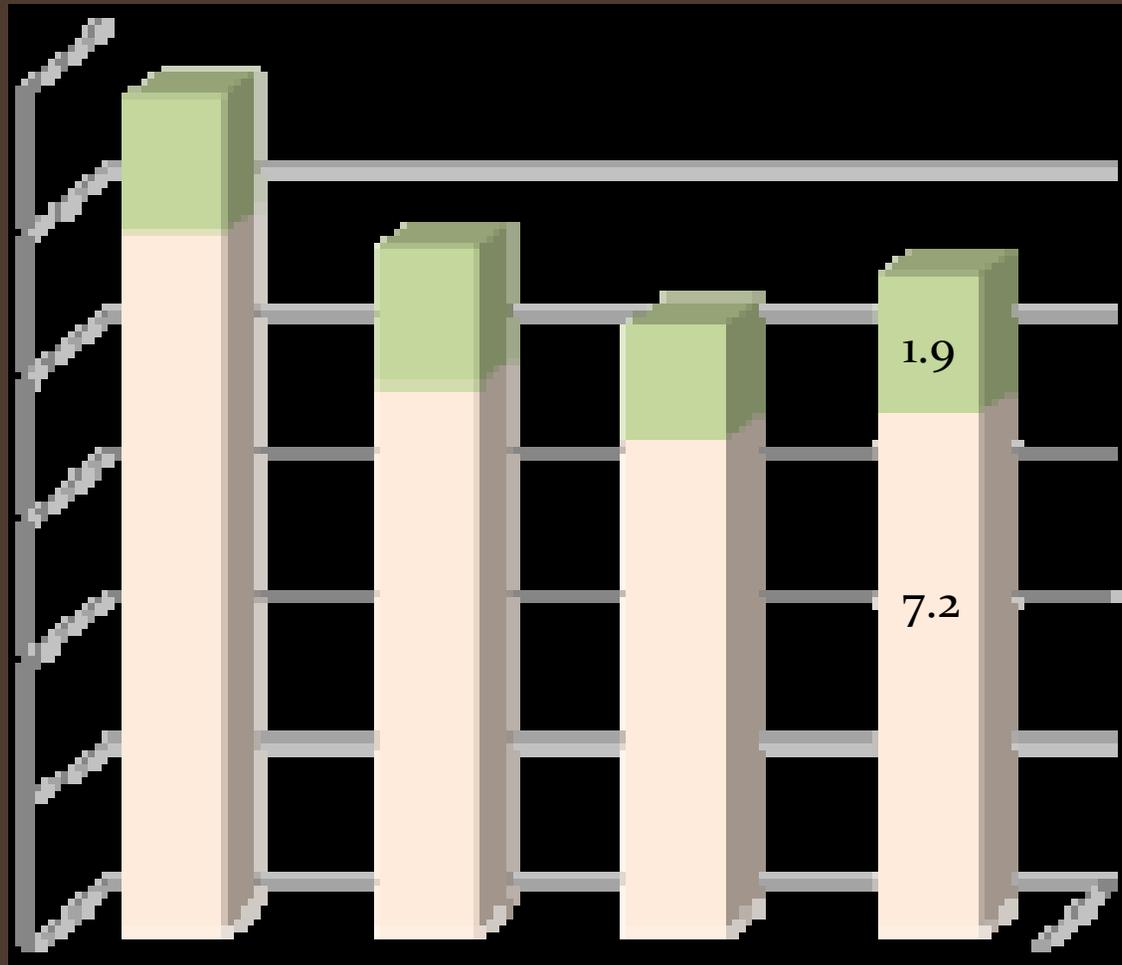


MYTH #3: WE DON'T NEED NO STINKIN' DATA!



Eagle/Garfield/Pitkin County Waste Composition Data
- Aggregated Residential Landfill Samples By Weight
(source = LBA, 2009)

12.0



0.0

2007

2008

2009

2010

2010 total
solid waste
generation
= 9.1 ppcd

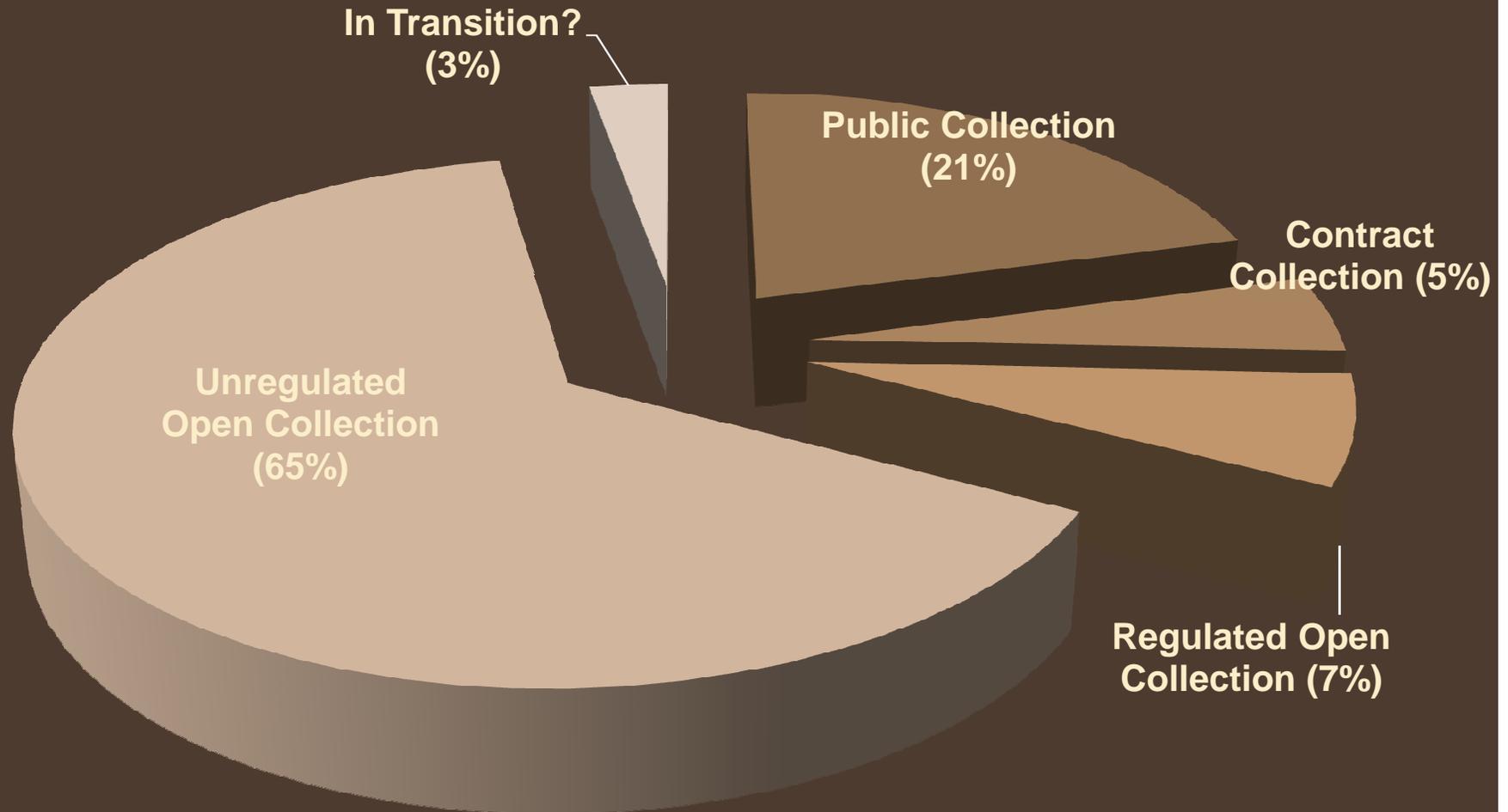
CDPHE Calculation of Per-Person Daily Waste Generation

MYTH #4: MARKETPLACE WILL MAKE DIVERSION HAPPEN WITHOUT OUR HELP



- MSW diversion level <20% (national 35%)
 - ▣ Low landfill tipping fees
 - ▣ Low recycling tons in CO
 - ▣ Very few local markets
 - ▣ High transportation costs
- We just want to be average!

MYTH #5: COLORADO ALREADY HAS TOO MANY REGULATIONS



Survey on cities with >10,000 population (2010) – includes HOA populations (source = LBA, 2010)
LBA Associates, Inc.

MYTH #6: SERVICE PRICING'S ALL THE SAME

LANDFILL "A" TIP FEE

- Fees include
 - Landfill operations, remediation, closure costs
 - Recycling operations
 - Composting operations
 - HHW program
 - E-waste program
 - Education



LANDFILL "O" TIP FEE

- Fees include
 - Landfill operations, remediation, closure costs



MYTH #7: VARIABLE RATES = ONLY WAY TO INCREASE DIVERSION

- Variable rates for residential trash collection
 - ▣ Big enough price differential to incentivize recycling
 - ▣ Multiple/same size containers, stickers, bags or carts
 - ▣ Part of open, regulated or contract system
 - ▣ Low/no cost to cities
 - ▣ Low/moderated cost to haulers - costs to residents vary

Other strategies: higher landfill fees - mandatory recycling - disposal bans - rewards - strong education program - super-convenient recycling (single-stream, etc.)

	Reduced Trash	Increased Diversion To	Decreased Costs
Fort Worth, TX			Saved \$6M in 1 yr
Midland Park, NJ		50% in 7 yrs	
Mount Vernon, IA		50% in 6 yrs	Saved \$47/hh
Worcester, MA	Reduced 50% in 1 yr		
Seoul, Korea	Reduced 42% in 1 yr		

	Reduced Waste Generation	Increased Diversion To
Aspen (2005 with MFUs, commercial)	To 8 ppcd in 4 yrs (county)	32% in 4 yrs (county)
Boulder (2002 w organics)		35% city-wide/48% residential in 8 yrs
Fort Collins (2004)		32% in 5 yrs
Lafayette (2007)		27% in 2 yrs
Loveland (1990 w organics)	6.6 to 2.6 ppcd in 5 yrs	56% in 5 yrs

MYTH #8: WASTE FEES ARE GOIN' KILL US!

Other Expenditures	Cost Per Month
Cable TV	\$30 (basic service)
5 packs Marlboro's /week	\$98 (health care costs excluded)
1 Starbucks tall latte/day	\$105 (no extra shots)
Driving 10 miles to work	\$237 (fuel, vehicle wear & tear)

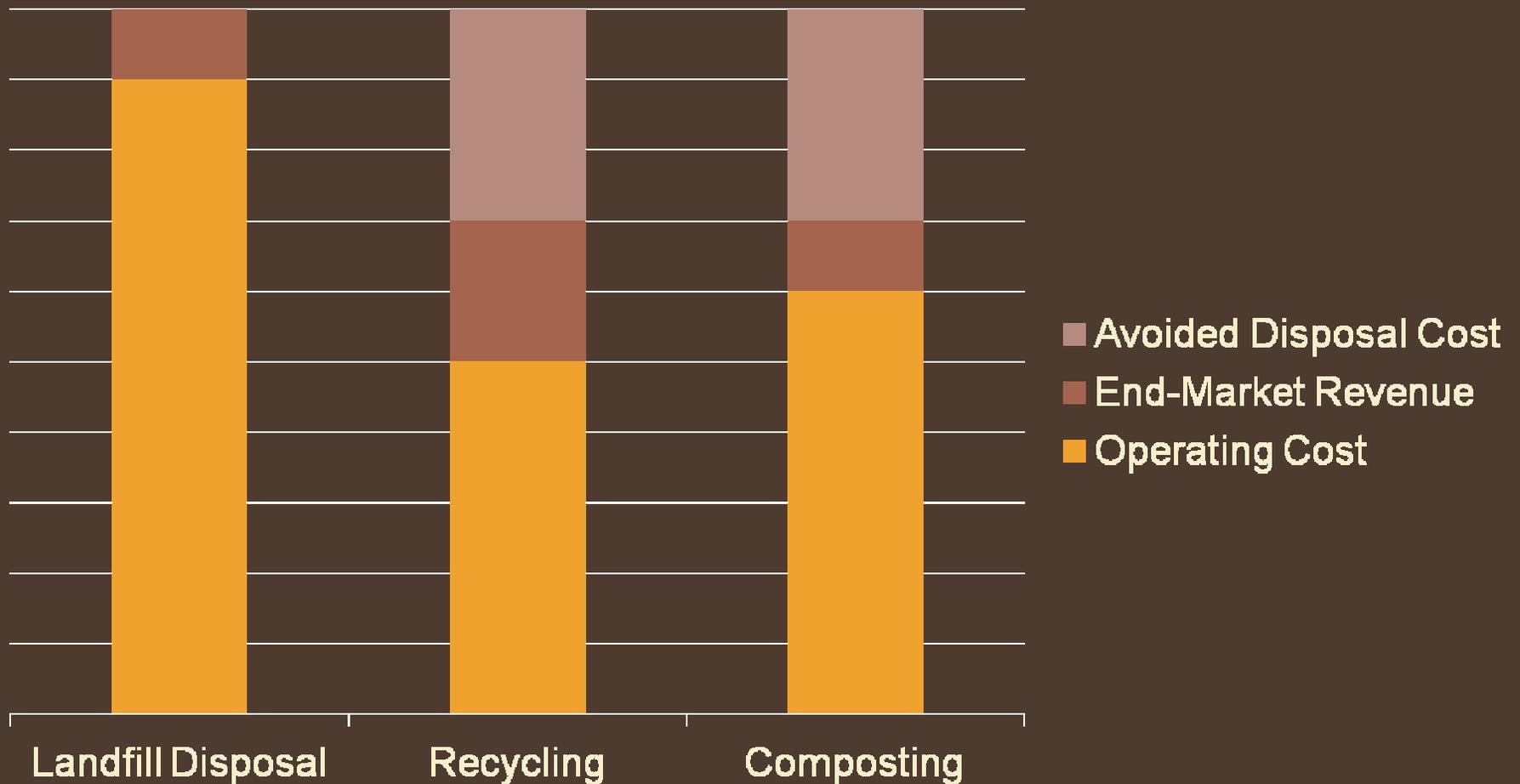


MYTH #9: ONCE WE GET OUR RECYCLABLES TO MRF, WE'RE DONE

- Long-haul distances for disposal or recycling
 - Costs (tractor/trailer)
 - Fuel costs (\$4/gal diesel, 5 mpg)
 - Labor costs
 - Vehicle operation, maintenance & repair cost
 - Infrastructure
 - Traffic
 - Highway wear & tear
 - Environment
 - Fuel consumption
 - Greenhouse gases



MYTH #10: RECYCLING & COMPOSTING IS FREE - RIGHT?



The Evolution of the waste Can

