

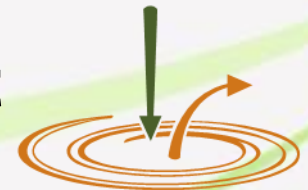
# Sorting It All Out:

## What's in Your Garbage And Why You Should Care



Mitch Kessler  
Kessler Consulting, Inc.

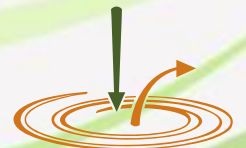
**SWANA FL / RFT Winter Summit**  
**February 22, 2016**



**kessler consulting inc.**  
innovative waste solutions

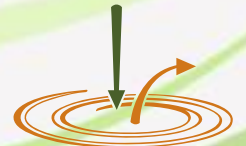
# Why Should You Care?

**If you don't measure it,  
you can't manage it.**



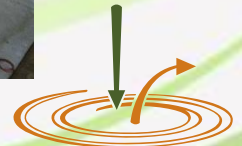
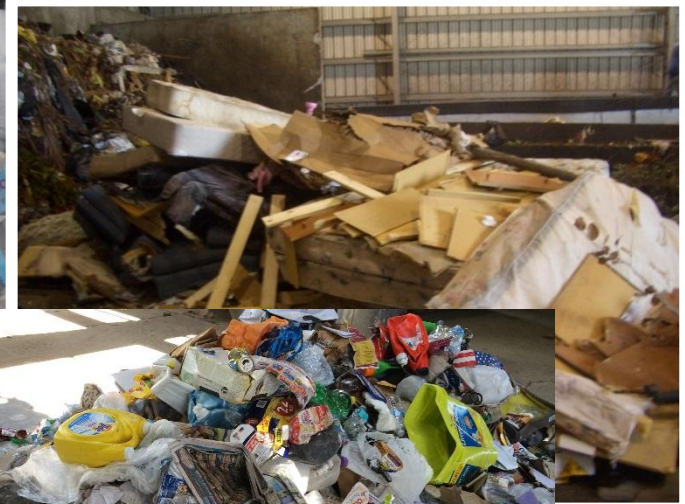
# Why Measure?

- SWM planning
- Benchmark/gauge program effectiveness
- Targeting education and outreach
- Potential cost savings
- Reporting requirements
- Certification programs (i.e., LEED<sup>®</sup>)



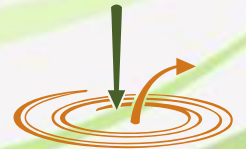
# Types of Studies

- Waste
  - Manual sorting
  - Visual audit
- Recycling
  - Pre-processing
  - Post-processing



# Generator and Sectors

- Sectors
  - Residential
  - Commercial
  - Institutional
  - Public areas
- Municipal
  - City/County
  - State
- Facility specific





# Solid Waste Variables

**Population**

**Politics**

**Policies**

**Types of Haulers**

**Geographic Location**

**Tons Processed**

**Materials Collected**

**Service Areas**



**Revenue Share**

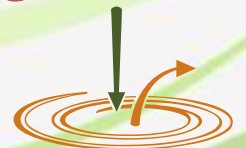
**Integration of Services**

**Public Participation**

**Tip Fees**

**Timeframe of Study**

**Recycling Market**

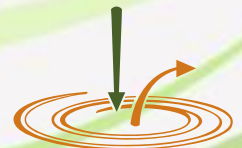


# Pitfalls of Comparing Data

- Diverse demographic, collection, and processing factors
- Non-standardized information
- Varying reporting practices
- Inconsistent definitions and methodology
- Numerous local factors



≠



# Measuring Recyclables

## Pre-processing

- Municipality/public
- Recyclables delivered
- Supply value
- Contamination



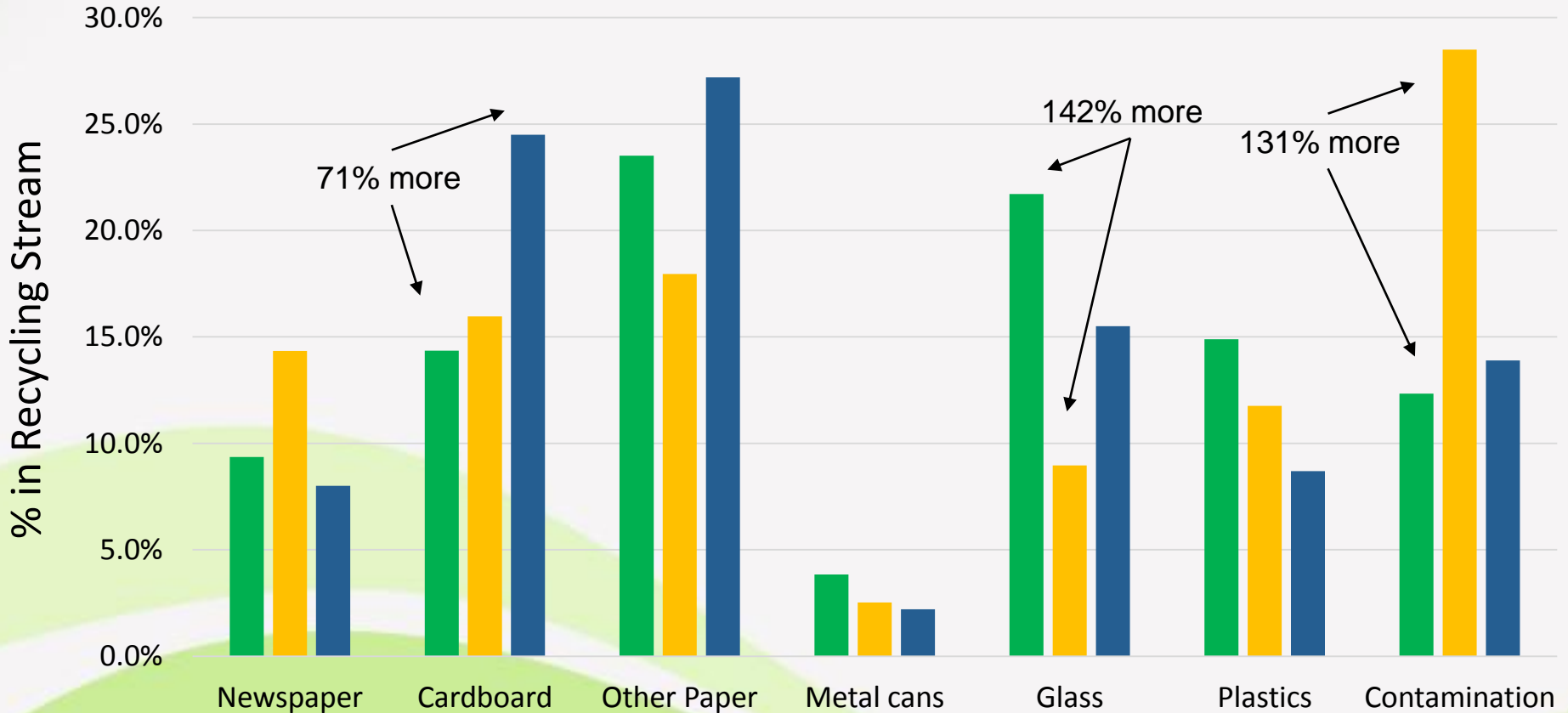
## Post-processing

- Operator
- Means & methods
- System efficiencies
- What's in residue?
- Market for recyclables

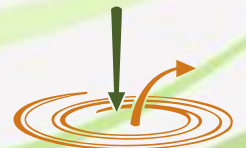




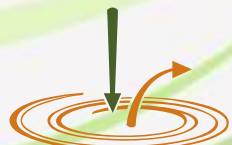
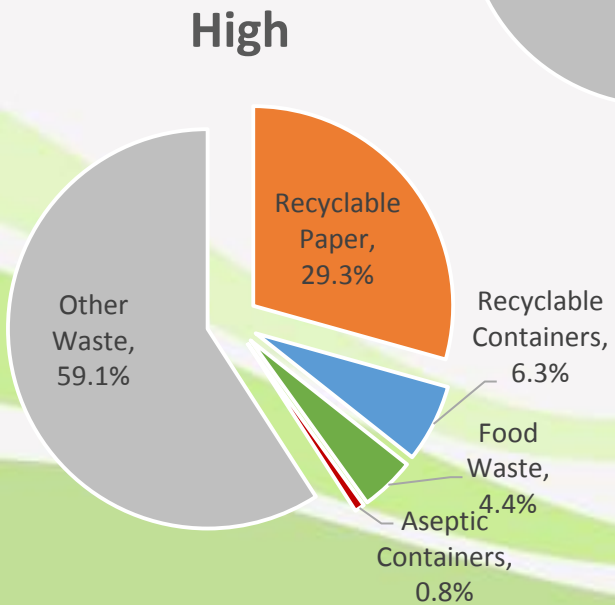
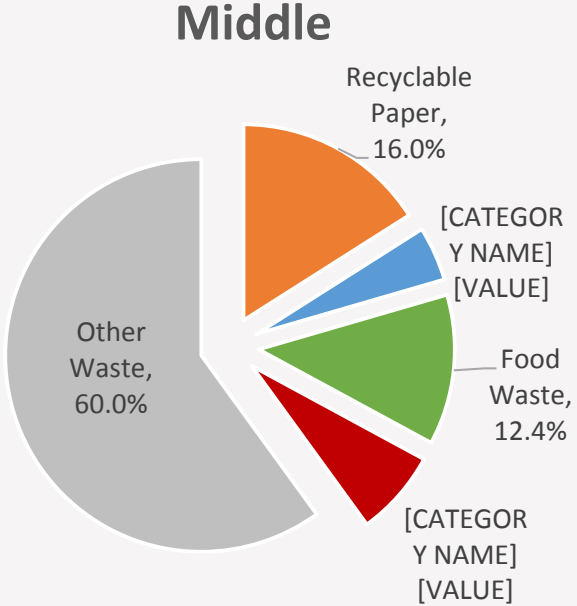
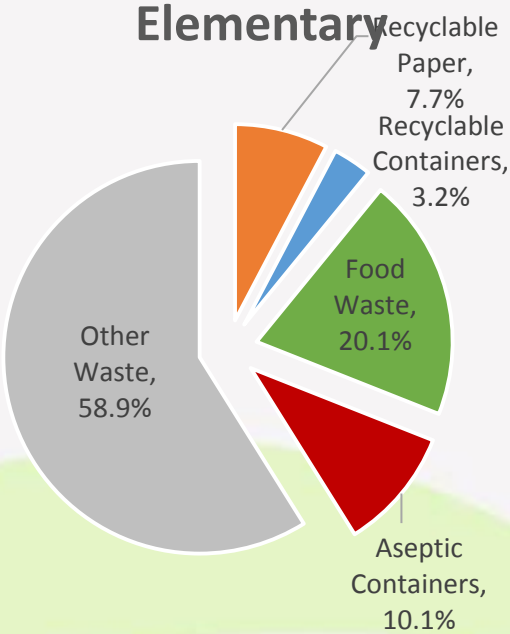
# The Tale of Three Cities



City 1 (Green): \$107.64/ton  
 City 2 (Yellow): \$90.14/ton  
 City 3 (Blue): \$88.01/ton

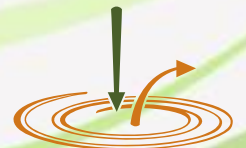


# Educating Schools on Diversion

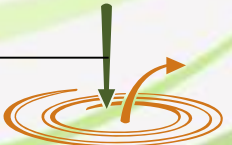
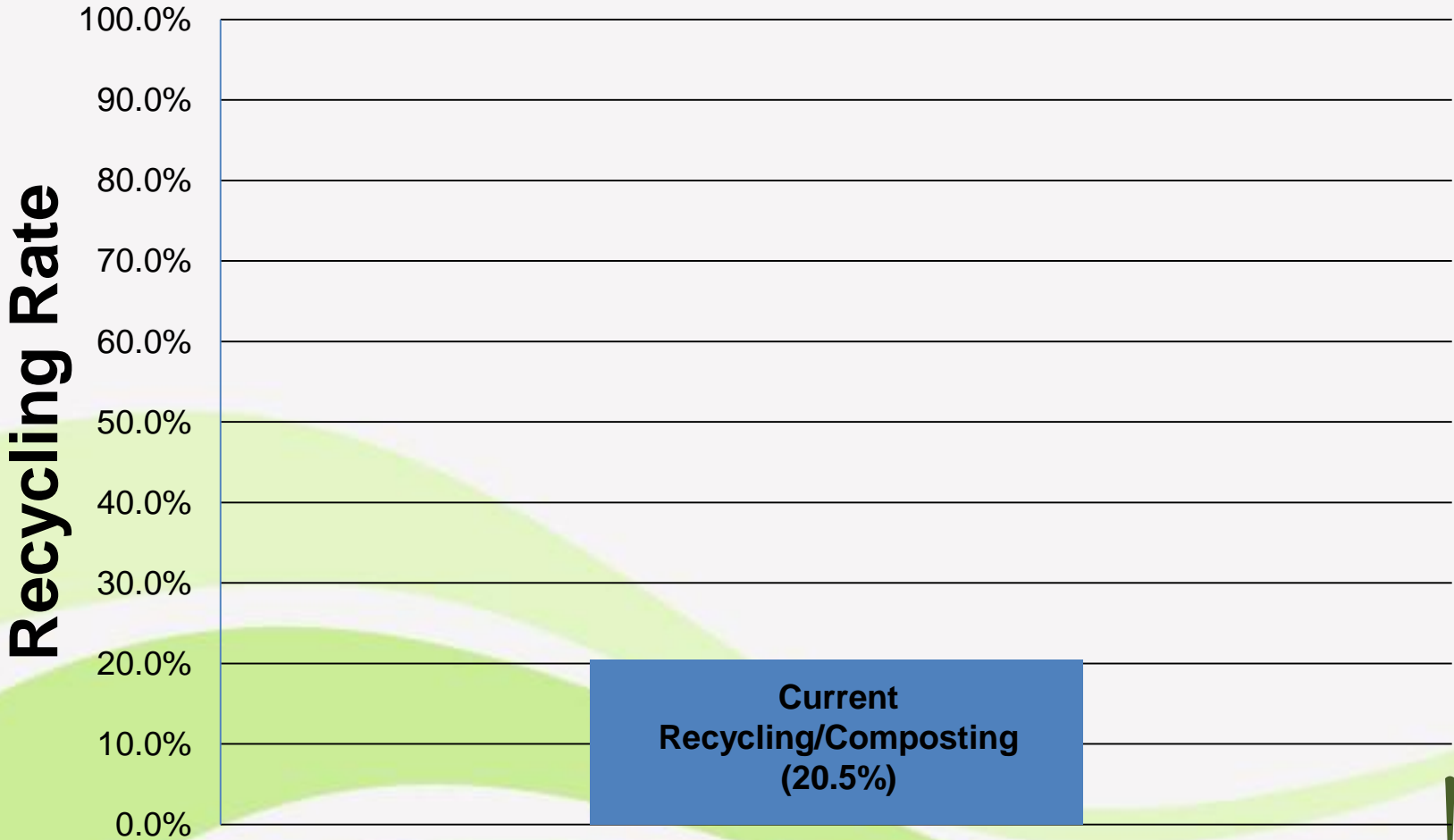


# The Changing Waste Stream

<b>Material Category</b>	<b>1994 Study</b>	<b>2001 Study</b>	<b>2014 Study</b>	<b>% change</b>
Newspaper	4.7%	4.2%	2.0%	-57.8%
Plastic Bottles	0.6%	1.1%	2.5%	346.4%
C&D Debris	27.8%	23.8%	17.6%	-36.6%
Yard Waste	18.5%	28.8%	32.0%	72.7%
Food Waste	4.7%	5.2%	6.8%	46.2%

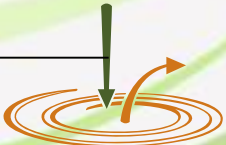
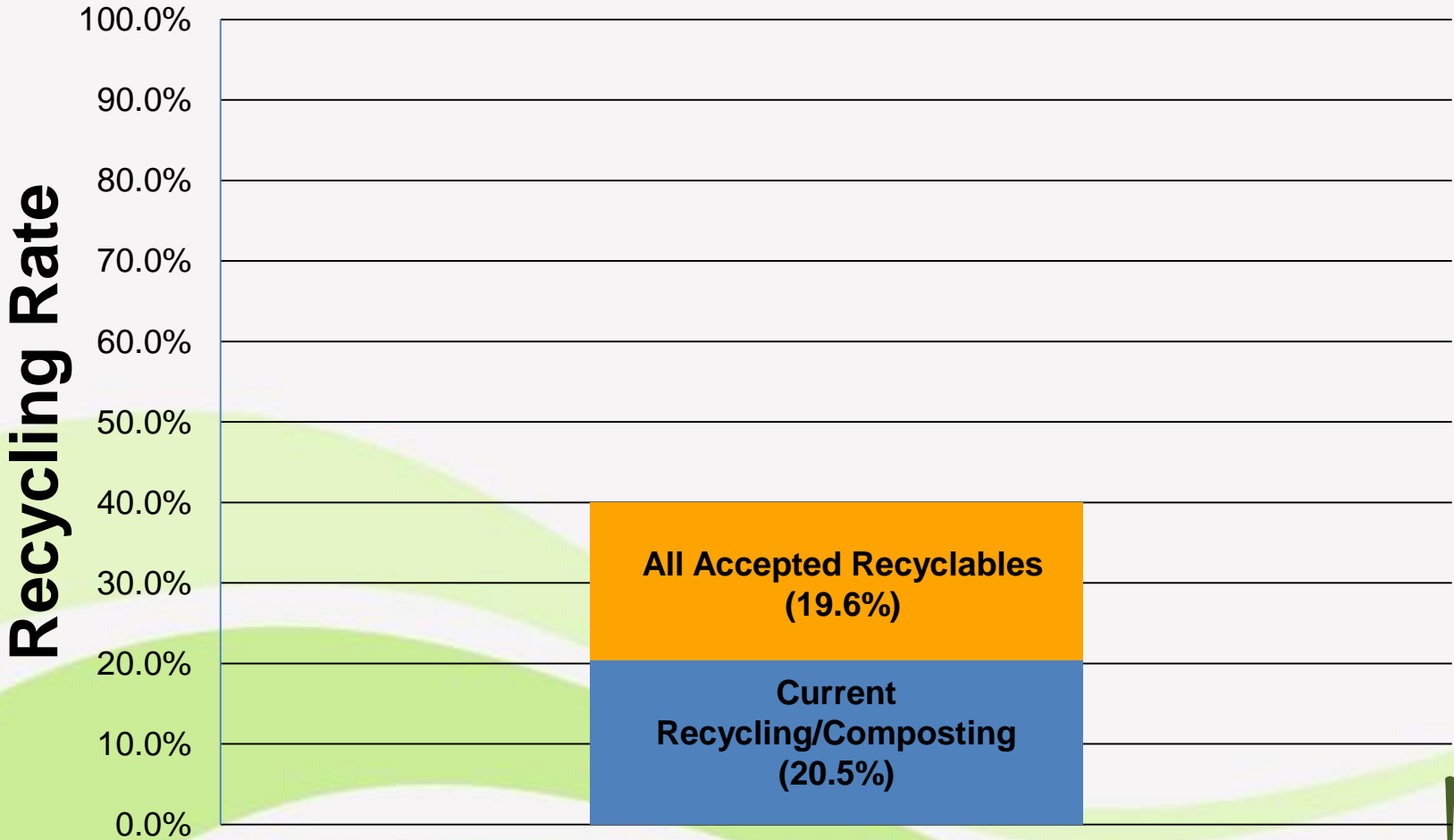


# Setting Achievable Goals

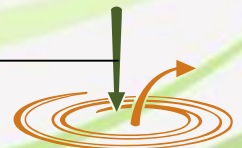
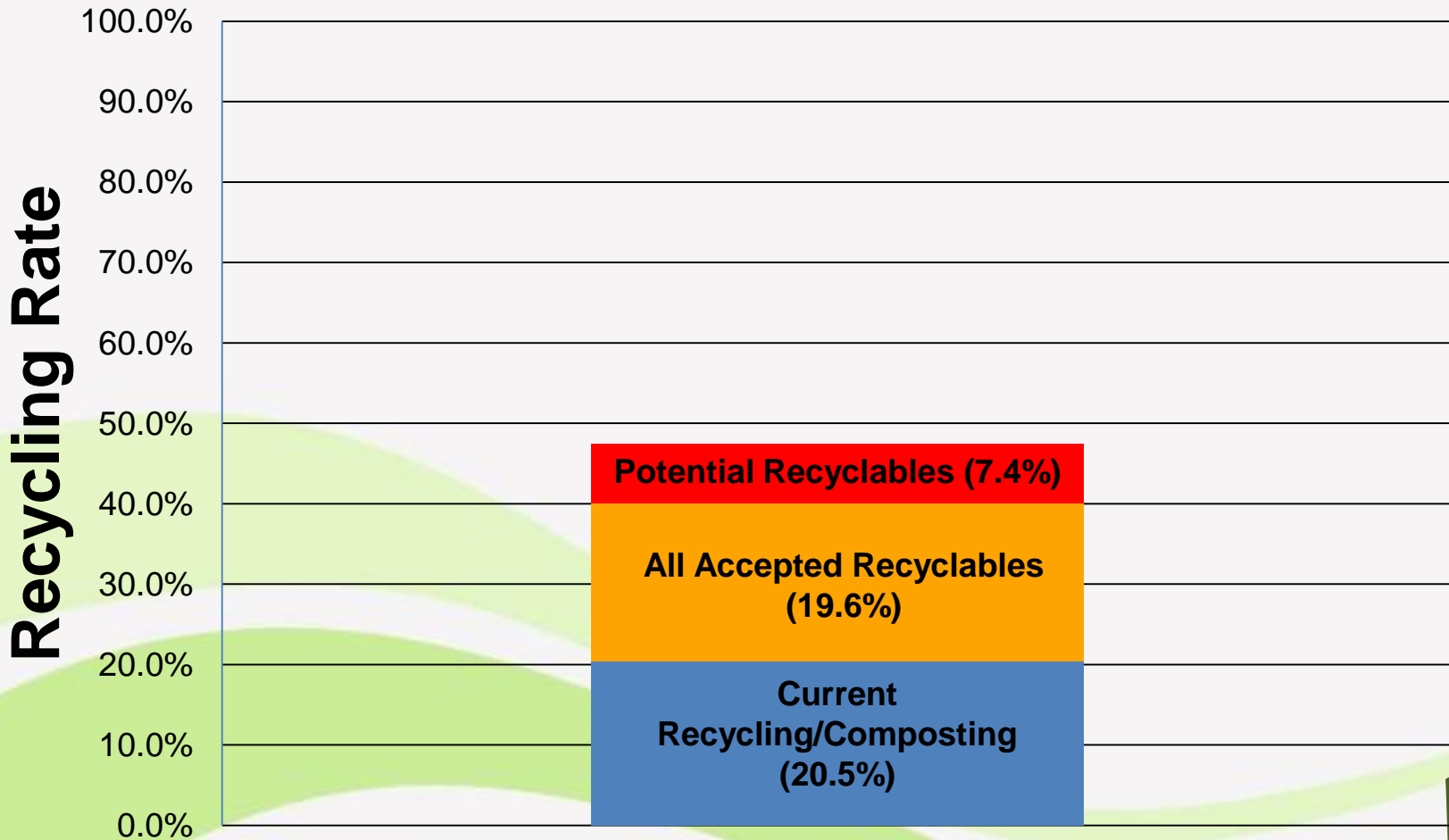




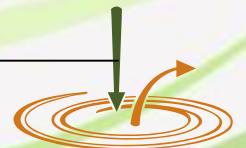
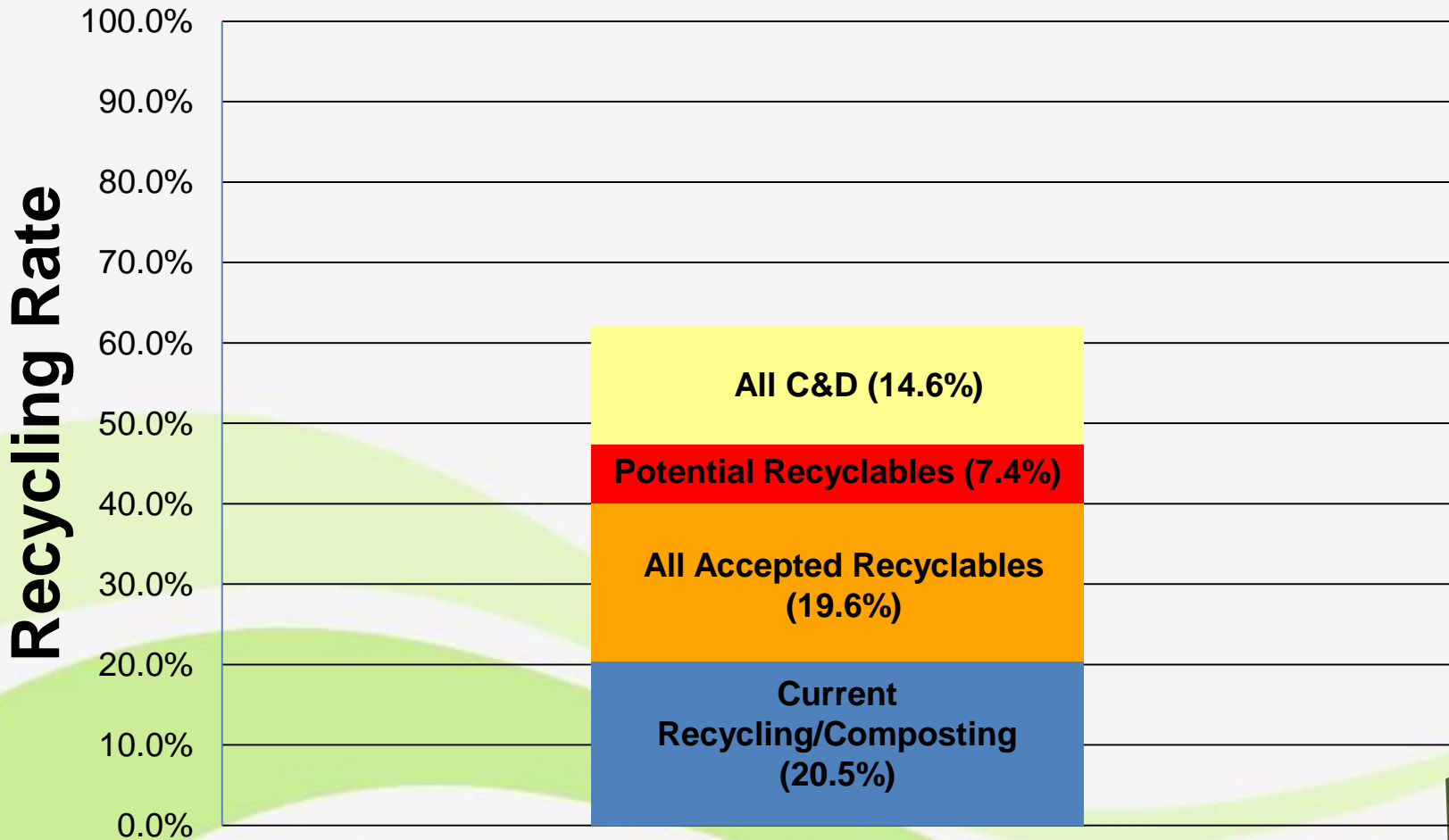
# Setting Achievable Goals



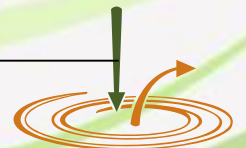
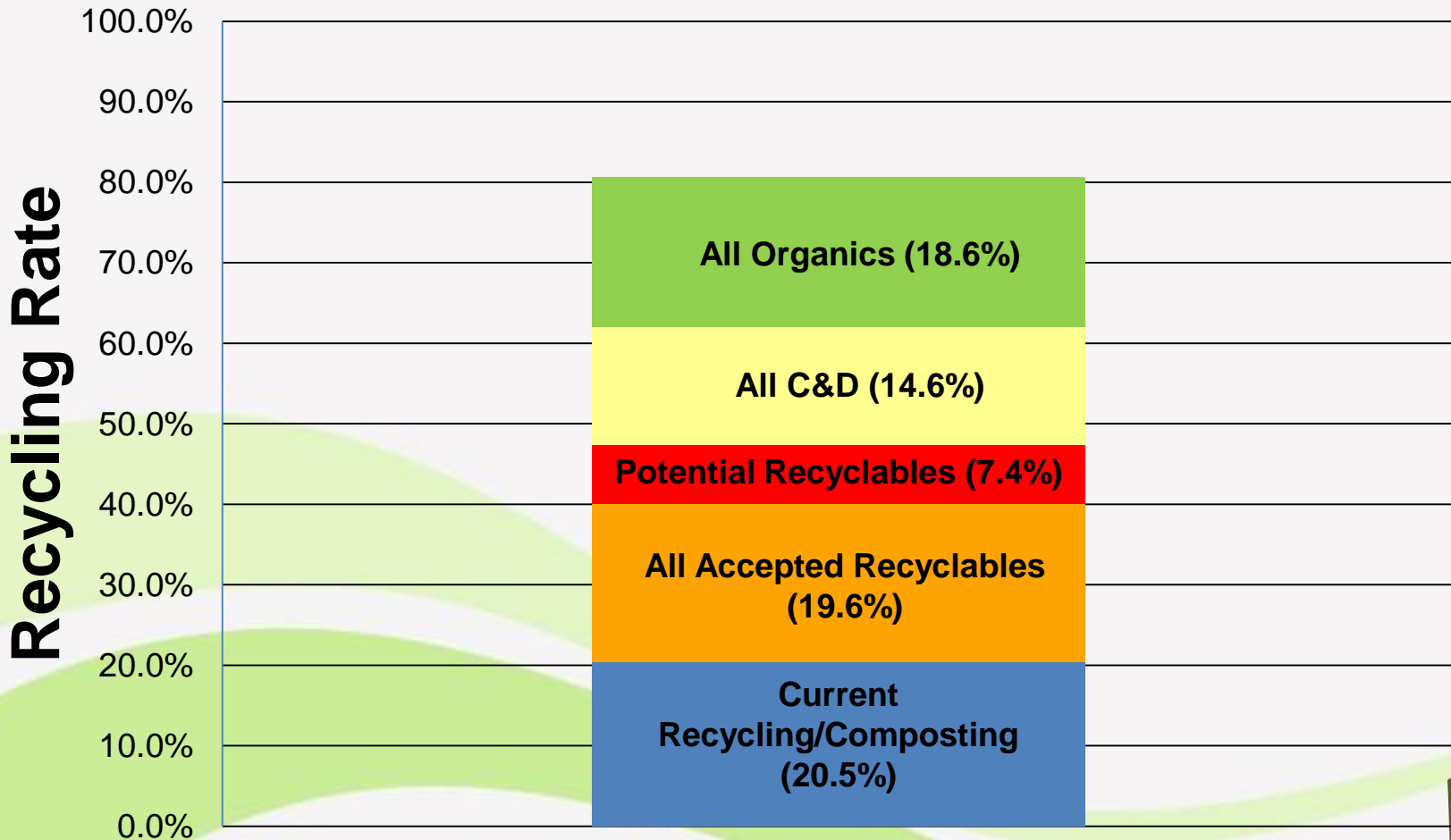
# Setting Achievable Goals



# Setting Achievable Goals



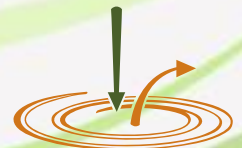
# Setting Achievable Goals





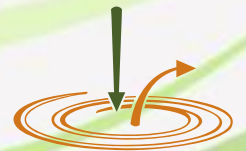
# Value of a Comp Study/Why You Should Care?

- Real actionable data
- Benchmarking and reporting
- Evaluate programs
- Identify future recycling opportunities
- Focused outreach
- Certification programs
- Environmental impact



# What's Best for Your Community ?

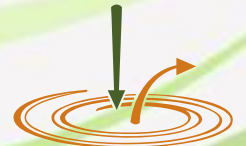
- Focus on YOUR waste and YOUR program's needs & objectives
- Know YOUR objectives
- Understand industry trends
- Remember...  
All solid waste is LOCAL



**“ Even if you're on the right track, you'll get run over if you just sit there.”  
- Will Rogers**



**Mitch Kessler**  
Kessler Consulting, Inc.  
813-971-8333  
MK@kesconsult.com



**kessler consulting inc.**  
innovative waste solutions