



UNLV Rebel Recycling Program

Presentation by
Tara Pike,
UNLV Solid Waste and
Recycling Manager

Chloe Klangos,
Assistant Rebel
Recycling Coordinator

EXHIBIT C – RECYCLED PRODUCTS
Document consists of 25 pages.
Entire Exhibit provided.
Meeting Date: 04-03-12

History



- Premise for the program came from a UNLV Environmental Studies undergraduate senior thesis
- Started in July 1995 after the Board of Regents approved a \$1 per student per semester fee
- Used an off-campus company for first years of program (collected about 2 tons per WEEK)
- Began collecting and processing materials internally in March 1997 (currently collecting about 2.8 tons per DAY)
- Initially housed in the Environmental Studies Program, it is now part of the Custodial Department (Facilities Management and Planning)

Mission



The Rebel Recycling Program is committed to providing the campus with comprehensive waste reduction, recycling, and resource management in an efficient, timely manner. The foundation of our mission is based on the 3Rs of **REDUCE, REUSE & RECYCLE!**

REDUCE the amount of things you throw away.

REUSE the things you have until they can no longer be reused.

RECYCLE once you have completed the first two Rs.

GOALS

- To divert the highest possible amount of materials from the UNLV waste stream
- Provide opportunities for meaningful student involvement
- Increase education relating to REDUCE, REUSE, RECYCLE
- Maintain a waste reduction program
- Maintain a reuse program

Reasons for University Recycling Program

- **Educational Value/Raises Awareness**
- **Good Community Member/Role Model**
- **Sustainability and Environmental Stewardship**
 - **Conserves Water**
 - **Reduces Air Pollution**
 - **Conserves Landfill Space**
 - **Conserves Finite and Renewable Resources**
 - **Conserves Energy**
- **Resource and Solid Waste Management**
- **Avoided Landfill Fees**
- **Help support state recycling goal of 25%**
- **Supports UNLV's Urban Sustainability Initiatives**

Materials Recycled



- All Grades of Paper
- Cardboard
- Aluminum
- Plastic #1 (PETE)
- Plastic #2 (HDPE)
- Steel/tin/scrap metal
- Glass
- Toner cartridges
- Ink Jet Cartridges
- Pallets
- Reusable items
- Food Waste
- Landscape Waste
- Tires

Services

- Scheduled weekly pick-up of materials from the Main Campus and off-site locations (approximately 500 recycling stations)
- Special Pick-ups
- Office Clean-out Bins
- Shredding of Confidential Documents
- Special Event Recycling (when requested)
- Drive Up and Drop Off (DUDO)

Staffing

- Manager
- Full-time Assistant Manager/Foreman
- Two Full-time Collectors
- Full-time Cardboard Collector
- 9 to 11 Student Workers
- Light Duty Workers
- Court Ordered Community Service Workers
- Student Volunteers
- Helen J. Stewart mentally challenged students



Equipment and Facility

- Two double-wide trailers
- Two forklifts
- Arlyn 5,000 pound Pallet Scale
- 16 foot box truck
- Four flat-bed utility carts
- Three collection trailers
- 35 towable cardboard dumpsters
- Two sea/storage containers
- 21 indoor student recycling bins (75 more on order)
- 12 outdoor student recycling bins
- Horizontal Baler
- Vertical Baler
- Heavy Duty Office Shredder
- Approximately 1/2 acre facility



Indoor Student Recycling Bins



**TOTAL
INDOOR
BINS: 150**

Outdoor Student Recycling Bins



**TOTAL
OUTDOOR
BINS: 12**

Bales and Boxes



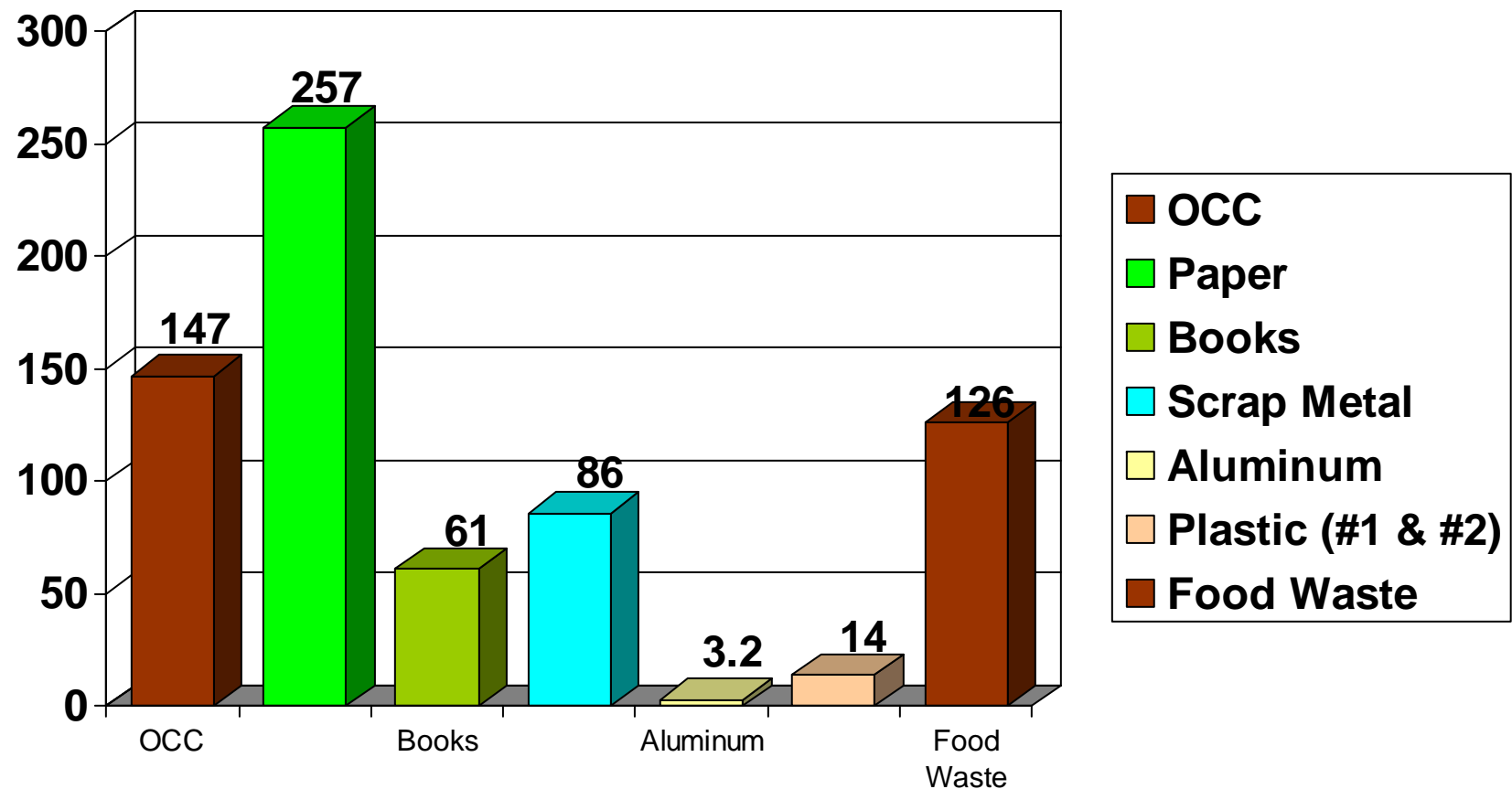
Special Projects/Community Involvement

- Earth Day and America Recycles Day events
- Tours and Paper-making projects
- Residence Hall Move-In
- Residence Hall Move-Out
- Christmas Tree Recycling Committee
- Recyclemania (www.recyclemania.org)
- Vegoose Music Festival Recycling
- Drive Up and Drop Off (DUDO)
- Walk Up and Drop Off Program (WUDO) in UNLV Residence Halls

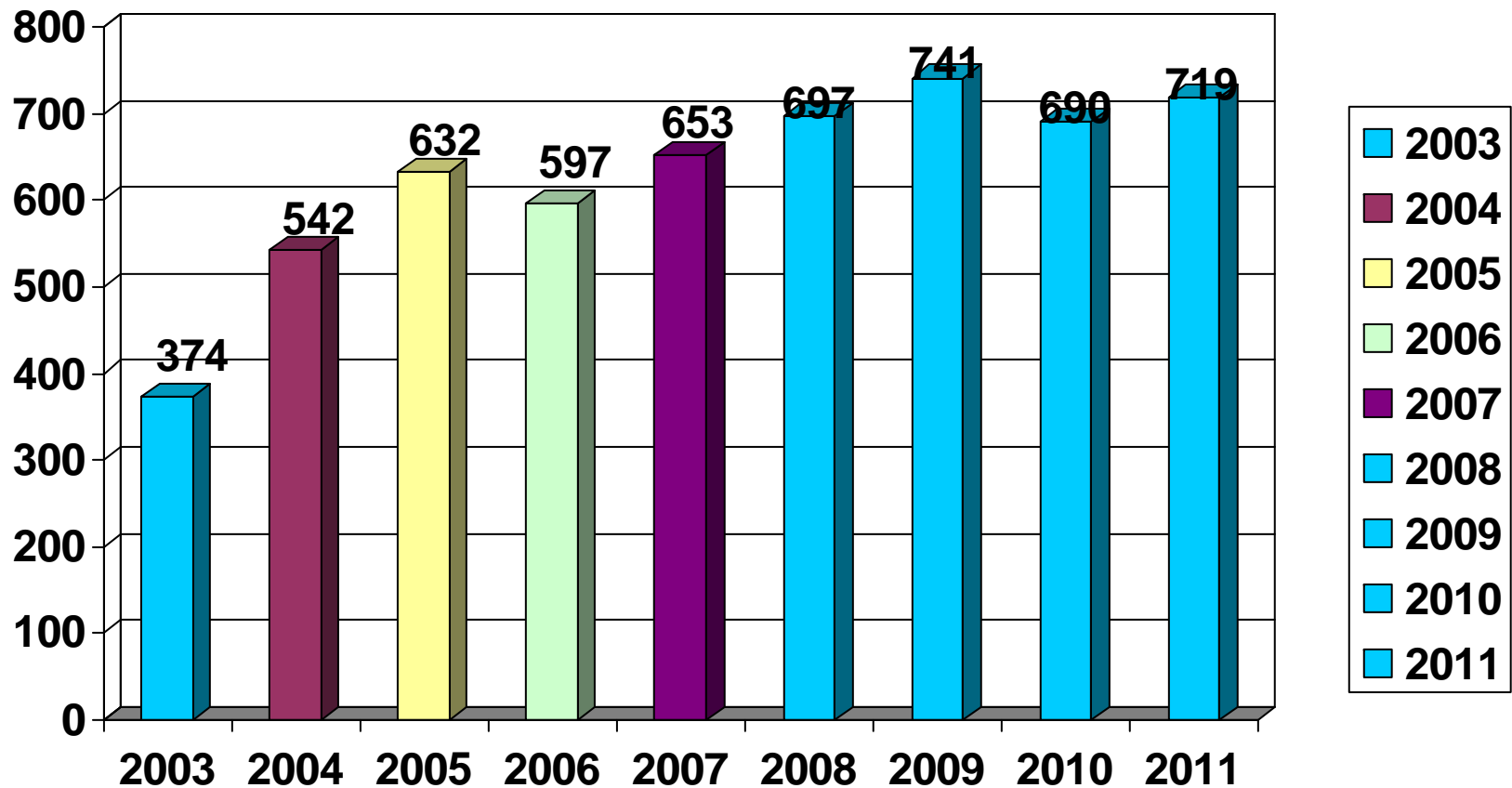
Drive Up and Drop Off (DUDO)



Breakdown of materials recycled in 2010 (in tons)



TOTAL Tonnages Recycled from 2003 to 2011



2003 to 2010 Environmental Impact Statement (EIS) or FUN FACTS (based on pounds of fiber recycled)



74,066
Trees
Conserved

1 ton = 17
forty foot
douglas fir
trees



261,408
Pounds of Air
Pollution
Reduced

1 ton = 60 pounds
of air pollutants



13,070 Cubic
Yards of Landfill
Space
Conserved

1 ton = 3 cubic
yards of landfill
space



17,871,594
KiloWatts
of Energy
Conserved

1 ton =
4,102
kilowatt
hours of
electricity



30,497,600
Gallons of
Water
Conserved

1 ton = 7,000
gallons of
water

Food Waste Recycling from August 2009 to December 2011



- 560,000 pounds
(280 tons)
- 284,788 gallons
(5,696 bathtubs full)
- Zero Waste Events

Future?

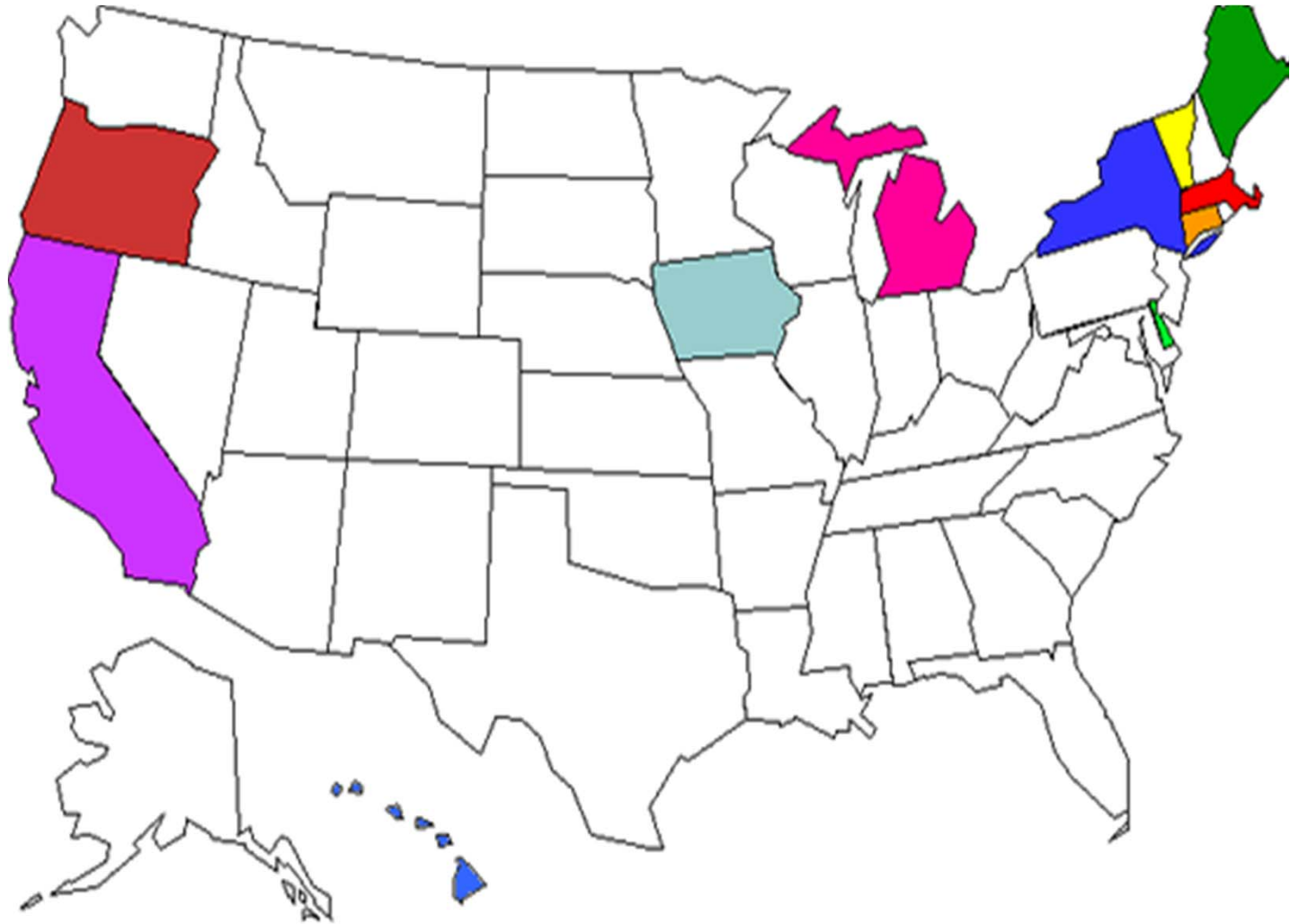
- **Continue to increase amount of materials collected and recycled**
- **Implement recycling in each newly constructed campus building**
- **Acquire more outdoor student recycling bins**
- **Try to get recycling inside classrooms**
- **Collect recycling from athletic and other UNLV sponsored special events**
- **Change the operating procedures so we can focus on a wide range of sustainability issues.**

BENEFITS OF A BOTTLE BILL

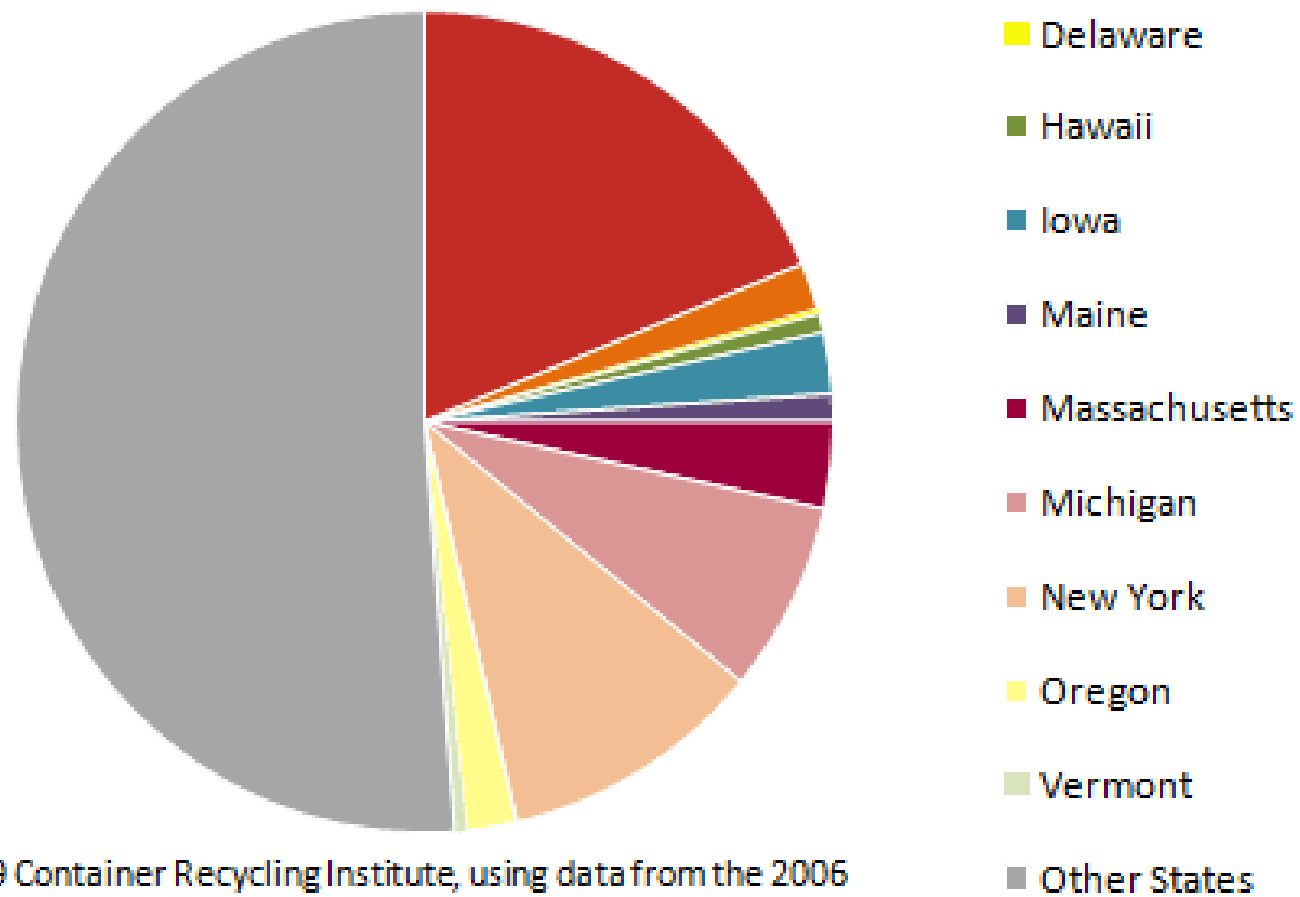
- Prevent litter
- Promote Recycling and Reduce waste
- Create jobs
- Receive widespread public support
- Encourage producer and consumer responsibility
- Provide financial incentives for recycling
- Help the Environment
- Complement curbside recycling
- Produce high-quality recyclable materials
- Create more opportunities to recycle

Container Deposit Laws

Oregon
Vermont
Michigan
Maine
Iowa
Connecticut
Massachusetts
Delaware
New York
California
Hawaii



Number of beverage containers recycled, by state



© 2009 Container Recycling Institute, using data from the 2006 Beverage Market Data Analysis

Hawaii

- **Hawaii's HI-5 recycling effort shows 76% diversion rate**

Aug. 10 -- Thanks to its HI-5 recycling program, people in Hawaii recycled more than 686 million containers from July 1, 2010 to June 30, or about 76% of all beverage containers sold, according to the Hawaii State Department of Health.

It was the second year in a row that the state's beverage recycling rate was 76%.

Under the HI-5 program, consumers pay 6 cents on each beverage purchased, which includes a 5-cent deposit that is returned to the consumer when the container is recycled and a nonrefundable 1-cent container fee to cover the cost of recycling the glass, plastic or aluminum.

Since the inception of the HI-5 program in 2005, more than 4 billion containers have been recycled, the Hawaii State Department of Health said.

Contact Waste & Recycling News reporter Shawn Wright at wright@crain.com or 313-446-0346.

Unclaimed Deposits in Hawaii

The 24% of the deposits that are not claimed equals about 165 million bottles and about \$8.25 million dollars. Currently the states of [California](#), [Connecticut](#), [Hawaii](#), and [Massachusetts](#) keep 100% of the unclaimed deposits, although the mechanism for retaining these deposits varies.

Contact Information



Tara Pike

895-3760

tara.pike@unlv.edu