

City of Surprise

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What needs to be included

- *What are the results and findings?*
 - Intellectual / Scientific lessons-learned?
 - Personal & Group lessons-learned?
 - How are these lessons-learned linked to the Key Competencies in Sustainability?

Summary of Problem

What is the Problem? Surprise has been failing recycling audits with an increased level of contamination (26-40%). Due to this level of contamination, Surprise is missing out on sizeable economic incentives (up to \$18,000 monthly).

What has been done? Surprise has launched the “Recycle Wise in Surprise” campaign that is goaled on educating residents on the do’s and dont’s of recycling. New positions were added to Solid Waste staff (inspector, supervisor) that increase focus on recycling through education and enforcement.



RECYCLEWISE
IN SURPRISE

Traditional Waste

- Traditional Waste Obstacles:

- High Levels of contamination from confusion on what to include
 - Common items causing contamination: bottles, cups, and wrappers
- Considered an inconvenience to sort and or take time to divide trash and recycling
- Lack of public policy
 - Eliminating blanket policy

WHAT IS MUNICIPAL SOLID WASTE (MSW)?

OUR TRASH, OR MUNICIPAL SOLID WASTE, IS COMPRISED OF VARIOUS MATERIALS AMERICANS COMMONLY THROW AWAY AFTER BEING USED.

MSW **DOES NOT** INCLUDE INDUSTRIAL, HAZARDOUS, OR CONSTRUCTION WASTE.

DID YOU KNOW?

MORE THAN **95%** OF FOOD WASTE THAT COULD BE COMPOSTED ENDS UP IN **LANDFILLS** AND INCINERATORS.

The infographic features a green header with the title, a central section with a circular graphic of various waste items, and a bottom section with three green icons: a leaf for food waste, a plant for composting, and a landfill for landfills/incinerators. A blue background with white text and icons is used throughout.

Recycling

Perception of Recycling

American society still does not fully embrace recycling

Americans only recycle 34.3% of their waste (EPA, 2015)

Recycling, and waste in general, is connected to a multitude of habits

One simple change will not solve the issue, a multi-pronged approach is needed

Can be seen as difficult or tedious

Citizens will avoid tasks that will make their lives more difficult

*** Ease of use is KEY! ***
Incentives often do not create the desired effects

Municipalities are often using older data, and incentives are not received quickly enough

Compost

Pros:

- Community-based social movement
- Certain types of composting are waste-free
- Contributes to circular economy

Cons-

- Rarely considered a city-wide management solution because maintenance costs outweigh beneficial sustainable output.

Great in theory on a manageable scale but have



Zero Waste

“Zero waste represents a shift from the traditional industrial model in which wastes are considered the norm, to integrated systems in which everything has its use” (Song, 2015)

Uses Principles: Reduce, Reuse, Recycle

Definition: Divert at least 90% of their waste

Leading by example

Show the economic side

Exposure to Zero Waste First



Final Solution- *Wisest in Surprise*

Wisest in Surprise is a friendly competition between the four designated recycling zones (green, blue, yellow, red) in Surprise that incentivises recycling participation in the community.

The recycling zone that has the highest recycling percentage with the lowest contamination levels may receive funds to improve their sustainable development. This may include but is not limited to community gardens, composting programs, public space, bike lanes, farmers markets or solar technology.

Competitions would be performed on a quarterly or semi-annually basis.

Final Solution- *Wsest in Surprise* (Community Impact)

- Combining the age gap in Surprise
 - Two largest population groups: Under 18 - 32,130 and Over 65 - 22,327
- Community initiative to better other aspects of Surprise
 - Proper recycling will lead to better community habits that continue to build a stronger sustainable community as well as feeling more like the solution rather than the problem
- Education without the town lecture experience through a fun tangible activity
 - Smaller gatherings lead to more engaged stakeholder experience
 - Easier to communicate to ~ 25% of the 7th largest city in the state at a time

Easy Recycling App

More ambitious solution for the city

Focused on making recycling easy

Can be scaled up/marketed

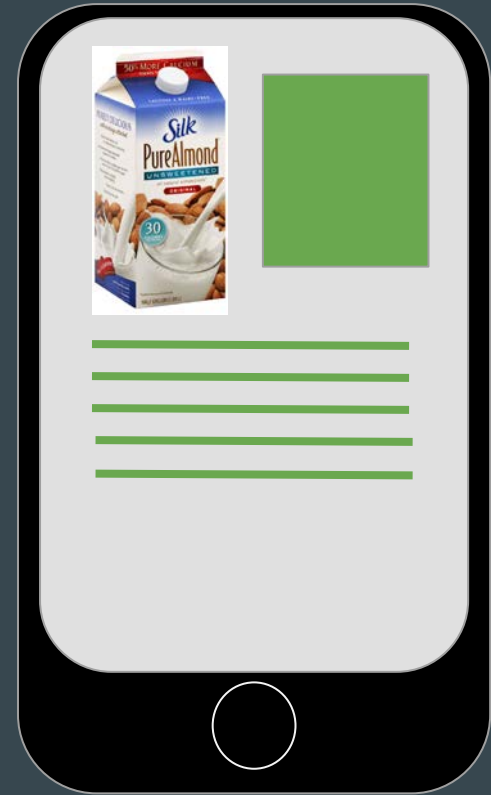
Main feature:

Barcode scanner that quickly displays if product is recyclable

Items can also be searched by name

Secondary features:

Additional information for products that can only be



Other Community Outreach Options

Earth Day and other local recycling events

Help spread community awareness, while also promoting fun and fellowship

Information packets and easy reference materials

Recycling cheat sheets to be applied to trash cans in the home

REDUCE. REUSE. RECYCLE.

LANDFILL WASTE

- Plastic Cup
- Plastic Bag
- Styrofoam
- Food Container
- Plastic Clips Only
- Paper Coffee Cup

PAPER RECYCLING

- Pizza Box
- Cardboard Roll
- Cardboard
- Newspaper
- Office Paper
- Paper Bag

MIXED RECYCLING

- Glass Bottle
- Plastic Bottle
- Metal Can
- Juice Box
- Metal Caps Only
- ~~Drum~~ ~~Carton~~ ~~Your Blog Here~~

Plastic Packaging
Nylon Containers
Plastic Caps
Nipples

Food Soaps
Plastic Drums
Plastic Hangers
Wood Hangers

Paper Towels
Foam Styrofoam
Coffee Caps
& Lids

Clean Paper
Paper Bags
Wrapping Paper

Magazines
Catalogs
Mail & Envelopes

Cardboard
Cardboard Egg
Cartons

Wire Hangers
Wine
Drum
Cartons
Aluminum Foil

Plastic Bottles
Plastic Jugs
Metal Caps
Bulk Metal

Juice Boxes
Glass Bottles
Metal Cans

Project)

get DIRTY
this Valentine's Day!

Green Works Orlando
LANDSCAPE WITH PURPOSE

WANT TO GIVE YOUR LOVED ONE SOMETHING SPECIAL FOR VALENTINE'S DAY?
Give them a free backyard composter from Green Works Orlando!
When you sign up, you will also receive a Valentine e-card.
Composters will be delivered during Spring 2015.

Participation is valid for City of Orlando residents only.

Challenges, The Unknown, and Lessons Learned



Challenges:

Different Schedules

Not living in the City of Surprise

The Unknown:

Ability to measure Group's Progress

Will this have an affect on the recycling after the project is over

Lessons we learned:

The are a variety of ways to tackle this problem

Most focus on the education side