Going Digital:
Beyond Handouts

ReCollect

R·R·R·A·S·O·C

The Situation

Waste management is increasingly complex

People want to help the environment

- 63% of American adults take some sort of action when learning about the environmental issues facing the world today.
  - National Environmental Education Foundation

People care about waste

- 90% of Americans believe recycling is important and people should do what they can to try and recycle
- 91% believe if more people recycled, it would help the environment
- 82% report that most or some homes in neighborhood set out their recycling for pickup
  - Carton Council of North America

Many ways to communicate with residents

Mobile devices are on the rise

- 64% of American adults have a smartphone.
- 2015: more people used their mobile device to do a Google search than they did using a computer.

Approaches to mobile technology

Municipalities are looking to mobile devices as a means of connecting with their residents.

Approach to mobile

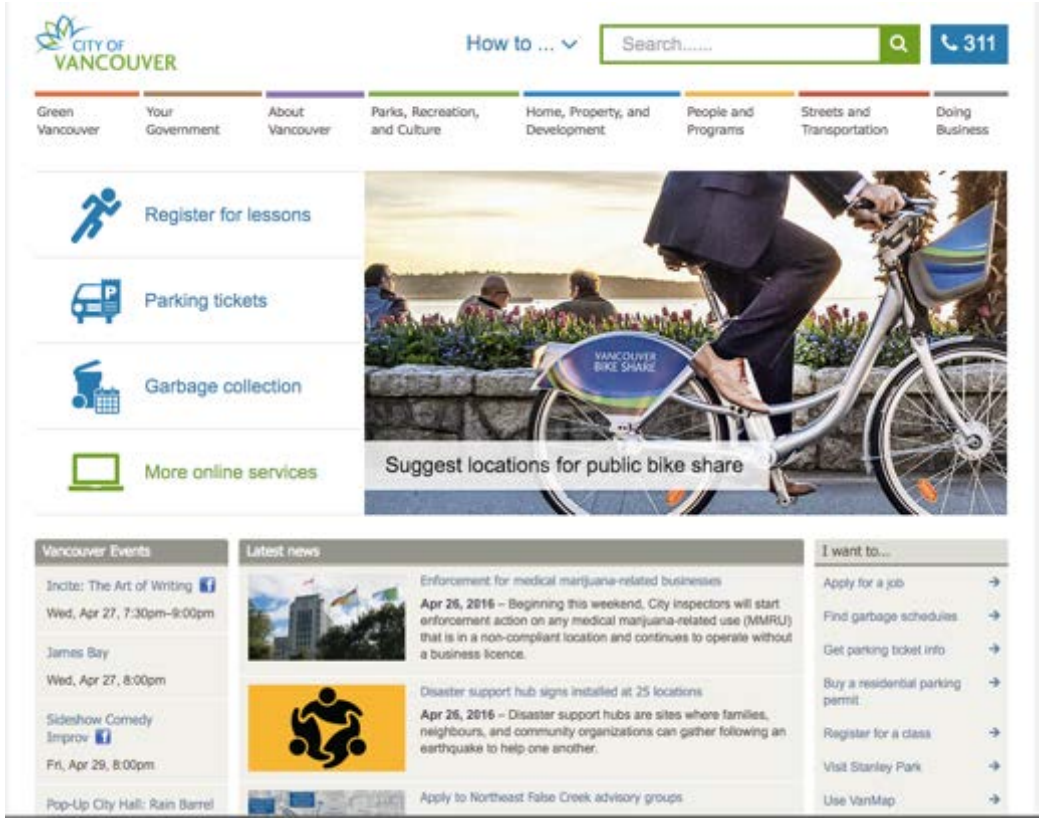
1. Responsive website
2. Mobile app

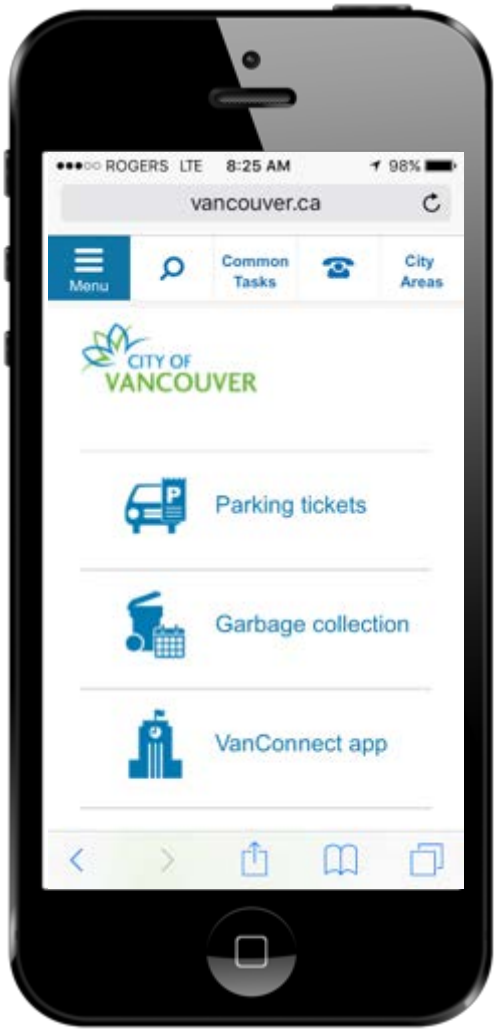
First: Responsive Website

- Website layout automatically adjusts itself depending upon the width of the device's web browser.
- A web browser on a desktop computer will display a more horizontal website, while the web browser on a smartphone will present the website in more of a vertical or "stacked" manner.

Non-responsive

Responsive


CITY OF VANCOUVER
How to ...
Search.....
311
Green Vancouver
Your Government
About Vancouver
Parks, Recreation, and Culture
Home, Property, and Development
People and Programs
Streets and Transportation
Doing Business
Register for lessons
Parking tickets
Garbage collection
More online services
Suggest locations for public bike share
Vancouver Events
Incite: The Art of Writing
Wed, Apr 27, 7:30pm-9:00pm
James Bay
Wed, Apr 27, 8:00pm
Sideshow Comedy Improv
Fri, Apr 29, 8:00pm
Pop-Up City Hall: Rain Barrel
Latest news
Enforcement for medical marijuana-related businesses
Apr 26, 2016 – Beginning this weekend, City inspectors will start enforcement action on any medical marijuana-related use (MMRU) that is in a non-compliant location and continues to operate without a business licence.
Disaster support hub signs installed at 25 locations
Apr 26, 2016 – Disaster support hubs are sites where families, neighbours, and community organizations can gather following an earthquake to help one another.
Apply to Northeast False Creek advisory groups
I want to...
Apply for a job
Find garbage schedules
Get parking ticket info
Buy a residential parking permit
Register for a class
Visit Stanley Park
Use VanMap


ROGERS LTE 8:25 AM 98%
vancouver.ca
Menu
Common Tasks
City Areas
CITY OF VANCOUVER
Parking tickets
Garbage collection
VanConnect app

Second: Mobile App

- A mobile app is a software application specifically designed to operate on a mobile device.
- Most smartphones or tablets come preloaded with mobile apps (such as email, calendar and contacts), while other mobile apps must be downloaded from stores like Apple's App Store or G

Mobile App Growth

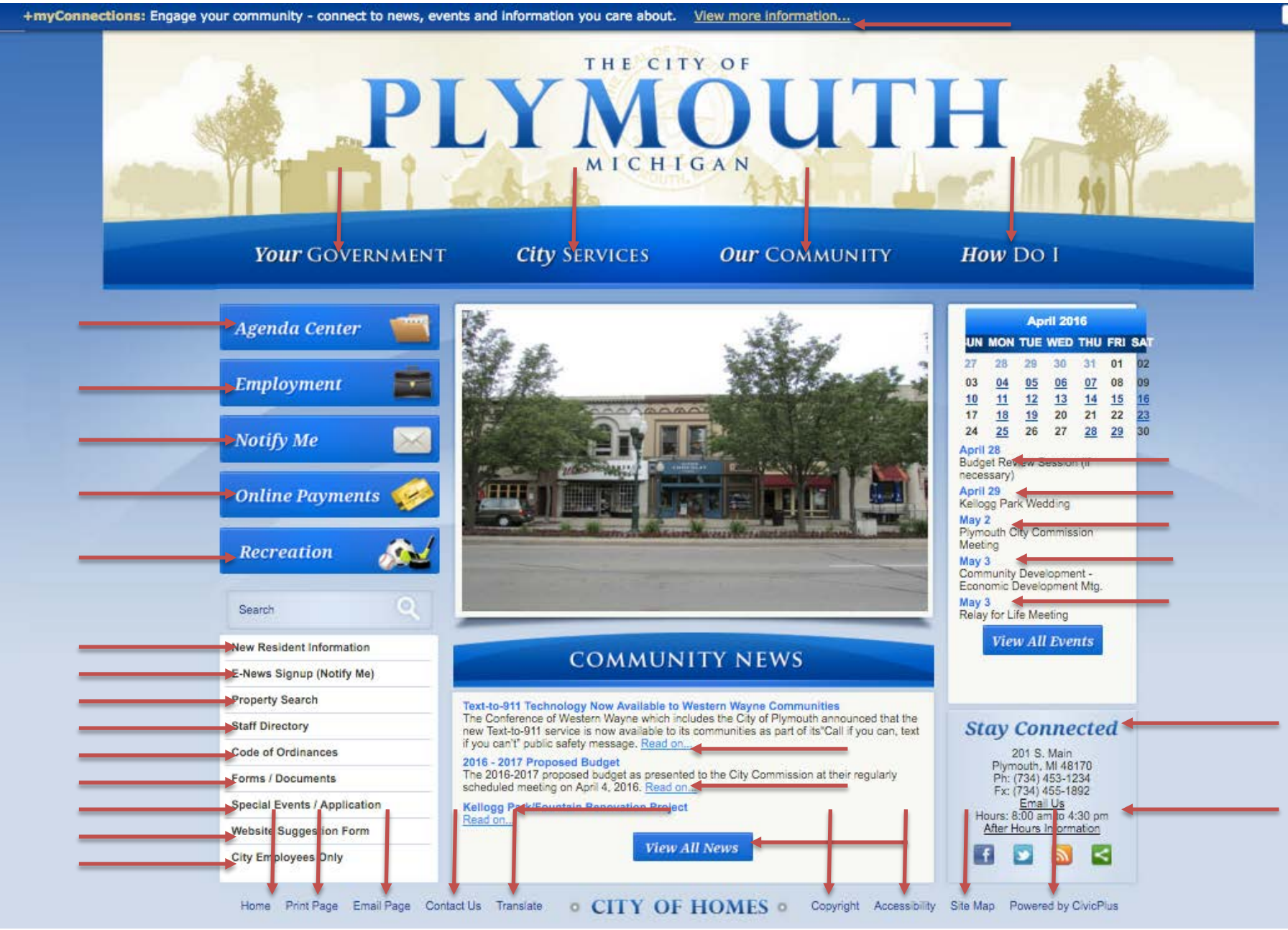
- 2009: approximately 2.52 billion mobile apps downloaded worldwide.
- 2015: 179.62 billion mobile apps downloaded worldwide.
- 89% of consumer media time is with mobile apps, while 11% of media time is with mobile web browsers.

How do municipalities develop a mobile presence that best serves its residents?

Using your website to influence the development of your mobile app

Websites have a lot of content

- Across multiple sectors, the average homepage has 108 links.
- The government sector averages 126 links on their homepages.


+myConnections: Engage your community - connect to news, events and information you care about. View more information...
Sign In
THE CITY OF
PLYMOUTH
MICHIGAN
Your GOVERNMENT
City SERVICES
Our COMMUNITY
How DO I
Agenda Center
Employment
Notify Me
Online Payments
Recreation
Search
New Resident Information
E-News Signup (Notify Me)
Property Search
Staff Directory
Code of Ordinances
Forms / Documents
Special Events / Application
Website Suggestion Form
City Employees Only
April 2016
SUN MON TUE WED THU FRI SAT
27 28 29 30 31 01 02
03 04 05 06 07 08 09
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
April 28
Budget Review Session (if necessary)
April 29
Kellogg Park Wedding
May 2
Plymouth City Commission Meeting
May 3
Community Development - Economic Development Mtg.
May 3
Relay for Life Meeting
View All Events
COMMUNITY NEWS
Text-to-911 Technology Now Available to Western Wayne Communities
The Conference of Western Wayne which includes the City of Plymouth announced that the new Text-to-911 service is now available to its communities as part of its"Call if you can, text if you can't" public safety message. Read on...
2016 - 2017 Proposed Budget
The 2016-2017 proposed budget as presented to the City Commission at their regularly scheduled meeting on April 4, 2016. Read on...
Kellogg Park Fountain Renovation Project
Read on...
View All News
Stay Connected
201 S. Main
Plymouth, MI 48170
Ph: (734) 453-1234
Fx: (734) 455-1892
Email Us
Hours: 8:00 am to 4:30 pm
After Hours Information
Home
Print Page
Email Page
Contact Us
Translate
CITY OF HOMES
Copyright
Accessibility
Site Map
Powered by CivicPlus

Websites have lots of applications

- Municipal websites utilize a number of different software applications to provide services to residents:
  - property tax estimators
  - waste collection schedules
  - parks and recreation registrations
  - utilities bill payments
  - construction permitting
  - pet licensing
  - 311 or report a problem features

Screen size

- Average desktop computer monitor is 20.9” and the average laptop monitor is 12.2”.
- On a computer, homepage web links and software applications can be easily used because the computer screen provides a lot of visual “real estate.”

In use

- Visiting a website on a computer tends to be a “stationary” activity.
- The user is most often seated, and tends to be using a keyboard, mouse or touchpad to navigate.
- Someone using a computer to visit a website tends to have more time to searc
take action, such as filling in form

Using the mobile app user experience to influence the development of your mobile app

Screen size

- The average smartphone screen is 5” in size.
- With less visual “real estate,” it becomes more challenging for a resident to access all the services and programs you may hope to include in a mobile app.

In use

- People use their mobile devices on the go:
  - at home
  - in transit
  - at work
  - while shopping
- They are using their thumbs to type and their fingers to navigate.

In use

- On a mobile device, people are looking for instant information, with minimal amounts of reading.
- Many mobile devices can only legibly display 80 to 90 words before the user needs to scroll the page.

“One-city”
versus
“Constellation”
mobile apps

One-City Mobile App

- A one-city app often attempts to replicate the municipality’s existing website, placing all information about the municipality's departments, services and programs into one app.

Constellation Mobile App

- A constellation series of apps separates the municipality's departments, services or programs into a number of different, but interconnected, apps.

“One-city” mobile app

The thought is…

- “Just like our website, we’ll have all programs and services in one mobile app. It’ll be easy and convenient for residents.”

The challenge

- How can a municipality possibly effectively integrate hundreds of services and programs — not to mention countless software applications — into one mobile app?

The reality

- The one-city mobile app is not about providing an accessible, user-friendly solution for residents, but instead about meeting the perceived needs of municipal staff.
- A one-city mobile app is about making procurement easier because the contractual relationship is with just one vendor.

Example

- If one municipal department is happy with how they are represented in the one-city app, but another five departments are unhappy, what's the course of action?
- Do the unhappy departments have to "live with it?"
- Would the municipality be willing or able to end its agreement with the one-city app vendor with minimal disruptions to residents?

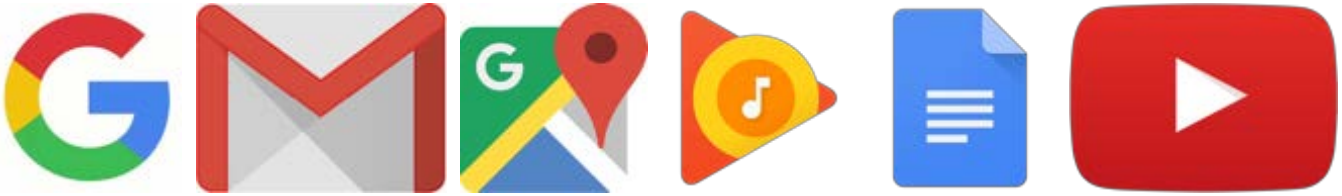
“Constellation” mobile app

The thought is…

“Putting a ton of functionality into a single app is not the right way to do it on mobile. Having a constellation of mobile apps that all work tightly with each other seems to be the better way. And the leading mobile app companies are all headed in that direction now.”

- Fred Wilson, Investor

The reality



- While these constellation apps work independently of each other, they seamlessly move the user from one app to the other for the best mobile user experience.

Example

- With constellation apps, municipalities have more leverage over their mobile app vendors than with a one-city mobile app.
- If one of your constellation apps isn’t performing the way you anticipate, you can switch vendors with residents encountering little to no disruptions.

“Constellation” mobile app best practices

Popular services

- Look at your municipality's most popular services and programs for insight into the the apps your residents may want in a constellation series of apps
- You may want separate mobile apps for
  - waste and recycling
  - parking
  - public transit
  - library
  - 311 or report a problem.

Apps that “hand-off”

- All constellation apps should include some sort of report a problem functionality.
- Ideally, one app will seamlessly “hand-off” to another app in its constellation.

Branding

- Constellation apps should incorporate similar branding to make it simple for residents to identify the municipality.
- Using clear graphic identifiers provides a simple means of wayfinding for residents.
- Use similar naming conventions such as “Pleasantville Waste,” “Pleasantville Parks,” “Pleasantville Library,” “Pleasantville 311.”

A local experience

Iris Waste Diversion Specialists, Inc.

- Resource Recovery Program Management Company
- Waste is a resource and we design, implement, manage and market waste diversion programs for government entities, businesses and institutions
- Contract with RRRASOC to provide public outreach and education
- Perform duties of Recycling Coordinator

Resource Recovery & Recycling Authority of Southwest Oakland County (RRRASOC)

- Intergovernmental, municipal solid waste authority
- Provides cost-effective, environmentally responsible, and convenient waste and recycling programs
  - curbside pick-up collection
  - recycling drop-off sites
  - HHW events

- 9 member communities
- 76,000 single family households
- Total Population -- 264,000

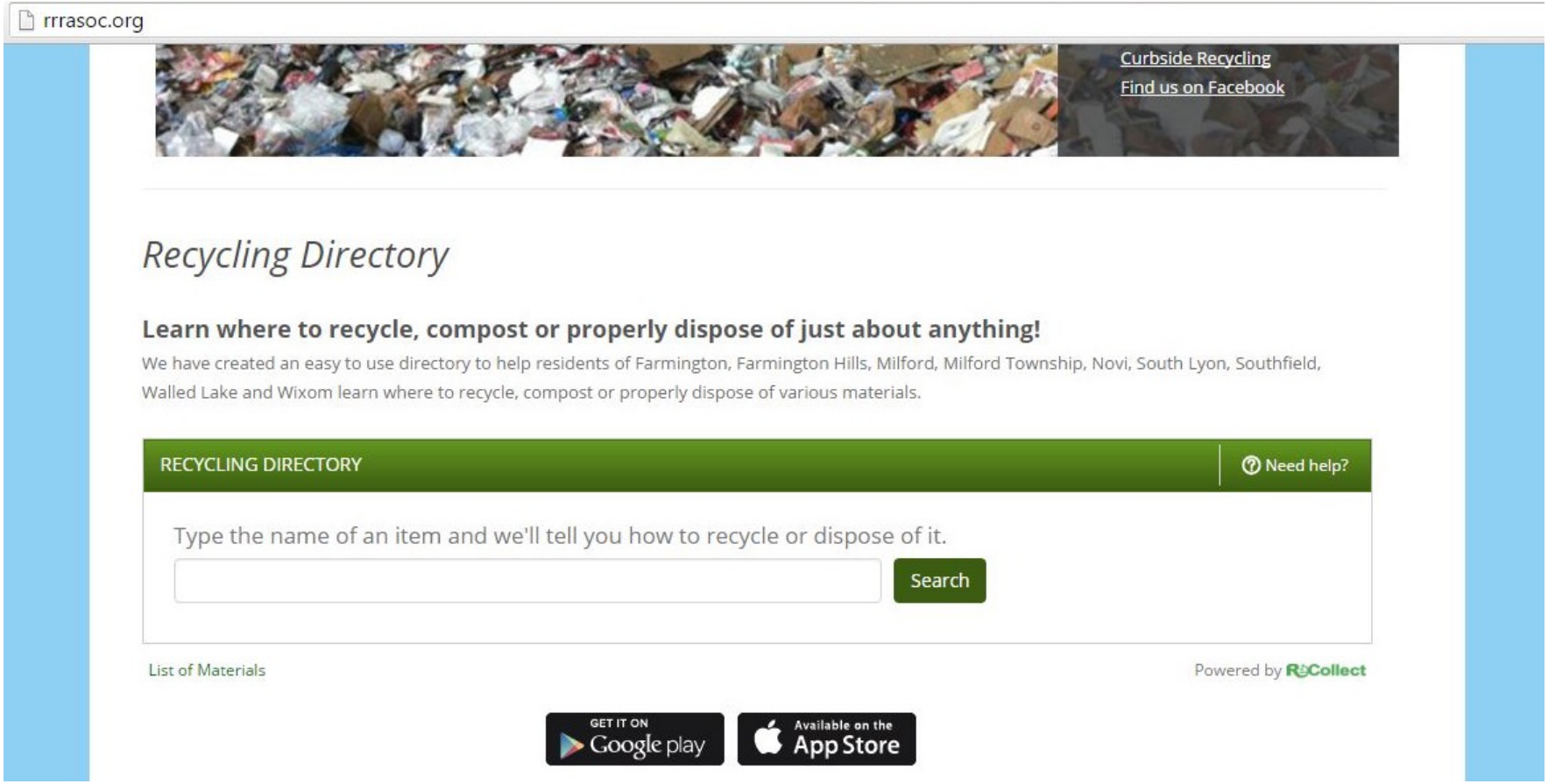
- RRRASOC/ReCommunity P3 to operate single stream MRF

Why Waste Wizard and Mobile App?

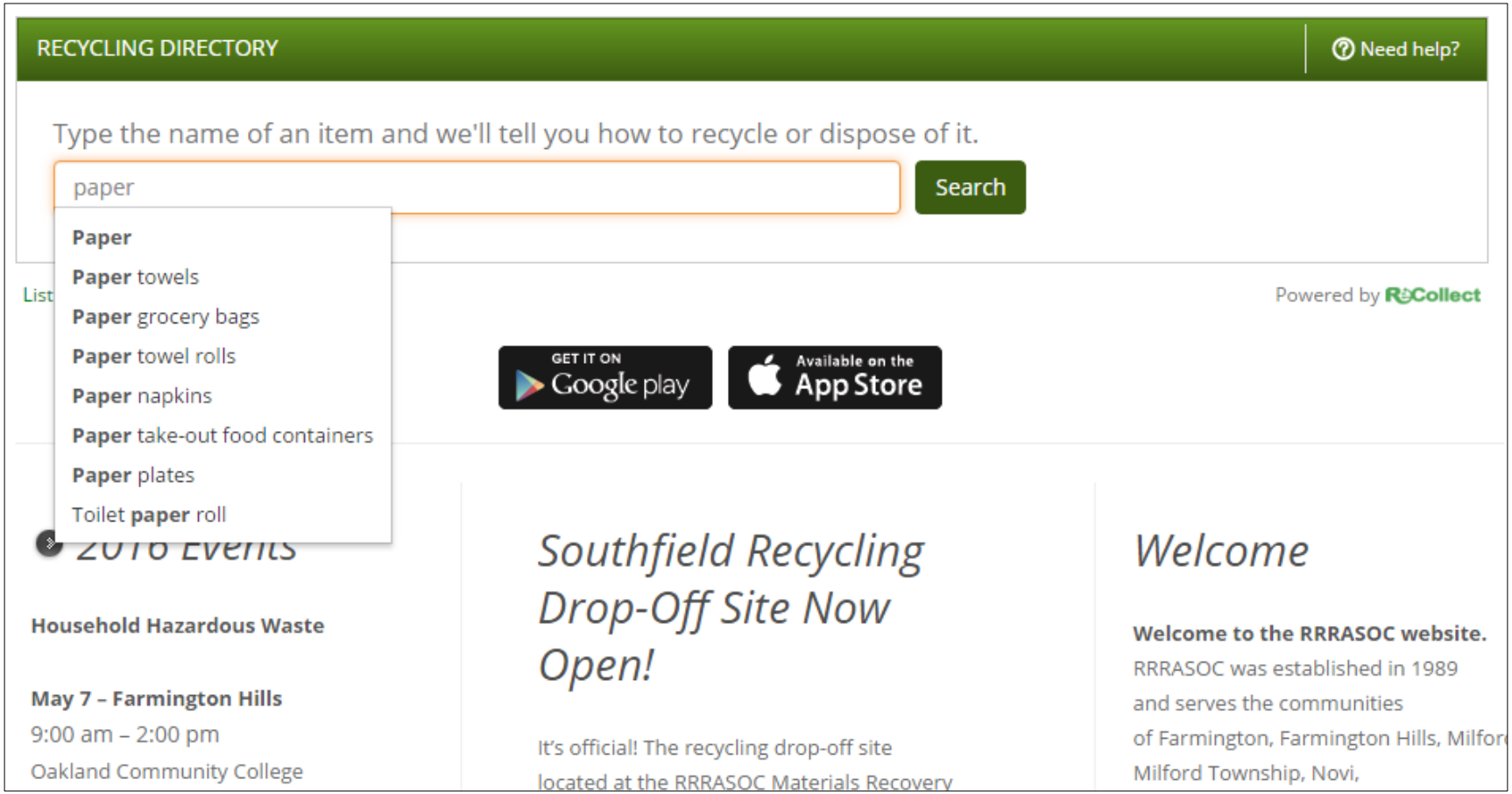
- Utilize a new communication method
- Ability for residents to help themselves
- Access to information
- Specific, manageable content
- Monitoring and reporting of usage

Recycling Locator Tool	ReCollect	Recyclesearch	Recycle Nation	Earth 911	Recycler Finder	Recycle Coach
Cost	Yes	No*	No	No	Yes	Yes
Integrate on client Website	Yes	No	No	No	No	Yes
Shareable on Member Websites	Yes	No	No	No	No	Yes
Content Management	Client	Client	Recycle Nation	Earth 911	Recycler Finder	Client
Compatible across web platforms	Yes	N/A	N/A	N/A	N/A	Yes
Monitor Usage	Yes	No	No	No	No	Yes
Reporting	Yes	No	No	No	No	Yes
Notes	Recycling and solid waste information search engine toolbar, mobile app and electronic calendar.	Searchable database for recycling collection information.	Recycling and green living-focused website including recycling location database, searchable by zip code.	Green-living focused website that includes a recycling location database, searchable by zip code and material.	Online and mobile application for finding recycling facilities, searchable by zip code and material.	Recycling and solid waste information search engine toolbar, mobile app and electronic calendar.

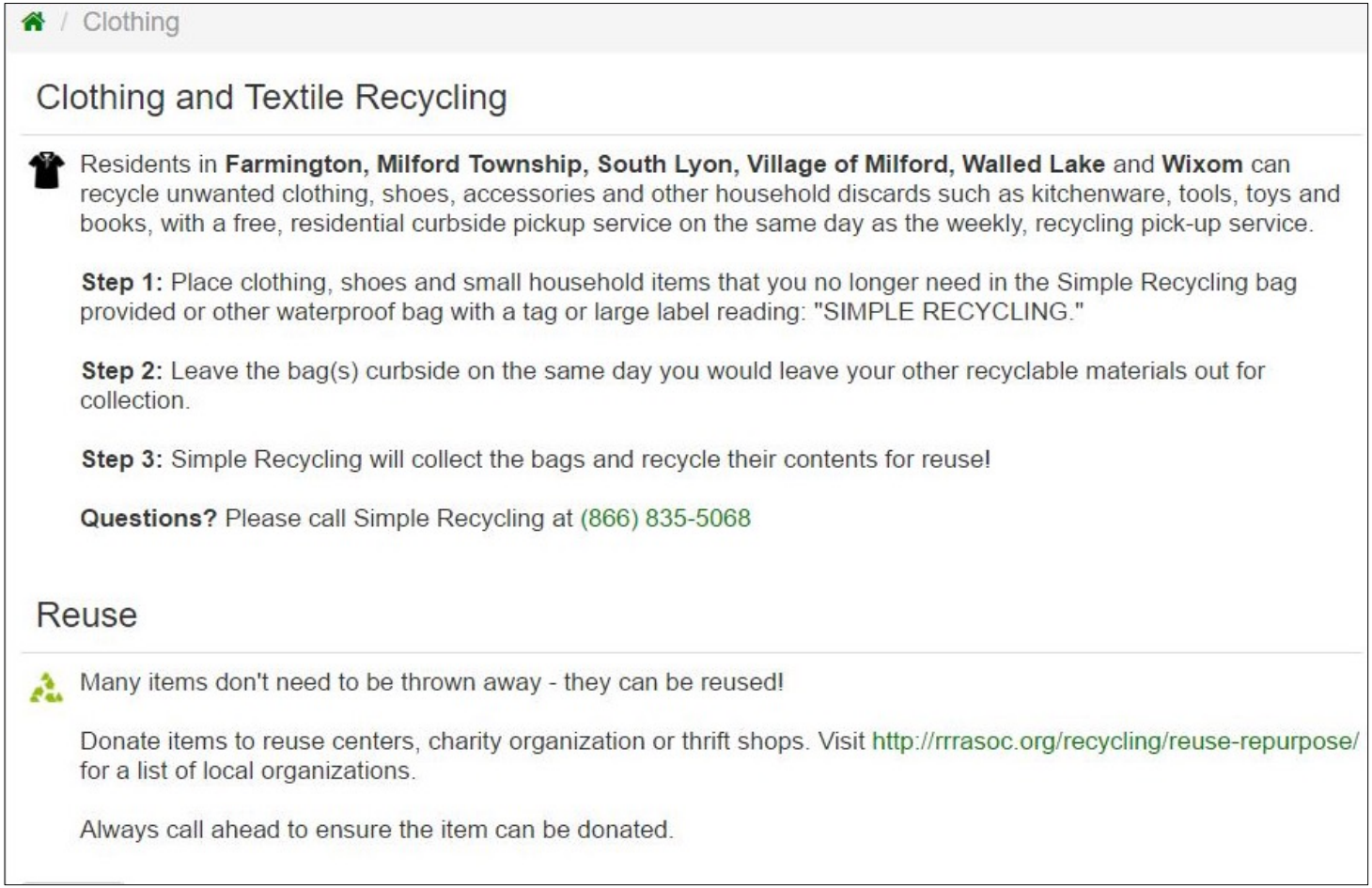
Website Recycling Directory



Directory Search



Search Results



Clothing

Clothing and Textile Recycling

Residents in **Farmington, Milford Township, South Lyon, Village of Milford, Walled Lake** and **Wixom** can recycle unwanted clothing, shoes, accessories and other household discards such as kitchenware, tools, toys and books, with a free, residential curbside pickup service on the same day as the weekly, recycling pick-up service.

Step 1: Place clothing, shoes and small household items that you no longer need in the Simple Recycling bag provided or other waterproof bag with a tag or large label reading: "SIMPLE RECYCLING."

Step 2: Leave the bag(s) curbside on the same day you would leave your other recyclable materials out for collection.

Step 3: Simple Recycling will collect the bags and recycle their contents for reuse!

Questions? Please call Simple Recycling at (866) 835-5068

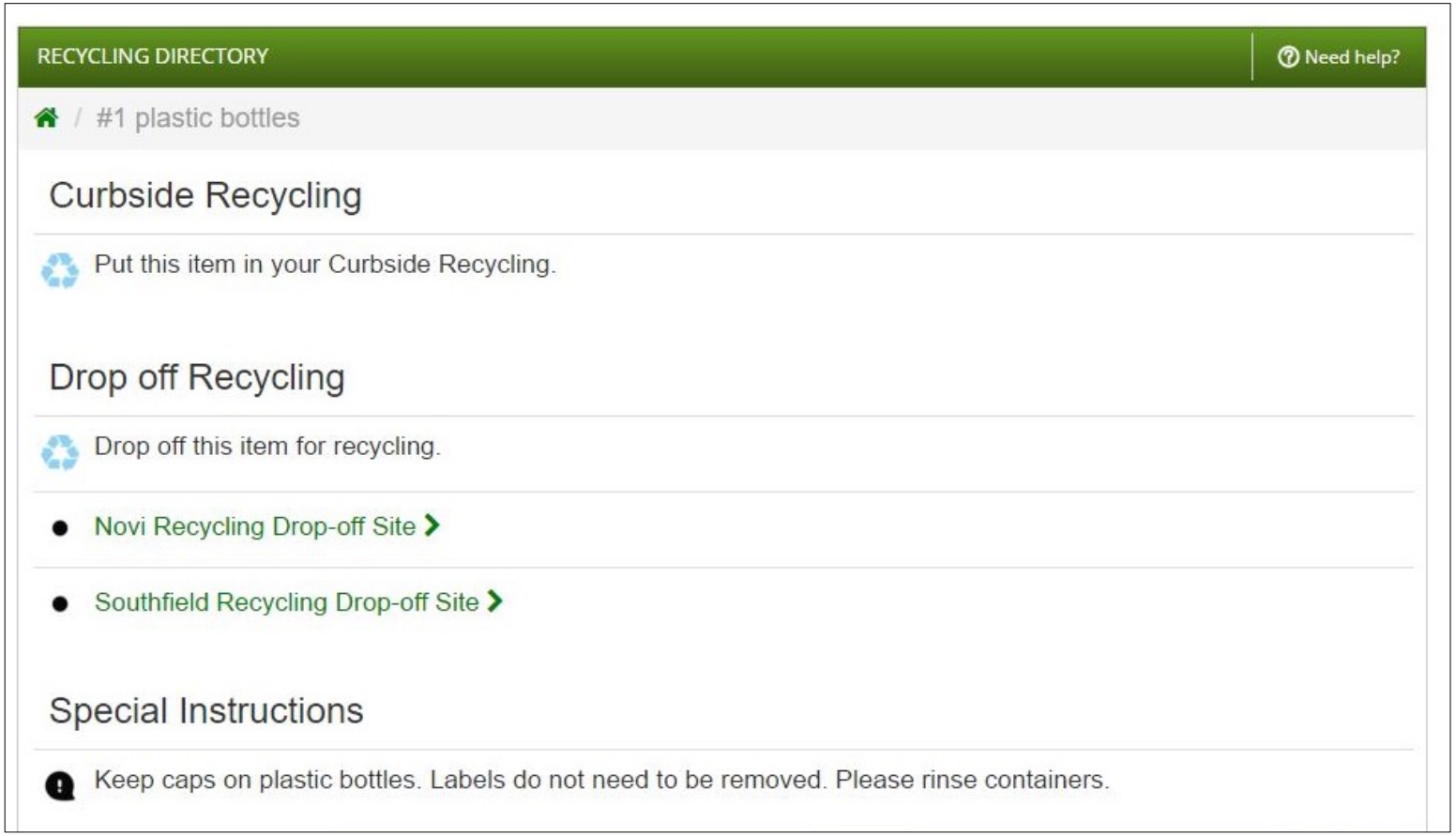
Reuse

Many items don't need to be thrown away - they can be reused!

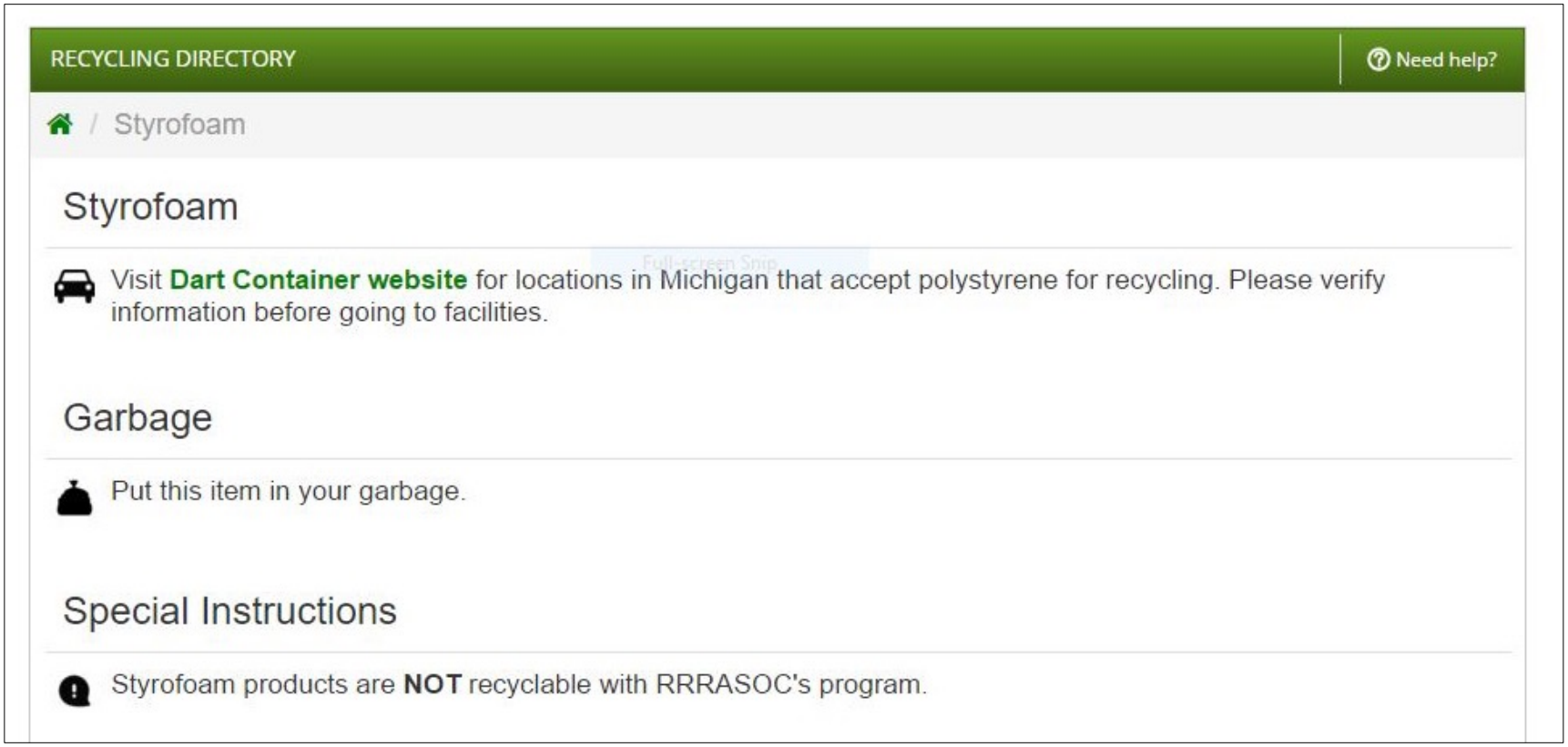
Donate items to reuse centers, charity organization or thrift shops. Visit http://rrrasoc.org/recycling/reuse-repurpose/ for a list of local organizations.

Always call ahead to ensure the item can be donated.

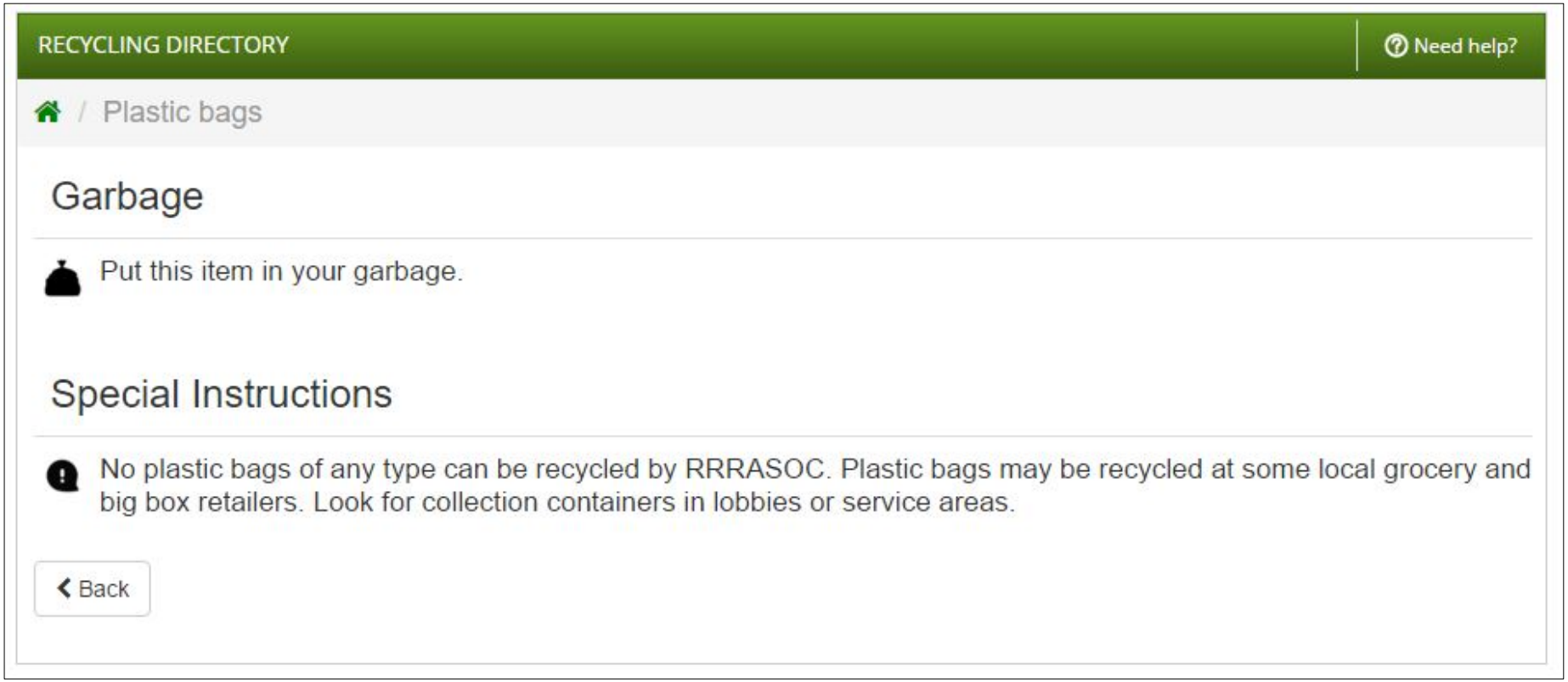
Search Results



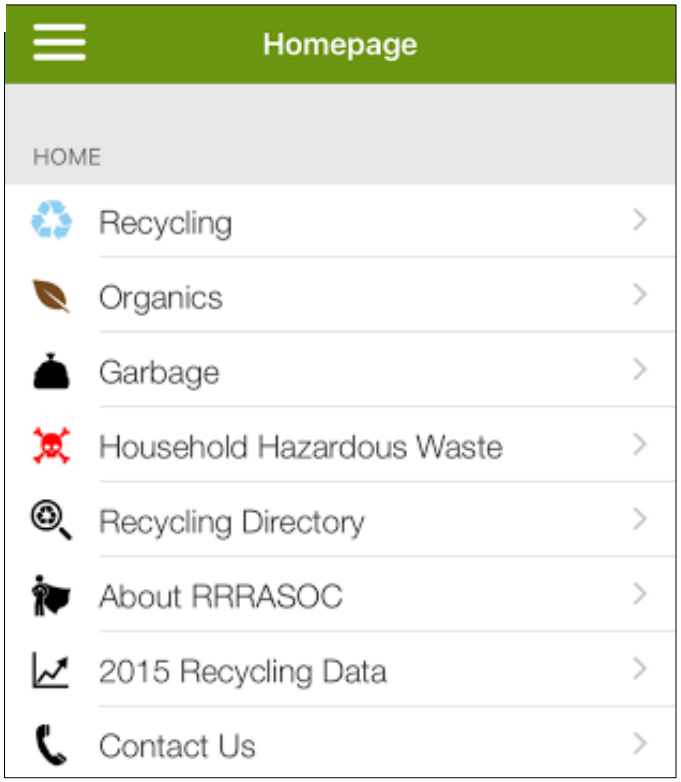
Search Results

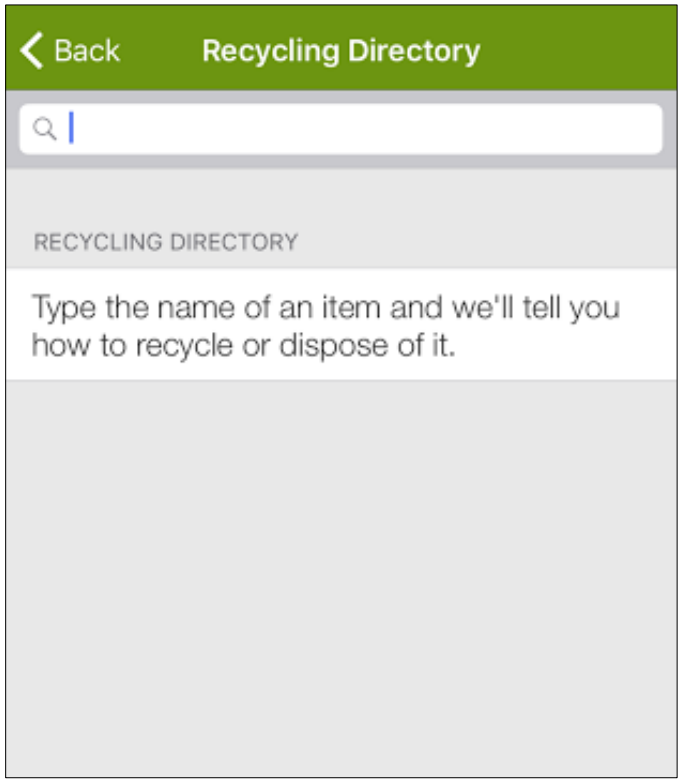


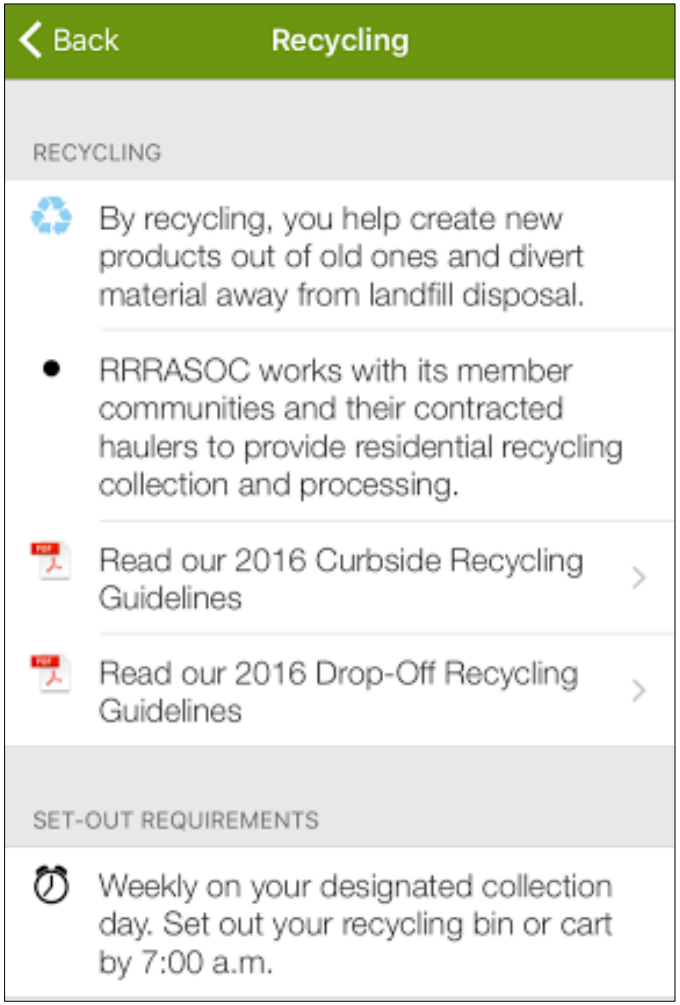
Search Results

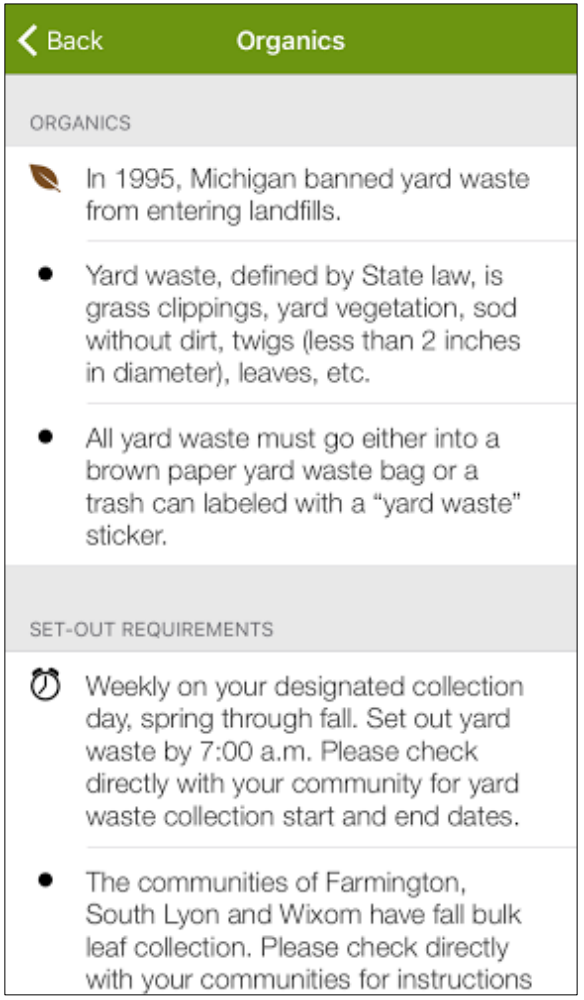


Mobile App


Homepage
HOME
Recycling
Organics
Garbage
Household Hazardous Waste
Recycling Directory
About RRRASOC
2015 Recycling Data
Contact Us


Back
Recycling Directory
RECYCLING DIRECTORY
Type the name of an item and we'll tell you how to recycle or dispose of it.


Back
Recycling
RECYCLING
By recycling, you help create new products out of old ones and divert material away from landfill disposal.
RRRASOC works with its member communities and their contracted haulers to provide residential recycling collection and processing.
Read our 2016 Curbside Recycling Guidelines
Read our 2016 Drop-Off Recycling Guidelines
SET-OUT REQUIREMENTS
Weekly on your designated collection day. Set out your recycling bin or cart by 7:00 a.m.


Back
Organics
ORGANICS
In 1995, Michigan banned yard waste from entering landfills.
Yard waste, defined by State law, is grass clippings, yard vegetation, sod without dirt, twigs (less than 2 inches in diameter), leaves, etc.
All yard waste must go either into a brown paper yard waste bag or a trash can labeled with a “yard waste” sticker.
SET-OUT REQUIREMENTS
Weekly on your designated collection day, spring through fall. Set out yard waste by 7:00 a.m. Please check directly with your community for yard waste collection start and end dates.
The communities of Farmington, South Lyon and Wixom have fall bulk leaf collection. Please check directly with your communities for instructions

HOUSEHOLD HAZARDOUS WASTE

Household hazardous waste (HHW) is products used in and around your home that have one or more of the following characteristics – corrosivity; toxicity; flammability; reactivity. HHW requires special handling and disposal.

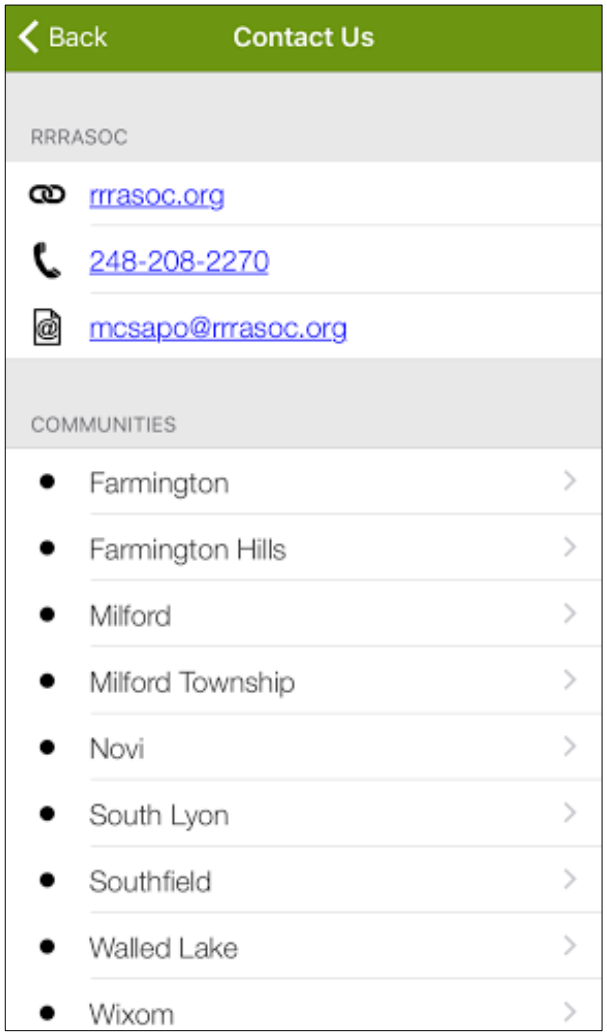
Residents are encouraged to bring HHW to a special drop-off event. Click here for the schedule.

HHW COLLECTION EVENT GUIDELINES

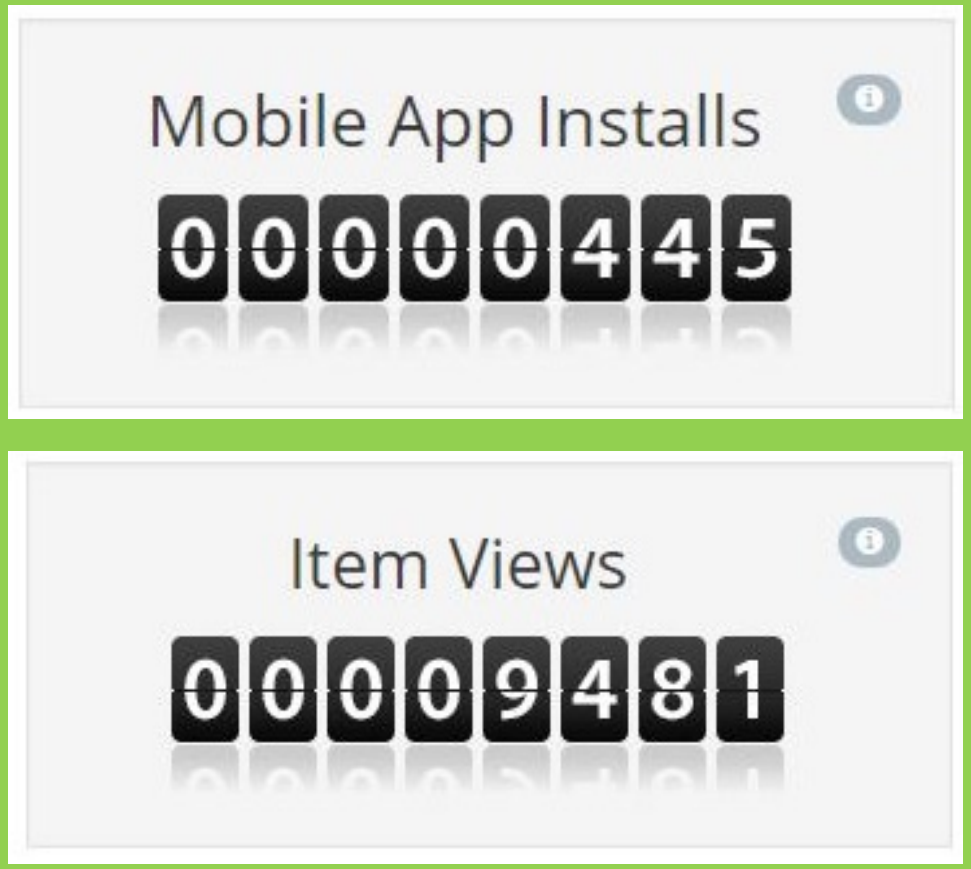
- HHW events are open ***only*** to residents of RRRASOC's nine member communities.
- Residents may attend any of the events.
- Electronic waste ***is*** accepted at HHW events (from residents only).
- Paper shredding is available, with a 3 box, 100 lb. limit.
- Items **NOT** ACCEPTED at HHW Events include Latex paint, Commercial waste, Tires, Fire extinguishers, Flares, Ammunition, Smoke detectors.

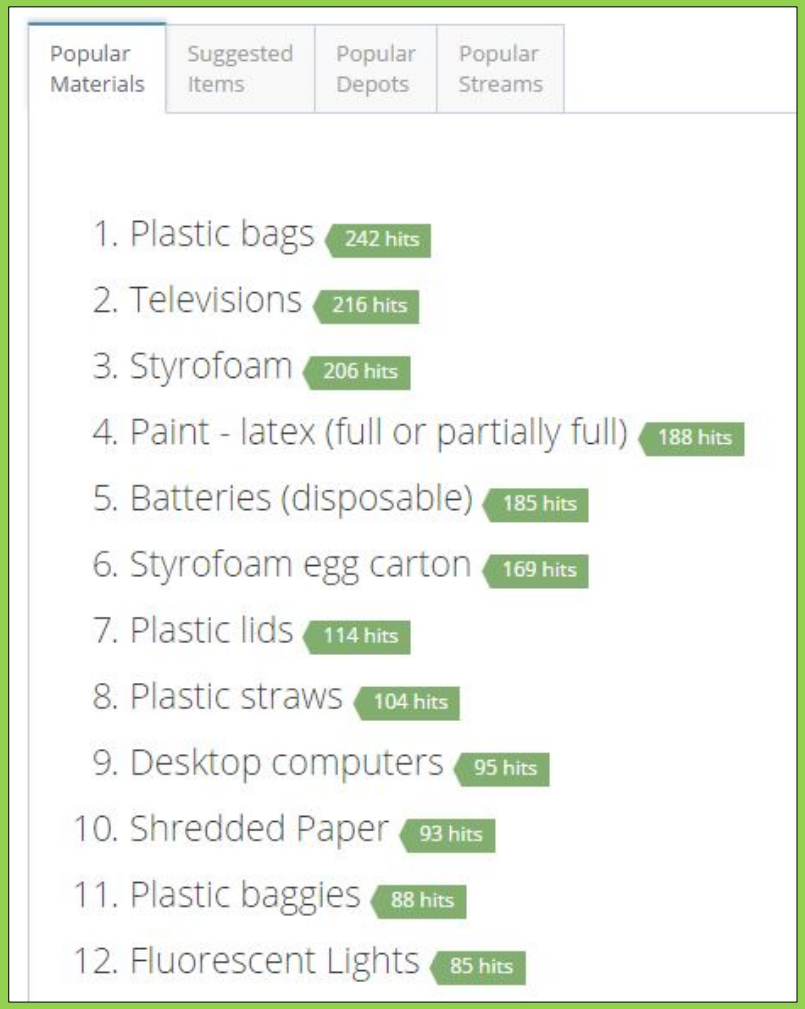
Read our What is Household Hazardous Waste? flyer

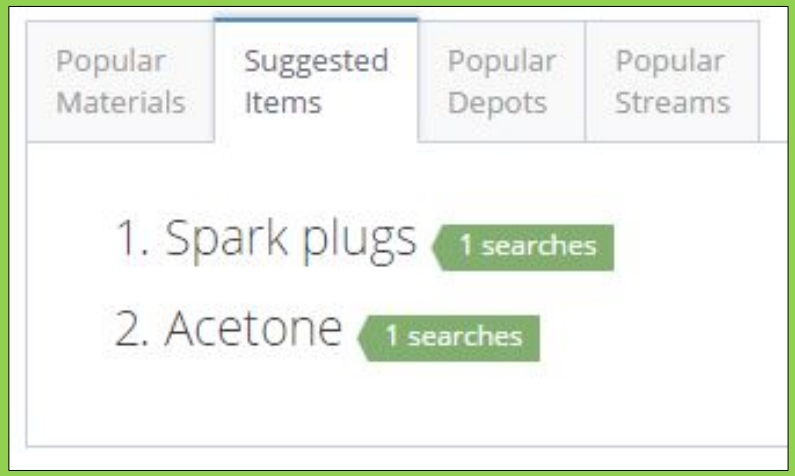
- RRRASOC Contact Information
- Links to Member Communities' Websites



Monitoring and Reporting




Popular Materials
Suggested Items
Popular Depots
Popular Streams
1. Plastic bags 242 hits
2. Televisions 216 hits
3. Styrofoam 206 hits
4. Paint - latex (full or partially full) 188 hits
5. Batteries (disposable) 185 hits
6. Styrofoam egg carton 169 hits
7. Plastic lids 114 hits
8. Plastic straws 104 hits
9. Desktop computers 95 hits
10. Shredded Paper 93 hits
11. Plastic baggies 88 hits
12. Fluorescent Lights 85 hits


Popular Materials
Suggested Items
Popular Depots
Popular Streams
1. Spark plugs 1 searches
2. Acetone 1 searches

RRRASOC's Experience: Summary

- 3 full months of use
- 4 of 9 Member Communities installed Recycling Directory
  - Usage data by community website
- Positive feedback from residents, communities & BOD
- Helping to connect with residents
  - Need Help function
  - Suggest Items

RRRASOC's Experience: Summary

- Popular Materials Search
  - Identify problematic items
  - Identify confusing descriptions/definitions
  - Guide future education/outreach

- Continue & potentially expand digital marketing efforts
  - Enhance search results/instructions
  - Promote mobile app
  - Add calendar tool?

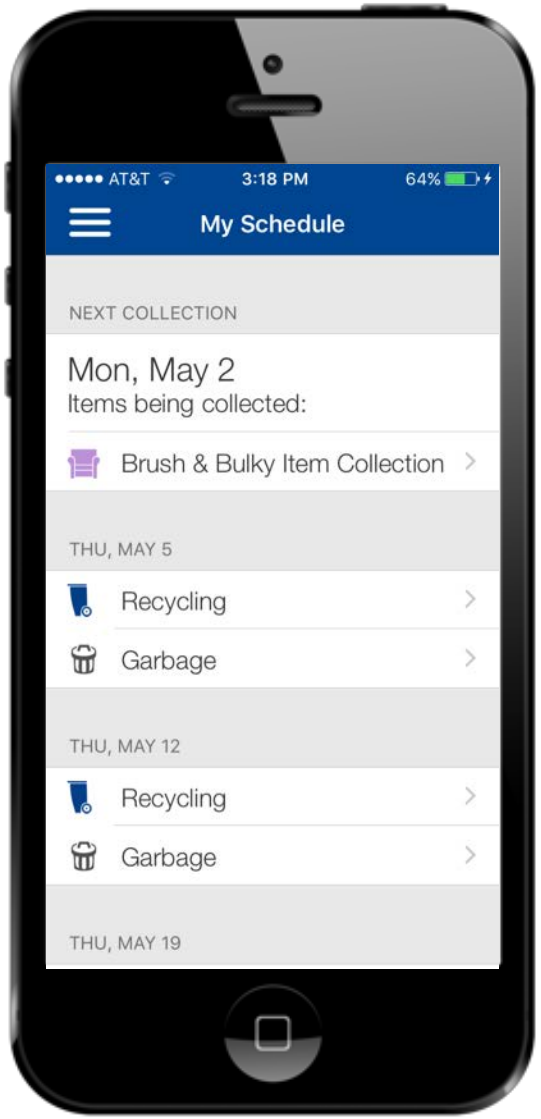
Other municipal experiences

City of Dallas, Texas

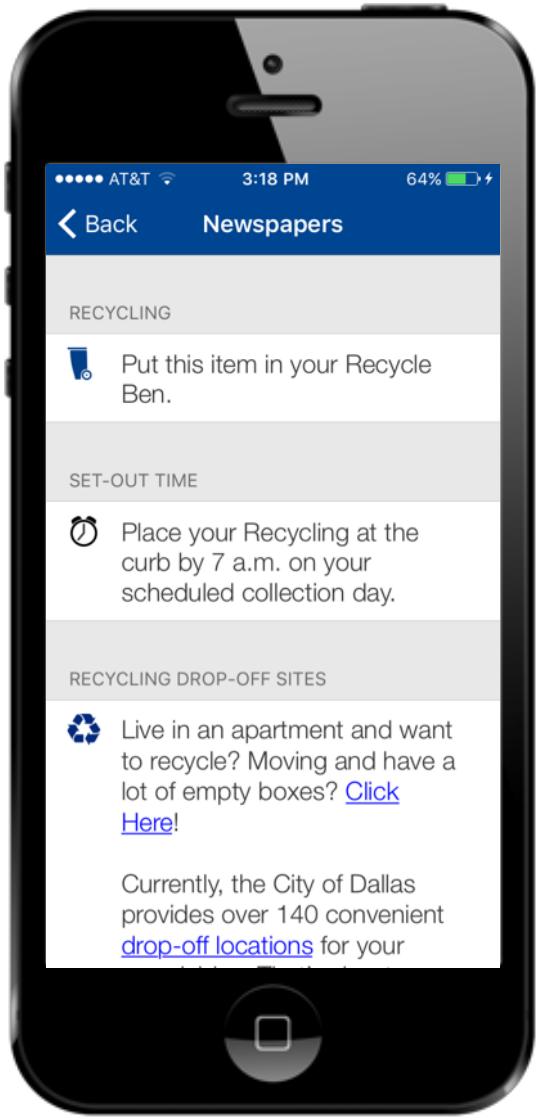
- Services approximately 450,000 households

Dallas

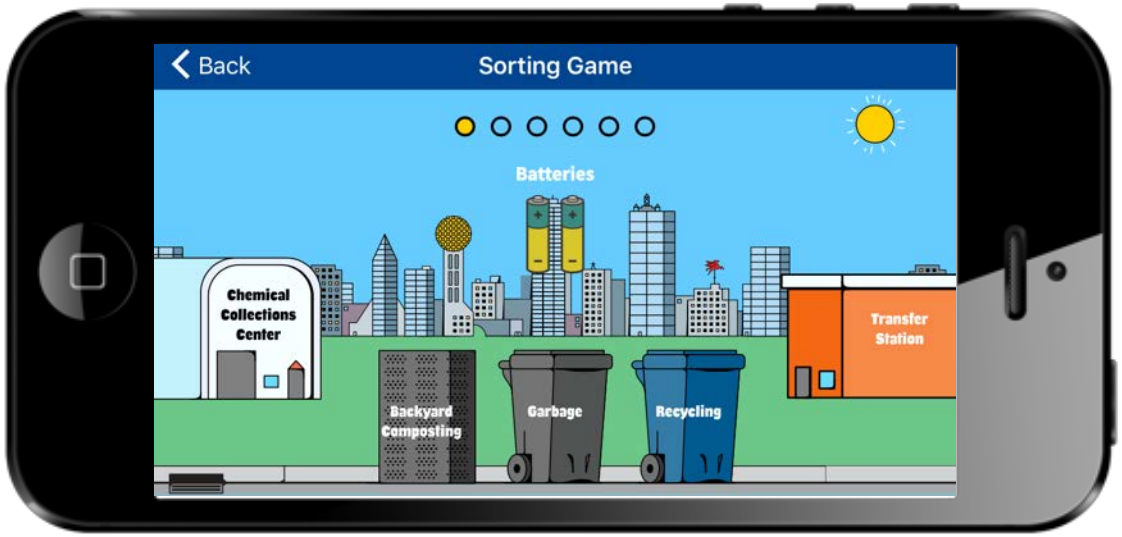
Dallas


AT&T
3:18 PM
64%
My Schedule
NEXT COLLECTION
Mon, May 2
Items being collected:
Brush & Bulky Item Collection
THU, MAY 5
Recycling
Garbage
THU, MAY 12
Recycling
Garbage
THU, MAY 19

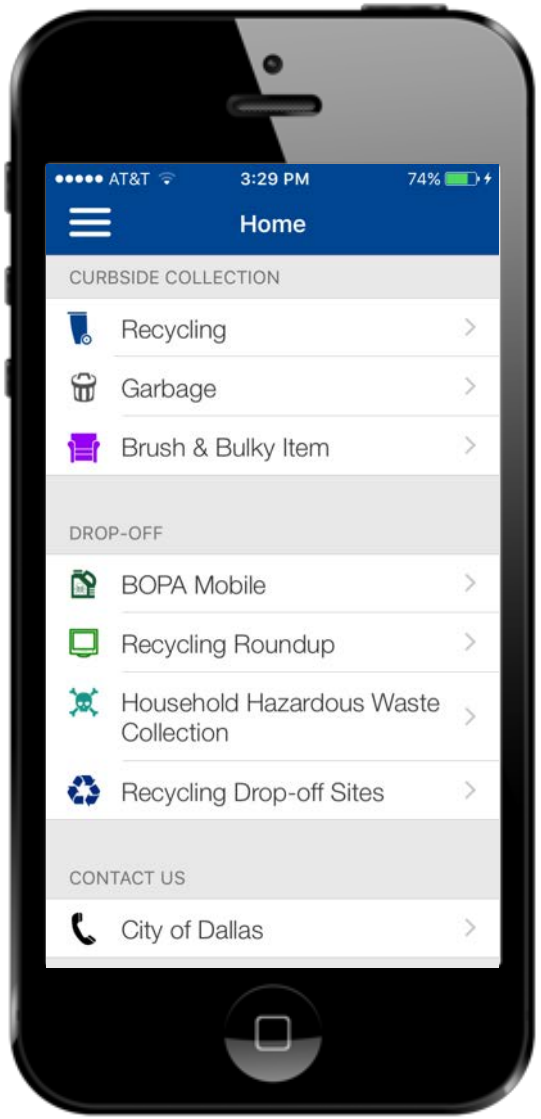
Dallas


AT&T
3:18 PM
64%
Back
Newspapers
RECYCLING
Put this item in your Recycle Ben.
SET-OUT TIME
Place your Recycling at the curb by 7 a.m. on your scheduled collection day.
RECYCLING DROP-OFF SITES
Live in an apartment and want to recycle? Moving and have a lot of empty boxes? Click Here!
Currently, the City of Dallas provides over 140 convenient drop-off locations for your

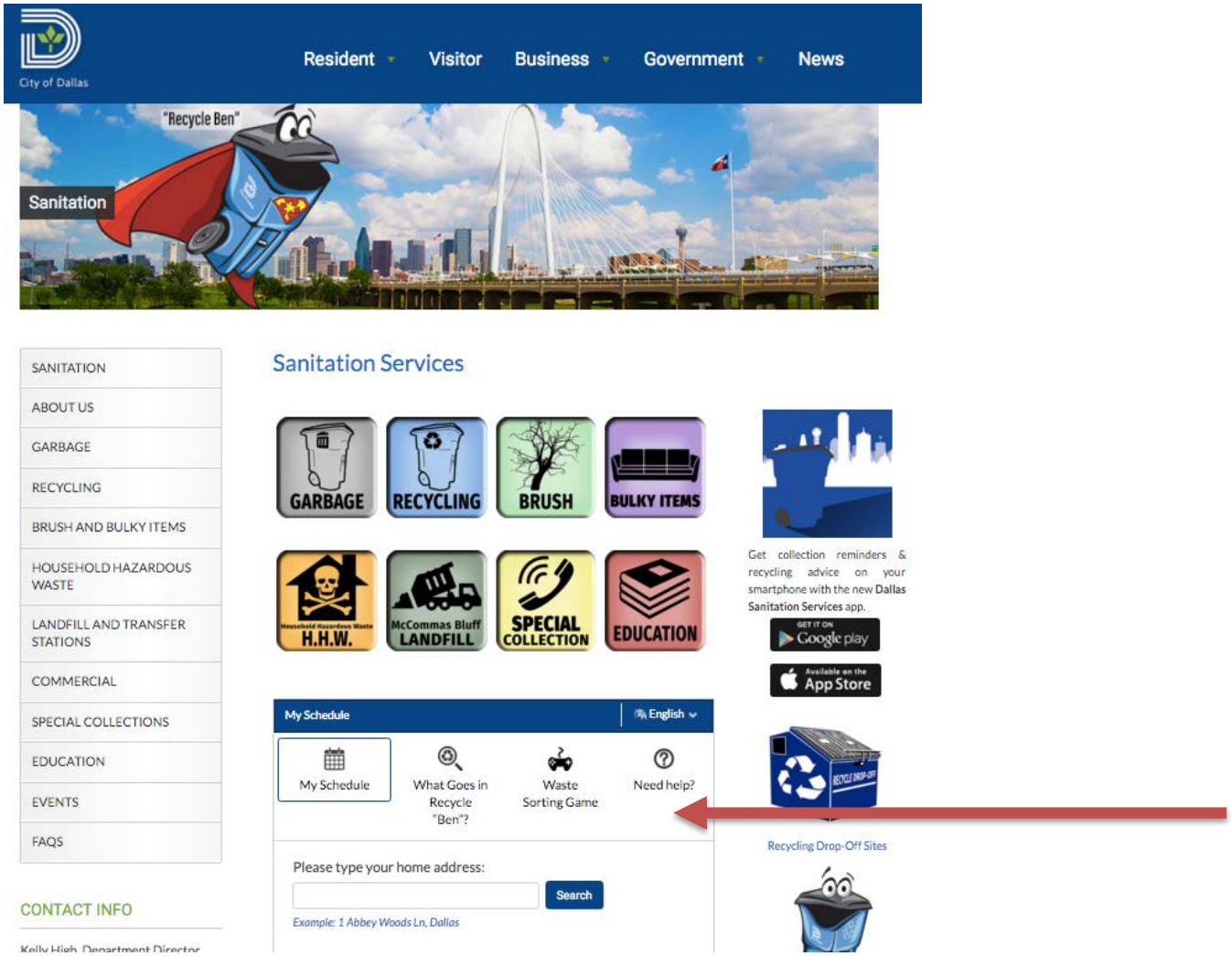
Dallas


Back
Sorting Game
Batteries
Chemical Collections Center
Transfer Station
Backyard Composting
Garbage
Recycling

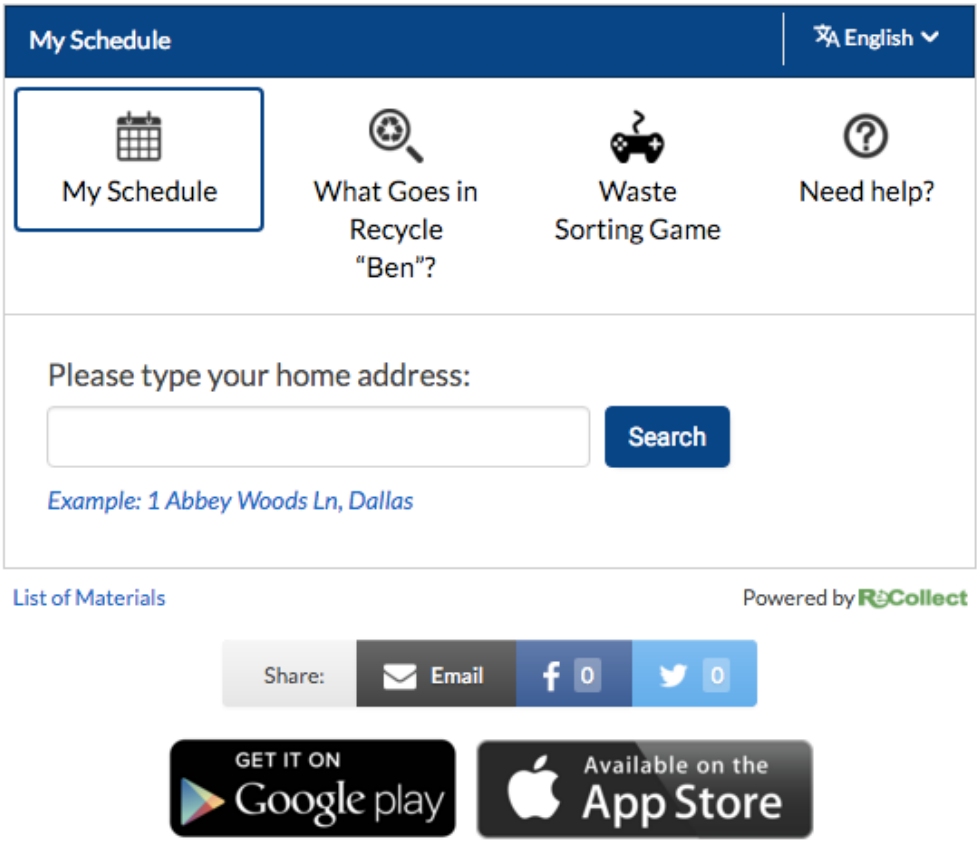
Dallas


AT&T
3:29 PM
74%
Home
CURBSIDE COLLECTION
Recycling
Garbage
Brush & Bulky Item
DROP-OFF
BOPA Mobile
Recycling Roundup
Household Hazardous Waste Collection
Recycling Drop-off Sites
CONTACT US
City of Dallas

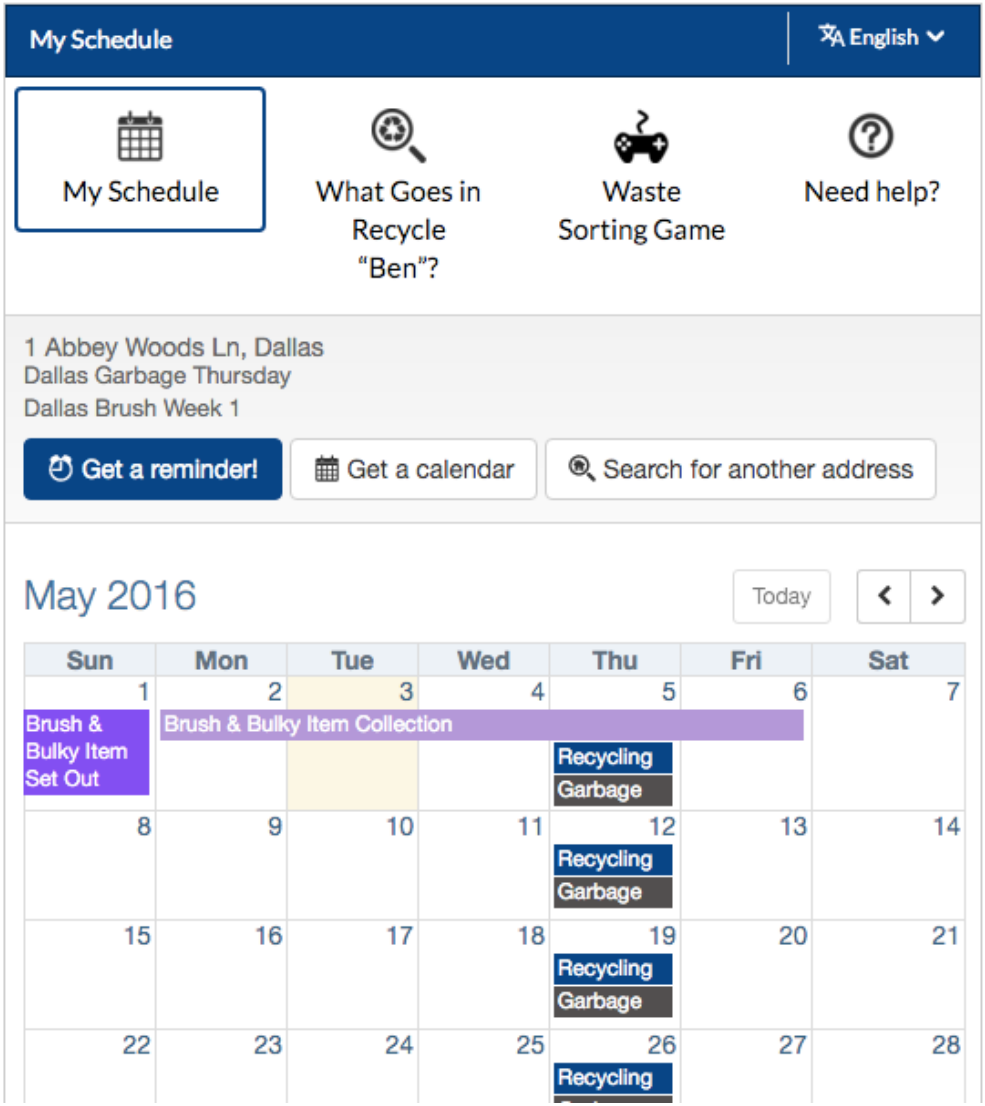
Dallas


City of Dallas
Resident
Visitor
Business
Government
News
"Recycle Ben"
Sanitation
SANITATION
ABOUT US
GARBAGE
RECYCLING
BRUSH AND BULKY ITEMS
HOUSEHOLD HAZARDOUS WASTE
LANDFILL AND TRANSFER STATIONS
COMMERCIAL
SPECIAL COLLECTIONS
EDUCATION
EVENTS
FAQS
CONTACT INFO
Sanitation Services
GARBAGE
RECYCLING
BRUSH
BULKY ITEMS
H.H.W.
McCommas Bluff LANDFILL
SPECIAL COLLECTION
EDUCATION
Get collection reminders & recycling advice on your smartphone with the new Dallas Sanitation Services app.
Google play
App Store
My Schedule
English
My Schedule
What Goes in Recycle "Ben"?
Waste Sorting Game
Need help?
Please type your home address:
Search
Example: 1 Abbey Woods Ln, Dallas
Recycling Drop-Off Sites

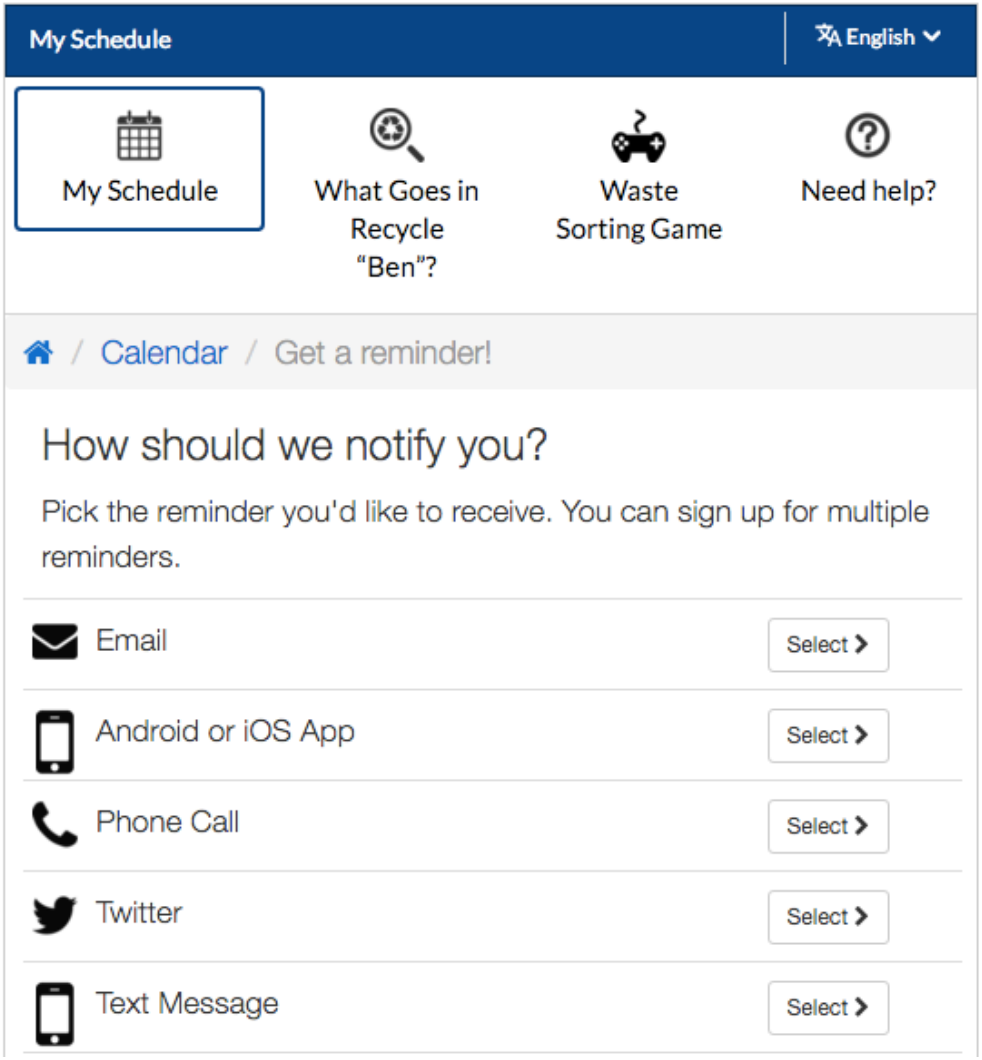
Dallas


My Schedule
English
My Schedule
What Goes in Recycle "Ben"?
Waste Sorting Game
Need help?
Please type your home address:
Search
Example: 1 Abbey Woods Ln, Dallas
List of Materials
Powered by ReCollect
Share:
Email
0
0
GET IT ON Google play
Available on the App Store

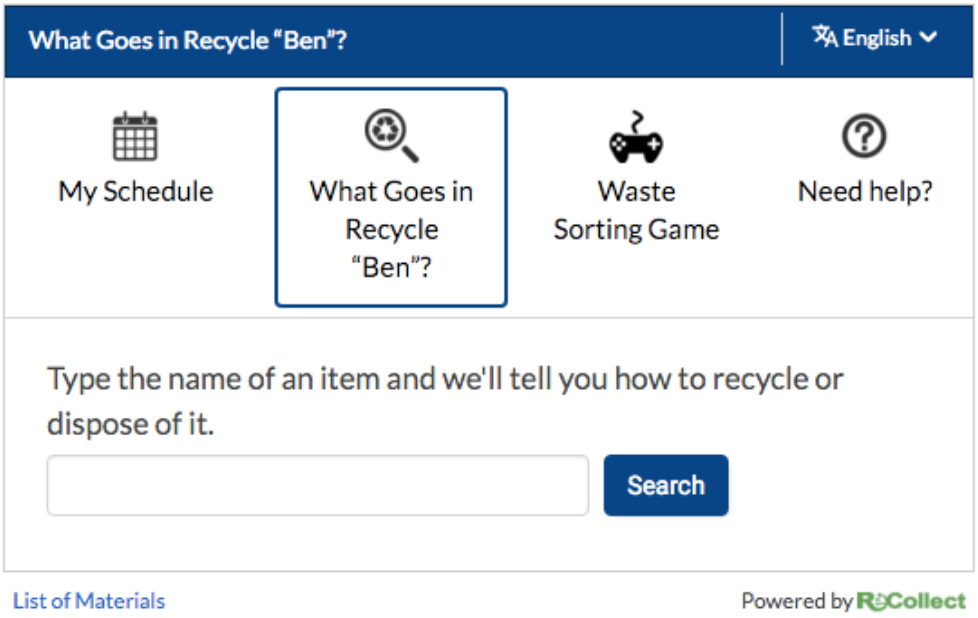
Dallas


My Schedule
English
My Schedule
What Goes in Recycle "Ben"?
Waste Sorting Game
Need help?
1 Abbey Woods Ln, Dallas
Dallas Garbage Thursday
Dallas Brush Week 1
Get a reminder!
Get a calendar
Search for another address
May 2016
Today
Sun Mon Tue Wed Thu Fri Sat
1 2 3 4 5 6 7
Brush & Bulky Item Set Out
Brush & Bulky Item Collection
Recycling
Garbage
8 9 10 11 12 13 14
Recycling
Garbage
15 16 17 18 19 20 21
Recycling
Garbage
22 23 24 25 26 27 28
Recycling

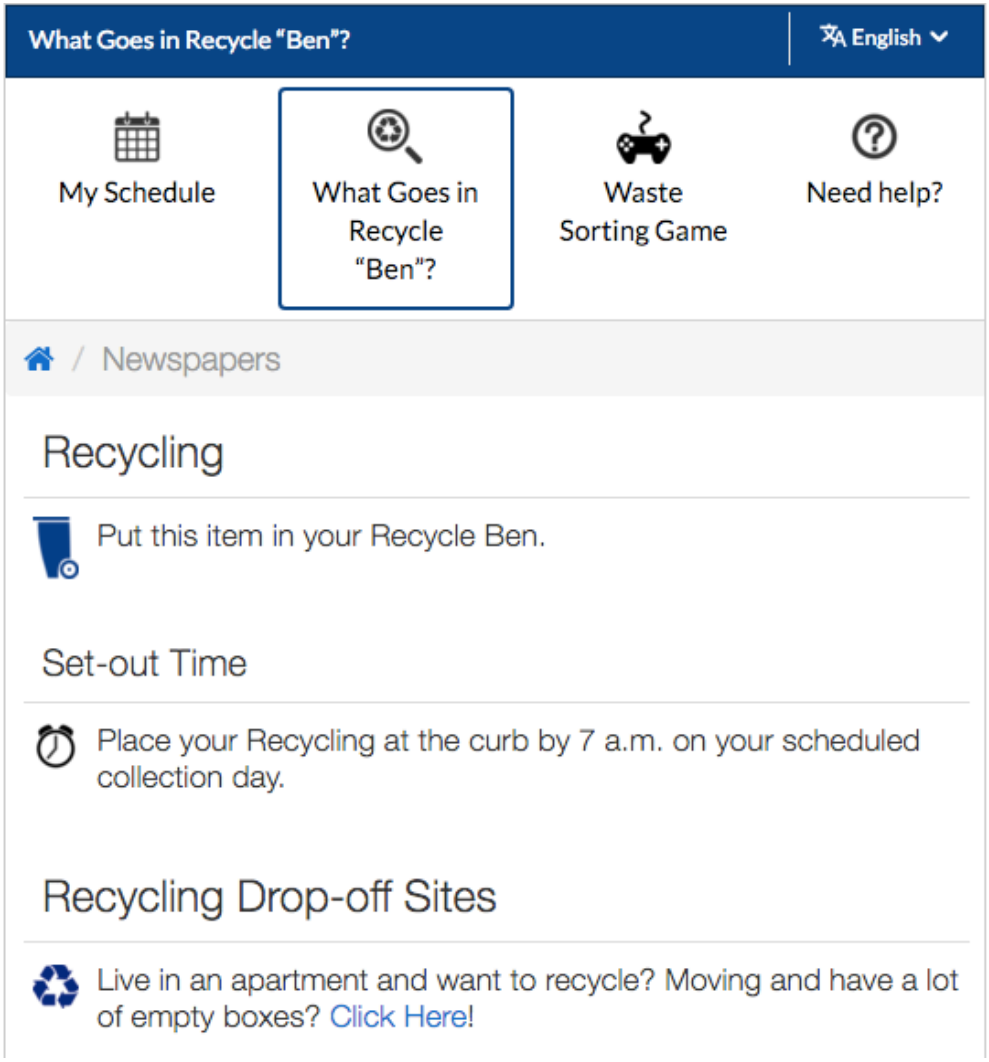
Dallas


My Schedule
English
My Schedule
What Goes in Recycle "Ben"?
Waste Sorting Game
Need help?
Calendar / Get a reminder!
How should we notify you?
Pick the reminder you'd like to receive. You can sign up for multiple reminders.
Email
Select
Android or iOS App
Select
Phone Call
Select
Twitter
Select
Text Message
Select

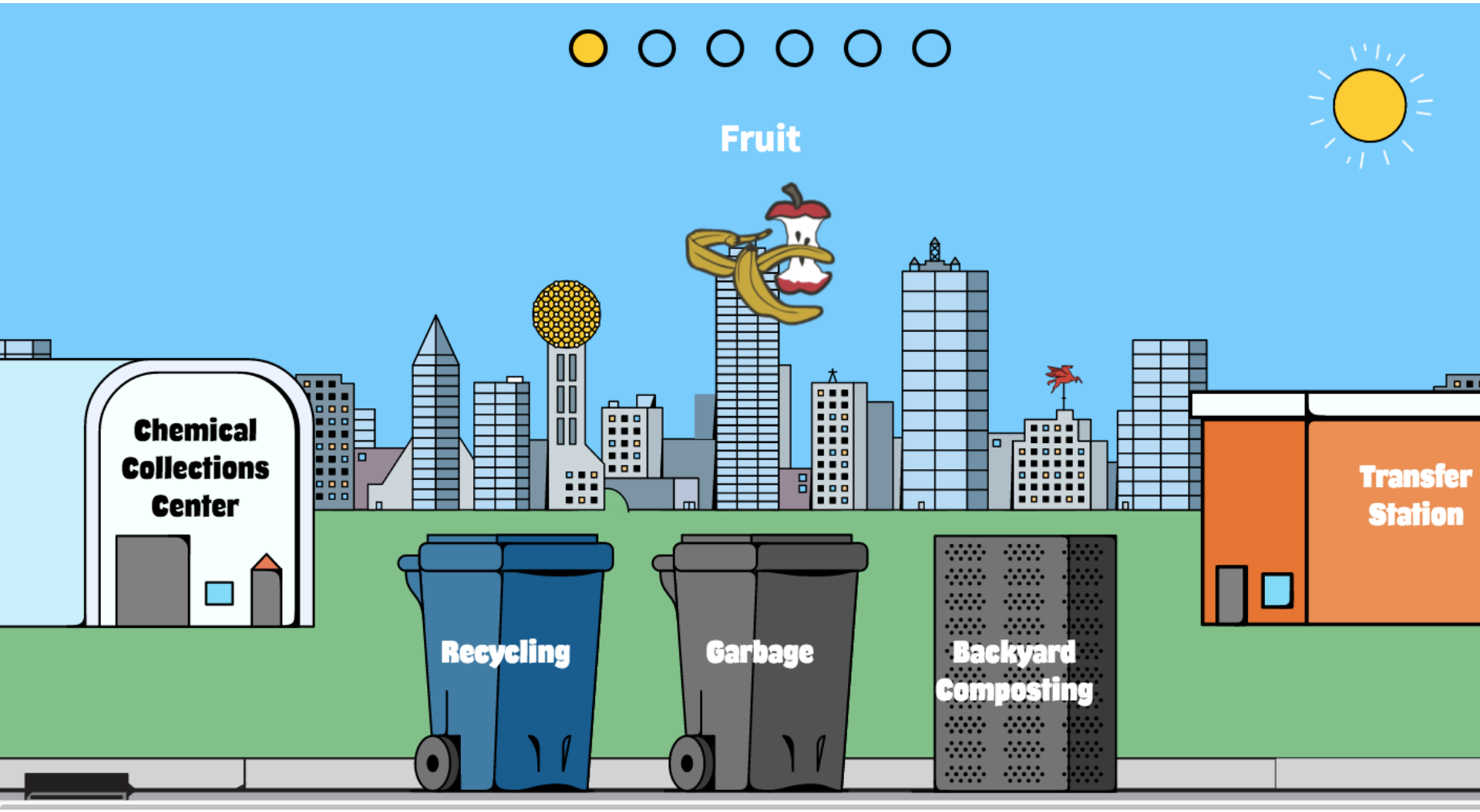
Dallas


What Goes in Recycle "Ben"?
English
My Schedule
What Goes in Recycle "Ben"?
Waste Sorting Game
Need help?
Type the name of an item and we'll tell you how to recycle or dispose of it.
Search
List of Materials
Powered by ReCollect

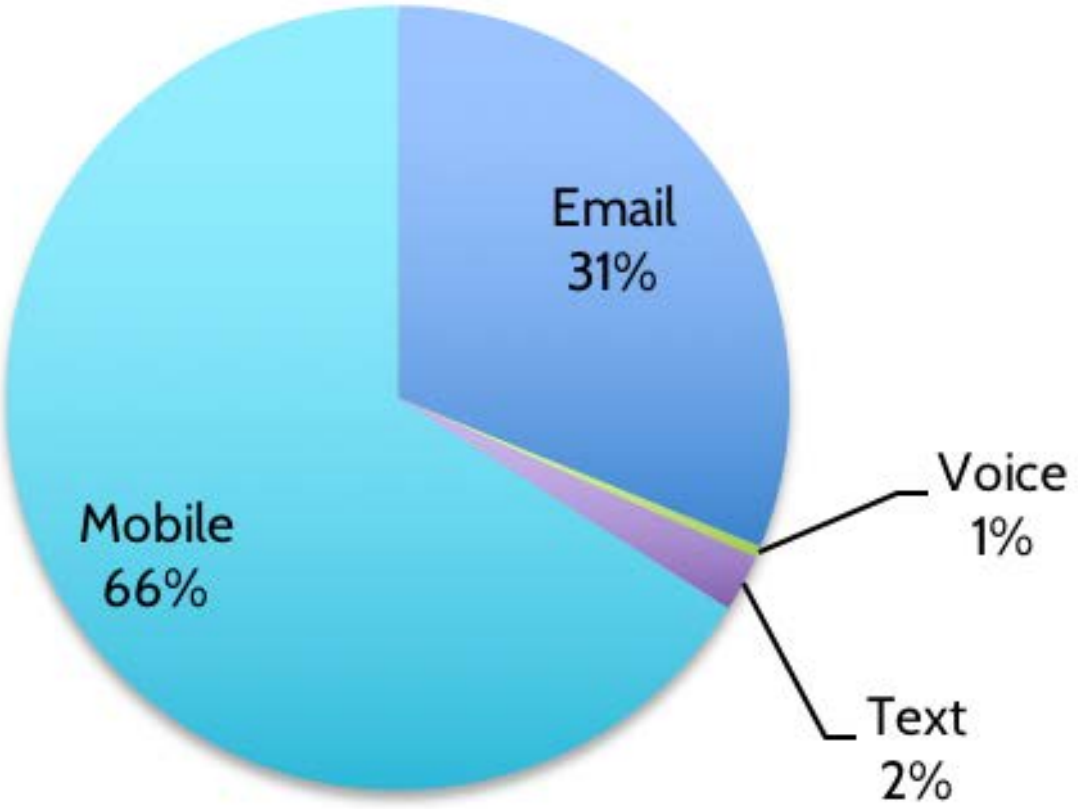
Dallas


What Goes in Recycle "Ben"?
English
My Schedule
What Goes in Recycle "Ben"?
Waste Sorting Game
Need help?
Newspapers
Recycling
Put this item in your Recycle Ben.
Set-out Time
Place your Recycling at the curb by 7 a.m. on your scheduled collection day.
Recycling Drop-off Sites
Live in an apartment and want to recycle? Moving and have a lot of empty boxes? Click Here!

Dallas


Fruit
Chemical Collections Center
Recycling
Garbage
Backyard Composting
Transfer Station

Reminder breakdown (as of May 3, 2016)

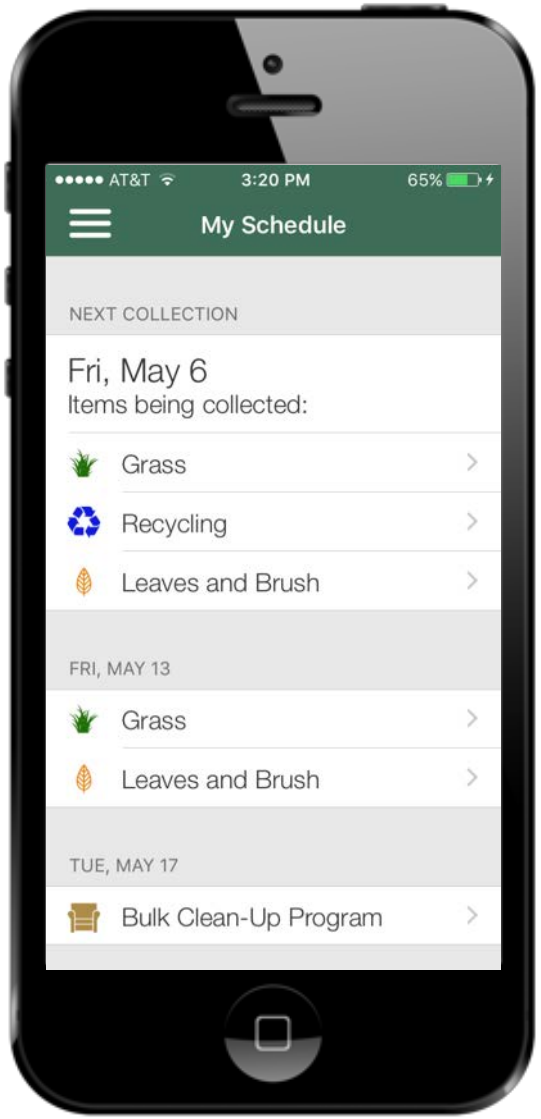


Rockaway Township, New Jersey

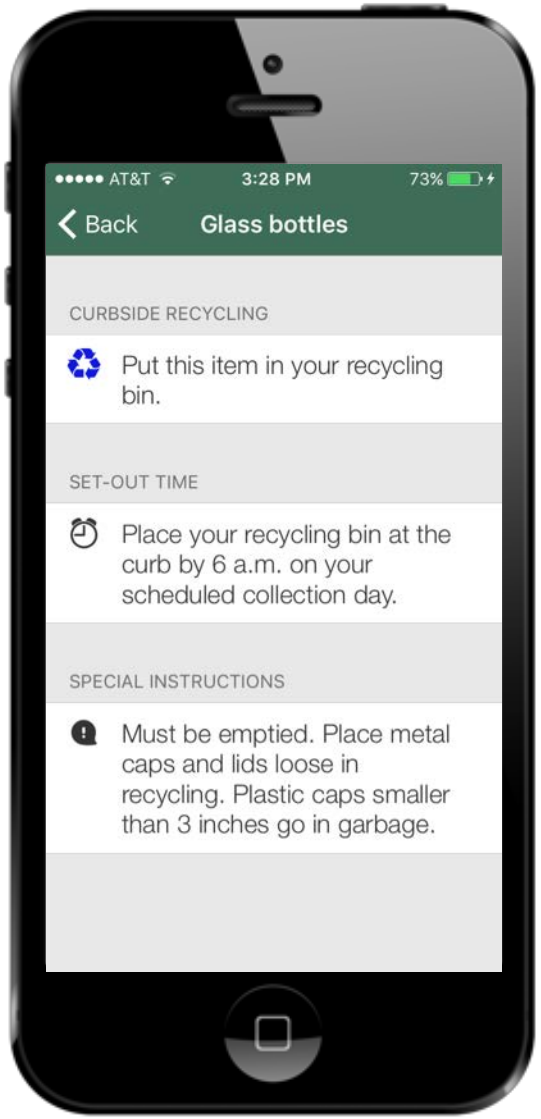
- Services approximately 8,900 households

Rockaway

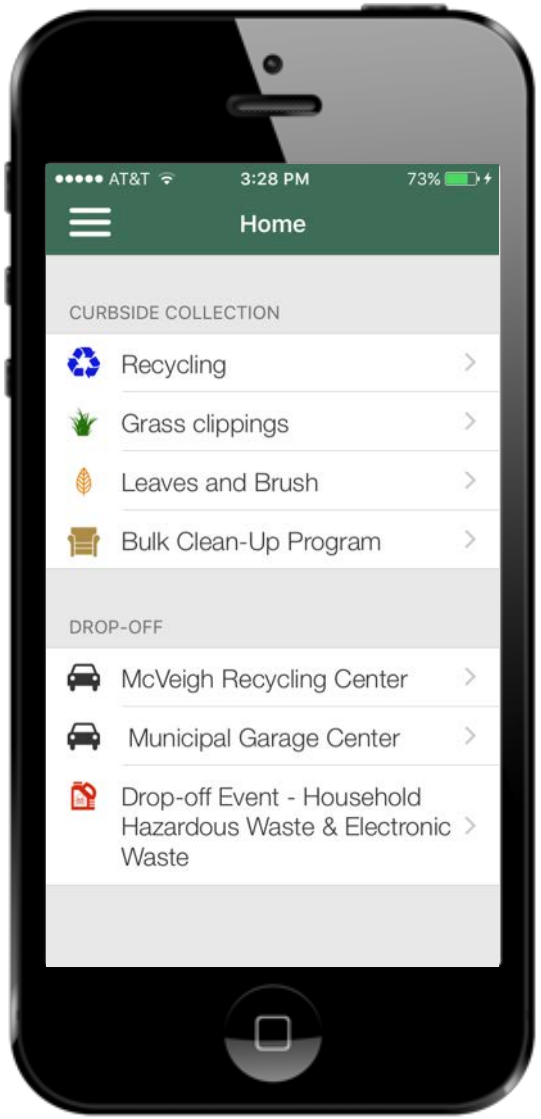
Rockaway


AT&T
3:20 PM
65%
My Schedule
NEXT COLLECTION
Fri, May 6
Items being collected:
Grass
Recycling
Leaves and Brush
FRI, MAY 13
Grass
Leaves and Brush
TUE, MAY 17
Bulk Clean-Up Program

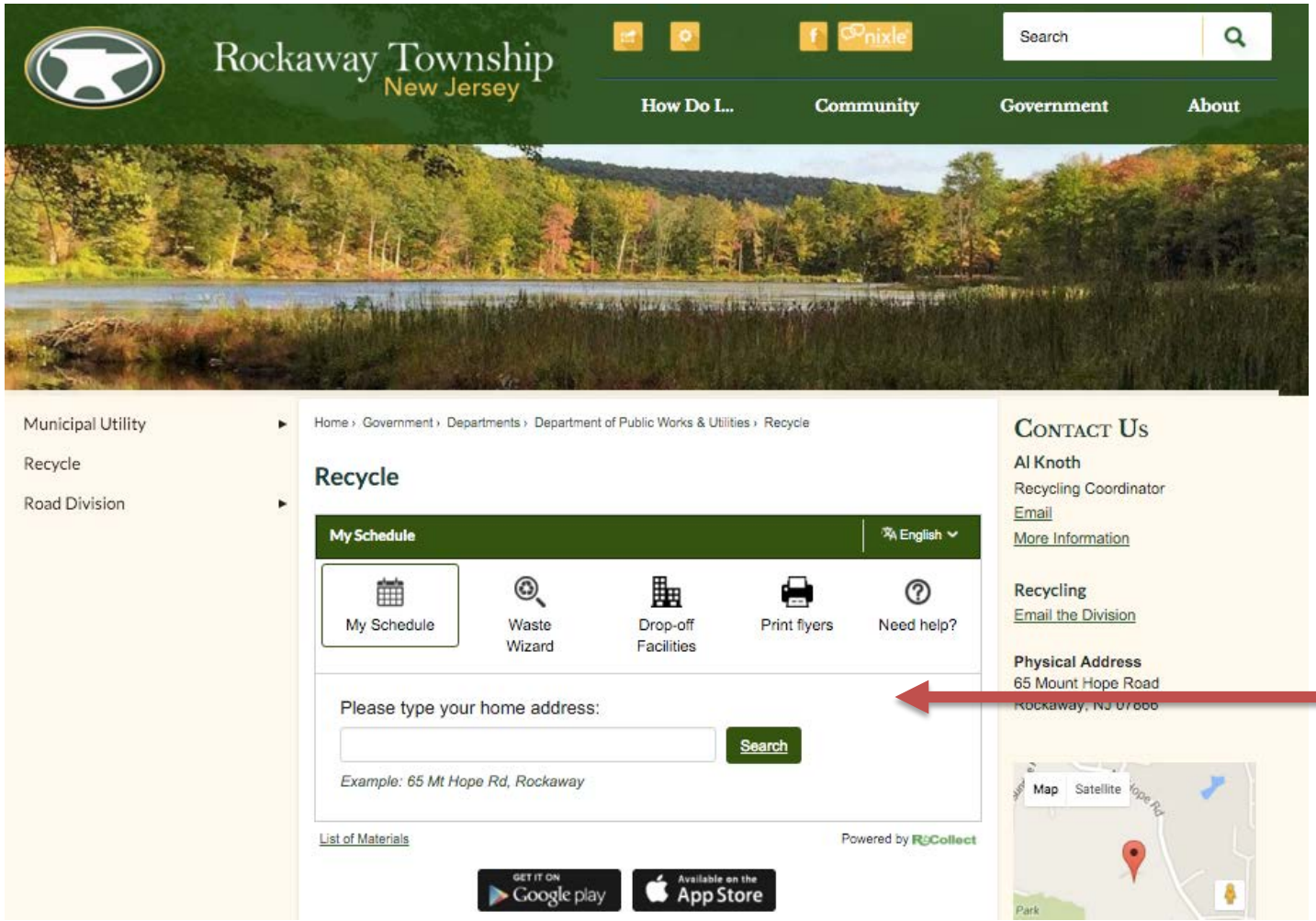
Rockaway


AT&T
3:28 PM
73%
Back
Glass bottles
CURBSIDE RECYCLING
Put this item in your recycling bin.
SET-OUT TIME
Place your recycling bin at the curb by 6 a.m. on your scheduled collection day.
SPECIAL INSTRUCTIONS
Must be emptied. Place metal caps and lids loose in recycling. Plastic caps smaller than 3 inches go in garbage.

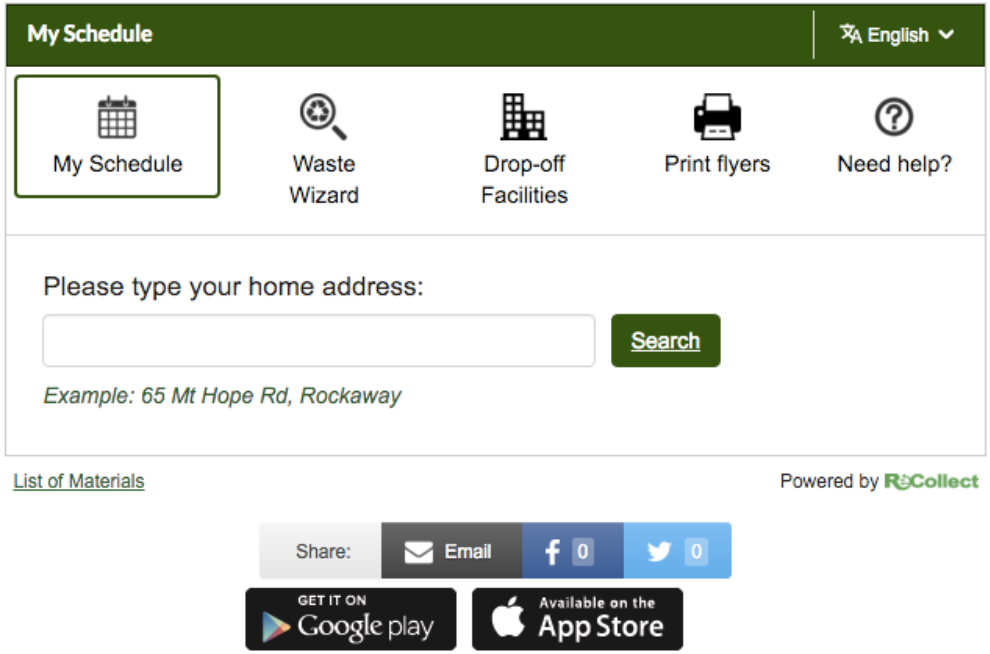
Rockaway


AT&T
3:28 PM
73%
Home
CURBSIDE COLLECTION
Recycling
Grass clippings
Leaves and Brush
Bulk Clean-Up Program
DROP-OFF
McVeigh Recycling Center
Municipal Garage Center
Drop-off Event - Household Hazardous Waste & Electronic Waste

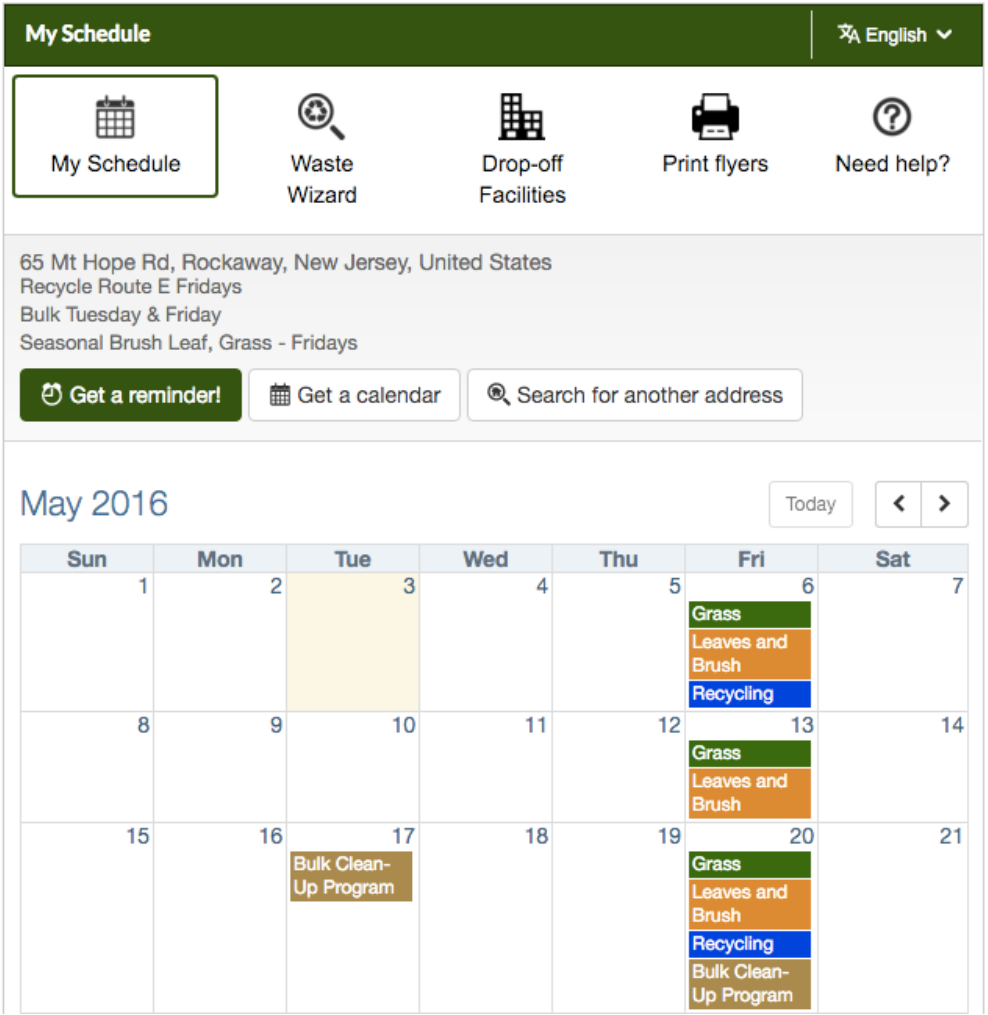
Rockaway


Rockaway Township
New Jersey
Search
How Do I...
Community
Government
About
Municipal Utility
Recycle
Road Division
Home › Government › Departments › Department of Public Works & Utilities › Recycle
Recycle
My Schedule
English
My Schedule
Waste Wizard
Drop-off Facilities
Print flyers
Need help?
Please type your home address:
Search
Example: 65 Mt Hope Rd, Rockaway
List of Materials
Powered by ReCollect
GET IT ON Google play
Available on the App Store
Contact Us
Al Knoth
Recycling Coordinator
Email
More Information
Recycling
Email the Division
Physical Address
65 Mount Hope Road
Rockaway, NJ 07866
Map
Satellite

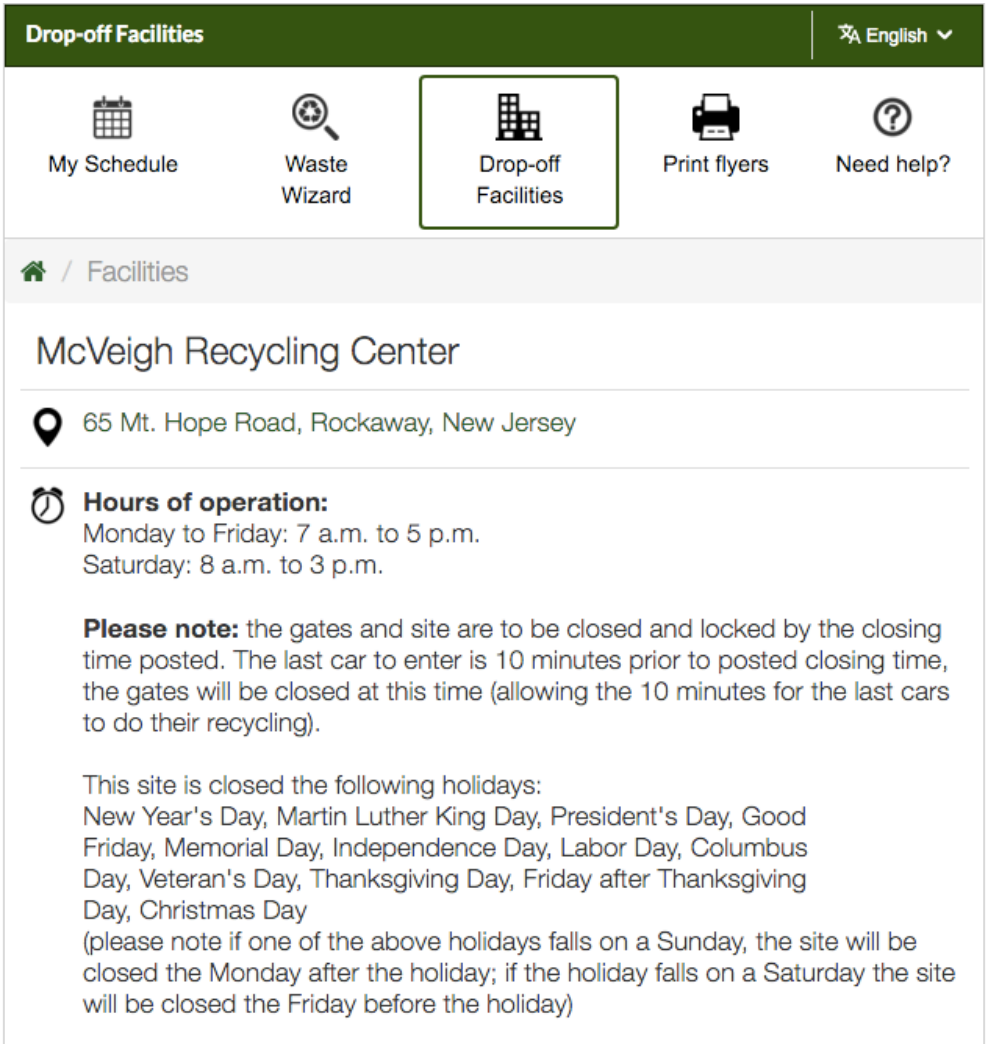
Rockaway


My Schedule
English
My Schedule
Waste Wizard
Drop-off Facilities
Print flyers
Need help?
Please type your home address:
Search
Example: 65 Mt Hope Rd, Rockaway
List of Materials
Powered by ReCollect
Share:
Email
0
0
GET IT ON Google play
Available on the App Store

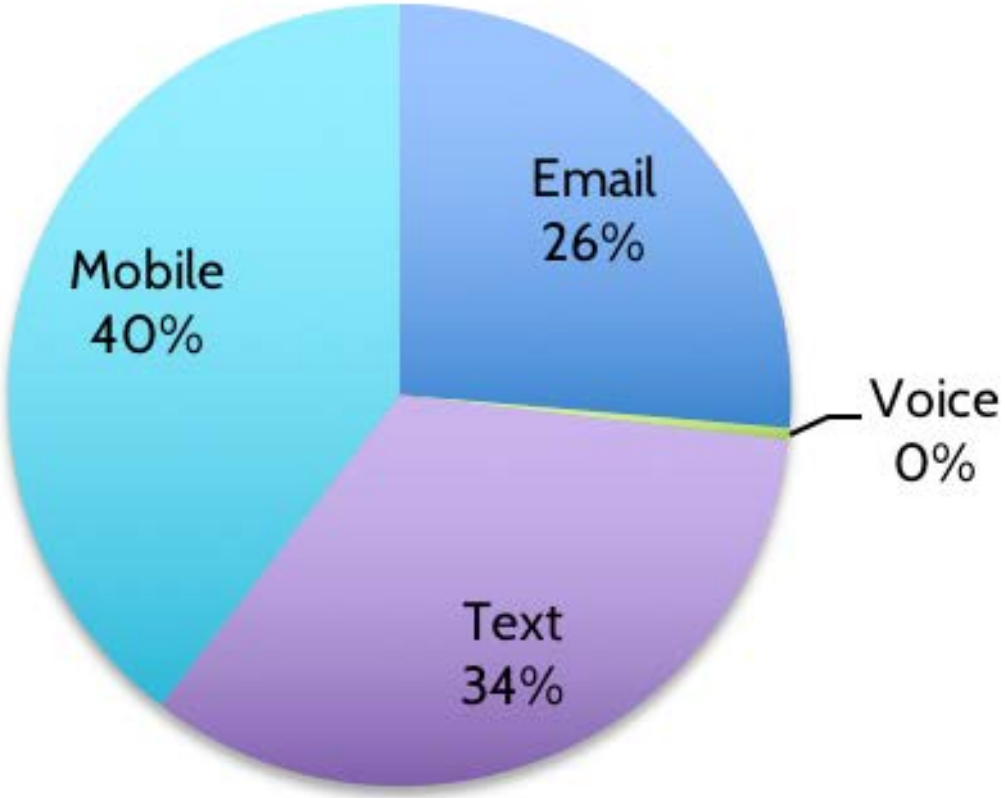
Rockaway


My Schedule
English
My Schedule
Waste Wizard
Drop-off Facilities
Print flyers
Need help?
65 Mt Hope Rd, Rockaway, New Jersey, United States
Recycle Route E Fridays
Bulk Tuesday & Friday
Seasonal Brush Leaf, Grass - Fridays
Get a reminder!
Get a calendar
Search for another address
May 2016
Today
Sun Mon Tue Wed Thu Fri Sat
1 2 3 4 5 6 Grass, Leaves and Brush, Recycling 7
8 9 10 11 12 13 Grass, Leaves and Brush 14
15 16 17 Bulk Clean-Up Program 18 19 20 Grass, Leaves and Brush, Recycling, Bulk Clean-Up Program 21

Rockaway


Drop-off Facilities
English
My Schedule
Waste Wizard
Drop-off Facilities
Print flyers
Need help?
Facilities
McVeigh Recycling Center
65 Mt. Hope Road, Rockaway, New Jersey
Hours of operation:
Monday to Friday: 7 a.m. to 5 p.m.
Saturday: 8 a.m. to 3 p.m.
Please note: the gates and site are to be closed and locked by the closing time posted. The last car to enter is 10 minutes prior to posted closing time, the gates will be closed at this time (allowing the 10 minutes for the last cars to do their recycling).
This site is closed the following holidays:
New Year's Day, Martin Luther King Day, President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day
(please note if one of the above holidays falls on a Sunday, the site will be closed the Monday after the holiday; if the holiday falls on a Saturday the site will be closed the Friday before the holiday)

Reminder breakdown (as of May 3, 2016)



Final thoughts

Final thoughts

- Plan how to deal with the increase in mobile users
  - responsive website
  - mobile app
    - one-city
    - constellation
- Determine what types of waste information you want to communicate
  - collection schedules
  - material look-up
- Involve program specialists, corporate communications, corporate IT, etc. in planning

Contacts

John Watson

Director of Customer Success

ReCollect Systems Inc.

1-888-291-0604

john@recollect.net

recollect.net

Tracy Purrenhage

Project Coordinator

Iris Waste Diversion Specialists

989-272-5057

tracy@iriswastediversion.com

iriswastediversion.com