# Recycling

**Urban Community Characteristics:**

* 80% of the population live in urban or sub-urban areas.
* Urban land takes up 30% of land area.
* Struggle with finding a place for everyone as more people more to urban areas.

**Recycling in Urban Communities:**

* Usually require little work from the resident other than paying a fee.
* Funded by local government.
* Most materials can usually be recycled including scrap metal and hazardous waste.
* Processing is more intensive.
* Cities can make money off selling recyclables to private manufacturers.
* Main methods of recycling include:
  + Dual Stream/Curb-Sorted
    - Mixed paper is sorted separately from metal, plastic, and glass.
  + Single Stream MRF-sorted (Material Recovery Facility)
    - All paper, cardboard, metal, plastic, and other recyclables are collected in the same bin.
    - Allows for greater collection efficiency and eliminates the burden on residents to sort recyclables.
    - Greater efficiency reduces GHG emissions from collection trucks.
    - Typically yields more recyclables collected.

**Rural Community Characteristics:**

* 20% of population lives in rural areas.
* Rural land takes up 70% of total land area.
* Rural inhabitants struggle with maintaining population and economic opportunities as more people move to urban areas.
* Often overwhelmed or pushed out by urban sprawl.

**Recycling in Rural Communities:**

* Typically feature centrally located collection centers for residents to bring recyclables to.
* Requires more input from the resident and may require driving some distance to get there.
* May not take as many types of recyclables as cities, meaning many items don’t get recycled at all.
* Operated by local government or private groups.
* Sends collected materials to a regional, state, or private processing facility.

**What can be recycled?**

* **Cardboard and paperboard**
  + One of the most recycled materials (up to 77%).
  + Can’t be waxed, greasy, or wet (so no OJ containers or pizza boxes).
  + Can also be reused for storage, fire starters, and garden bed liners.
  + Usually picked up curbside or at centralized collection centers.
* **E-waste**
  + This includes old cellphones, mp3 players, TVs, etc.
  + Usually dropped off at designated collection facility.
    - Verify this facility has acceptable e-waste recycling practices.
  + “For every million cell phones recycled, 772lbs of silver, 75lbs of gold, and 22lbs of palladium were recovered.” (EPA.gov)
* **Glass**
  + 100% recyclable, meaning it can be recycled over and over again indefinitely.
  + In 2013, only about 34% of glass was recycled.
  + Usually picked up curbside or at centralized collection centers.
* **Hazardous Waste**
  + Includes cleaning chemicals, paints, automotive fluids, batteries containing heavy metals, and CFL bulbs.
  + When these items get thrown away instead of recycled, they can leach harmful contaminants into the environment.
  + Typically can be brought to a specialized HW facility or sometimes an auto-shop.
    - Check with Earth911.com for your local center.
* **Metals**
  + Includes food and drink cans, scrap metal, and aluminum foil.
  + Aluminum is 100% recyclable, meaning it can be recycled over and over.
  + Uses a fraction of the energy to make new cans out of recycled materials as opposed to new materials.
  + Aluminum cans are typically accepted by local recycling program.
    - Scrap metal may require drop off at a specialized facility.
* **Paper**
  + Cannot be recycled indefinitely as the fibers eventually wear out.
  + Recycled paper can make over 5,000 other products.
  + Usually picked up curbside or at centralized collection centers.
* **Plastics**
  + 1-7 plastics can be recycled…
    - This includes items like PB jars, milk jugs, shampoo bottles, Tupperware, medicine bottles, flower pots, window cleaner, etc.
  + …BUT aren’t always
    - Check with local authority to see which numbers are collected in your area.
  + Usually picked up curbside or at centralized collection centers.

# Questions for HS and Up:

* Which of these is a benefit of Single-Stream recycling?
  + Typically leads to more materials being recycled.
  + You get to spend time sorting your recycled goods.
  + Efficient collection reduces GHG emissions of collection trucks.
  + **A and C.**
* Which of these materials cannot be recycled indefinitely?
  + Glass.
  + Aluminum.
  + **Paper.**
  + B and C.
* What is the most recycled product today?
  + Glass.
  + Paper.
  + **Cardboard.**
  + Aluminum cans.