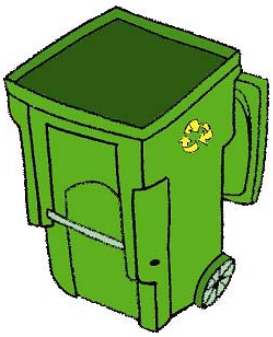
How-To Conduct Waste Assessments



Waste Assessments calculate the percentage of a school's waste that is composted and recycled instead of put in the garbage.

Preparing for Your Waste Assessment

1) **Research** your garbage, recycling, and compost service information. Find out:
   - The size of all dumpsters (also called yarders) in yards and/or of all bins in gallons.
   - How many dumpsters and/or bins there are.
   - The days of the week they are each serviced.
   - Where they are put for service. This is usually at a curbside or inside a locked gate.)

   You can either ask your school administration, custodian, or call the garbage company for this information. Sunset Scavenger 330-1300 or Golden Gate Disposal 626-4000. Note all of this information on the *School Waste Assessment Form*.

2) **Schedule** your waste assessment. Waste assessments are conducted over 1 week. Decide when you'll conduct your waste assessment.
   - **This is very important** **Schedule time to check bins and/or dumpsters in the late afternoon before the morning of a scheduled pickup.** Example: If your school has recycling pickups on Tuesday mornings, you should check the recycling bins on Monday afternoons.
   - Create a schedule of which days you'll need to check the dumpsters and/or bins. If many students will participate, decide who will be responsible for each day that observation is needed.

3) By the end of the assessment you will have collected data for each day of the week that your school has pickups because you're doing it over a 1-week period.
   - Try to complete your waste assessment over **one consecutive weeks** rather than breaking it up over a handful of weeks. This will allow you to collect more accurate data that truly reflects what is happening at your school.

Conducting Your Waste Assessment

1) On the late afternoon (4-5pm) on the day before each pick-up, go to where the bins and/or dumpsters are placed for pick-ups.

2) Use the *School Waste Assessment Form* to record your data.

3) For each day you observe, note the number and size of dumpsters/bins you saw ready for pick-up. Don't include bins that are inside since this means they aren't ready for pick-up.

4) **Estimate and record** the percentage that each was full.
   - Bins: Imagine the contents are compressed and then determine percentage.
   - Dumpsters: The back wall of it is divided into horizontal sections. Use these sections to help figure out the percentage full. Example: If container has 6 segments, but garbage is 4 segments high, then percentage full is 4/6 or 66.6%.

5) Note any special observations (i.e. lots of plastic containers in the green bin, lots of milk cartons in the garbage, broken down cardboard boxes piled next to bins, etc.).

6) If possible: Determine how many extra bags/bins of trash and recycling are added at night by the night custodian after you observe.

- Add this amount to each afternoon of recycling or garbage that you observe. Example: The night custodian puts out about (2) 96-gallon garbage bags a night. Add 192-gallons to each of your days of garbage data. If the garbage is collected in a yarder, convert the night gallons to yards before adding to your data. [202 gallons=1 cubic yard]

Calculating Your Waste Averages

Using the data collected, you will determine the average amounts (in percentages of how full your containers are) of garbage, recycling and composting generated by your school in one week. (For a complete example, see the *Sample Waste Assessment Form* and *Sample Calculations*.)

1) Add up the **total percentage** for garbage put out over the week.
   - Example: School has a 6-yarder for garbage that is picked up twice a week. First day = 30% full and second day = 50% full, so the total percentage is 30% + 50% = 80%. Don't forget to add in the extra amount put out at night! [202 gallons=1 cubic yard]

2) What was the highest number of dumpsters and/or bins you ever saw being used on one day? Multiply this number by the number of days you observed.
   - Example: You observed garbage on 2 days. On each day there was only 1 yarder. 1 yarder x 2 days = 2.

3) Divide your total percentage by this number. This is your **garbage average**. This states what percent of your garbage containers your school fills in one week.

4) Use this process to determine the **recycling average** and the **compost average** that your school generates in one week as well.

Filling in the Waste Calculator

Fill in the *Waste Calculator* spreadsheet to reflect your school's amounts of garbage, recycling and compost averages.

1) Find the row that corresponds to your garbage yarder/bin size. Fill in the maximum amount of containers you ever saw being used, the number of days a week they're picked up, and their average fullness (calculated above). Fill in the recycling and compost sections as well. As you fill in the *Waste Calculator*, it will automatically use the data you input to calculate your school's waste diversion rate in the bottom, right corner.

2) If you have two different sizes of bins for the same category (garbage, recycling, or compost), calculate the percentage *separately for each bin size*. For example:
   - If your school has (2) 96-gallon blue bins and (3) 32-gallon blue bins, calculate the average percentage for the (2) 96-gallon bins and enter it into the *Waste Calculator*.
   - Then calculate the average percentage for the (3) 32-gallon bins and enter it.
   - There are spaces within the same category for multiple sizes and it will take the different sizes into account when calculating the total diversion rate.

3) Check the total diversion percentages in the key at the bottom right of the spreadsheet. It will show you results in weight and in a final percentage. Congratulations, you have completed your Waste Assessment!

4) Report your finding back to SF Environment: Email Rachel.pomerantz@sfgov.org.

Questions? Call SF Environment at (415) 355-3742.