

US EPA ARCHIVE DOCUMENT

# Adjusting Waste Generation



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**Use this methodology if you have waste generation data from a survey conducted in a previous year, but do not have data from the current measurement year. You will adjust the previous data for changes in population and economic conditions. This methodology is based on a regression analysis that tested the predictive power of several variables on waste generation in California. Results showed that population, employment, and taxable transactions were the strongest predictors of waste generation. Please note that because the methodology was developed by the State of California using California data, this may affect its accuracy when used in other states. For more information about the methodology, please contact the California Integrated Waste Management Board at 916 255-2341.**

## You Will Need:

- ✓ Population data for both the current measurement and reference years (P)
- ✓ Employment data for both the current measurement and reference years (E)
- ✓ Taxable sales receipts for both the current measurement and reference years (TSR)  
(Your state's economic development office might be a source of county-specific data.)
- ✓ Consumer Price Index for the current measurement year (CPI)
- ✓ Residential waste generation tonnage for the reference year (R)
- ✓ Commercial waste generation tonnage for the reference year (C)

## Definitions:

m = Current measurement year

ry = Reference year

Reference year = Year of the most recent survey

Adjusted taxable transactions (T) = Taxable sales receipts corrected for inflation

**A.** Use Worksheet A to determine if your scope of MSW is consistent with the definition used here. If there are inconsistencies, use Worksheet A to adjust your scope.

**B.** Adjusted Taxable Transactions (current measurement year):

$$\frac{\quad}{\text{CPI}_{ry}} \div \frac{\quad}{\text{CPI}_m} \times \frac{\quad}{\text{TSR}_m} = \frac{\quad}{\text{Adjusted Taxable Transactions (T) (current measurement year)}}$$

**C. Commercial Adjustment Factor (CAF):**

$$\left[ \left( \frac{\text{Em}}{\text{Ery}} \div \right) + \left( \frac{\text{TSRm}}{\text{Try}} \div \right) \right] \div 2 = \frac{\text{Commercial Adjustment Factor (CAF)}}{\text{Commercial Adjustment Factor (CAF)}}$$

**D. Residential Adjustment Factor (RAF):**

$$\left[ \left( \frac{\text{Pm}}{\text{Pry}} \div \right) + \text{CAFm} \right] \div 2 = \frac{\text{Residential Adjustment Factor (RAF)}}{\text{Residential Adjustment Factor (RAF)}}$$

**E. Adjusted Waste Generation (current measurement year):**

$$\left( \frac{\text{R}}{\text{RAF}} \times \right) + \left( \frac{\text{C}}{\text{CAF}} \times \right) =$$

**Adjusted Waste Generation  
(current measurement year)  
(tons)**  
**This is the denominator of the  
recycling rate equation.  
(for Worksheet B3).**



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