# Using the Spreadsheet Version of the Deflator Study

- The Deflator Study was prepared by C.N. Watson and Associates and provided by the Municipal Finance Officers' Association (MFOA) and the Association of Municipal Managers, Clerks and Treasurers of Ontario (AMCTO). The study was made possible by financial support from the Ministry of Municipal Affairs and Housing.
- This spreadsheet, prepared by staff of MFOA, uses the deflation factors from the Deflator Study. It is intended to permit you to insert into the excel spreadsheet large amounts of data without having to manually look the deflators up in the tables in Appendix B and C.
- When you first open the spreadsheet you will notice that there are data already on the file. These are simply examples for illustration purposes. You can erase the data in the columns with the yellow bars. Do not erase the equations in columns F and G.
- If you have any questions, or suggestions for improvement, please contact Dan Cowin at dan@mfoa.on.ca or by phone at 416-362-9001 ext. 223.

#### Asset Description

• If you wish, you can insert a description of the asset. This can be done by copying from an already existing spreadsheet or by manually typing asset descriptions into this spreadsheet.

#### In Service Year

- The in-service year is the year that the asset began to provide service. For example, your recreation centre was built in 1972. You have a fire truck that went into service in 1995. These would be the in-service years to insert into the spreadsheet. The in-service year is the historic year that costs will be deflated to in order to estimate an original historic cost.
- The spreadsheet does not make provision for part years.
- The in-service year is a **required** input from the user. This is signified by the yellow bar over this column on the spreadsheet.

#### **Recent Cost**

- The deflator tables provide a mechanism for translating a recent cost for an asset into an historic cost. The recent cost might not be a 2006 cost. For example, you might have an asset that you acquired in 1970 and you do not have historic records of the cost. However, you do have actual costs from 2002 for a very similar asset. The spreadsheet deflates the 2002 cost to 1970.
- The user **must insert the recent cost data** (e.g. the 2002 costs in the above example). The fact that this is required is signified by the yellow bar over this column on the spreadsheet.

#### Year of Recent Cost

- Under "Recent Cost" above, we provided an example of an asset acquired in 1970 for which no historic cost records exist, but a similar asset was acquired in 2002, and the 2002 cost is known. Under "Recent Cost" we indicated that you would insert the 2002 known cost. Under "Year of Recent Cost" you will insert the year that corresponds to the known recent cost in Column C (i.e. 2002 in this example).
- The "Year of Estimated Cost" should be more recent than the "In Service Year."
- This is a required field to be provided by the user. The fact that this is required is signified by the yellow bar over this column on the spreadsheet.

## **Estimation Option**

- The deflator study provided two possible deflation options. For a full description of these options, see chapter 6 of the study.
- Option 1 should be used primarily for construction assets. Option 2 should be used for consumer product assets.
- To use Option 1 to deflate costs you must insert the number "1" in this column.
- To use Option 2 to deflate costs you must insert the number "2" in this column.
- You cannot leave this column blank or you will be prompted to insert an option number.

# **Deflation Factor**

- The spreadsheet will calculate the appropriate deflator based on your inputs of:
  - o In service year
  - o Recent cost
  - Year of recent cost
  - o Estimation option
- The deflator will appear as a percentage. If you wish, you can undertake random checks of the deflation factor by comparing to the table in Appendix B if you selected Option 1 (Construction Assets) or Appendix C if you selected Option 2 (Consumer Product Assets).

# **Estimated Original Cost**

• The spreadsheet calculates the estimated original or historic cost by multiplying the deflation factor (Column F)by the "Recent Cost" (Column C).

### **Other Information**

- You will see error messages in the spreadsheet when you first open it. These error messages arise because there is no data in the spreadsheet, except for a few examples on the first four rows.
- The error messages will disappear when you insert the required data.
- You may need to copy the formulas in columns F and G if you have many assets.
- You may add additional columns to this spreadsheet as you wish.
- The columns with a yellow bar indicate where users must provide input data
- Columns with no yellow bars are columns that the spreadsheet will calculate.
- Do not remove or delete the tabs with the two deflators or the spreadsheet will not work.
- NRBCI (sheet 2) is extracted from the Final Study Appendix B
- CPI (sheet 3) is extracted from the Final Study, Appendix C