HOW TO CONCATENATE CELLS IN EXCEL

Sometimes data distributed over multiple columns in an excel spreadsheet is more efficient to use when combined into one column. For example, when downloading Census data from the American Factfinder website, number codes used to identify geographic entities such as state, county, and census tract may be presented separately as in columns B-E:

For purposes of creating a join between this table and a shapefile it will be more convenient to have a single column combining these numeric codes identifying each Census Tract, like the new column F shown below:

You can do this using the CONCATENATE feature of Excel. What follows is one of several variations of this feature. For others, use the Excel online HELP.

Place your cursor in the empty cell F2 and enter the concatenate formula. The format of the formula is =CONCATENATE(B2,C2,D2,E2) as illustrated in EXAMPLE 1.
EXAMPLE 1

The formula will be stored in the cell and appear above the table in the SUM box when the cell is selected. The results of the formula will appear in the cell itself, as illustrated in EXAMPLE 2. In this case, the result is a sequential listing of the numbers from the four cells specified, with no spaces.

EXAMPLE 2

To reproduce that formula in each of the following rows (F3 through the last row in the table) you do not have to retype the formula in each cell. Instead, click your cursor on the cell with the original formula and copy that cell (right click, select copy – the cell to be copied will be outlined with dashes). Then use your cursor to highlight all the cells where you want that formula to be replicated (click the cursor in cell F3 and holding down the mouse button drag to the end of the column – when highlighted these will have a solid line around them and appear in blue). These two steps are illustrated in EXAMPLE 3.
When all the cells are highlighted, PASTE (right click in the highlighted area, select paste). The formula will automatically be updated with the appropriate column and row numbers. You should see the final combined number in each cell, as in **EXAMPLE 4**.

**EXAMPLE 4**

Give the new column a useful heading such as GEO_ID. You will need this to identify the column when making the JOIN in ArcGIS.

One last step. Format the information in the cells you just created as NUMBERS. Currently the information is stored as text and cannot be used for any calculations.

To view and change the format of information stored in a cell, right click in the cell and select CELL FORMAT from the menu that appears as shown in **EXAMPLE 5**.
A dialog box will appear indicating both the current format of the cell and providing you with many options, illustrated in **EXAMPLE 6**.

**EXAMPLE 6**
For this example we will select NUMBER and set the DECIMAL PLACES to 0 (ZERO). Click OK. See EXAMPLE 7 below.