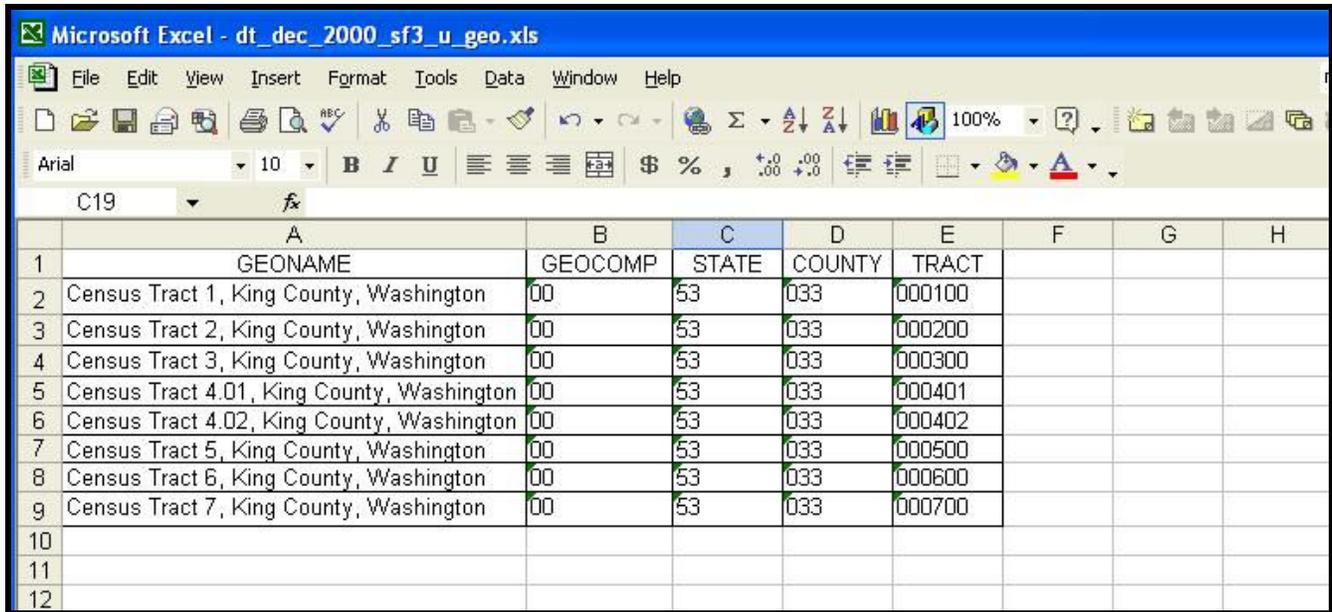


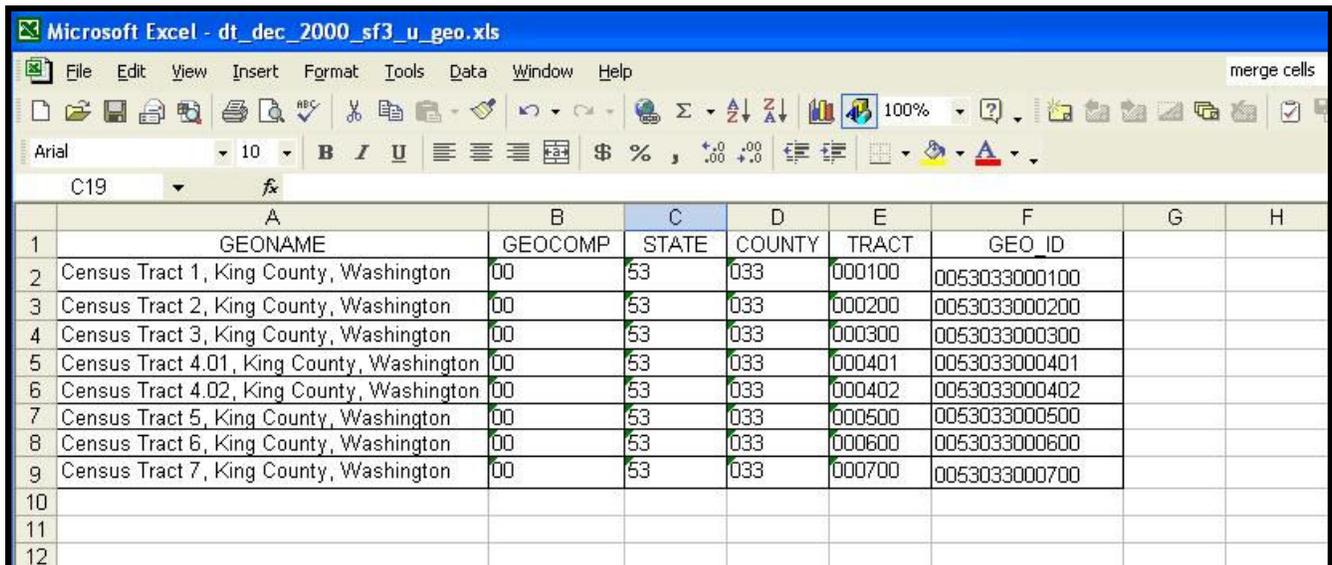
HOW TO CONCATENATE CELLS IN EXCEL

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:



	A	B	C	D	E	F	G	H
1	GEONAME	GEOCOMP	STATE	COUNTY	TRACT			
2	Census Tract 1, King County, Washington	00	53	033	000100			
3	Census Tract 2, King County, Washington	00	53	033	000200			
4	Census Tract 3, King County, Washington	00	53	033	000300			
5	Census Tract 4.01, King County, Washington	00	53	033	000401			
6	Census Tract 4.02, King County, Washington	00	53	033	000402			
7	Census Tract 5, King County, Washington	00	53	033	000500			
8	Census Tract 6, King County, Washington	00	53	033	000600			
9	Census Tract 7, King County, Washington	00	53	033	000700			
10								
11								
12								

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:

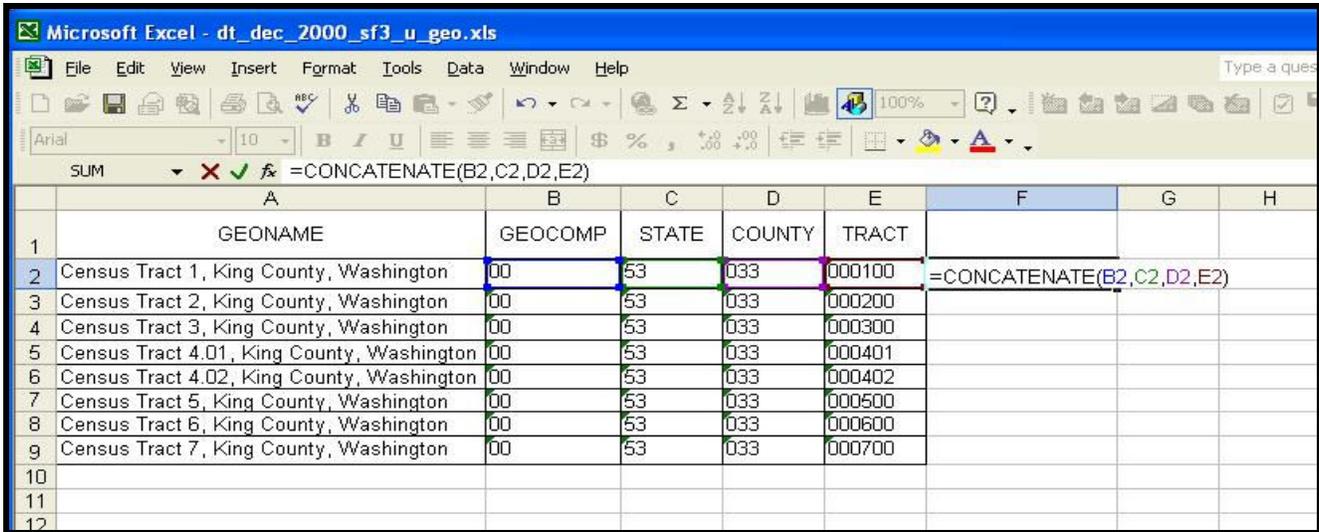


	A	B	C	D	E	F	G	H
1	GEONAME	GEOCOMP	STATE	COUNTY	TRACT	GEO_ID		
2	Census Tract 1, King County, Washington	00	53	033	000100	0053033000100		
3	Census Tract 2, King County, Washington	00	53	033	000200	0053033000200		
4	Census Tract 3, King County, Washington	00	53	033	000300	0053033000300		
5	Census Tract 4.01, King County, Washington	00	53	033	000401	0053033000401		
6	Census Tract 4.02, King County, Washington	00	53	033	000402	0053033000402		
7	Census Tract 5, King County, Washington	00	53	033	000500	0053033000500		
8	Census Tract 6, King County, Washington	00	53	033	000600	0053033000600		
9	Census Tract 7, King County, Washington	00	53	033	000700	0053033000700		
10								
11								
12								

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



Microsoft Excel - dt_dec_2000_sf3_u_geo.xls

File Edit View Insert Format Tools Data Window Help

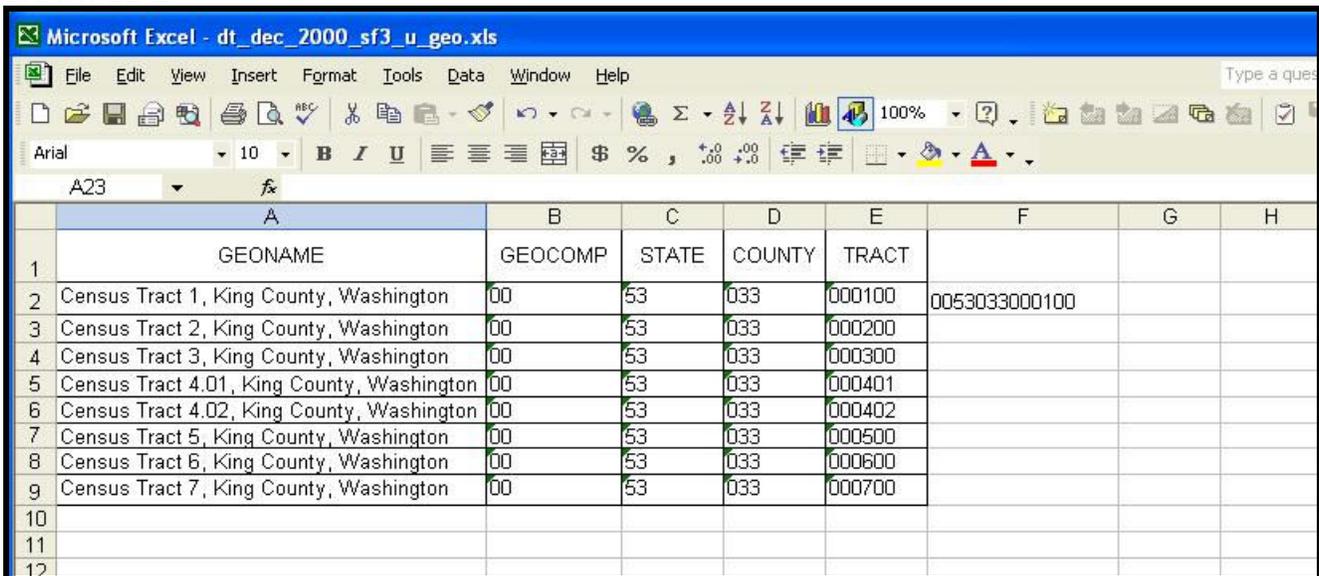
100%

Formula Bar: =CONCATENATE(B2,C2,D2,E2)

	A	B	C	D	E	F	G	H
1	GEONAME	GEOCOMP	STATE	COUNTY	TRACT			
2	Census Tract 1, King County, Washington	00	53	033	000100	=CONCATENATE(B2,C2,D2,E2)		
3	Census Tract 2, King County, Washington	00	53	033	000200			
4	Census Tract 3, King County, Washington	00	53	033	000300			
5	Census Tract 4.01, King County, Washington	00	53	033	000401			
6	Census Tract 4.02, King County, Washington	00	53	033	000402			
7	Census Tract 5, King County, Washington	00	53	033	000500			
8	Census Tract 6, King County, Washington	00	53	033	000600			
9	Census Tract 7, King County, Washington	00	53	033	000700			
10								
11								
12								

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



Microsoft Excel - dt_dec_2000_sf3_u_geo.xls

File Edit View Insert Format Tools Data Window Help

100%

Formula Bar: A23

	A	B	C	D	E	F	G	H
1	GEONAME	GEOCOMP	STATE	COUNTY	TRACT			
2	Census Tract 1, King County, Washington	00	53	033	000100	0053033000100		
3	Census Tract 2, King County, Washington	00	53	033	000200			
4	Census Tract 3, King County, Washington	00	53	033	000300			
5	Census Tract 4.01, King County, Washington	00	53	033	000401			
6	Census Tract 4.02, King County, Washington	00	53	033	000402			
7	Census Tract 5, King County, Washington	00	53	033	000500			
8	Census Tract 6, King County, Washington	00	53	033	000600			
9	Census Tract 7, King County, Washington	00	53	033	000700			
10								
11								
12								

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**.

EXAMPLE 3

Microsoft Excel - dt_dec_2000_sf3_u_geo.xls

	A	B	C	D	E	F	G	H
1	GEONAME	GEOCOMP	STATE	COUNTY	TRACT			
2	Census Tract 1, King County, Washington	00	53	033	000100	0053033000100		
3	Census Tract 2, King County, Washington	00	53	033	000200			
4	Census Tract 3, King County, Washington	00	53	033	000300			
5	Census Tract 4.01, King County, Washington	00	53	033	000401			
6	Census Tract 4.02, King County, Washington	00	53	033	000402			
7	Census Tract 5, King County, Washington	00	53	033	000500			
8	Census Tract 6, King County, Washington	00	53	033	000600			
9	Census Tract 7, King County, Washington	00	53	033	000700			
10								
11								
12								

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

Microsoft Excel - dt_dec_2000_sf3_u_geo.xls

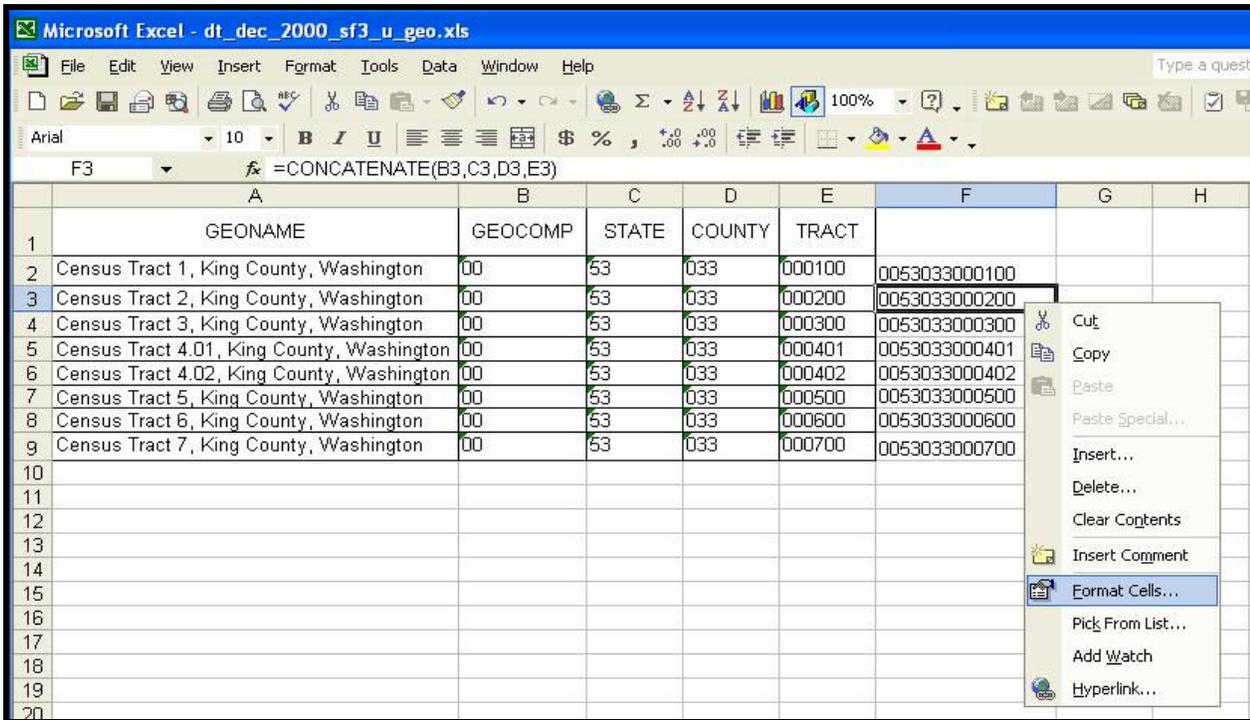
	A	B	C	D	E	F	G	H
1	GEONAME	GEOCOMP	STATE	COUNTY	TRACT			
2	Census Tract 1, King County, Washington	00	53	033	000100	0053033000100		
3	Census Tract 2, King County, Washington	00	53	033	000200	0053033000200		
4	Census Tract 3, King County, Washington	00	53	033	000300	0053033000300		
5	Census Tract 4.01, King County, Washington	00	53	033	000401	0053033000401		
6	Census Tract 4.02, King County, Washington	00	53	033	000402	0053033000402		
7	Census Tract 5, King County, Washington	00	53	033	000500	0053033000500		
8	Census Tract 6, King County, Washington	00	53	033	000600	0053033000600		
9	Census Tract 7, King County, Washington	00	53	033	000700	0053033000700		
10								
11								
12								

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.

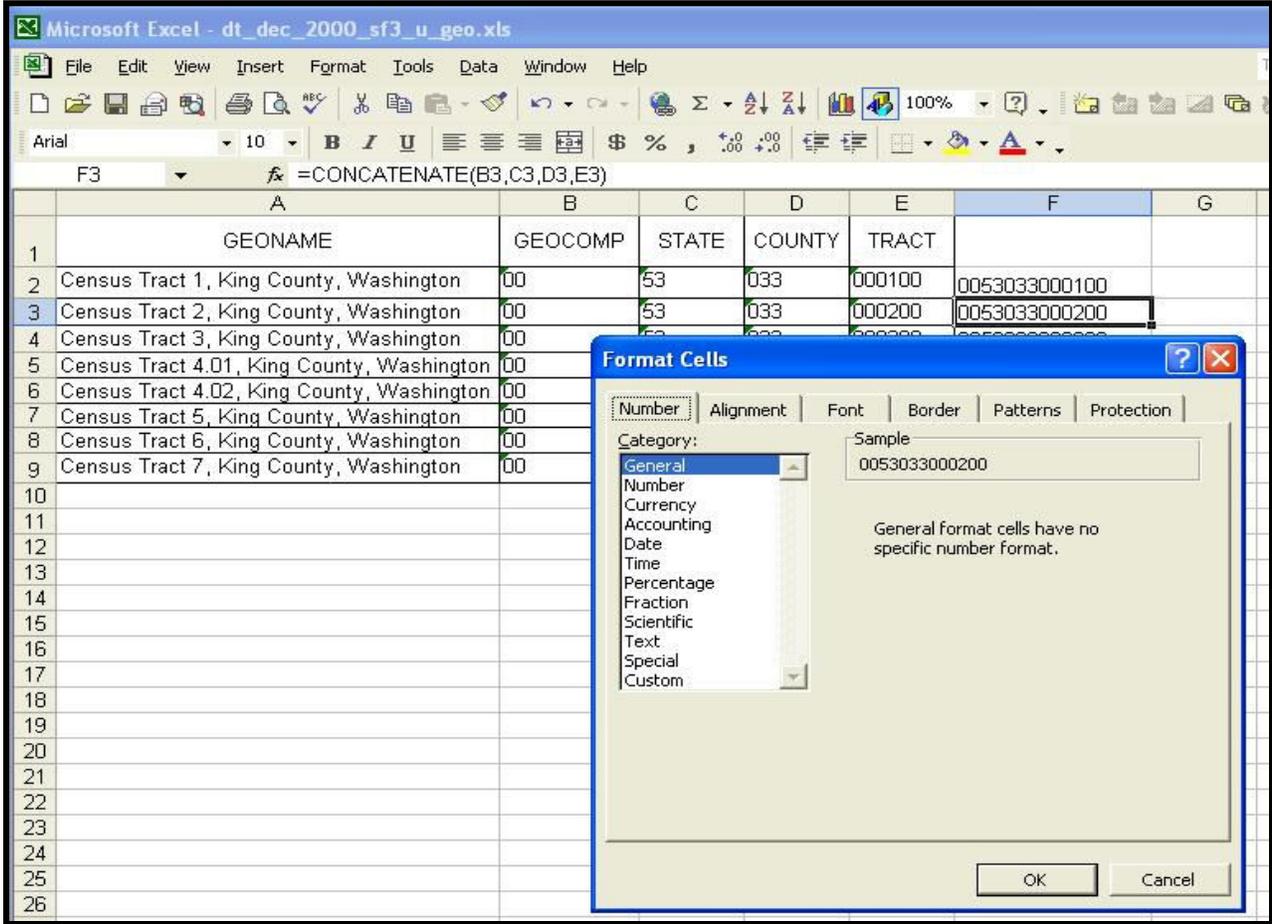
To view and change the format of information stored in a cell, right click in the cell and select CELL FORMAT from the menu that appears as shown in **EXAMPLE 5**.

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.

EXAMPLE 7

Microsoft Excel - dt_dec_2000_sf3_u_geo.xls

File Edit View Insert Format Tools Data Window Help

Arial 10 B I U \$ % , +.00 +.0

F3 =CONCATENATE(B3,C3,D3,E3)

	A	B	C	D	E	F	G
1	GEONAME	GEOCOMP	STATE	COUNTY	TRACT		
2	Census Tract 1, King County, Washington	00	53	033	000100	0053033000100	
3	Census Tract 2, King County, Washington	00	53	033	000200	0053033000200	
4	Census Tract 3, King County, Washington						
5	Census Tract 4.01, King County, Washington						
6	Census Tract 4.02, King County, Washington						
7	Census Tract 5, King County, Washington						
8	Census Tract 6, King County, Washington						
9	Census Tract 7, King County, Washington						
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Format Cells

Number Alignment Font Border Patterns Protection

Category: General Number Currency Accounting Date Time Percentage Fraction Scientific Text Special Custom

Sample: 0053033000200

Decimal places: 0

Use 1000 Separator (,)

Negative numbers: -1234 1234 (1234) (1234)

Number is used for general display of numbers. Currency and Accounting offer specialized formatting for monetary value.

OK Cancel