

EXCEL SPREADSHEETS FOR LIBRARY CENSUS USERS

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FORMULAS

Operation	Symbol	Numbers	Cell References
Begin Formula	=		
Addition	+	=1+2	=B2+B3
Addition	=sum(c:c)	=1+2+963	=sum(B2:B5)
Subtraction	-	=3-2	=B2-B3
Multiplication	*	=3*6	=B3*B4
Division	/	=6/3	=B3/B2

Processing Order

Parentheses processed first
 Then multiplication and division
 Then additions and subtractions

Use parentheses and Boolean logic to eliminate confusion

EXAMPLE

=3*6+12/4-2 is read as
 =(3*6)+(12/4)-2=19
not as
 3*(6+12/(4-2))=27

Layering Formulas

You can layer formulas, building one to use as part of another. Be cautious, however. The symbol #VALUE means you have deleted an important component of your formula.

EXAMPLE OF LAYERED FORMULA

	A	B	C	D	E	F
1						
2		White90	Black90	Hispanic90		
3	Total Population	1,198,302	836,308	47,672	3. =d5+d14	
4	Income above poverty					
5	Total	1,083,933	545,381	35,618	1. =sum(d6:d12)	
6	Under 5 years	69,585	35,686	3,547		
7	5 years	13,807	7,122	631		
8	6 to 11 years	79,320	43,391	3,776		
9	12 to 17 years	78,485	51,333	3,809		
10	18 to 64 years	687,649	345,566	21,641		
11	65 to 74 years	98,775	41,049	1,546		
12	75 years and over	56,312	21,234	668		
13	Income below poverty					
14	Total persons	114,369	290,927	12,054	2. =sum(d16:d22)	
15	Percent in Poverty	9.54%	34.79%	25.29%	4. =d14/d3	
16	Under 5 years	13,653	43,077	2,105		
17	5 years	2,754	7,594	360		
18	6 to 11 years	12,829	38,643	1,810		
19	12 to 17 years	10,235	36,955	1,716		
20	18 to 64 years	60,628	145,071	5,551		
21	65 to 74 years	7,491	11,056	283		
22	75 years and over	6,779	8,531	229		
23						
24						

Copying Formulas

Formula in A3
=A1+A2

Copied to B3
=B1+B2

Copied to C3
=C1+C2

Second Formula in A3
=\$A\$1-A2

Copied to B3
=\$A\$1-B2

Copied to C3
=\$A\$1-C2

EXAMPLE OF COPYING A FIXED FORMULA

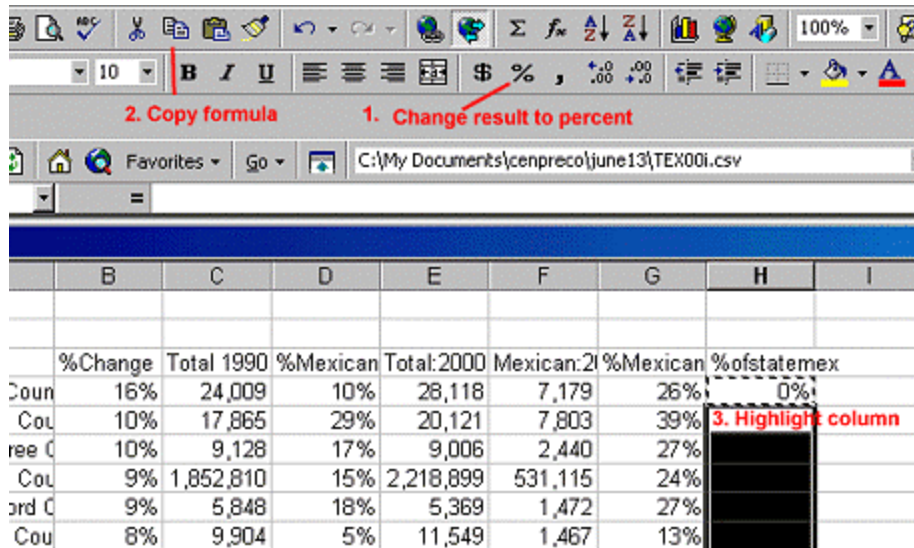
1. F4 is Mexican population in Titus County. F126 is Mexican population in Texas.
2. The formula is entered as \$F\$126 so when it is copied, each county will show its own percent of the state's Mexican population.

Area	%Change	Total 1990	%Mexican	Total:2000	Mexican:2000	%Mexican	%ofstatemex
Titus Coun	16%	24,009	10%	28,118	7,179	26%	=F4/\$F\$126
Moore Cou	10%	17,865	29%	20,121	7,803	39%	\$F\$126
Ochiltree C	10%	9,128	17%	9,006	2,440	27%	Fixed cell referring to Texas
Dallas Cou	9%	1,852,810	15%	2,218,899	531,115	24%	
Hansford C	9%	5,848	18%	5,369	1,472	27%	
Camp Cou	8%	9,904	5%	11,549	1,467	13%	
Lipscomb	7%	3,143	11%	3,057	550	18%	
Navarro Co	7%	39,926	7%	45,124	6,129	14%	
Shelby Co	7%	22,034	2%	25,224	2,232	9%	
Harris Cou	6%	2,818,199	18%	3,400,578	814,693	24%	
Hudspeth	6%	2,915	65%	3,344	2,386	71%	
Sherman C	6%	2,858	18%	3,186	771	24%	

3. The search result is a decimal.

Mexican:2000	%Mexican	%ofstatemex
7,179	26%	0.001415
7,803	39%	
2,440	27%	Highlight result
531,115	24%	
1,472	27%	

3. Change the search result to a percent. Highlight H4 and copy.
4. Then highlight the remaining cells in the column.



5. Paste the formula.

County Percent of State's Mexican Population							
Area	%Change	Total 1990	%Mexican	Total:2000	Mexican:2	%Mexican	%ofstatemex
Titus Coun	16%	24,009	10%	28,118	7,179	26%	0%
Moore Cou	10%	17,865	29%	20,121	7,803	39%	0%
Ochiltree C	10%	9,128	17%	9,006	2,440	27%	0%
Dallas Cou	9%	1,852,810	15%	2,218,899	531,115	24%	10%
Hansford C	9%	5,848	18%	5,369	1,472	27%	0%
Camp Cou	8%	9,904	5%	11,549	1,467	13%	0%
Lipscomb	7%	3,143	11%	3,057	550	18%	0%
Navarro Co	7%	39,926	7%	45,124	6,129	14%	0%
Shelby Co	7%	22,034	2%	25,224	2,232	9%	0%
Harris Cou	6%	2,818,199	18%	3,400,578	814,693	24%	16%
Hudspeth	6%	2,915	65%	3,344	2,386	71%	0%
Sherman C	6%	2,858	18%	3,186	771	24%	0%
Tarrant Co	6%	1,170,103	10%	1,446,219	227,701	16%	4%
Waller Cou	6%	23,390	10%	32,663	5,233	16%	0%
Cherokee	5%	41,049	6%	46,659	5,302	11%	0%
Erath Cour	5%	27,991	8%	33,001	4,243	13%	0%

FORMATTING CELLS

You can format the numbers, alignment borders, font, colors, and patterns by first highlighting the cells you want to change (or CONTROL-A for the entire spreadsheet) and then using the FORMAT/CELLS menu.

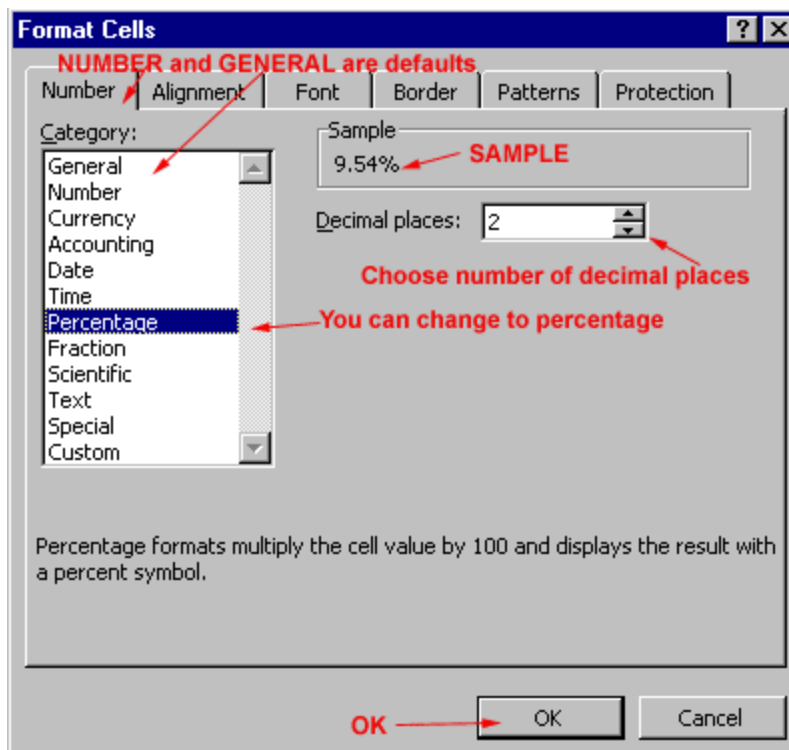
Numbers

1. Highlight the cells
2. Choose FORMAT/CELLS

The screenshot shows the 'Format Cells' dialog box open over a table. The table has columns for 'Total Population', 'Black90', and 'Hispanic90'. The row for 'Percent in Poverty' is highlighted in orange. Red arrows point to the 'Format' menu, the 'Cells...' option, and the highlighted cells in the table.

		C	D	E
1				
2				
3	Total Population	90	Black90	Hispanic90
4	Income above	302	836,308	47,672
5	Total	933	545,381	35,618
6	Under 5 years	585	35,686	3,547
7	5 years	807	7,122	631
8	6 to 11 years	79,320	43,391	3,776
9	12 to 17 years	78,485	51,333	3,809
10	18 to 64 years	687,649	345,566	21,641
11	65 to 74 years	98,775	41,049	1,546
12	75 years and over	56,312	21,234	668
13	Income below poverty			
14	Total persons	114,369	290,927	12,054
15	Percent in Poverty	0.095443	0.347871	0.252853
16	Under 5 years	13,653	43,077	2,105
17	5 years	2,754	7,594	360

2. Choose the type of number; look at the samples when available; click OK



3. Revised cell format

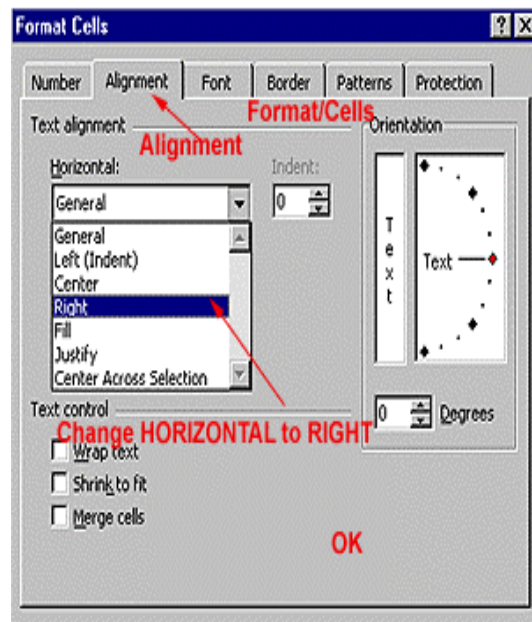
income below poverty				
Total persons	Revised format	114,369	290,927	12,054
Percent in Poverty		9.54%	34.79%	25.29%
Under 5 years		13,653	43,077	2,105
5 years		2,754	7,594	360
6 to 11 years		12,829	38,643	1,810

Alignment

	Column headings aligned left		
	White	Black	Hispanic
Male:	522,439	401,103	40,861
Under 5 ye	34,057	35,806	4,563
5 to 9 year	37,144	45,703	4,225
10 to 14 ye	36,207	40,567	3,506
15 to 17 ye	21,075	20,084	2,072
18 and 19	12,670	11,863	1,676
20 years	5,968	5,771	865
21 years	5,922	5,400	874
Female:	543,168	467,889	36,346
Under 5 ye	32,748	34,788	4,467
5 to 9 year	35,041	44,434	3,914

The default for text, including column headings, is the left.

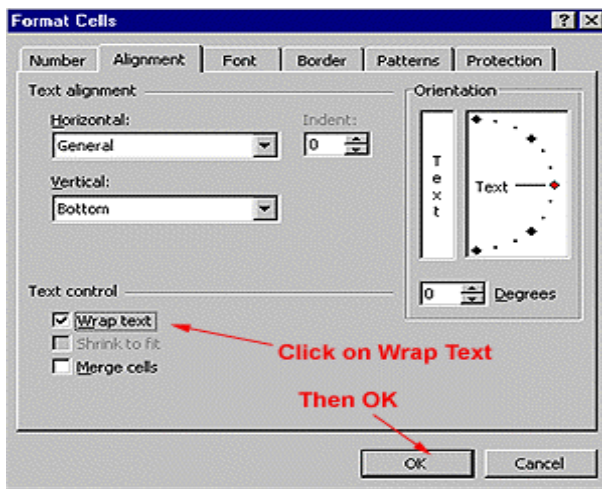
Use **FORMAT/CELLS/ALIGNMENT** to change alignment to the right, as in the column headings above.



Wrapping Text

You can also use
**FORMAT/CELLS/
 ALIGNMENT** to
 wrap the text in a
 cell to a second line

		Too wide for columns	
	Total:2000	Mexican:21	%Mexican2000
Texas	#####	5,071,963	
Anderson	55,109	3,480	
Andrews C	13,004	4,235	
Angelina C	80,130	9,366	



Check off *Wrapped Text*. Then click on
OK

Note that the text in those two columns is now wrapped even though the word
 break can be awkward.

		Wrapped Text	
	Total:2000	Mexican: 2000	%Mexican2000
Texas	#####	5,071,963	
Anderson	55,109	3,480	

Fonts

Fonts can be changed from the toolbar or the FORMAT/CELLS/FONT Menu

1. Highlight Cells

	A	B	C	D	E
1					
2					
3					
4		White	Black	Hispanic	
5	Male:	522,439	401,103	40,861	
6	Under 5 ye	34,057	35,806	4,563	
7	5 to 9 year	37,144	45,703	4,225	
8	10 to 14 ye	36,207	40,567	3,506	
9	15 to 17 ye	21,075	20,084	2,072	
10	18 and 19	12,670	11,863	1,676	
11	20 years	5,968	5,771	865	
12	21 years	5,922	5,400	874	
13	Female:	543,168	467,889	36,346	
14	Under 5 ye	32,748	34,788	4,467	
15	5 to 9 year	35,041	44,434	3,914	
16	10 to 14 ye	34,983	39,681	3,346	
17	15 to 17 ye	19,642	20,014	1,780	
18	18 and 19	11,528	11,878	1,207	

2. Click on FONT

3. Choose font

4. OK

New Text Style

	White	Black	Hispanic
Male:	522,439	401,103	40,861
Under 5 ye	34,057	35,806	4,563
5 to 9 year	37,144	45,703	4,225
10 to 14 ye	36,207	40,567	3,506
15 to 17 ye	21,075	20,084	2,072
18 and 19	12,670	11,863	1,676
20 years	5,968	5,771	865
21 years	5,922	5,400	874

Borders

1. Highlight Area

	White	Black	Hispanic
Male:	522,439	401,103	40,861
Under 5 ye	34,057	35,806	4,563
5 to 9 year	37,144	45,703	4,225
10 to 14 ye	36,207	40,567	3,506
15 to 17 ye	21,075	20,084	2,072
18 and 19	12,670	11,863	1,676
Female:	543,168	467,889	36,346
Under 5 ye	32,748	34,788	4,467
5 to 9 year	35,041	44,434	3,914
10 to 14 ye	34,963	39,681	3,346
15 to 17 ye	19,642	20,014	1,780
18 and 19	11,528	11,878	1,207

2. Border

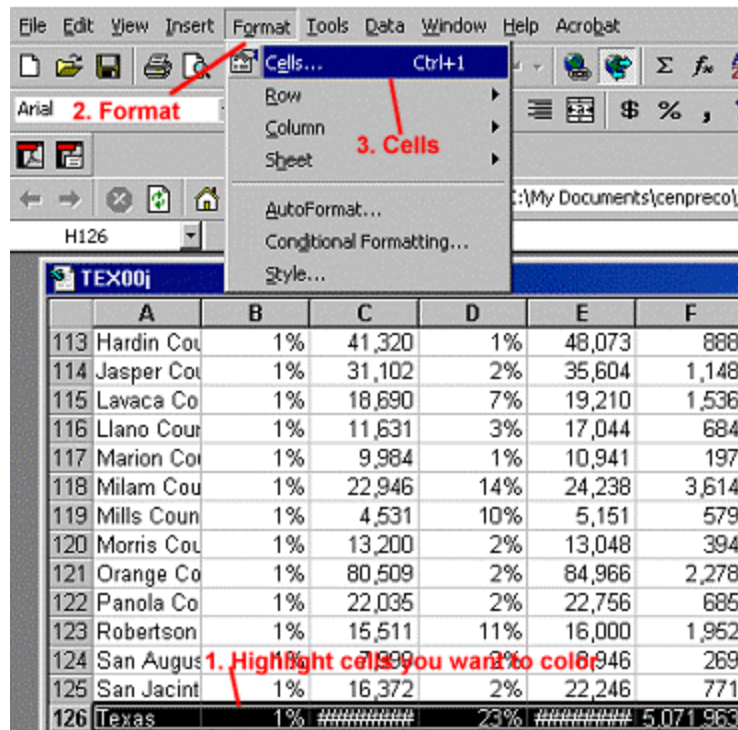
3. Choose type and style

4. OK

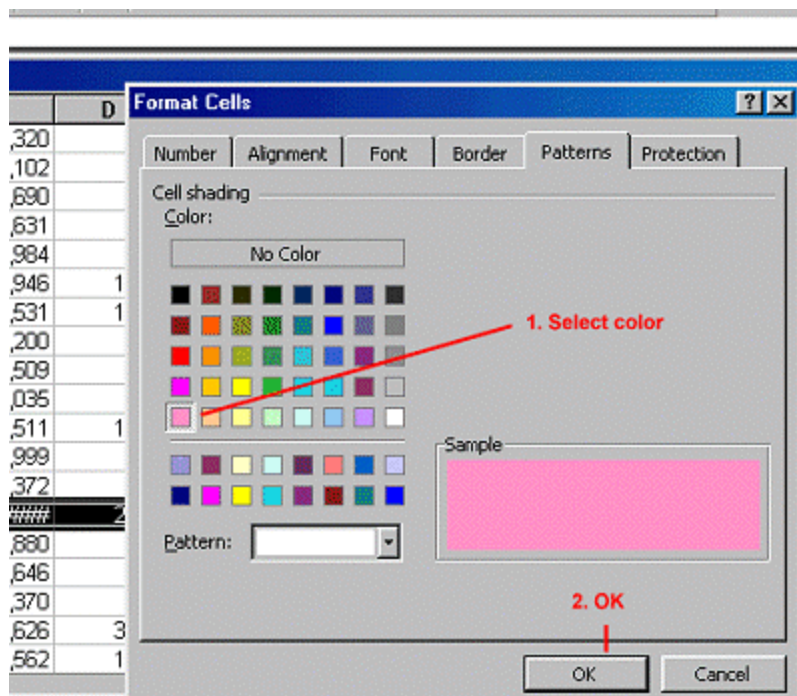
	White	Black	Hispanic	New Border
Male:	522,439	401,103	40,861	
Under 5 ye	34,057	35,806	4,563	
5 to 9 year	37,144	45,703	4,225	
10 to 14 ye	36,207	40,567	3,506	
15 to 17 ye	21,075	20,084	2,072	
18 and 19	12,670	11,863	1,676	

Colors and Patterns

1. Highlight the rows or columns you want to color; then FORMAT/CELLS



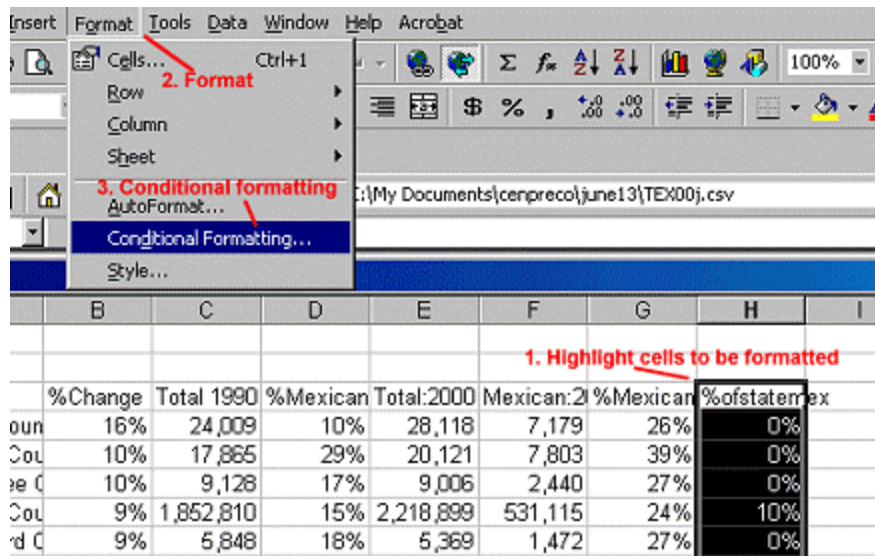
2. Choose a color or select a pattern



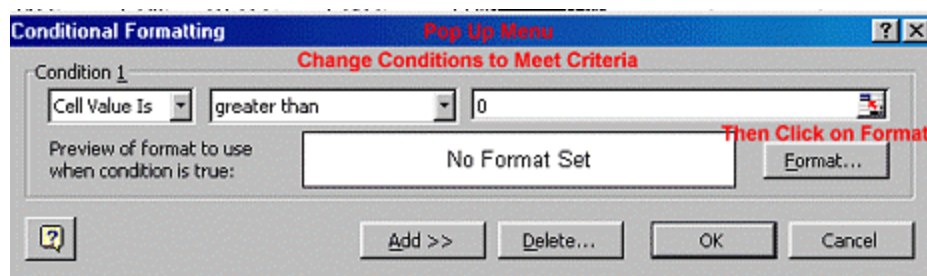
Conditional Formatting

Allows cells to be formatted if their contents meet certain criteria.

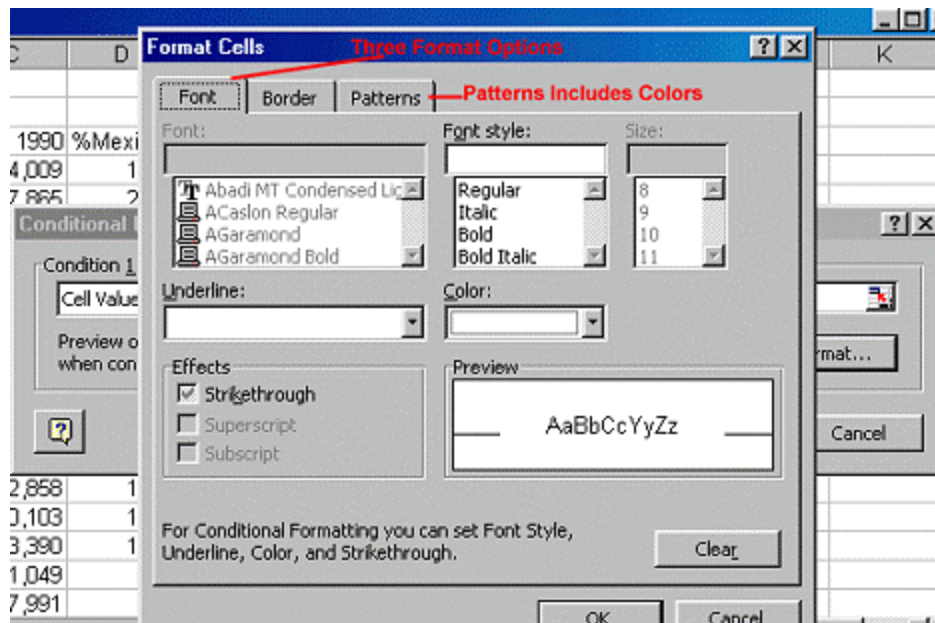
1. Highlight cells. Then choose **FORMAT/CONDITIONAL FORMATTING**.



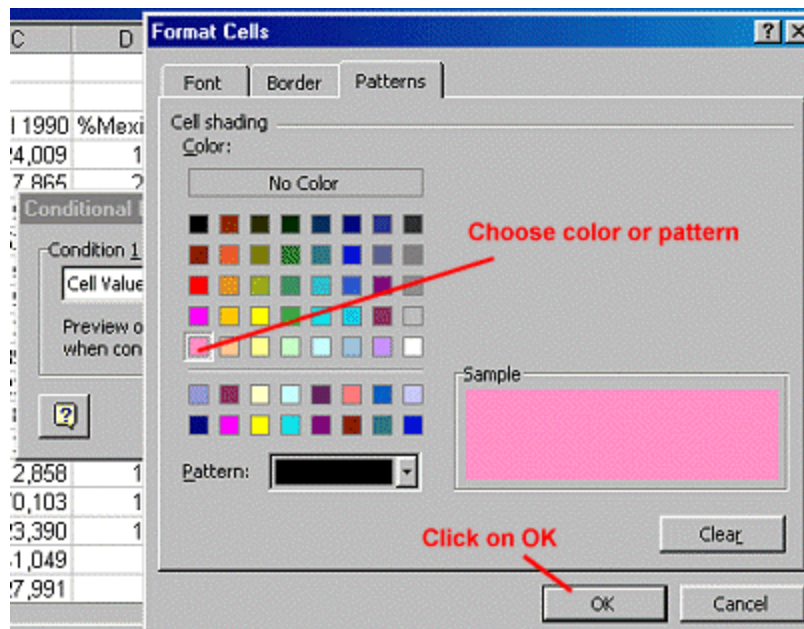
2. Use second pulldown box in pop-up menu to create condition (e.g. equal to, greater than) and type number in third box
3. You can add another condition at the bottom
4. When you have finished with the conditions, click on **FORMAT**.



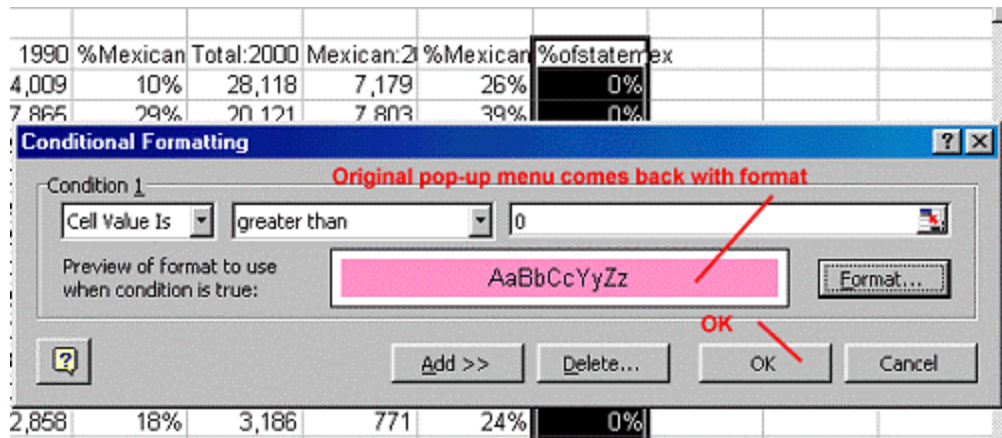
- Cells can be formatted with a different FONT, BORDER, or PATTERN/COLOR.



- Choose a font, border, or color and CLICK OK.



6. The conditional formatting tool will reappear. Click OK.



7. Search result colors cells which meet the criteria above.

			Cells over 0%
Mexican:2	%Mexican	%ofstatemex	
7,179	26%	0%	
7,803	39%	0%	
2,440	27%	0%	
531,115	24%	10%	
1,472	27%	0%	
1,467	13%	0%	
550	18%	0%	
6,129	14%	0%	
2,232	9%	0%	
814,693	24%	16%	
2,386	71%	0%	
771	24%	0%	
227,701	16%	4%	

COLUMN WIDTH

You can change the column width in one of three ways.

	A	B	C	D
1	Double click to right of column to widen it			
2				
3	Area	Total:2000	Mexican:2000	
4	Texas	20,851,820	5,071,963	
5	Anderson County, Texas	55,109	3,480	
6	Andrews County, Texas	13,004	4,235	
7	Angelina County, Texas	80,130	9,366	
8	Aransas County, Texas	22,497	3,281	
9	Archer County, Texas	8,854	344	

1. Double-click on the line to the left of the lettered column heading.

2-Format

3-Column

Equivalent to clicking on column letters

Opens new box

	A	B	C	D
1	1. Highlight Columns			
2				
3	Area	Total:2000		
4	Texas	#####	5,071,963	
5	Anderson	55,109	3,480	
6	Andrews C	13,004	4,235	
7	Angelina C	80,130	9,366	
8	Aransas C	22,497	3,281	
9	Archer Cou	8,854	344	
10	Armstrong	2,148	71	
11	Atascosa	38,628	13,012	
12	Austin Cou	23,590	3,158	
13	Bailey Cou	6,594	2,259	

2. Use the format/autofit selection command. The results are the same as 1. above.

3. Use the format/width command and change the column width manually.

Column Width

Column width: 3.43

Change size manually

OK Cancel

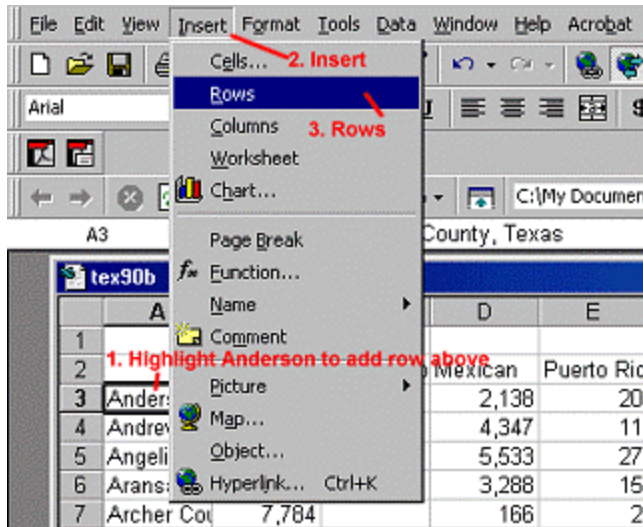
DELETING AND INSERTING ROWS AND COLUMNS

Inserting Rows and Columns

USE THE INSERT COMMAND TO ADD ROWS AND COLUMNS. ROWS ARE ADDED *ABOVE* YOUR CURSOR AND COLUMNS TO THE *LEFT* OF YOUR CURSOR.

INSERTING ROWS

1. Place your cursor below the row you want to insert.



- Click on the *INSERT* menu at the top. Then click on *ROW*. A row will be inserted and the remainder of the column will move down a row.

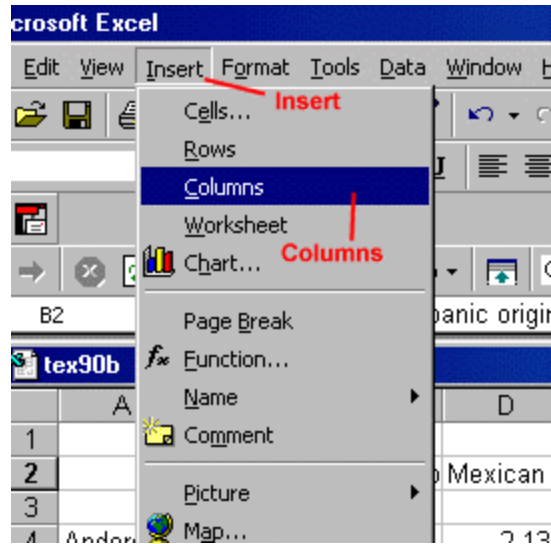
	A	B	C	D
1				
2		Not of Hisp	Hispanic o	Mexican
3		New Row		
4	Anderson	44,071		2,138
5	Andrews C	9,786		4,347
6	Angelina C	63,812		5,533
7	Aransas C	14,304		3,288
8	Archer Cou	7,784		166

Inserting Columns

1. Highlight a cell to the right of where you want a new column.

	A	B	C	D	E
1					
2		Not of Hisp	Hispanic o	Mexican	Pu
3		Highlight cell to right of new column			
4	Anderson	44,071		2,138	
5	Andrews C	9,786		4,347	
6	Angelina C	63,812		5,533	
7	Aransas C	14,304		3,288	
8	Archer Cou	7,784		166	
9	Armstrong	1,966		41	
10	Atascosa	14,469		14,644	
11	Austin Cou	17,759		1,863	

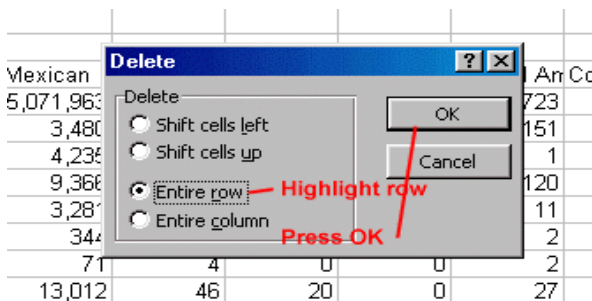
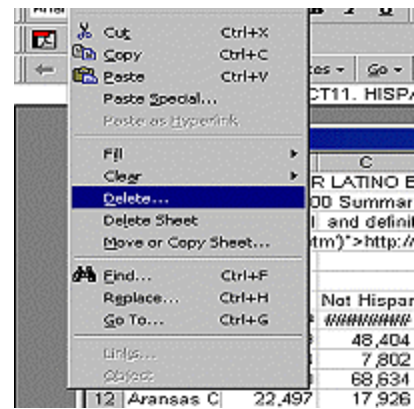
2. Click on the INSERT menu at the top. Then click on COLUMN. A new column will be inserted to the left of the column you highlighted.



Deleting Rows and Columns

CLICK ON ONE CELL IN YOUR ROW OR COLUMN. THEN USE THE EDIT/DELETE COMMAND TO DELETE THE ROW OR COLUMN.

EDIT/DELETE



DELETE ROW

DELETE COLUMN

Highlight one cell in each column

	Not Hispanic	Hispanic	Mexican	Puerto Ric	Cuban	Dominican	Central A
#	#####	6,669,666	5,071,963	69,504	25,705	4,296	146,72
9	48,404	6,705	3,480	88	10	2	15
4	7,802	5,202	4,235				
0	68,634	11,496	9,366				
7	17,926	4,571	3,267				
4	8,423	431	347				
8	2,032	116	77				
8	16,008	22,620	13,011				
0	19,785	3,805	3,156				
4	3,475	3,119	2,256				
5	15,261	2,384	1,699	24	2	0	1

CUTTING AND PASTING TABLES

American Factfinder produces separate tables rather than combining them on screen, so it is often necessary to cut and paste the tables together using Excel. A good example: separate tables for whites, blacks, and Hispanics by age in Wayne County combined on one Excel spreadsheet for comparative purposes.

Download Three Separate Tables
 Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data
 Tables: P12A. SEX BY AGE (WHITE ALONE) [49] - Universe: People who are White alone
 P12B. SEX BY AGE (BLACK OR AFRICAN AMERICAN ALONE) [49] - Universe: Peop
 P12H. SEX BY AGE (HISPANIC OR LATINO) [49] - Universe: People who are Hispanic
 Format: Comma delimited - spreadsheet format (.csv file)
 Tab delimited (.lst file)
 Transpose Rows/Columns

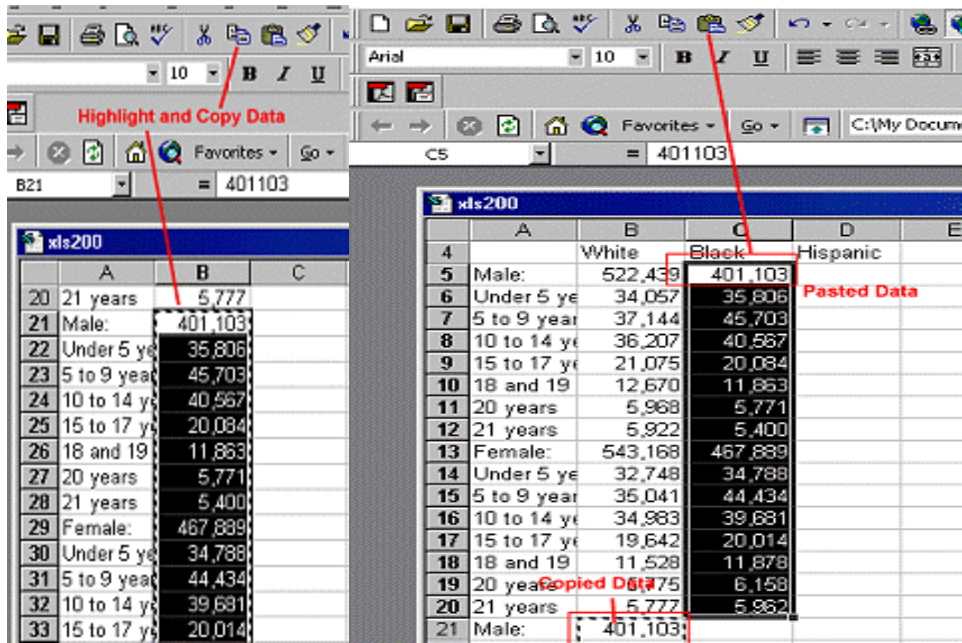
These three tables would be downloaded on the same spreadsheet but as separate tables.

Eliminate Wayne in Column B
Rename Columns by Race

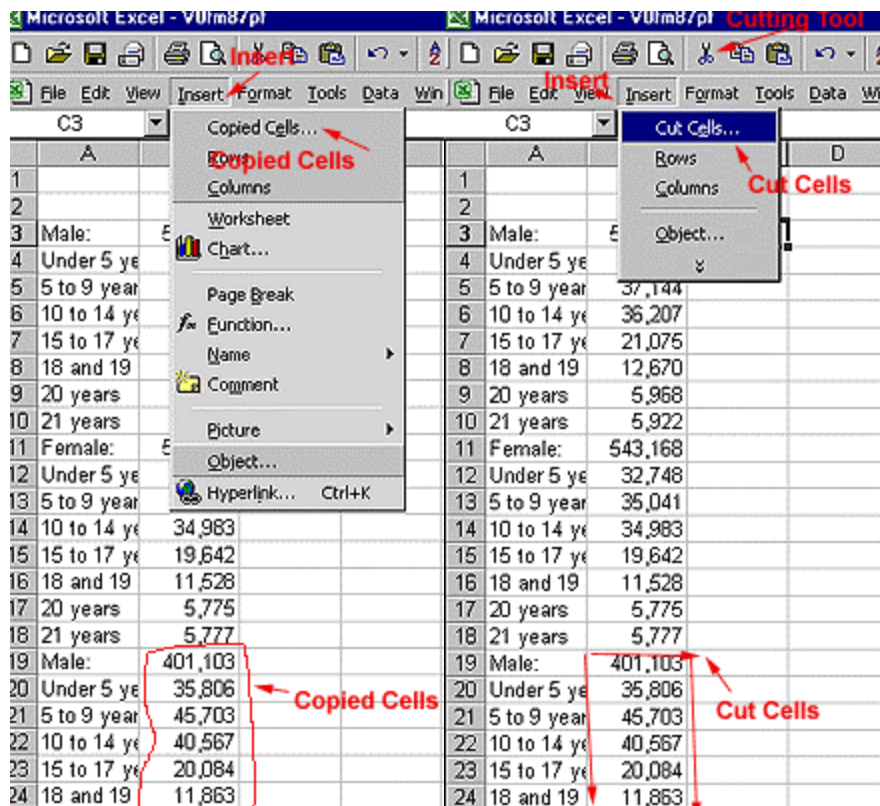
	White	Black	Hispanic
Male:	522,439		
Under 5 ye	34,057		
5 to 9 year	37,144		
10 to 14 ye	36,207		
15 to 17 ye	21,075		
18 and 19	12,670		
20 years	5,968		

When you opened the spreadsheet, you would delete the rows you didn't need. You would eliminate the word Wayne County which appears in the cell to the right and above male. You would rename the cell White, then add columns for Black and Hispanic.

In the example below, we copied the cells with data for the black population and pasted it into the new column using the tool bar.



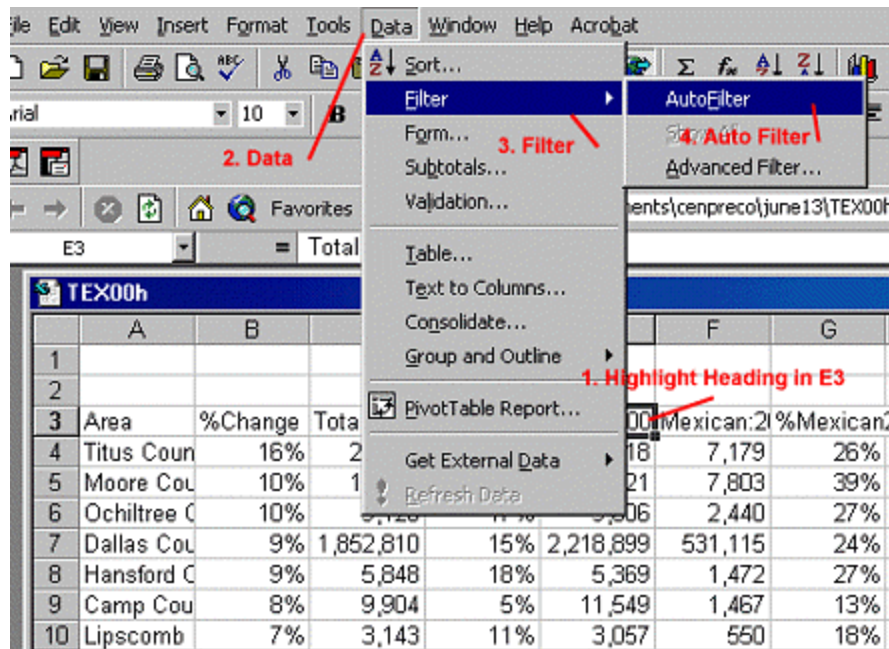
You could have COPIED the cells and INSERTED them instead of PASTING them. You could have also CUT the cells and INSERTED THEM.



FILTERING RESULTS

Filtering allows you to only look at the parts of the spreadsheet that meet a certain criteria, such as cities between 25,000 and 100,000. The following example shows Texas counties with over 250,000 in total population that have also have over 100,000 Mexican Americans.

1. Highlight any column.
2. Pull down the *Data* menu.
3. Click on *Filter*; then choose *Auto Filter* in the pop-up box



TEX00h *All columns now have a filter*

	A	B	C	D	E	F	G	H
1								
2								
3	Area	%Chang	Total 19	%Mexic	Total:200	Mexican	%Mexic	2000
4	Titus Coun	16%	24,009	1	(All)	7,179	26%	
5	Moore Cou	10%	17,865	2	(Top 10...)	7,803	39%	
6	Ochiltree C	10%	9,128	1	(Custom...)	2,440	27%	
7	Dallas Cou	9%	1,852,810	1	356	531,115	24%	
8	Hansford C	9%	5,848	1	414	1,472	27%	
9	Camp Cou	8%	9,904	1	729	1,467	13%	
10	Lipscomb	7%	3,143	1	851	550	18%	
11	Navarro Co	7%	39,926	1	887	6,129	14%	
12	Shelby Co	7%	22,034	1	1,081	2,232	9%	
13	Harris Cou	6%	2,818,199	1	1,393	814,693	24%	
14	Hudspeth	6%	2,915	6	1,406	2,386	71%	
15	Sherman C	6%	2,858	1	1,426	771	24%	

Use pulldown box in E3 to choose CUSTOM

4. Click on the pulldown box in E3 and choose custom.

5. In the new pop-up box/first row
 - a. Use the pulldown box to change the word from *equals* to *greater than or equal to*
 - b. Type in 250,000
 - c. Click on OK.

Chosen Column

	B	C	D	E	F	G	H	I	J
%Chang	Total 19%	%Mexic	Total:2000	Mexican:2000	%Mexic	2000			
oun	16%	24,009	10%	28,118	7,179	26%			
CoL	10%	17,868							
ee C	10%	9,120							
CoL	9%	1,852,810							
rd C	9%	5,840							
Cou	8%	9,900							
mb	7%	3,140							
o Cc	7%	39,920							
Co	7%	22,030							
Cou	6%	2,818,199							
ath	6%	2,910							
an C	6%	2,850							
Co	6%	1,170,103			227,701	16%			
CoL	6%	23,390			5,233	16%			
ee	5%	41,049	6%	46,659	5,302	11%			

6. Click on the *pulldown box* in F3 and choose *custom*.

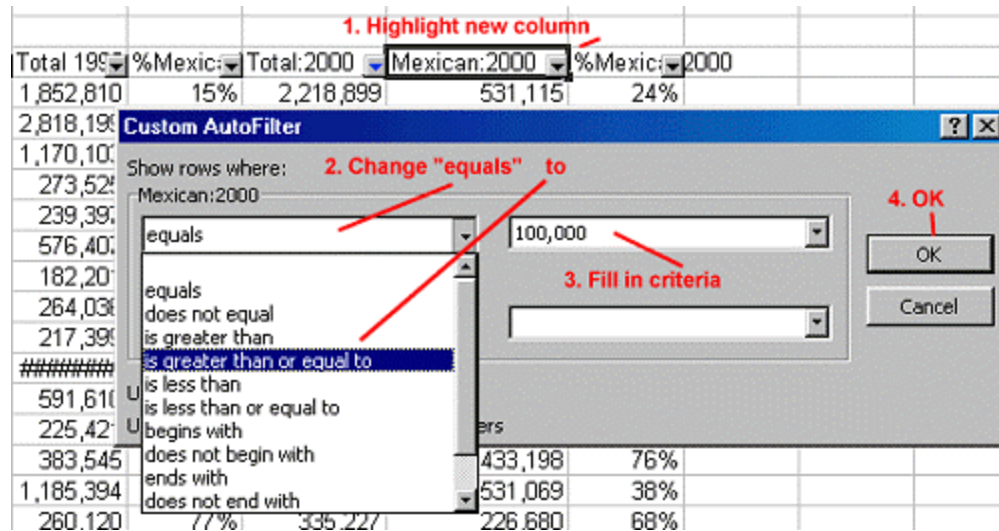
1. Use pulldown menu under Mexican: 2000

Area	%Chang	Total 19%	%Mexic	Total:2000	Mexican	%Mexic	2000
Dallas Cou	9%	1,852,810	15%	2,218,000	(All)	24%	
Harris Cou	6%	2,818,199	18%	3,400,000	(Top 10...)	24%	
Tarrant Co	6%	1,170,103	10%	1,446,000	(Custom...)	16%	
Denton Co	4%	273,525	5%	432,000	20,155	8%	
Jefferson C	4%	239,397	4%	252,000	27,845	8%	
Travis Cou	4%	576,407	18%	812,000	34,670	22%	
Montgome	3%	182,201	6%	293,000	36,383	9%	
Collin Cour	2%	264,036	5%	491,000	38,456	7%	
Galveston	2%	217,399	12%	250,000	51,447	14%	
Texas	1%	#####	23%	#####	113,334	24%	
El Paso C	0%	591,610	66%	679,000	175,053	66%	
Fort Bend	-1%	225,421	16%	354,000	226,680	15%	

2. Choose CUSTOM

7. In the new pop-up box/first row

- Use the pulldown box to change the word from *equals* to *greater than or equal to*
- Type in 100,000
- Click on OK.



Filtered Results

All counties over 250,000
Mexican population over 100,000

A	B	C	D	E	F	G	H
		Total Population over 250,000					
Area	%Chang	Total 199	%Mexic	total:2000	Mexican:2000	%Mexic	2000
Dallas Cou	9%	1,852,810	15%	2,218,899	531,115	24%	
Harris Cou	6%	2,818,199	18%	3,400,578	814,693	24%	
Tarrant Co	6%	1,170,103	10%	1,446,219	227,701	16%	
Travis Cou	4%	576,407	18%	812,280	175,053	22%	
Texas	1%	#####	23%	20,851,820	5,071,963	24%	
El Paso Co	0%	591,610	66%	679,622	447,065	66%	
Hidalgo Co	-5%	383,545	81%	569,463	433,198	76%	
Bexar Cou	-7%	1,185,394	45%	1,392,931	531,069	38%	
Cameron Co	-9%	260,120	77%	335,227	226,680	68%	
Nueces Co	-12%	291,145	48%	313,645	113,334	36%	
				Mexican Population over 100,000			

FREEZING/SPLITTING WORKSHEET

Freezing Windows

Saves column and row endings when you page down or across the spreadsheet.
Highlight cell to the right and below your desired split; then choose *WINDOW*

Click to the right and below the headings to be frozen

Area	Total:2000	Mexican:2000
Texas	20,851,820	5,071,963
Anderson County, Texas	55,109	3,480
Andrews County, Texas	13,004	4,235

Area	%Mexican2000
Caldwell County, Texas	29%
Calhoun County, Texas	30%
Callahan County, Texas	5%
Cameron County, Texas	68%
Camp County, Texas	13%
Carson County, Texas	5%
Cass County, Texas	1%
Castro County, Texas	38%

Splitting Windows

Creates four windows that can be moved independently of one another.
Highlight cell to the right and below your desired split; then choose *WINDOW*

Then Window/Split

Click to the Right and Below the Desired Split

Area	Total:2000	Mexican
Texas	20,851,820	5,07
Anderson County, Texas	55,109	
Andrews County, Texas	13,004	
Angelina County, Texas	80,130	

The four parts can be moved and altered independently

%Mexican2000	Total:2000	Mexican:2000	%Mexican2000
17%	78,021	12,966	17%
16%	14,026	2,267	16%
30%	3,966	1,172	30%
8%	36,363	3,046	8%
8%	74,978	5,660	8%
13%	1,904	243	13%
36%	3,996	1,456	36%
43%	4,099	1,750	43%
32%	7,072	2,288	32%
64%	2,975	1,917	64%

HIDING COLUMNS/ROWS

1. Highlight columns or rows to hide

	%Change	Total 1990	%Mexican	Total 2000	Mexican:2000	%Mexican	%ofstatemex
un	16%	24,009	10%	28,118	7,179	26%	0%
ou	10%	17,865	29%	20,121	7,803	39%	0%
30	10%	9,128	17%	9,006	2,440	27%	0%
ou	9%	1,852,810	15%	2,218,899	531,115	24%	10%
10	9%	5,848	18%	5,369	1,472	27%	0%
ou	8%	9,904	5%	11,549	1,467	13%	0%
b	7%	3,143	11%	3,057	550	18%	0%

	A	H	I	J
1				
2				
3	Area	%ofstatemex		
4	Titus Cou	0%		
5	Moore Cou	0%		
6	Ochiltree C	0%		
7	Dallas Cou	10%		
8	Hansford C	0%		
9	Camp Cou	0%		
10	Lipscomb	0%		
11	Navarro Cc	0%		
12	Shelby Co	0%		
13	Harris Cou	16%		
14	Hudspeth C	0%		
15	Sherman C	0%		
16	Tarrant Co	4%		
17	Waller Cou	0%		

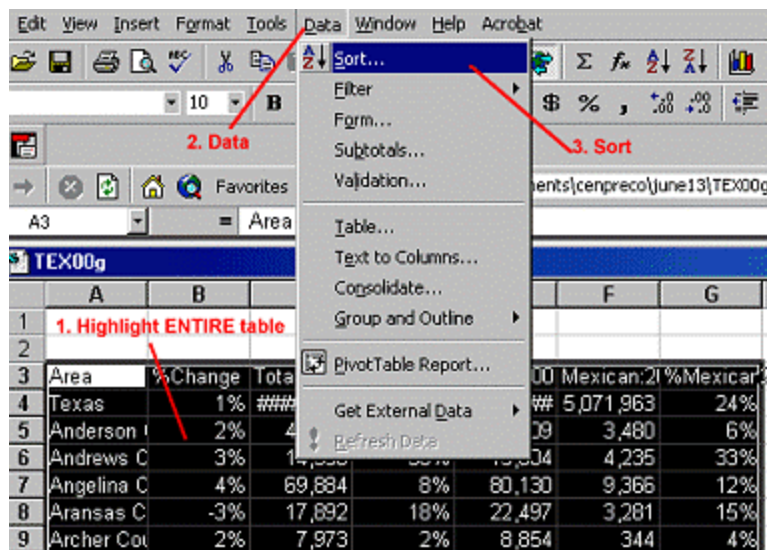
1. Click on the row or column you want to hide.
2. Use the *FORMAT* menu to select either *ROW* or *COLUMN*.
3. Then click on *HIDE*.

The spreadsheet retains the row and column numbering of the original; you just won't see the hidden material. Click on *FORMAT/Row* or *Column* to *UNHIDE*.

RANKING/SORTING

You can do the same type of ranking found in Statistical Abstract by using the *Data* menu in Excel. Your columns should be named before you start the procedure.

1. Highlight the *entire table* because it will keep the rows together when the columns are sorted. **VERY IMPORTANT.**
2. Click on Data menu in the top toolbar.
3. Click on *SORT*.



4. In the pop-up box
 - a. First sort – use the pulldown box to highlight a column name; then choose ascending (A-Z, least to most) or descending (Z-A, most to least).
 - b. You can choose a second and third sort.
 - c. Click on OK.

Area	%Change	Total 1990	%Mexican	Total:2000
Texas	1%	#####	23%	#####
Anderson	2%	48,024	4%	55
Andrews C	3%	14,338	30%	13
Angelina C	4%	69,884	8%	80
Aransas C	-3%	17,892	18%	22
Archer Cou	2%	7,973	2%	8
Armstrong	1%	2,021	2%	2
Atascosa	-14%	30,533	48%	38
Austin Cou	4%	19,832	9%	23
Bailey Cou	-3%	7,064	37%	6
Bandera C	0%	10,562	10%	17
Bastrop Co	2%	38,263	17%	57
Baylor Cou	0%	4,385	7%	4
Bee Count	-17%	25,135	47%	32
Bell Count	1%	191,088	9%	237

Results Ranked by Column B and then Column A

Area	%Change	Total 1990	%Mexican	Total:2000	Mexican:21	%Mexican:2000
Titus Coun	16%	24,009	10%	28,118	7,179	26%
Moore Cou	10%	17,865	29%	20,121	7,803	39%
Ochiltree C	10%	5,128	17%	9,006	2,440	27%
Dallas Cou	9%	1,852,810	15%	2,218,899	531,115	24%
Hansford C	9%	5,848	18%	5,369	1,472	27%
Camp Cou	8%	9,904	5%	11,549	1,467	13%
Lipscomb	7%	3,143	11%	3,057	550	18%
Navarro Co	7%	39,926	7%	45,124	6,129	14%
Shelby Co	7%	22,034	2%	25,224	2,232	9%
Harris Cou	6%	2,818,199	18%	3,400,578	814,693	24%
Hudspeth	6%	2,915	65%	3,344	2,386	71%
Sherman C	6%	2,858	18%	3,186	771	24%

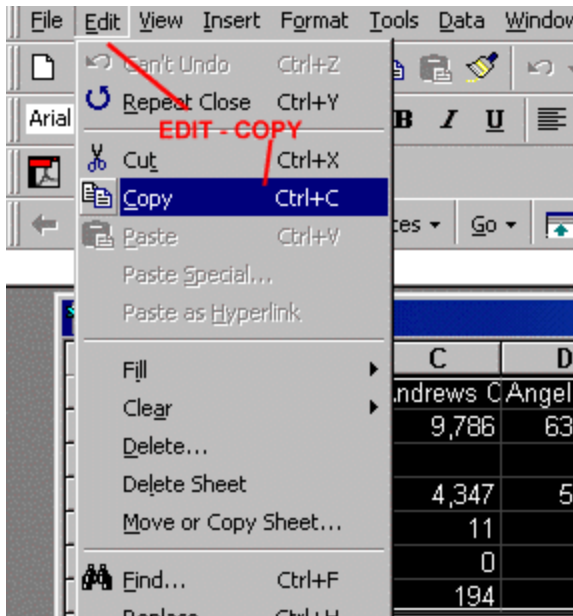
TRANSPOSING ROWS AND COLUMNS

Transposing spreadsheets (switching rows and columns on the original to the opposite orientation on your spreadsheet) may be necessary if your spreadsheet is too wide to print. Geography in rows and subjects in columns is advisable for many of the statistical manipulations with EXCEL.

1. Highlight the entire table.

tex90b Highlight ENTIRE Table							
	A	B	C	D	E	F	G
1		Anderson	Andrews C	Angelina C	Aransas C	Archer Co	Armstrong
2	Not of Hisp	44,071	9,786	63,812	14,304	7,784	1,966
3	Hispanic o						
4	Mexican	2,138	4,347	5,533	3,288	166	41
5	Puerto Ric	20	11	27	15	2	0
6	Cuban	1	0	12	7	2	0
7	Other Hisp	1,794	194	500	278	19	14

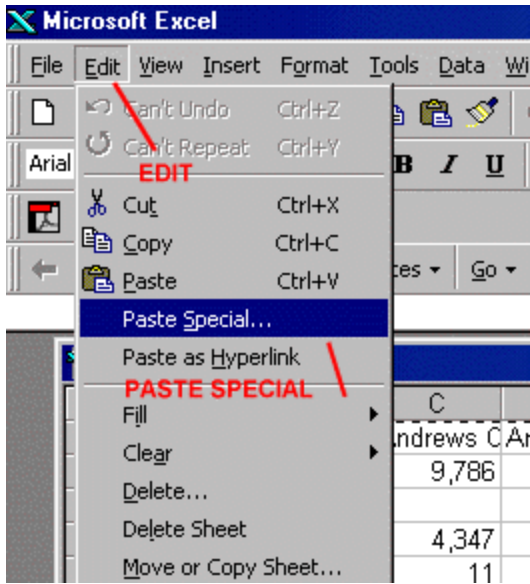
2.



2. EDIT/COPY or single click on the copy symbol (double sheet of paper) on the toolbar.

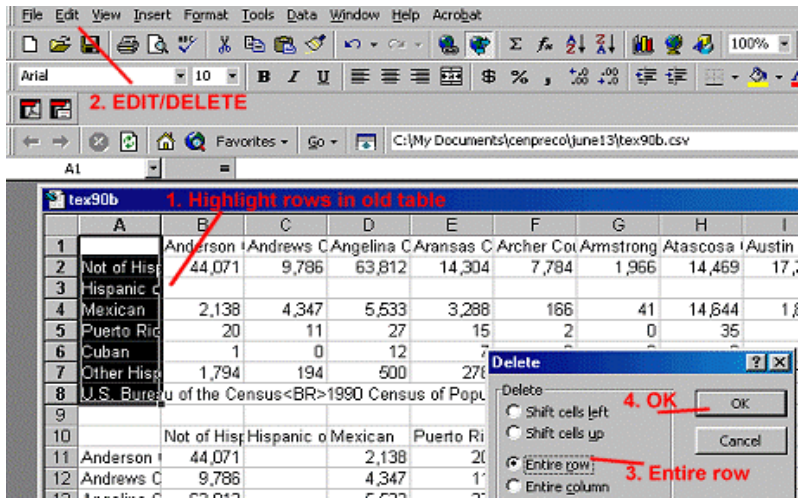
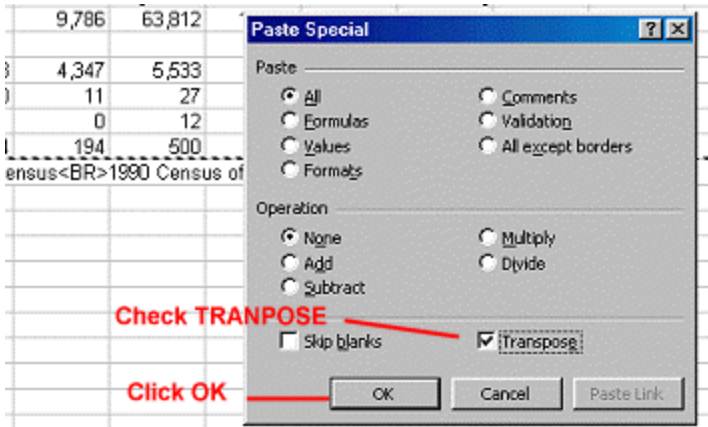
tex90b				
	A	B	C	D
1		Anderson	Andrews C	Angelina CA
2	Not of Hisp	44,071	9,786	63,812
3	Hispanic o			
4	Mexican	2,138	4,347	5,533
5	Puerto Ric	20	11	27
6	Cuban	1	0	12
7	Other Hisp	1,794	194	500
8	U.S. Bureau of the Census 1990 Census			
9	Highlight cell to begin new table			
10				
11	Make sure there is expansion room			

3. Click your cursor once on underneath your first spreadsheet so you will have enough space to paste your revised worksheet.



5. Click on the *EDIT* menu at the top and then *PASTE SPECIAL*.

6. On the pop-up menu, click in the box next to the word *Transpose*. Then click *OK*.



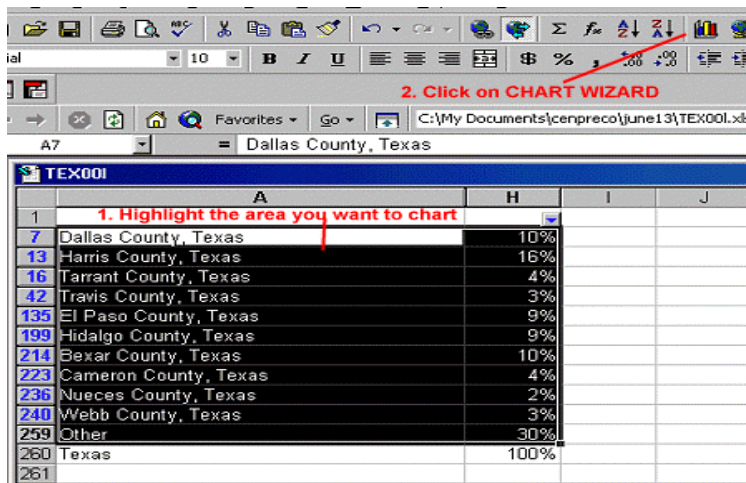
7. Highlight, edit, and delete your old spreadsheet.

GRAPHS

Although the CHART WIZARD makes graph creation easy, you may spend a lot of time fiddling with your spreadsheet and the chart style to make sure you are representing what you want in the best possible manner. For example, it is very difficult to represent all 50 states or 1% on a chart and make the chart look meaningful.

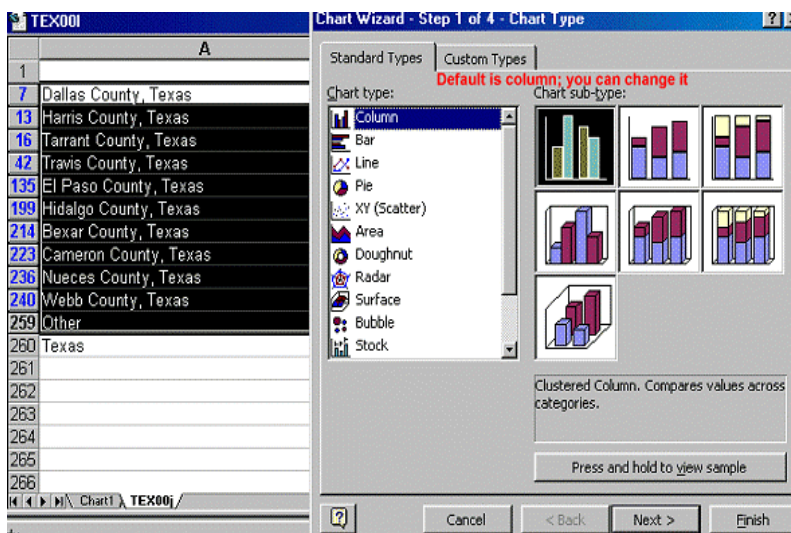
Pie Charts

Good for representing percentages as part of one whole, e.g. federal budget by broad function.



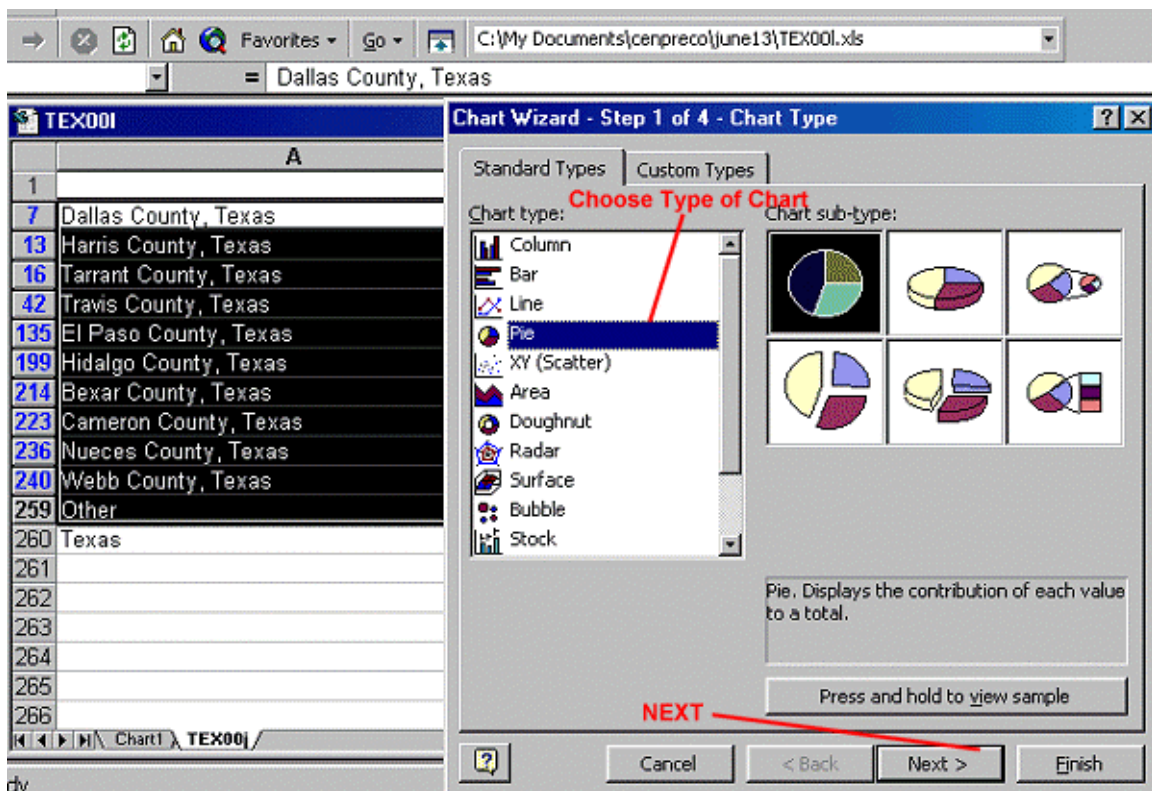
	A	H	I	J
1	1. Highlight the area you want to chart			
7	Dallas County, Texas	10%		
13	Harris County, Texas	16%		
16	Tarrant County, Texas	4%		
42	Travis County, Texas	3%		
135	El Paso County, Texas	9%		
199	Hidalgo County, Texas	9%		
214	Bexar County, Texas	10%		
223	Cameron County, Texas	4%		
236	Nueces County, Texas	2%		
240	Webb County, Texas	3%		
259	Other	30%		
260	Texas	100%		
261				

1. There were too many counties with 1% Mexican population so they were grouped as OTHER.
2. Highlight cells and click on the CHART WIZARD symbol in the toolbar.

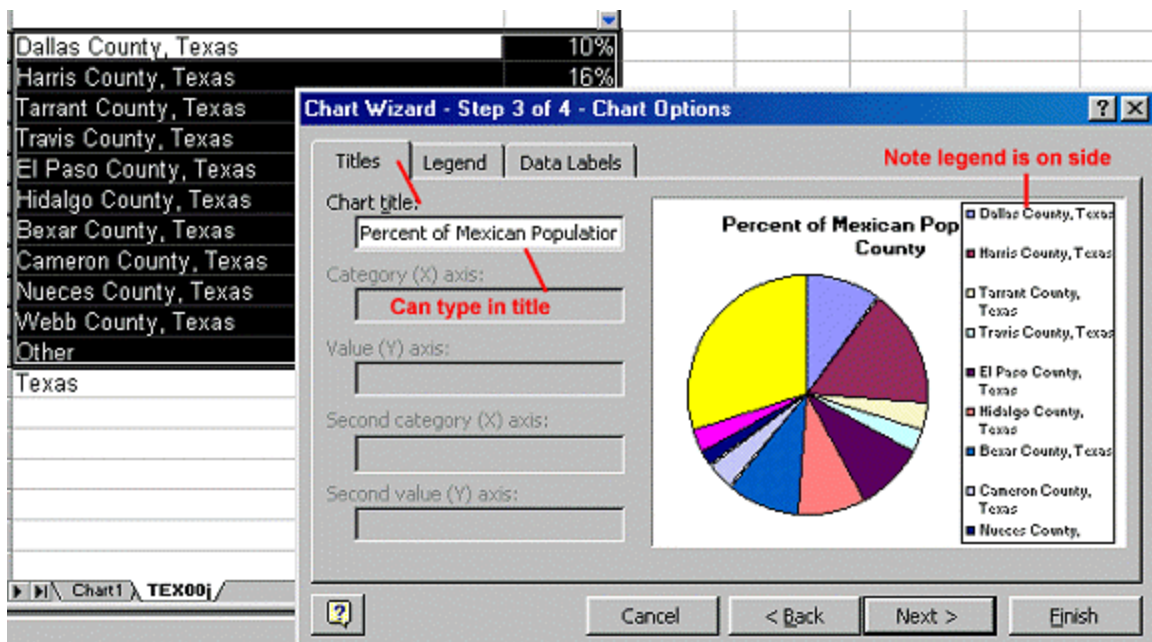


3. Choose the type of chart from the middle box. The default is column

3. Once you choose a type of chart, you have your choice of subtype.



4. You can also choose the title, location of the legend (perhaps on bottom), and data labels.



5. You will probably want your chart on a new sheet in the same workbook.

Dallas County, Texas	10%
Harris County, Texas	16%
Tarrant County, Texas	4%
Travis County, Texas	3%
El Paso County, Texas	9%
Hidalgo County, Texas	9%
Bexar County, Texas	10%
Cameron County, Texas	4%
Nueces County, Texas	2%
Webb County, Texas	
Other	
Texas	

Chart Wizard - Step 4 of 4 - Chart Location

Place chart: **New sheet in same workbook?**

As new sheet:

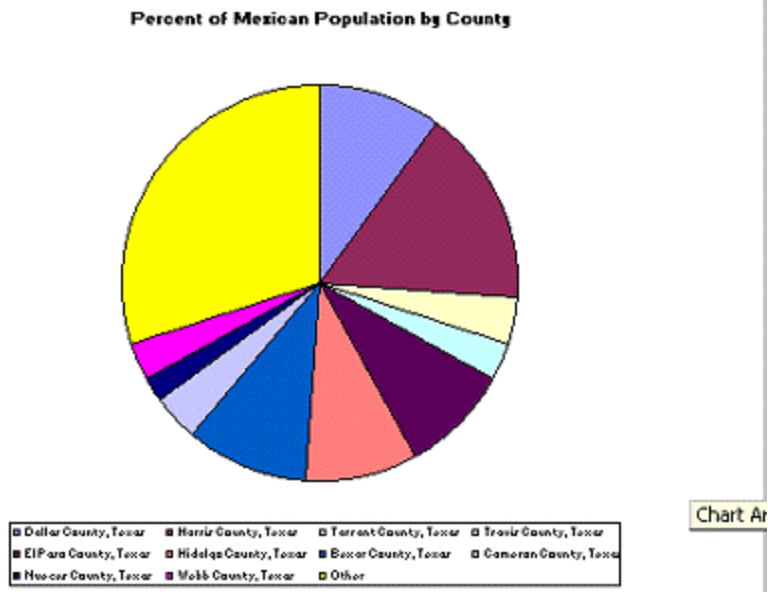
On spreadsheet?

As object in:

FINISH

Cancel < Back Next > Finish

6. Finished Product



Bar Graphs

Microsoft Excel - tex00g

Area	Non-Mexican:1990	Mexican:1990	Total:2000	Mexican:2000
Bexar County, Texas	651,967	533,427	1,392,931	531,069
Harris County, Texas	2,310,923	507,276	3,400,578	814,693
El Paso County, Texas	201,147	390,463	679,622	447,065
Hidalgo County, Texas	72,874	310,671	569,463	433,198
Dallas County, Texas	1,574,889	277,922	2,218,899	531,115
Cameron County, Texas	59,828	200,292	335,227	226,680
Nueces County, Texas	151,395	139,750	313,645	113,334
Webb County, Texas	14,656	118,583	193,117	145,669

Chart Wizard - Step 1 of 4 - Chart Type

Standard Types | Custom Types

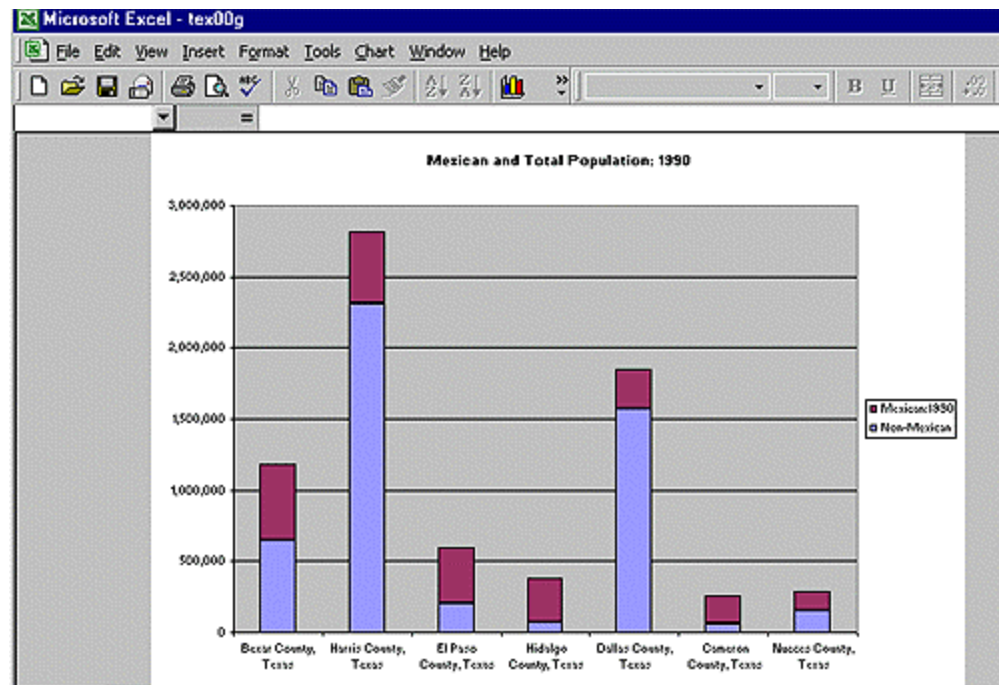
Chart type: Column

Chart sub-type: Stacked Column

Stacked Column. Compares the contribution of each value to a total across categories.

Press and Hold to view Sample

Cancel < Back Next > Finish

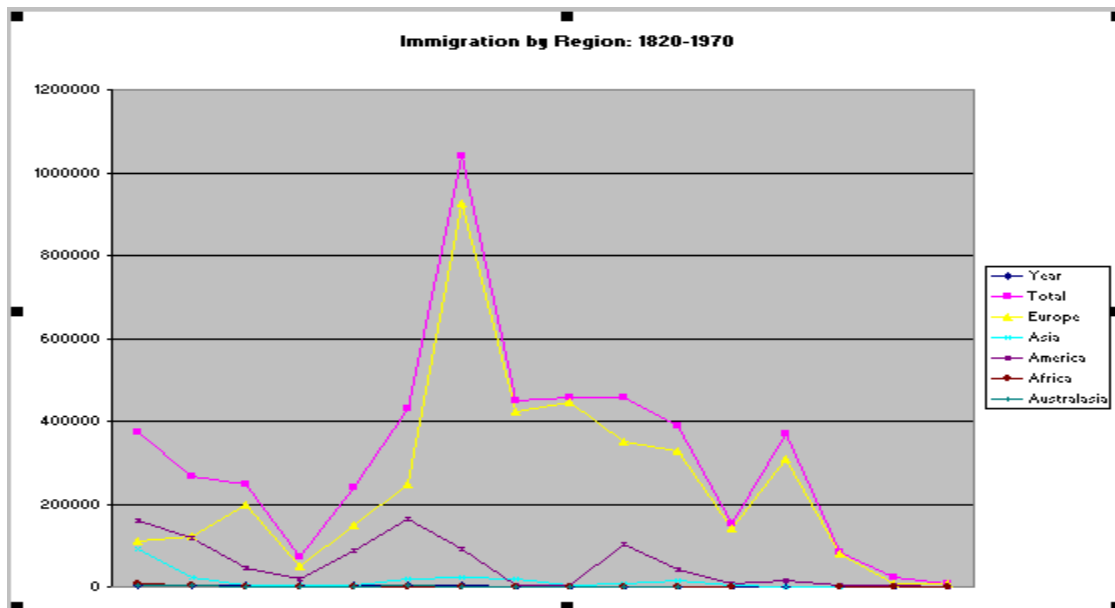


Line Charts

The screenshot shows Microsoft Excel with a data table and the Chart Wizard dialog box. The data table is as follows:

Year	Total	Europe	Asia	America	Africa	Australasia
1970	373326	110653	90215	161727	7099	3632
1960	265398	120178	21604	119525	1925	2140
1950	249187	199115	4508	44191	849	517
1940	70756	50454	2050	17822	202	228
1930	241700	147438	4535	88104	572	1051
1920	430001	246295	17505	162666	648	2185
1910	1041570	926291	23533	89534	1072	1097
1900	448572	424700	17946	5455	30	428
1890	455302	445680	4448	3833	112	1167
1880	457257	348691	5839	101692	18	954
1870	387203	328626	15825	42658	31	36
1860	153640	141209				
1850	369980	308323				
1840	84066	80126				
1830	23322	7217				
1820	8385	7691				

The Chart Wizard dialog box is open, showing the 'Line' chart type selected. The 'Line with markers displayed at each data value' sub-type is chosen. The dialog box includes buttons for 'Cancel', '< Back', 'Next >', and 'Finish'.



IMPORTING SPREADSHEETS

Microsoft's Excel is compatible with numerous formats displaying Census data.

TIP: When in doubt about choosing a format to download, choose

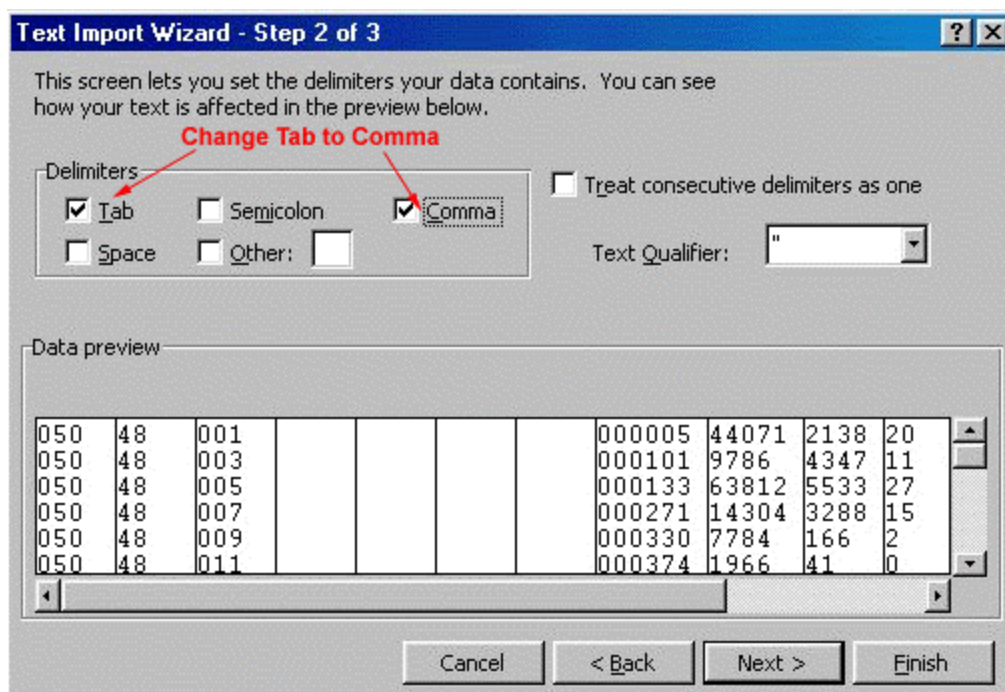
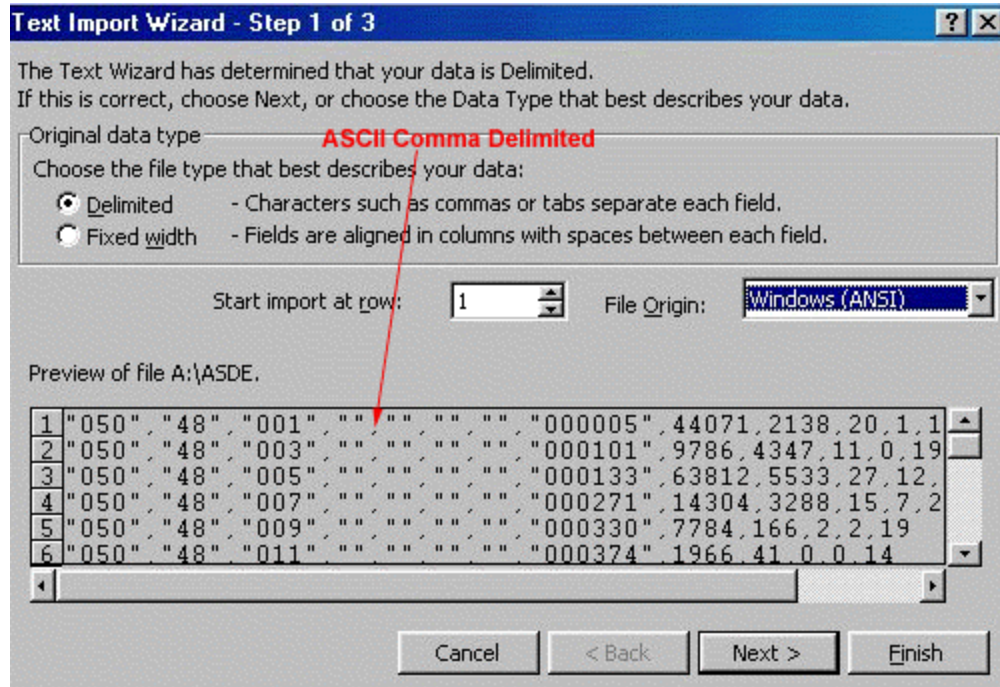
**.XLS
.DBF
.CSV**

and make sure your filename has the extension affixed to the

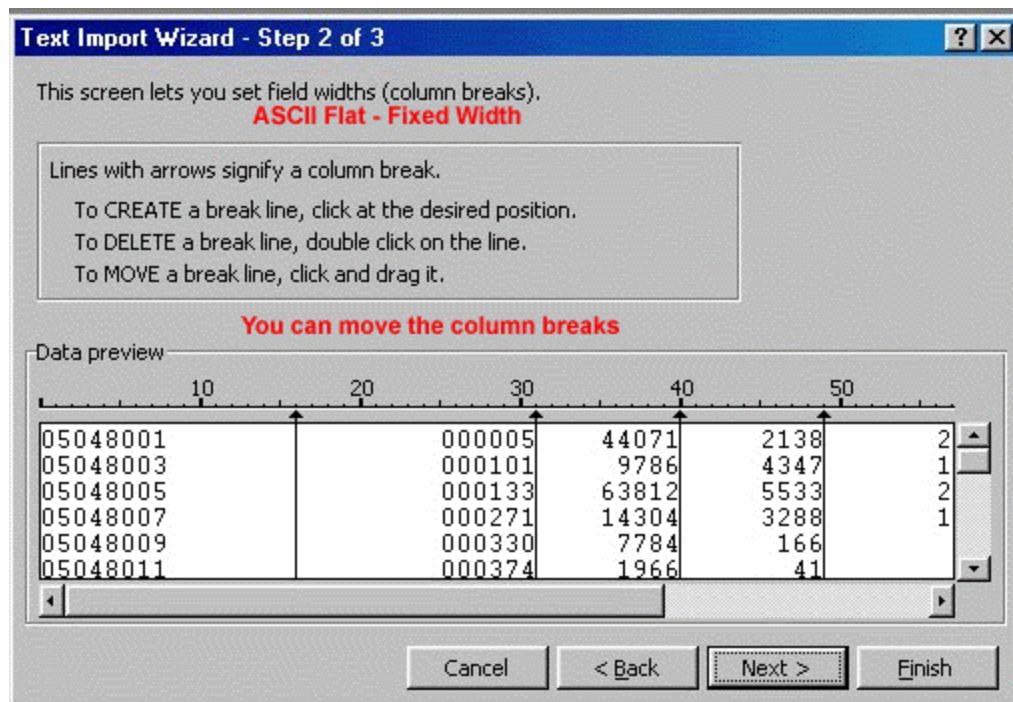
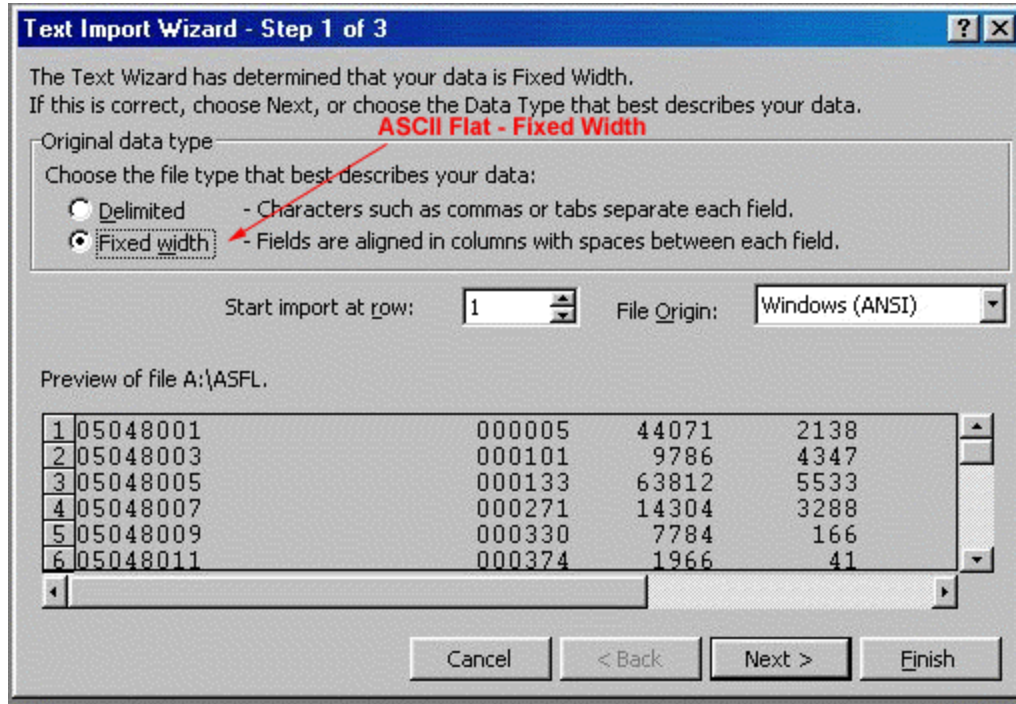
Name	Abbreviation	Census Source	Import Process
Excel	.xls	Census DVD	Opens automatically
Comma Separated Value	.csv	American Factfinder Census DVD Geolytics 1990 Census CD	Opens automatically if has extension .csv
ASCII Flat Tab Delimited	.lst	American Factfinder	Requires column manipulation
ASCII Flat Fixed Width	.txt .sdf	1990 Census CD	Requires column manipulation
Database	.dbf	American Factfinder Census DVD Geolytics 1990 Census CD	Opens automatically if has extension .dbf
Lotus 1-2-3	.wk1	1990 Census CD	Opens automatically
Perl	.pl	Historical Census Browser	Opens automatically but you will want to eliminate misc. web frames
Adobe Acrobat	.pdf	Various web sites	Imports depending on data's original format and manipulation with full Acrobat version; still requires some manipulation

IMPORT ILLUSTRATIONS

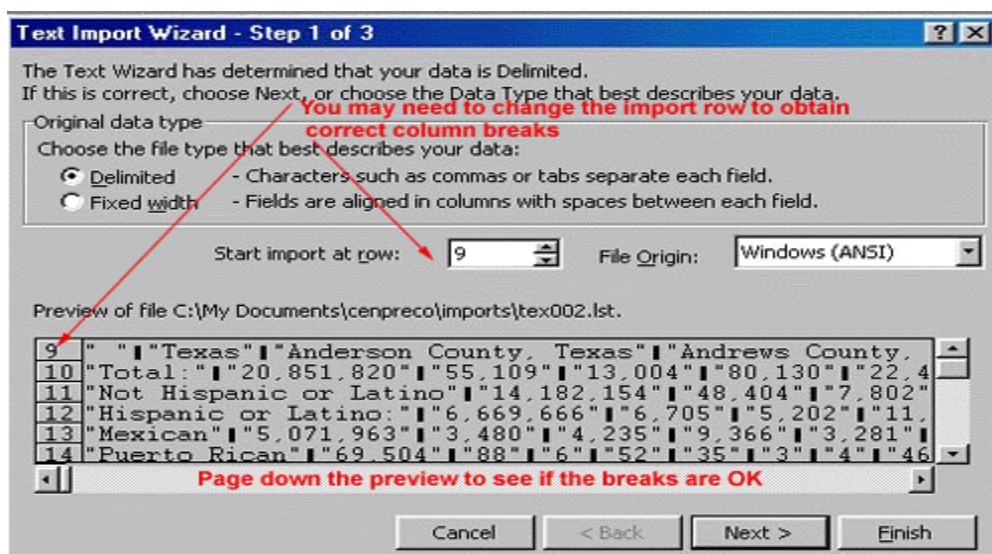
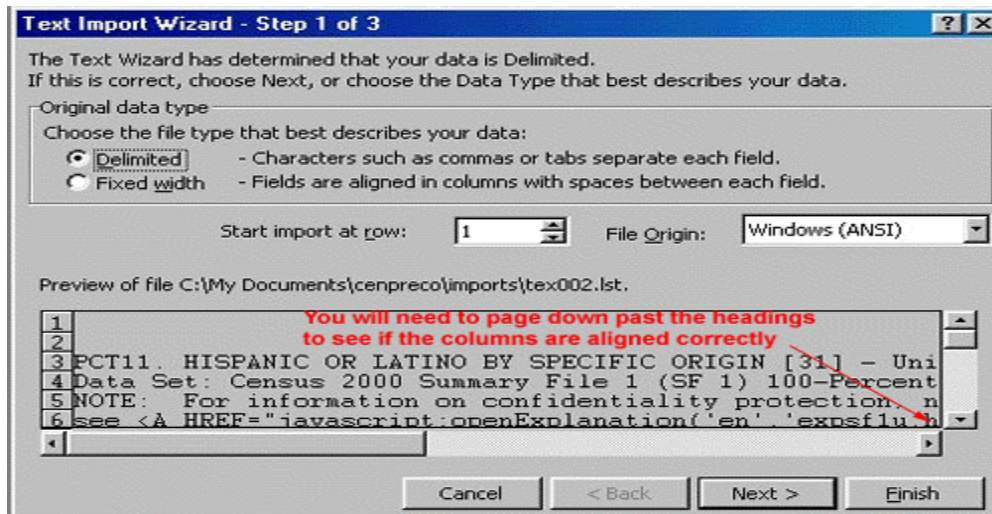
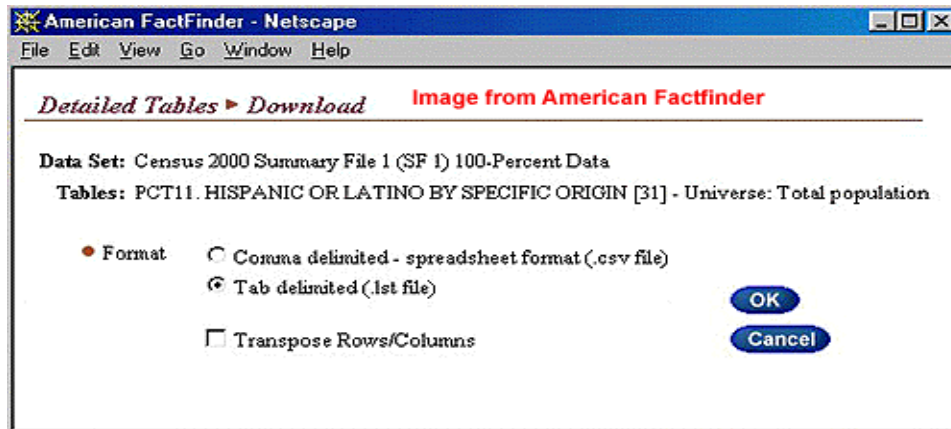
ASCII Comma Delimited (.csv)

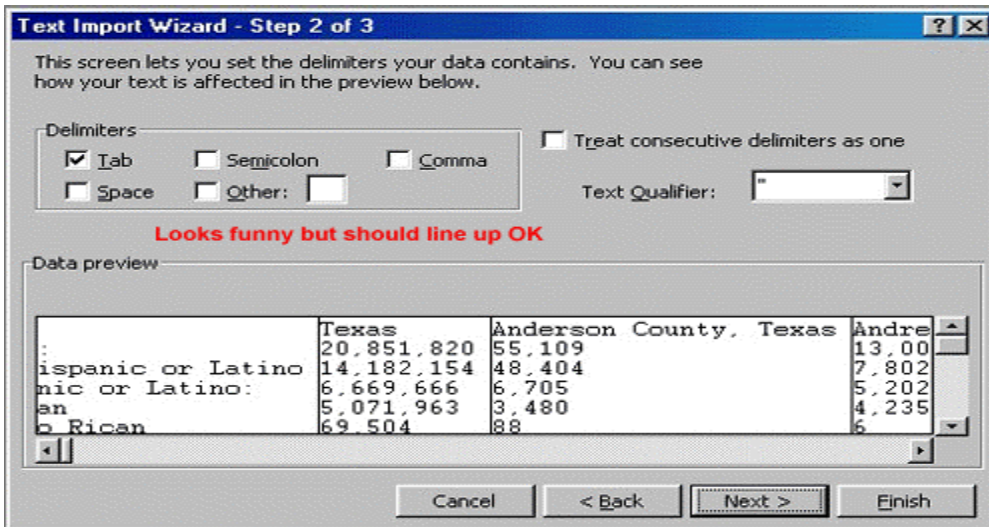


ASCII Flat – Fixed Width (.txt, .sdf)



ASCII Tab Delimited (.lst)





tex002.lst Final LST import

	A	B	C	D	E	F	G
1		Texas	Anderson	Andrews C	Angelina C	Aransas C	Archer Cou
2	Total:	#####	55,109	13,004	80,130	22,497	8,854
3	Not Hispar	#####	48,404	7,802	68,634	17,926	8,423
4	Hispanic o	6,669,666	6,705	5,202	11,496	4,571	431
5	Mexican	5,071,963	3,480	4,235	9,366	3,281	344
6	Puerto Ric	69,504	88	6	52	35	3
7	Cuban	25,705	10	1	26	14	1
8	Dominican	4,296	2	0	1	0	0
9	Central Am	146,723	151	1	120	11	2
10	Costa Rica	3,302	0	0	2	0	0
11	Guatemala	18,539	46	1	8	0	1
12	Honduran	24,179	23	0	11	7	0
13	Nicaraguan	7,487	0	0	5	2	0
14	Panamanian	7,076	3	0	5	0	1

Database File (.dbf) – imports directly

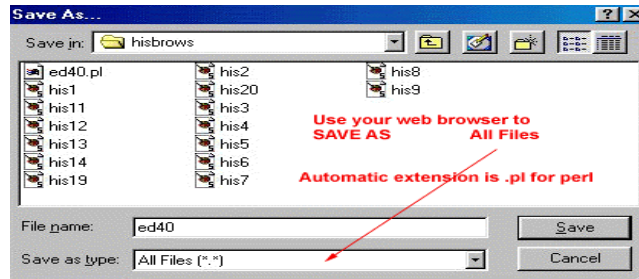
Db.dbf

	A	B	C	D	E	F	G	H	I	J
1	SUMST	CNT	COUS	PLACI	TRACTE	B	LOGRE	P0090001	P0090002	
2	050	48	001				000005	44071	2138	
3	05	04	800	3			00010			
4	4	0	50	480	05		0001			
5	00	05	048	007			000			
6	278	0	504	8009			00	330	7784	
7	1	9	050	48011			0	374	1966	
8		14	05	04801	3			393	14469	
9	1	37	9	0	50480	15		467	17759	
10		1	50	05048	017			528	4324	
11			151	0504	8019			550	9390	
12			12	5	050	48021		58		
13	1		4	69	05	04802	3	6		
14	1			28	0	50480	25	0		

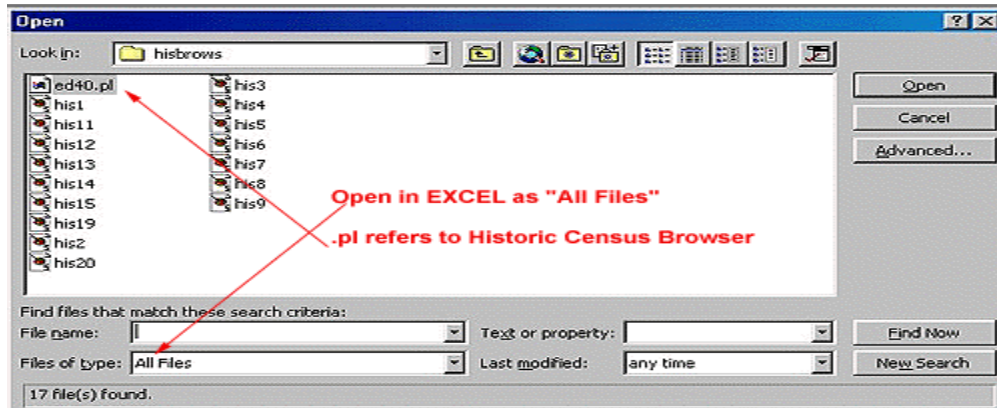
Database Format imports Directly

Historical Census Browser – perl (.pl)

1. Use your web browser to save as ALL Files



2. Open up EXCEL; look for ALL Files; then .pl extension



3. Spreadsheet opens up immediately but you may need to delete some miscellaneous rows at the top.

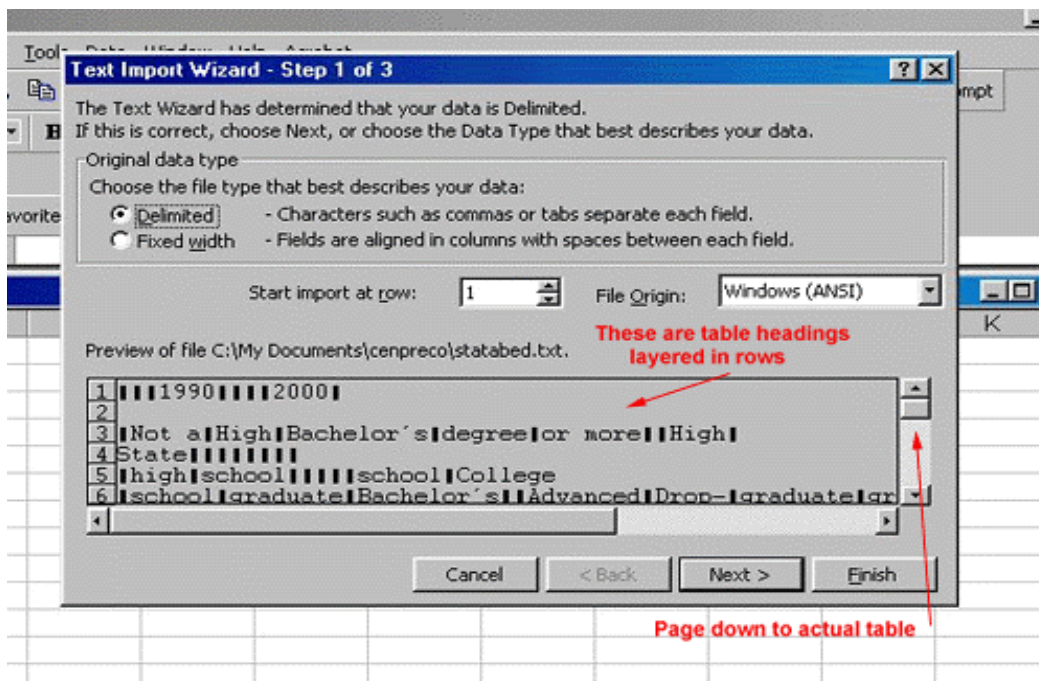
Spreadsheet opens immediately

NO.	MALES 25 YEARS OF AGE AND OVER WITH	NO. MALES	NO. MALES	NO. FEMALES	NO. FEMALES	NO. FEMALES	NO. MALES 25	number 25 years
16	= 18487							
A								
K	51,039	25,495	23,551	69,348	34,605	18,935	725,040	7
N	37,388	19,581	15,955	51,903	25,722	15,464	517,789	7
S	30,617	17,012	17,963	42,801	22,887	21,436	408,121	7
A	37,255	17,821	12,462	46,563	21,352	9,122	491,469	7
G	58,330	30,119	27,037	82,491	42,980	23,475	744,820	7
A	52,046	22,693	20,505	65,569	33,404	18,455	664,560	7
V	38,273	20,679	18,117	46,581	26,258	13,046	478,979	8
N	65,466	36,002	31,466	87,350	52,862	36,570	812,437	8
L	49,996	22,620	24,045	67,813	28,505	18,271	595,988	8
N	15,168	9,328	6,714	20,306	16,631	4,924	176,115	8
T	64,402	29,390	25,503	86,270	42,275	20,413	737,466	8
V	59,897	29,839	32,997	87,285	50,212	25,627	678,169	8
N	48,817	20,829	32,630	73,680	23,135	17,741	526,707	9
S	18,487	10,020	7,603	25,932	18,301	5,417	181,480	10
M	99,093	40,729	41,983	126,416	61,243	28,077	925,816	10
N	13,972	7,384	6,072	16,240	9,149	4,919	129,521	10
N	121,155	52,960	52,088	166,824	67,801	36,092	1,116,944	10

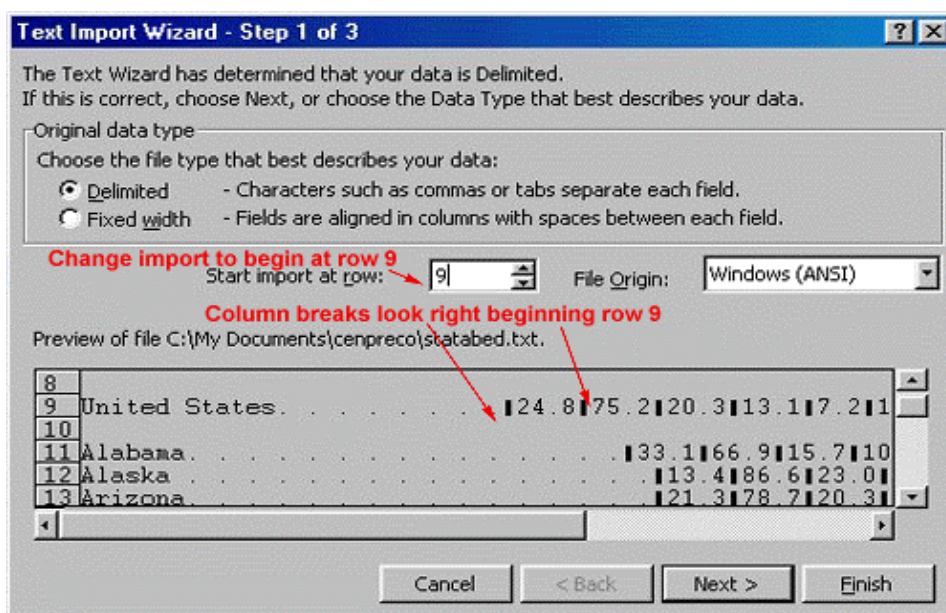
Adobe Acrobat (.pdf)

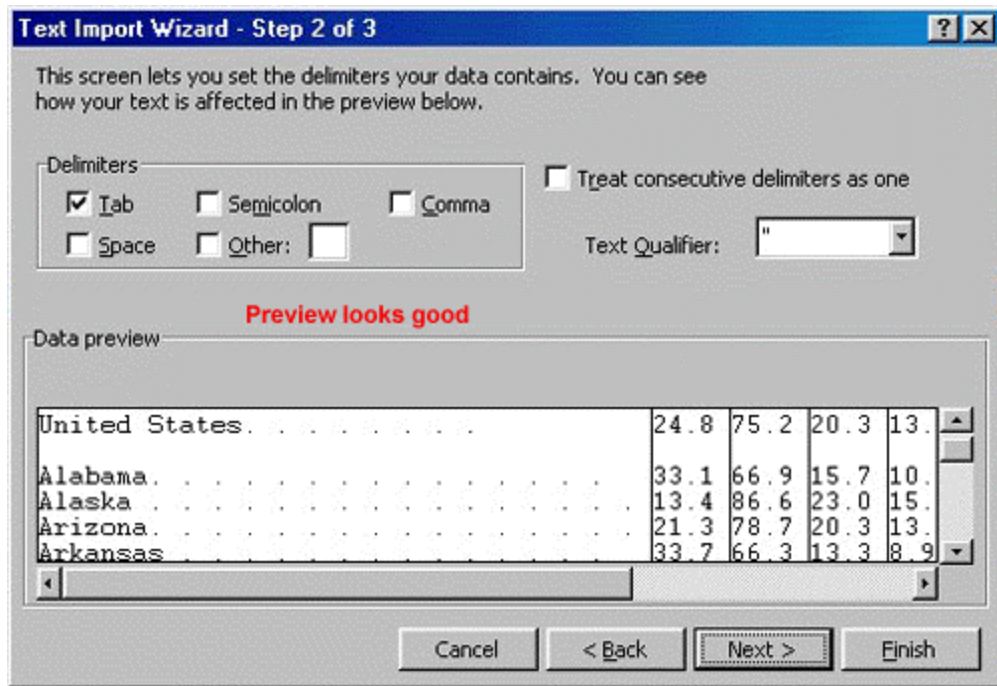
See HOW TO EXPORT A TABLE FROM A PDF FILE INTO A SPREADSHEET
<<http://www.library.mcgill.ca/edrs/services/publications/howto/PDFtoXLS/PDFtoExcel.html>> by Tira Cohene and Anatassia Khouri for instructions on preparing pdf files into ANSI text.

Page down past the column headings, which could throw off your import.

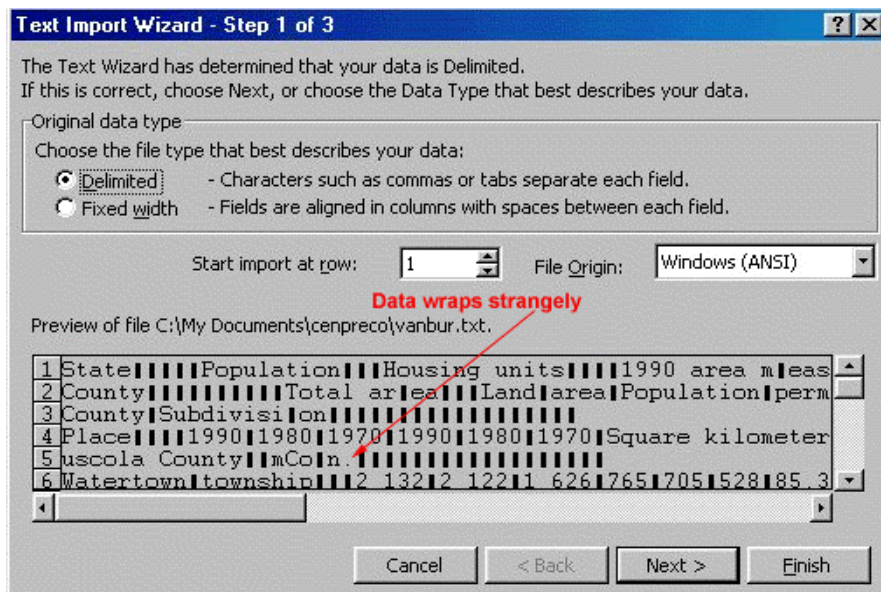


Importing at Row 9 rather than the beginning will probably work.



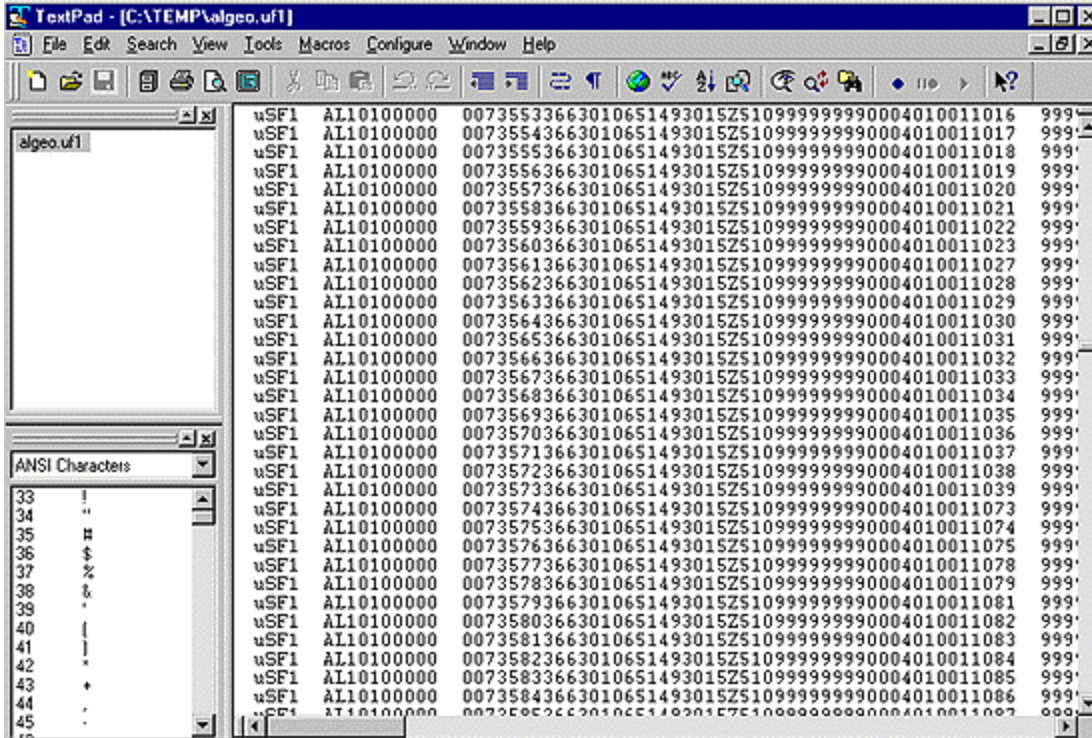


If the text doesn't wrap correctly, you may need to run it through the Acrobat Distiller.



ASCII (FLAT) – Manipulating with Textpad

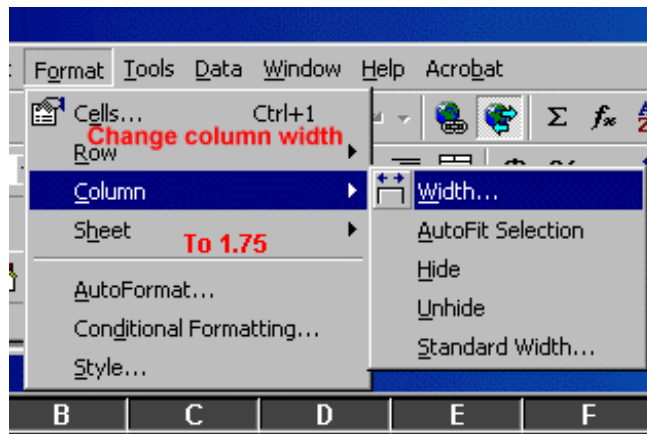
Excel has a limit of about 250 columns and 65,000 rows. Some of the files available from the Census Bureau via ftp are too large for both EXCEL and Microsoft Word. If you need to cut them into smaller segments for spreadsheet manipulation, consider using Textpad <<http://www.textpad.com>>.



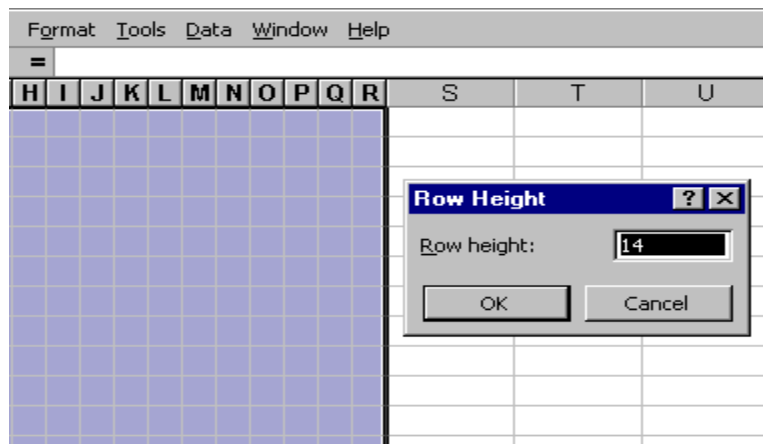
Ultimately opens like this in Excel

8	uSF1	AL0405800	8366301	1.75E+10	451463382	AN	922408
9	uSF1	AL0405900	9366301	0	0Alabama	AN	0
10	uSF1	AL0406400	10366301	2.56E+09	166613445	AN	1157006
11	uSF1	AL0406500	11366301	0	0Alabama	AN	0
12	uSF1	AL0406600	12366301	0	0Alabama	AN	0
13	uSF1	AL0406700	13366301	0	0Alabama	AN	0
14	uSF1	AL0406800	14366301	6.94E+08	112837800	AN	441735
15	uSF1	AL0406900	15366301	8.53E+08	3088580A	AN	359784
16	uSF1	AL0407000	16366301	1.01E+09	50687065A	AN	355487
17	uSF1	AL0407100	17366301	0	0Alabama	AN	0
18	uSF1	AL0407200	18366301	4.09E+10	287449462	AN	1951953

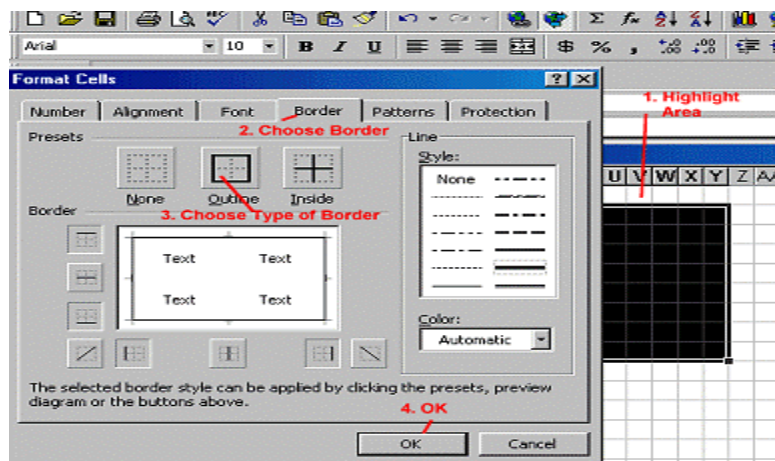
USING EXCEL FOR FLOOR PLANS



1. Highlight the entire table (CONTROL-A.)
2. Format/Column – change column width to 1.75



3. Change the row height to 14.



4. Highlight cells; then choose Format/Cells/Border.
5. Color parts of floor plan by highlighting cells; then choose Format/Cells/Patterns

<http://www.lib.umich.edu/govdocs/census2/xlguide.pdf>

Grace York, University of Michigan
May 2, 2002

