

## **PROTOCOL FOR GATHERING MANUFACTURED HOME COMMUNITY (MHC) DATA**

August 21, 2006

### **THE USES OF DEMOGRAPHIC DATA:**

A significant challenge for advocates is the lack of available demographic information about who lives in manufactured home communities. This data can be a critical tool for advocates because through data it is possible to challenge the inaccurate preconceived notions about manufactured home communities that are shared by both policy makers and members of the general public. The conception that people who live in manufactured housing are transient, for example, is easily dispelled with solid statistical analysis. By combining personal stories with compelling data, a full picture can emerge of manufactured home communities. This can be a powerful tool in efforts to change public policy, as well as a vital component in the struggle to shift public opinion about this vital affordable housing resource.

### **COMPILE A LIST OF PARKS:**

Compiling demographic data on manufactured housing communities is complicated by the fact that the census data does not differentiate between manufactured housing that is privately sited and that which is sited in parks. Our interest is only in the latter. Because the census does not make this differentiation, it is necessary to have as complete of a list of parks as possible before beginning to manipulate the census data. We can't stress this step enough!

Some states have some means of licensing or otherwise tracking manufactured home communities. If your state is one of these, then you're in luck. If not, then one place to start is:

<http://www.mobilehomeparkstore.com/list.htm>.

We don't make any guarantees as to the completeness or accuracy of this information, but if nothing else it's a jumping off point. The most important information you need to gather is number of lots, city, and county. To find county names, use the website:

[http://www.naco.org/Template.cfm?Section=Data\\_and\\_Demographics&Template=/cfiles/counties/city\\_srch.cfm](http://www.naco.org/Template.cfm?Section=Data_and_Demographics&Template=/cfiles/counties/city_srch.cfm).

To find zip codes, you can use the website:

<http://zip4.usps.com/zip4/citytown.jsp>.

Make your list in the "Complete Park List" tab of the Protocol Template provided.

PARK NAME	NUMBER OF LOTS	ADDRESS	CITY	COUNTY	ZIP
1 Adkin Mobile Park	37	13 First St NW	Adkin	Adkin	56431
2 Beulah's Mobile Home	10	219 S Maddy Street	McGreggor	Adkin	56760
3 Beulah's Park	10	20 S Mable Street	McGreggor	Adkin	56760
4 Burk's Resort	2	3925 State Hwy 18	Adkin	Adkin	56431
5 Cartmoy's	89	Route 138	Isle	Adkin	56342
6 Ekman Resort	3	808 S 2nd Street	Princeton	Adkin	56371
7 Fisher's Resort	4	3039 212th Lane	Isle	Adkin	56342
8 Gora Resort (Wilderness)	2	5307 22nd Place	McGreggor	Adkin	56760
9 Riverside Mobile Home	10	3460S Hwy 189	Adkin	Adkin	56431
10 Sakers trailer court	26	4792 State Hwy 65	McGreggor	Adkin	56760
11 Sport Lake Mobile Home	16	2230 165th Ave NE	Han Lake	Adkin	56304
12 Sunset View Resort	24	2781 436th Ave	Adkin	Adkin	56431
13 Tom & Country Motel	14	Box 286	McGreggor	Adkin	56760
14 Trotter's Lakeshore	13	15140 220th Street	Adkin	Adkin	56431
15 Virginia Court Rental	6	6250 Leandale Lane	Maple Grove	Adkin	56311
16 Why Not Cafe	17	22577 State Hwy 47	Adkin	Adkin	56431
17 Baldwin Lake Court	84	6333 Hodgson Rd	Blaine	Anoka	55014
18 Blake International Village	622	10664 Central Ave NE	Blaine	Anoka	55434
19 Castle Towers	186	24336 Hwy 65 NE	Bethel	Anoka	56006
20 Centennial Square	566	3030 8th Ave NE	Blaine	Anoka	55434
21 Creekside	266	1100 Eight Boulevard	Cook Rapids	Anoka	56431
22 Fleming Terrace	262	17100 Hwy 65	Han Lake	Anoka	56304
23 Folley Terrace	156	7400 Hwy 65 NE	Fridley	Anoka	56432
24 Hilltop Mobile Home Community	170	4550 Central Ave NE	Hilltop	Anoka	56421
25 Hilltop Mobile Home Park	31	72947 1/2 Ave NE	Mlyri	Anoka	56421
26 Lurewood Terrace	90	21765 Waving Blvd	Wynning	Anoka	56502
27 Northshore Villa	201	1306 95th Lane NE	Blaine	Anoka	55434
28 Oak Terrace Properties	90	6645 Hwy 10 NW	Ramsey	Anoka	55303
29 Park of Four Seasons	572	11999 University Avenue NE	Blaine	Anoka	55434
30 Park Plaza Estates	90	11330 Fessle Drive	Fridley	Anoka	56432
31 Park Resene Community	156	3628 Meadowman Lane	Lovington	Anoka	56014
32 Redwood Terrace	276	3631 91st drive NE	Blaine	Anoka	56112
33 Sandpiper Bend	227	333 Sandpiper Drive NE	Blaine	Anoka	55434
34 SLP Mobile Home Park	31	Sunport Road	SLP	Anoka	56432
35 Spring Lake Park Terrace	101	8110 Pleasantview Dr	SLP	Anoka	56432
36 Sunny Side Manufactured Home Park	36	4300 Central Ave NE	Hilltop	Anoka	56421
37 Triller City Park	50	6093 Hwy 10	Col Heights	Anoka	56421
38 Village Green North	177	Hwy 65 N	Cedar	Anoka	56011
39 Woodhaven Manul Home Community	309	4062 234th Ave NW	St Francis	Anoka	56070
40 Woodport Court	40	6093 Hwy 10	Anoka	Anoka	56548
41 Zion Lake Mobile Home	12	601 Main Ave E	Frazee	Becker	56544
42 Albertson Lake Trailer Park	31	512 Blum Ave Box 308	Frazee	Becker	56544
43 Alabaster Mobile Home Park	32		Audubon	Becker	56011

**TEST COUNTY MATCHES:**

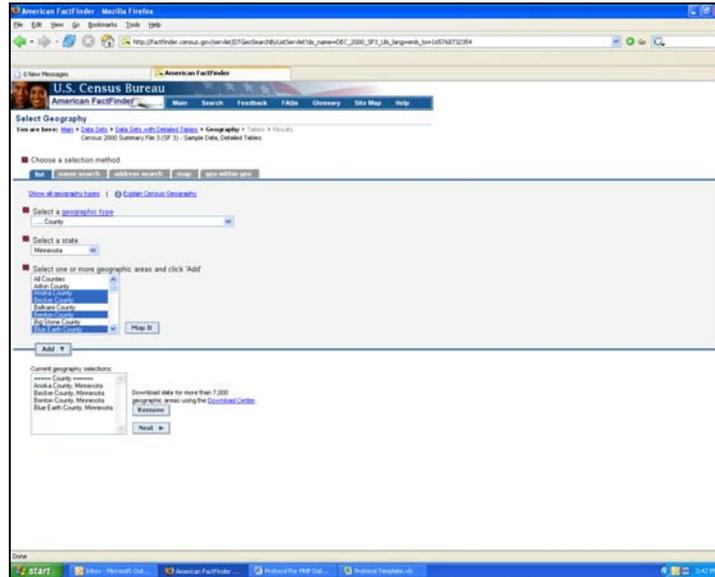
- Count how many known units exist in each county. One way to do this is to sort your master list alphabetically by county, and then use the sum function. Place your totals and the corresponding county name in the first two columns of the “County Match Test” tab of your spreadsheet.

COUNTY	KNOWN UNITS	CENSUS UNITS	MATCH
1 Adkin	290	0.00%	0.00%
2 Anoka	4079	0.00%	0.00%
3 Becker	555	0.00%	0.00%
4 Beltrami	1036	0.00%	0.00%
5 Benton	803	0.00%	0.00%
6 Big Stone	62	0.00%	0.00%
7 Blue Earth	1507	0.00%	0.00%
8 Brown	360	0.00%	0.00%
9 Carlton	216	0.00%	0.00%
10 Cass	862	0.00%	0.00%
11 Chippewa	556	0.00%	0.00%
12 Clay	155	0.00%	0.00%
13 Clear Lake	989	0.00%	0.00%
14 Cook	967	0.00%	0.00%
15 Crow Wing	40	0.00%	0.00%
16 Crow Wing	63	0.00%	0.00%
17 Cottonwood	9	0.00%	0.00%
18 Crow Wing	869	0.00%	0.00%
19 Dakota	3899	0.00%	0.00%
20 Dodge	398	0.00%	0.00%
21 Douglas	450	0.00%	0.00%
22 Faribault	130	0.00%	0.00%
23 Fillmore	177	0.00%	0.00%
24 Freeborn	323	0.00%	0.00%
25 Goodhue	988	0.00%	0.00%
26 Grant	29	0.00%	0.00%
27 Hennepin	937	0.00%	0.00%
28 Houston	314	0.00%	0.00%
29 Hubbard	231	0.00%	0.00%
30 Isanti	462	0.00%	0.00%
31 Itasca	586	0.00%	0.00%
32 Jackson	48	0.00%	0.00%
33 Kandakee	262	0.00%	0.00%
34 Kandakee	317	0.00%	0.00%
35 Kanabec	76	0.00%	0.00%
36 Kandakee	210	0.00%	0.00%
37 Kandakee	19	0.00%	0.00%
38 Lac Qui Parle	39	0.00%	0.00%
39 Lake of the Woods	439	0.00%	0.00%
40 Lake of the Woods	179	0.00%	0.00%
41 Lincoln	0	0.00%	0.00%
42 Lyon	315	0.00%	0.00%
43 Mahanomen	35	0.00%	0.00%

- All census numbers dealing with manufactured homes come from Summary File 3 of the 2000 Census, which can be accessed online at:

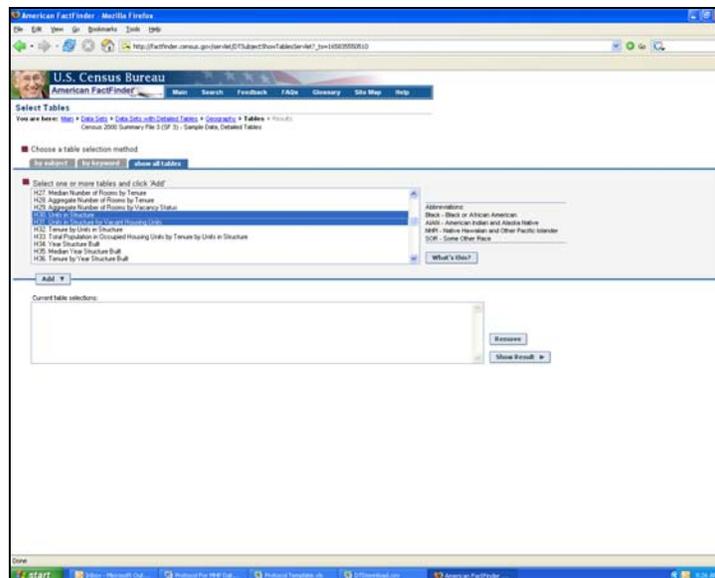
[http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds\\_name=DEC\\_2000\\_SF3\\_U& lang=en& ts=147707767812](http://factfinder.census.gov/servlet/DTGeoSearchByListServlet?ds_name=DEC_2000_SF3_U& lang=en& ts=147707767812).

Go to this website and under “Select a geographic type” choose “County.” The website will then prompt you to select a state. After you select your state, the website will generate a list of counties. Select all the counties that contain manufactured home parks, and then click the “Add” button. To select multiple counties at once, hold down the Control key while highlighting the counties you want. When you’re done making your selection, and all of the counties appear in the “Current geography selections” box at the bottom of the webpage, click “Next.”



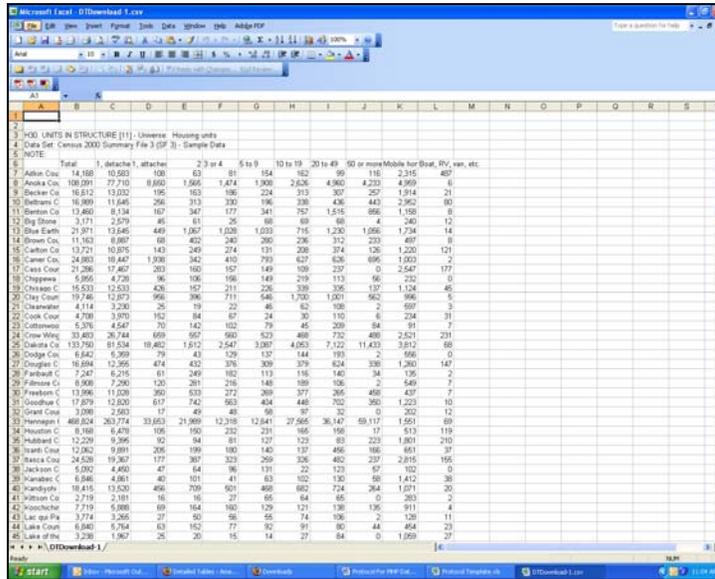
3) Select the following tables, and click “Add,” then “Show Result”:

- H30. Units in Structure
- H31. Units in Structure for Vacant Housing Units

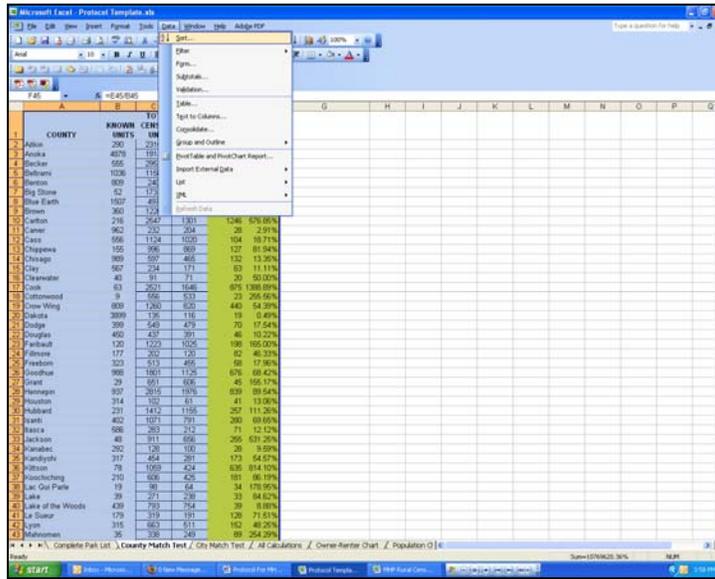


4) Go up to “Print/Download” tab and select “Download” from the drop-down menu.

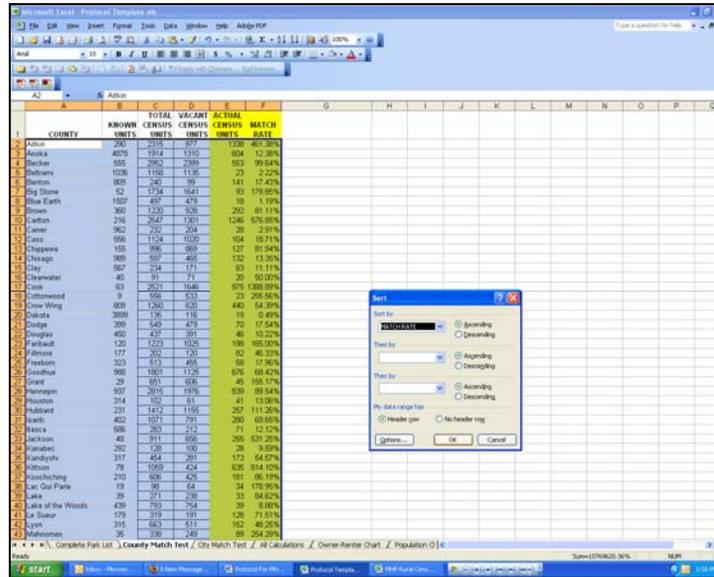




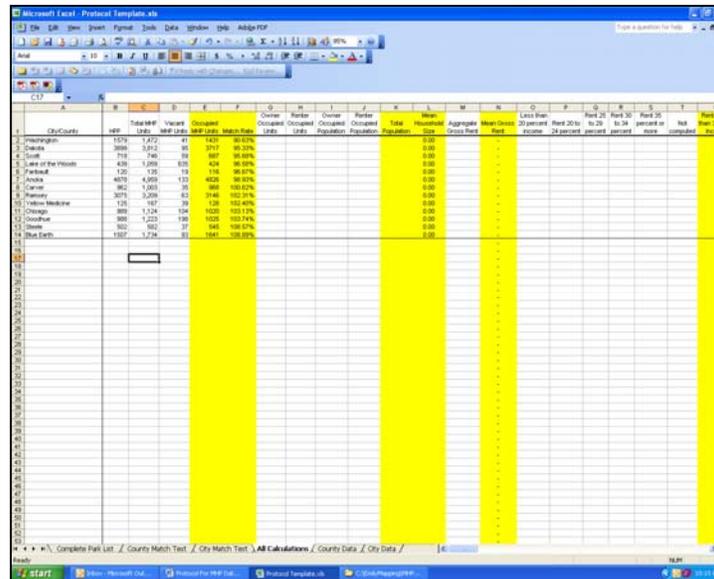
- 7) The template will automatically calculate the “Match Rate” column for you. Note that ALL yellow columns throughout the template will automatically calculate. Click in the upper right hand box (the one to the left of “A” and above “1”) to select your entire chart. The go up to “Data” and select “Sort” from the dropdown menu.



- 8) Under “Sort by” option, select “MATCH RATE.” If this is not an option, make sure that below you have chosen to have a header row. Click OK.

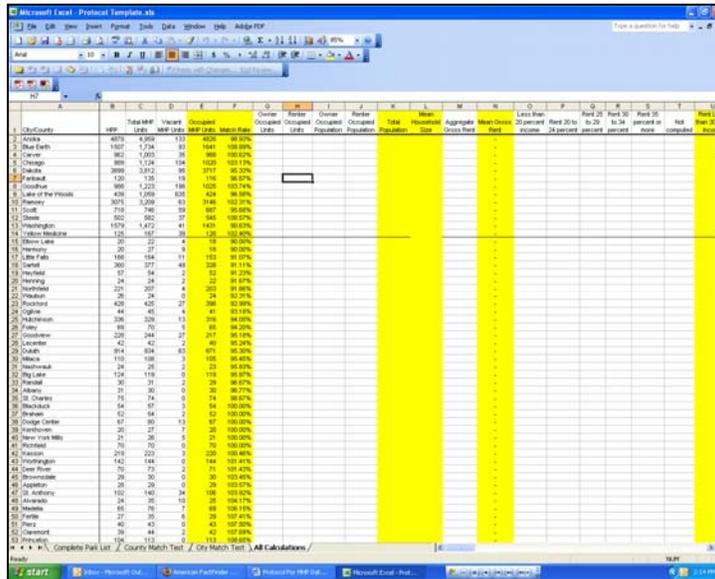
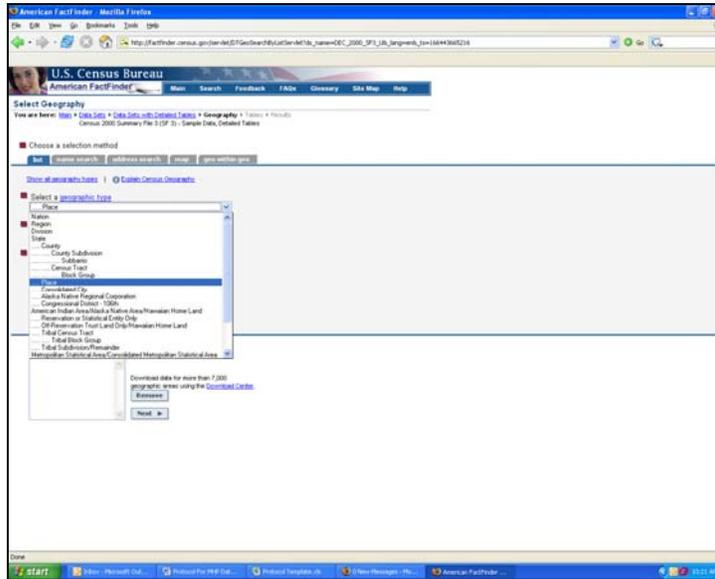


- Copy those counties with match rates between 90% and 110% into column A of the “All Calculations” tab of your spreadsheet. Then copy columns B-F into columns B-F. Draw a line underneath the counties you have pasted.



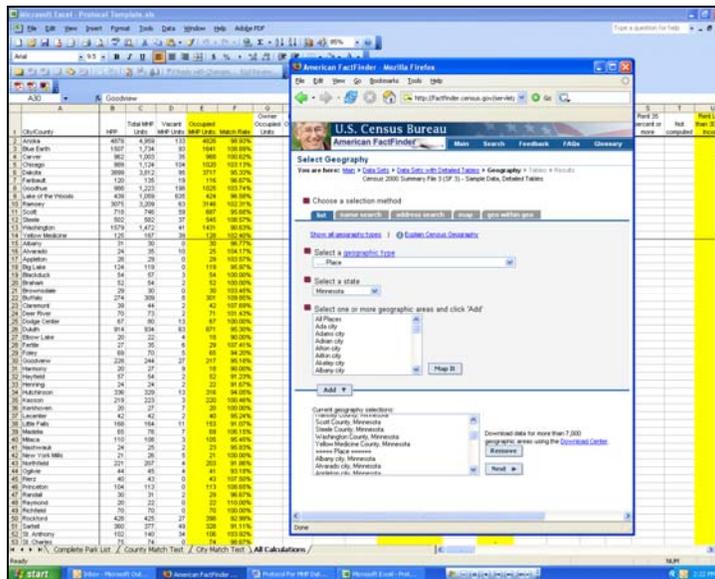
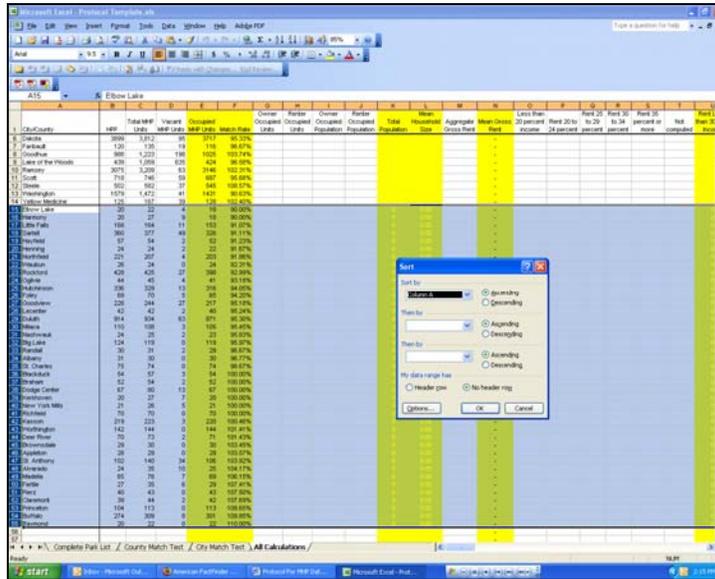
### TEST CITY MATCHES:

- Exclude all cities from your list that are located in the counties which you pasted into the “All Calculations” spreadsheet. If you do not exclude these cities, then you will double count certain areas, and thus throw off your data.
- Repeat the steps above, using city data instead of county data. Note that the census refers to city as “Place.”



## MANIPULATE CENSUS DATA:

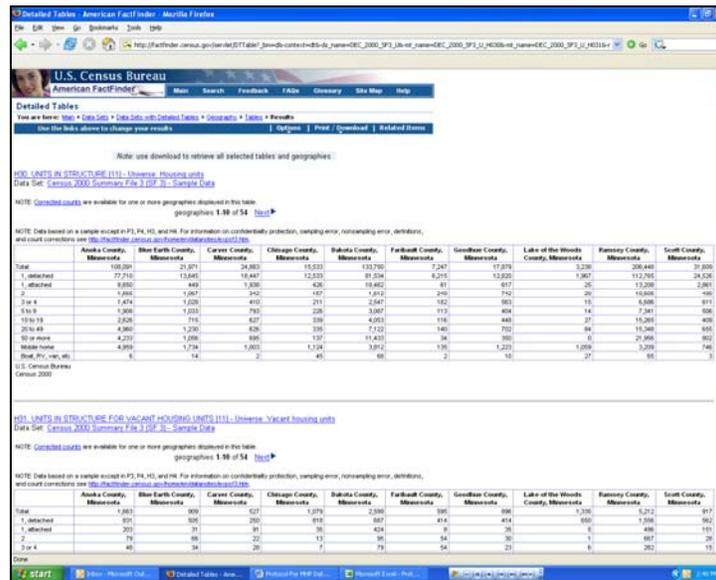
- 1) Reopen the website for summary file 3. Select all of the counties and cities you have listed on the “All Calculations” spreadsheet. In other words, choose everything that had a match rate of between 90% and 100%. To expedite this process, sort your list alphabetically, keeping the cities and counties separate.



2) Select the following tables, and click “Add” then “Show Result”:

- H30. Units in Structure
- H31. Units in Structure for Vacant Housing Units
- H32. Tenure by Units in Structure
- H33. Total Population in Occupied Housing Units by Tenure by Units in Structure
- H66. Aggregate Gross Rent (Dollars) by Units in Structure
- H72. Units in Structure by Gross Rent as a Percentage of Household Income in 1999
- H79. Aggregate Value (Dollars) for all Owner-Occupied Housing Units by Units in Structure
- HCT3. Tenure by Household Size by Units in Structure
- HCT4. Tenure by Age by Householder by Units in Structure
- HCT6. Tenure by Year Structure Built by Units in Structure

- HCT8. Tenure by Year Householder Moved into Unit by Units in Structure
- HCT14. Aggregate Household Income in 1999 (Dollars) by Tenure by Age of Householder by Units in Structure
- HCT30B. Units in Structure (Black Alone Householder)
- HCT30C. Units in Structure (American Indian or Alaska Native Alone Householder)
- HCT30D. Units in Structure (Asian Alone Householder)
- HCT30E. Units in Structure (Native Hawaiian or Other Pacific Islander Alone Householder)
- HCT30F. Units in Structure (Some Other Race Alone Householder)
- HCT30G. Units in Structure (Two or More Races Householder)
- HCT30H. Units in Structure (Hispanic Householder)
- HCT30I. Units in Structure (White Alone, Not Hispanic Householder)



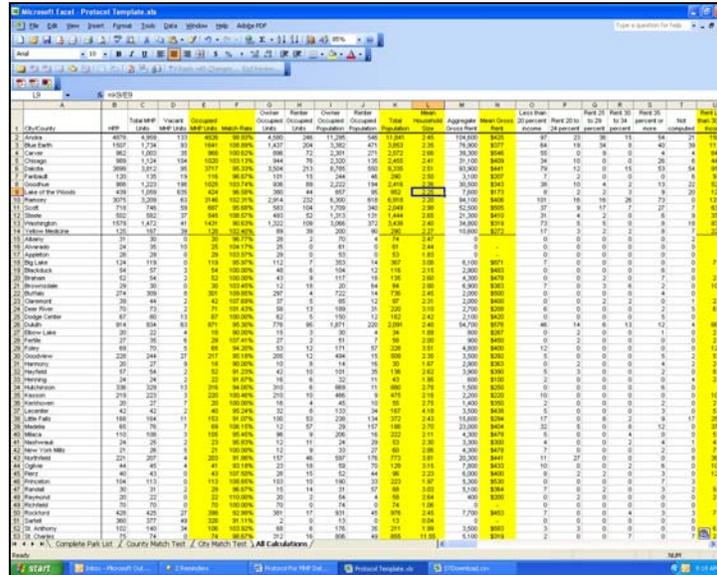
- 3) Go up to “Print/Download” tab and select “Download” form the drop-down menu. Select the second option on the list, “Comma delimited (.csv) (transpose rows and columns)” and then click “Ok.” Your downloaded file will be called DTDownload.csv.
- 4) The next thing that you need to do is a ton of copying from the new DTDownload.csv spreadsheet into the “All Calculations” spreadsheet. You’ll notice that as you fill in the white columns, the yellow ones automatically calculate themselves.

CENSUS SUMMARY FILE	“DTDownload.csv” COLUMN	“All Calculations” COLUMN
H32	L	G
H32	W	H
H33	L	I
H33	W	J
H66	H	M
H72	AM	O
H72	AN	P
H72	AO	Q

H72	AP	R
H72	AQ	S
H72	AR	T
H79	H	W
HCT3	J	Y
HCT3	R	Z
HCT3	Z	AA
HCT3	AH	AB
HCT3	AP	AC
HCT3	AY	AD
HCT3	BG	AE
HCT3	BO	AF
HCT3	BW	AG
HCT3	CE	AH
HCT4	J	AL
HCT4	R	AM
HCT4	Z	AN
HCT4	AH	AO
HCT4	AP	AP
HCT4	AX	AQ
HCT4	BF	AR
HCT4	BO	AS
HCT4	BW	AT
HCT4	CE	AU
HCT4	CM	AV
HCT4	CU	AW
HCT4	DC	AX
HCT4	DK	AY
HCT6	J	BC
HCT6	R	BD
HCT6	Z	BE
HCT6	AH	BF
HCT6	AP	BG
HCT6	AX	BH
HCT6	BF	BI
HCT6	BN	BJ
HCT6	BV	BK
HCT6	CE	BL
HCT6	CM	BM
HCT6	CU	BN
HCT6	DC	BO
HCT6	DK	BP
HCT6	DS	BQ
HCT6	EA	BR
HCT6	EI	BS
HCT6	EQ	BT

HCT8	J	BX
HCT8	R	BY
HCT8	Z	BZ
HCT8	AH	CA
HCT8	AP	CB
HCT8	AX	CC
HCT8	BG	CD
HCT8	BO	CE
HCT8	BW	CF
HCT8	CE	CG
HCT8	CM	CH
HCT8	CU	CI
HCT14	D	CM
HCT14	L	CN
HCT14	T	CO
HCT14	AC	CP
HCT14	AK	CQ
HCT14	AS	CR
HCT14	J	CS
HCT14	R	CT
HCT14	Z	CU
HCT14	AI	CV
HCT14	AQ	CW
HCT14	AY	CX
HCT4	D	CY
HCT4	L	CZ
HCT4	T	DA
HCT4	AB	DB
HCT4	AJ	DC
HCT4	AR	DD
HCT4	AZ	DE
HCT4	BI	DF
HCT4	BQ	DG
HCT4	BY	DH
HCT4	CG	DI
HCT4	CO	DJ
HCT4	CW	DK
HCT4	DE	DL
HCT30B	B	DY
HCT30B	K	DZ
HCT30C	B	EB
HCT30C	K	EC
HCT30D	B	EE
HCT30D	K	EF
HCT30E	B	EH
HCT30E	K	EI

HCT30F	B	EK
HCT30F	K	EL
HCT30G	B	EN
HCT30G	K	EO
HCT30H	B	EQ
HCT30H	K	ER
HCT30I	B	ET
HCT30I	K	EU



5) A few notes on what the data in the calculated rows means:

COLUMN	MEANING
E	This is one measure of how accurate your data is. The closer to exactly 100%, the better.
F	This tells you how many homes/households there are. Note that totaling this column would only tell you how many units there are in your selected data set, not in the entire state.
K	This tells you the total number of people living in manufactured home communities. Note that totaling this column would only tell you how many people there are in your selected data set, not in the entire state.
L	This tells you the average (mean) household size.
N	This tells you the average (mean) rent for those who rent both their home and the land it sits on. This is different than lot rent, and represents a relatively small portion of people living in manufactured home communities.
U	This tells you how many people are paying less than 30% of their total income towards rent. 30% is the standard cutoff that measures affordability. Again, note that this only applies to people who rent both their home and the land it sits on.
V	This tells you how many people are paying more than 30% of their total income towards rent. 30% is the standard cutoff that measures affordability. Again, note that this only applies to people who rent both their home and the land it

	sits on, and therefore represents a relatively small portion of people living in manufactured home communities.
X	This represents the average (mean) value of the homes themselves. Note that this is the homeowners own estimate of how much the home would sell for if it were for sale.
AI	This tells you how many households have only one occupant.
AJ	This tells you how many households have two occupants. If these occupants are related, then this falls under the census definition of “family housing.” Unfortunately, the census data does not give you a way to determine if people are related.
AK	This tells you how many households have three of more occupants. If these occupants are related, then this falls under the census definition of “family housing.” Unfortunately, the census data does not give you a way to determine if people are related.
AZ	This tells you how many heads of households are under age 35. Note that this unfortunately does not tell you the total number of people living in the house in that age range.
BA	This tells you how many heads of households are between the ages of 35 and 55. Note that this unfortunately does not tell you the total number of people living in the house in that age range.
BB	This tells you how many heads of households are aged 55 and older. This is generally considered the cutoff for senior citizens. Note that this unfortunately does not tell you the total number of people living in the house in that age range.
BU	This tells you how many homes are less than 10 years old.
BV	This tells you how many homes are between 10 and 20 years old. Many parks will not accept homes that are over 10 years old.
BW	This tells you how many homes are more than 20 years old. Many parks will not accept homes that are over 10 years old.
CJ	This tells you that the current occupant of the home has lived there for less than five years. HUD’s study “Is Manufactured Housing a Good Alternative for Low Income Families?” found that, despite stereotypes, the average tenure for those living in manufactured housing is longer than for those living in rental housing.
CK	This tells you that the current occupant of the home has lived there for between 5 and 10 years. HUD’s study “Is Manufactured Housing a Good Alternative for Low Income Families?” found that, despite stereotypes, the average tenure for those living in manufactured housing is longer than for those living in rental housing.
CL	This tells you that the current occupant of the home has lived there for more than ten years. HUD’s study “Is Manufactured Housing a Good Alternative for Low Income Families?” found that, despite stereotypes, the average tenure for those living in manufactured housing is longer than for those living in rental housing.
DM	This tells you how many heads of households for ALL housing types are under age 35. This data is only calculated so that we will be able to compare mean income levels.

DN	This tells you how many heads of households for ALL housing types are between the ages of 35 and 65. This data is only calculated so that we will be able to compare mean income levels.
DO	This tells you how many heads of households for ALL housing types are aged 65 and older. This data is only calculated so that we will be able to compare mean income levels.
DP	This tells you how many heads of households for manufactured housing are under age 35.
DQ	This tells you how many heads of households for manufactured housing are between the ages of 35 and 65. Note that this is a different age division than above.
DR	This tells you how many heads of households for manufactured housing are aged 65 and older. Note that this is a different age division than above.
DS	This tells you the average (mean) income for ALL housing types that are headed by householders under age 35.
DT	This tells you the average (mean) income for ALL housing types that are headed by householders between the ages of 35 and 65.
DU	This tells you the average (mean) income for ALL housing types that are headed by householders aged 65 and older.
DV	This tells you the average (mean) income for manufactured housing that is headed by householders under age 35.
DW	This tells you the average (mean) income for manufactured housing that is headed by householders between the ages of 35 and 65.
DX	This tells you the average (mean) income for manufactured housing that is headed by householders aged 65 and older.
EA	This calculates the number of African-American people living in housing types beside manufactured housing. The purpose of this calculation is so that it is possible to create a pie chart showing what percentage of Asian-American people live in manufactured housing.
ED	This calculates the number of African-American people living in housing types beside manufactured housing. The purpose of this calculation is so that it is possible to create a pie chart showing what percentage of Native-American people live in manufactured housing.
EG	This calculates the number of Asian-American people living in housing types beside manufactured housing. The purpose of this calculation is so that it is possible to create a pie chart showing what percentage of Asian-American people live in manufactured housing.
EJ	This calculates the number of Pacific-Islanders living in housing types beside manufactured housing. The purpose of this calculation is so that it is possible to create a pie chart showing what percentage of the Pacific-Islander population lives in manufactured housing.
EM	This calculates the number of "other" people living in housing types beside manufactured housing. The purpose of this calculation is so that it is possible to create a pie chart showing what percentage of the "other" people live in manufactured housing. This is a self-selecting census category, presumably meaning "none of the above."
EP	This calculates the number of multiracial people living in housing types beside

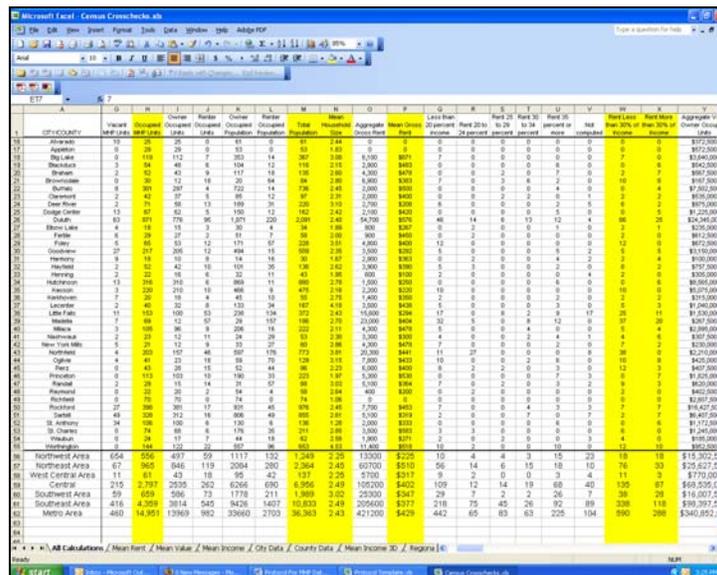
	manufactured housing. The purpose of this calculation is so that it is possible to create a pie chart showing what percentage of multiracial people live in manufactured housing.
ES	This calculates the number of Latino (Hispanic) people living in housing types beside manufactured housing. The purpose of this calculation is so that it is possible to create a pie chart showing what percentage of Latino people live in manufactured housing.
EV	This calculates the number of white people living in housing types beside manufactured housing. The purpose of this calculation is so that it is possible to create a pie chart showing what percentage of white people live in manufactured housing.
EW	This calculates the number of manufactured households headed by people of color. This is the sum of all of the categories besides “white.”

5) The template creates numerous charts for you.

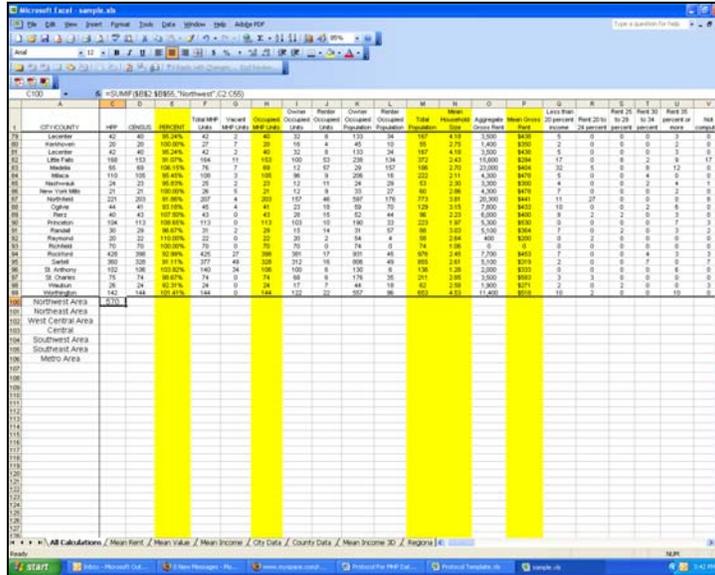
### MAKING YOUR DATA MORE SPECIFIC:

One way to make your data more specific is to divide it up into regions. Most housing finance agencies already have standard regional divisions, and the data is available on their websites. The regions tend to be divided along county lines.

- 1) The last column in the template says “Region.” The fastest way to figure this out is actually by hand. It is possible to do in Excel using “if” functions, but they are pretty complex functions and probably don’t save time in the long run. Once you’ve manually filled in all of the regions, it is relatively easy to figure out values for them.
- 2) Draw a line under row 100. Starting in row 101, type the name of each region in Column A. Note that doing this in rows 1-100 will mess up the chart calculations, so it important that you do this in row 101.



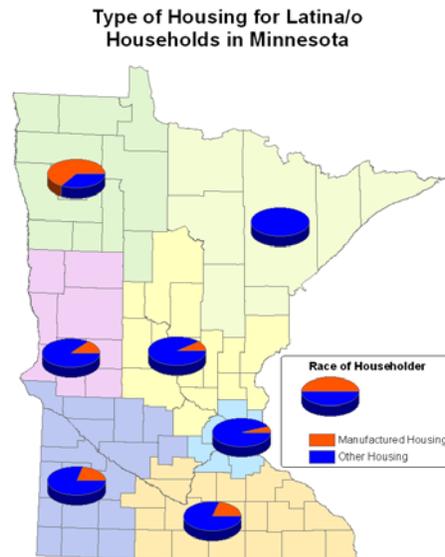
- In all of the WHITE columns you'll want to create a "sum if" function. Your function will look something like "`=SUMIF($EX$2:$EX$100,"Region Name",?2:?100)`" In place of Region Name though, you should type the name of the first region exactly how you typed it in column EX. In place of the question marks, type the letter of the column you are calculating.



- Once you have creating this function in cell B101, you can copy and paste it into all the white cells in row 101. To copy, highlight the cell (or cells) you want to copy and hit Ctrl and C simultaneously. To paste, highlight the cell (or cells) you want to paste into and hit Ctrl and V simultaneously. The letter of the column you are calculating will automatically change for you.
- Repeat this step in each subsequent row until you have listed and created functions for all of your regions.
- To fill in calculations for the yellow rows of each region, simply paste the function from row 100 of the same column.

## Mapping:

Mapping the demographic information you've now calculated is both possible and useful. Visuals are always powerful policy tools. In addition, regional mapping allows you to more easily analyze and hence target your advocacy work. Here's an example of what you can do. The orange sections of the pie charts show Latino people living in manufactured home parks, and the blue sections show Latino people living in all other housing types.



Though this is a great idea on paper, in practice mapping requires significant investments of money, staff time, and training. Though there are an increasing number of online mapping programs, they don't allow you to do many of the necessary functions for this type of work. The software that does is quite expensive, as is the training on how to use it. The program is not intuitive. For those already familiar with mapping software, the basic process for mapping this demographic data using ArcView software is listed below:

- 1) Aggregate applicable census data by region. This is done in Excel and then transferred to a database format.
- 2) Download shapefiles for cities and counties in your state.
- 3) Manually use the selection tool to create the regions you want to use as new layers.
- 4) Create an address locator that allows you to geocode data by region.
- 5) Geocode your database of census data using your new address locator.
- 6) Use the symbology functionality to create pie charts.