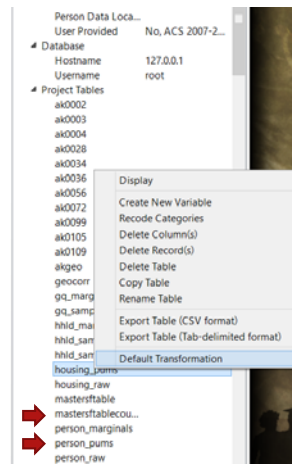


3

## Default Transformation

- ▶ When working with census data, the following default transformations need to be carried out on the raw files in order to prepare input data for PopGen
  - ❑ Right-click on *housing\_pums* under 'Project Tables' in the File Manager
  - ❑ Select **Default Transformation** at the bottom
  - ❑ The default transformation will take a few moments to complete
  - ❑ Repeat this step for 'person\_pums' and 'mastersfblecounty' also located under 'Project Tables'



4

## Default Transformation

Default Control Variables from Census Data

Household	Person	Group quarter
Household Income	Employment Status*	Institutional Group Quarter
Household Size	Age	Non-institutional Group Quarter
Presence of Children*	Gender	
# Workers in the Household*	Race	
Householder Age		
Household Type		

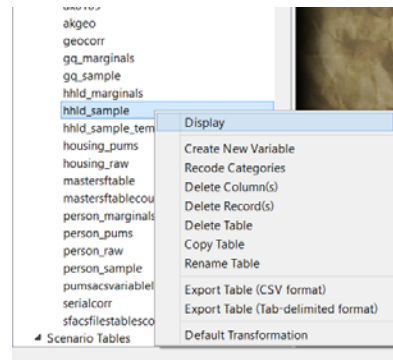
Marginal data not available at the census block-group level

**Note:** Detailed information regarding the control variables is available at the end of this presentation.

5

## Displaying a Data Table

- ▶ Right-click the table of your choice under '*Project Tables*' or '*Scenario Tables*' in the File Manager
- ▶ Select **Display** to open the data table
- ▶ You can view the descriptives or frequencies by clicking on the appropriate button



6

## Displaying a Data Table

Data Table - hhld\_sample

	state	pumano	hhid	serialno	hhldtype	hhldinc	hhldsize	ch
1	2	400	1	1	2	7	4	1
2	2	102	2	2	1	6	3	2
3	2	200	3	3	4	3	1	2
4	2	200	4	4	1	8	4	1
5	2	102	6	6	3	5	2	2
6	2	400	7	7	5	6	2	2
7	2	400	8	8	5	4	2	2
8	2	400	9	9	1	6	5	1
9	2	101	10	10	3	6	2	2
10	2	200	12	12	1	7	2	2
11	2	300	13	13	2	6	3	1
12	2	102	14	14	3	6	5	1
13	2	400	15	15	3	5	2	1
14	2	101	16	16	1	4	2	2
15	2	102	17	17	1	8	4	1

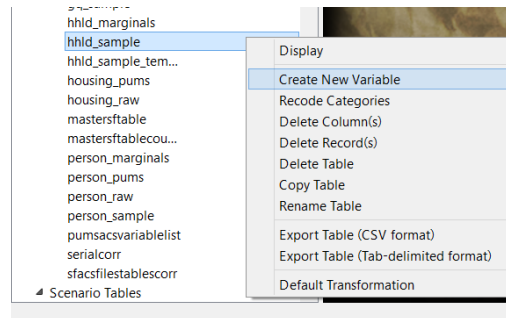
Output

OK Cancel

7

## Create a New Variable

- ▶ Right-click the table of your choice under '*Project Tables*' or '*Scenario Tables*' in the File Manager
- ▶ Select **Create New Variable** from the list
- ▶ Give a name to the new variable



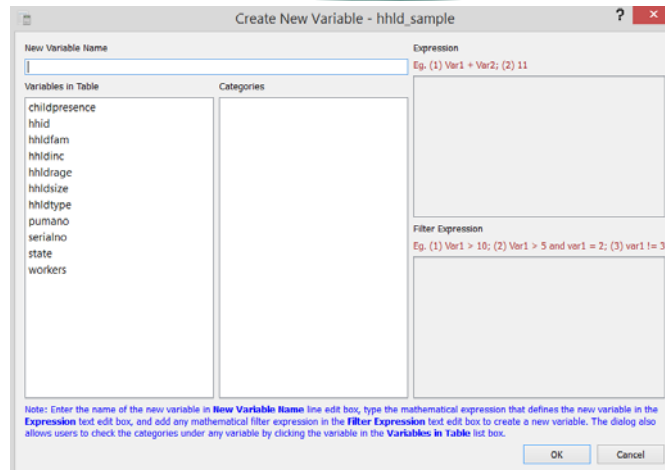
8

## Create a New Variable

- ▶ Define the new variable by giving it a mathematical expression in the '*Expression*' text box
- ▶ Add any mathematical filter expressions in the '*Filter Expression*' text box
- ▶ You can also reference the different categories of each variable by clicking the variable

9

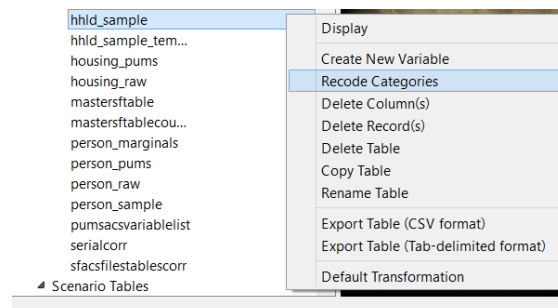
## Create a New Variable



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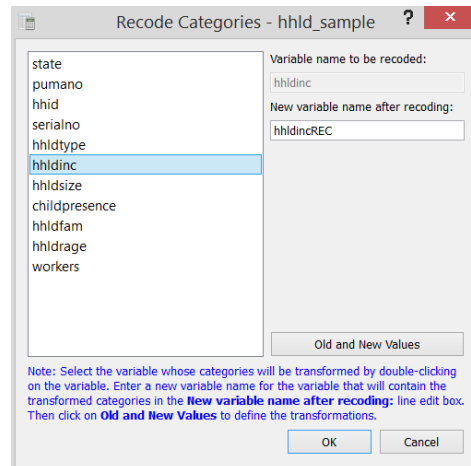
## Recode Categories

- ▶ Right-click the table of your choice under 'Project Tables' or 'Scenario Tables' in the File Manager
- ▶ Select **Recode Categories** from the list
- ▶ Double-click the variable you wish to recode
- ▶ Give a new name to the variable being recoded



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## Recode Categories



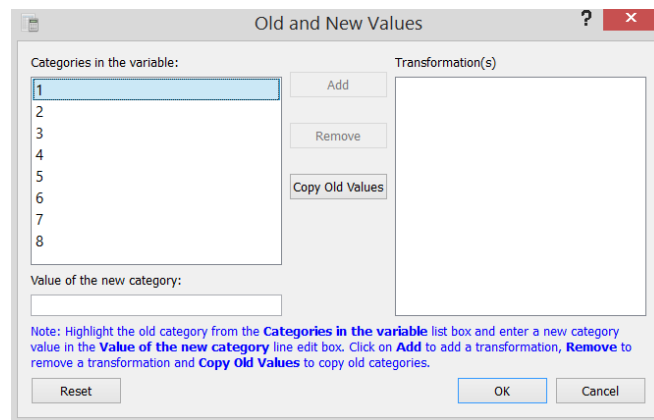
12

## Recode Categories

- ▶ Click **Old and New Values** to define the transformations
- ▶ Highlight the old category in the '*Categories in the Variable*' text box and assign it a new value in the '*Value of the New Category*' text box
- ▶ Click **Add** to add the transformation and repeat, if necessary, for other categories
- ▶ When all your transformations are shown in the '*Transformation*' text box, click **OK**

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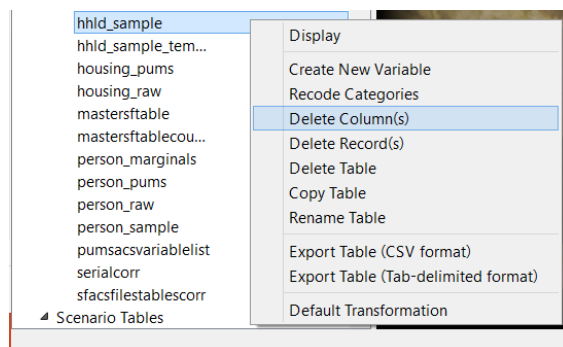
## Recode Categories



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## Delete a Column

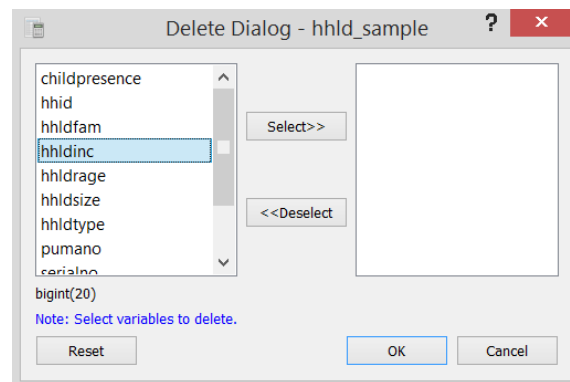
- ▶ Right-click the table of your choice under '*Project Tables*' or '*Scenario Tables*' in the File Manager
- ▶ Select **Delete Column(s)** from the list
- ▶ Choose the variable(s) from the list that you wish to delete and click **Select**
- ▶ Click **OK** to continue





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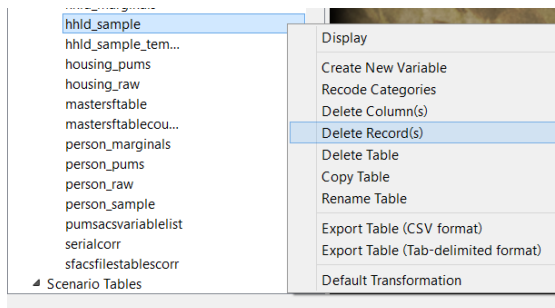
## Delete a Column



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## Delete Records

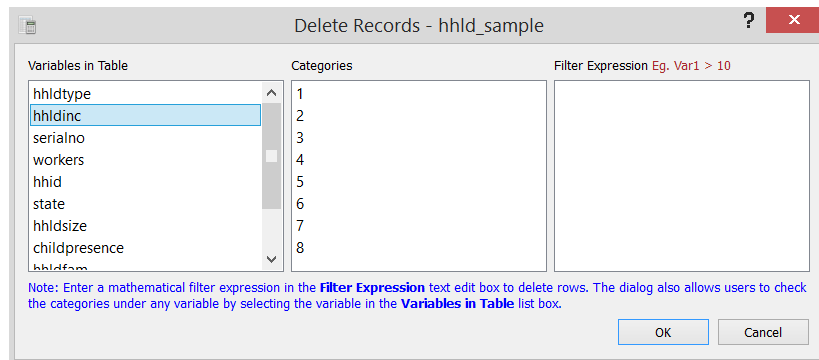
- ▶ Right-click the table of your choice under 'Project Tables' or 'Scenario Tables' in the File Manager
- ▶ Select **Delete Record(s)** from the list
- ▶ Enter a mathematical filter expression in the 'Filter Expression' text box to delete rows
- ▶ Click **OK** when you are finished





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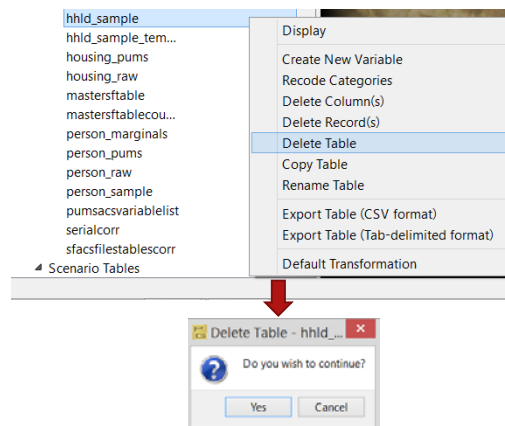
## Delete Records



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## Delete a Data Table

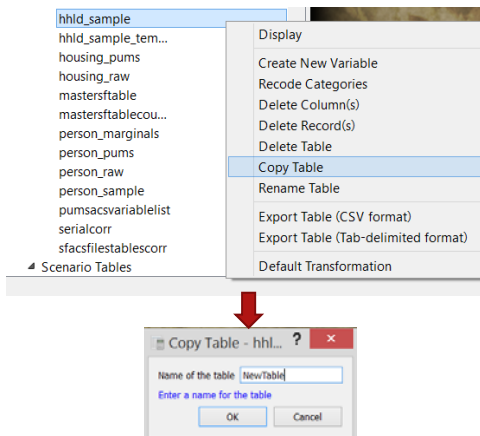
- ▶ Right-click the table of your choice under 'Project Tables' or 'Scenario Tables' in the File Manager
- ▶ Select **Delete Table** from the list
- ▶ A prompt window will appear asking if you wish to continue with the deletion
- ▶ Click **Yes** if you are sure that you want to delete the data table



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## Copy a Data Table

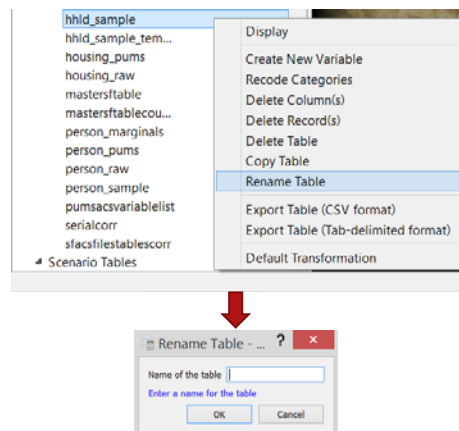
- ▶ Right-click the table of your choice under '*Project Tables*' or '*Scenario Tables*' in the File Manager
- ▶ Select **Copy Table** from the list
- ▶ Enter a name for the table and click **OK**



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## Rename a Data Table

- ▶ Right-click the table of your choice under '*Project Tables*' or '*Scenario Tables*' in the File Manager
- ▶ Select **Rename Table** from the list
- ▶ Enter a new name for the table and click **OK**



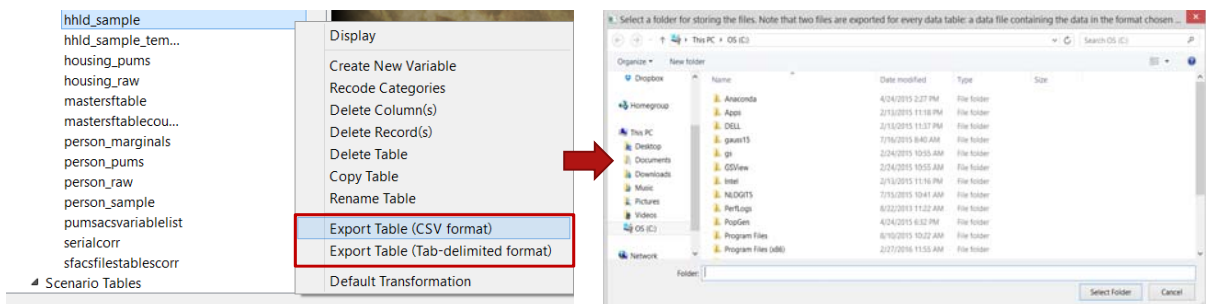
21

## Exporting Data Tables

- ▶ Right-click the table of your choice under 'Project Tables' or 'Scenario Tables' in the File Manager
- ▶ Select either *Export Table (CSV format)* or *Export Table (Tab delimited format)* from the list
- ▶ Browse for a folder where you would like to save the data table and click **OK**

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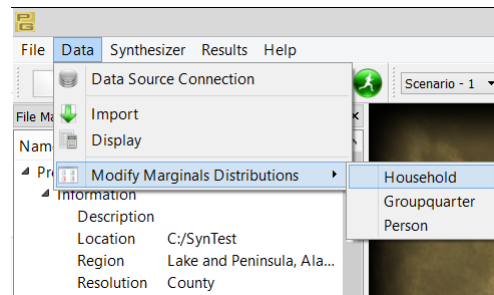
## Exporting Data Tables



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## Modify Marginal Distributions

- ▶ Go to “Data → Modify Marginals Distributions → Household” in the menu bar at the top



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## Modify Marginal Distributions

- ▶ Select a geography ID from the drop down menu and then select a household variable from the '*Variables in Table*' list box to modify the marginals distribution for the variable
- ▶ Modify the marginals by moving the slider or adjusting the spin box

*Note:* The modified marginals total and the actual total need to remain the same.

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## Modify Marginal Distributions

Modify Household Marginals Distributions

Geography ID: 2,100,000

Variables in Table: hhstype, hhsize, workers, hhinc, childpresence, hhage

Category - 1: Act 388, Adj 388

Category - 2: Act 473, Adj 473

Category - 3: Act 88, Adj 88

Category - 4: Act 158, Adj 158

Category - 5: Act 38, Adj 38

Category - 6: Act 13, Adj 13

Category - 7: Act 0, Adj 0

Actual Total: 1176  
Adjusted Total: 1176

Add to Scenario Delete from Scenario

Select a geography ID from the Geography ID drop down menu and select a household variable from the Variables in Table list box to modify the marginals distribution for the variable. Marginals can be modified by using the slider or the spin box. Note that the modified marginals total and the actual total should remain the same. After modifying the marginals, click on Add to Scenario to use the modified marginals for the selected geography. Note that if you modify household marginals here and also choose to adjust/modify the household control variable distributions in the Set Correspondence Variables option, the modified marginals from the later option will be used. However for groupquarter and person control variable distributions the modified marginals from this option are used.

OK Cancel

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## Modify Marginal Distributions

- ▶ After modifying the variables, click **Add Scenario** to use the modified marginals for the selected geography
- ▶ If you modify household marginals here and also choose to adjust/modify the household control variable distributions in the Set Correspondence Variables option, the modified marginals from the later option will be used
- ▶ However, for groupquarter and person control variable distributions, the modified marginals from this option are used

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## Modify Marginal Distributions

Geography ID: 2,100,0,0

Variables in Table:

- HhType
- HhSize
- workers
- HhInc
- chidpresence
- hhdrage

Modify:

Category - 1: Act: 396, Adj: 491

Category - 2: Act: 473, Adj: 246

Category - 3: Act: 98, Adj: 193

Category - 4: Act: 138, Adj: 93

Category - 5: Act: 38, Adj: 149

Category - 6: Act: 13, Adj: 13

Category - 7: Act: 8, Adj: 8

Actual Total - 1176  
Adjusted Total - 1176

Add to Scenario Delete from Scenario

2,100,0,0/HhSize-[396, 473, 98, 138, 38, 13, 0]-->[491, 246, 193, 93, 149, 13, 0]

Select a geography ID from the Geography ID drop down menu and select a household variable from the Variables in Table list box to modify the marginals distribution for the variable. Marginals can be modified by using the slider or the spin box. Note that the modified marginals total and the actual total should remain the same. After modifying the marginals, click on Add to Scenario to use the modified marginals for the selected geography. Note that if you modify household marginals here and also choose to adjust/modify the household control variable distributions in the Set Correspondence Variables option, the modified marginals from the later option will be used. However for groupquarter and person control variable distributions the modified marginals from this option are used.

OK Cancel

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## Dictionary of Default Control Variables

### Default Control Variables at the Household Level

Variable Label	Value	Variable Label	Value
<b>Household Type</b>		<b>Household Size</b>	
Married Couple	1	1 Person	1
Male Householder, No Wife	2	2 Persons	2
Female Householder, No Husband	3	3 Persons	3
Householder Alone	4	4 Persons	4
Householder Not Alone	5	5 Persons	5
<b>Number of Workers in Household*</b>		6 Persons	6
No workers	1	≥ 7 Persons	7
1 worker	2	<b>Household Family Type</b>	
2 workers	3	Family	1
≥ 3 workers	4	Non-family	2

\* Marginal data not available at the census block-group level

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## Dictionary of Default Control Variables

### Default Control Variables at the Household Level

Variable Label	Value	Variable Label	Value
<b>Household Income</b>		<b>Children Presence*</b>	
\$0 - \$14,999	1	Yes	1
\$15,000 - \$24,999	2	No	2
\$25,000 - \$34,999	3	<b>Householder Age</b>	
\$35,000 - \$44,999	4	Age ≤ 64 years	1
\$45,000 - \$59,999	5	Age ≥ 65 years	2
\$60,000 - \$99,999	6	<b>Group Quarter</b>	
\$100,000 - \$149,999	7	Institutional Groupquarter	1
≥ \$150,000	8	Non-Institutional Groupquarter	2

\* Marginal data not available at the census block-group level

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## Dictionary of Default Control Variables

### Default Control Variables at the Person Level

Variable Label	Value	Variable Label	Value
<b>Gender</b>		<b>Employment Status*</b>	
Male	1	Not Employed	1
Female	2	Employed	2
		Unemployed	3
		Not in Labor Force	4
<b>Race</b>			
White	1	Native Hawaiian and Other Pacific Islander	5
Black or African American	2	Some Other Race	6
American Indian and Alaska Native	3	Two or More Races	7
Asian	4		

\* Marginal data not available at the census block-group level



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## Dictionary of Default Control Variables

### Default Control Variables at the Person Level

Variable Label	Value	Variable Label	Value
<b>Age</b>			
< 5 years	1	45 - 54 years	6
5 - 14 years	2	55 - 64 years	7
15 - 24 years	3	65 - 74 years	8
25 - 34 years	4	75 - 84 years	9
35 - 44 years	5	≥ 85 years	10

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Thank You!