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Viewing Results

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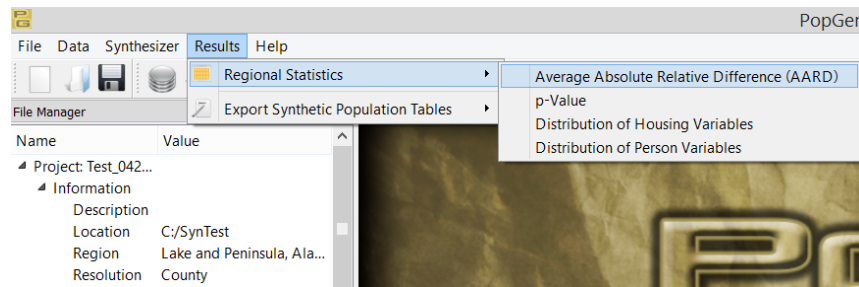
Average Absolute Relative Difference

- ▶ The Average Absolute Relative Difference (AARD) chart displays the distribution of the AARD across all geographies for which a synthetic population was generated
- ▶ The AARD measure gives the average deviation of the person weighted sums with respect to composite person type constraints
- ▶ The AARD is also used to monitor convergence in the Iterative Proportional Updating (IPU) algorithm of PopGen

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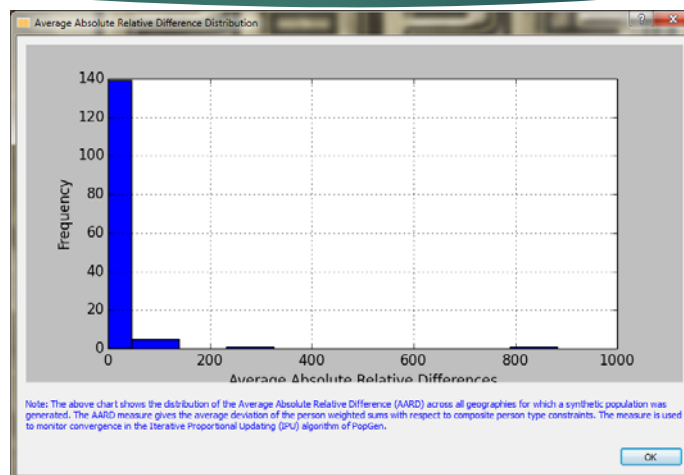
Average Absolute Relative Difference

- Go to “Results → Regional Statistics → Average Absolute Relative Difference (AARD)” on the menu bar at the top



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Average Absolute Relative Difference



p-Value

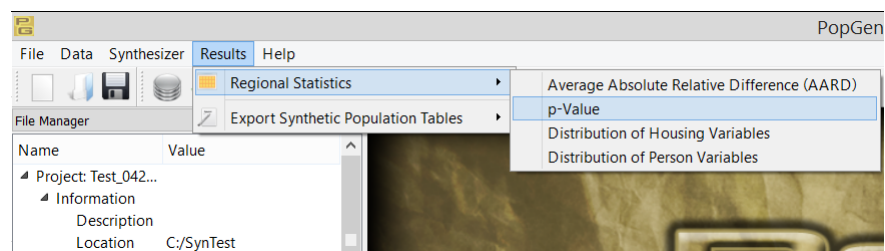
7

- ▶ The p-Value chart shows the distribution of the p-value across all geographies for which a synthetic population was generated
- ▶ The p-value gives the confidence level at which the chosen synthetic population statistically matches the composite person type constraints

p-Value

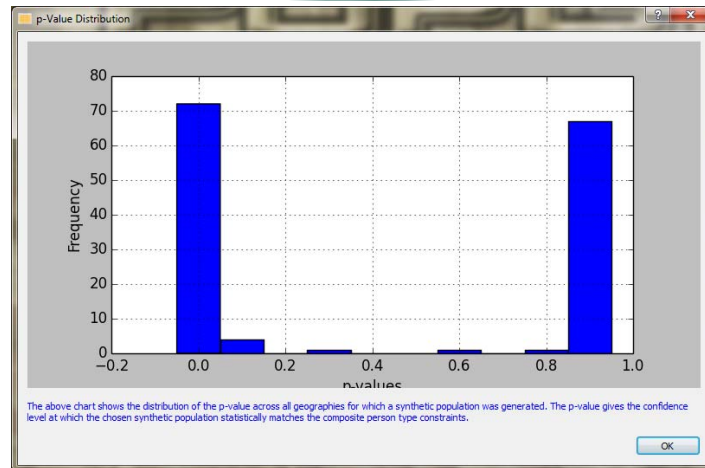
8

- ▶ Go to "*Results → Regional Statistics → p-Value*" in the menu bar at the top



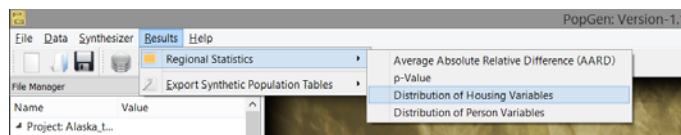
p-Value

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Distribution of Housing Variables

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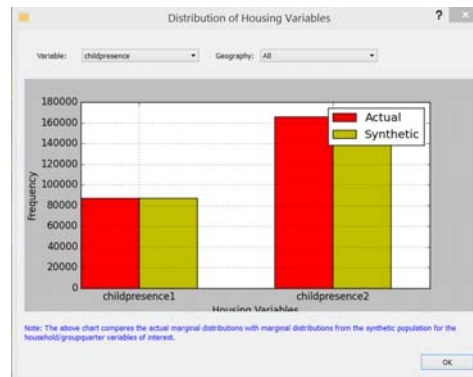


To see how the characteristics of the synthetic population match with the marginal totals, go to "Results → Regional Statistics → Distribution of Housing/Person variables"

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Distribution of Housing Variables

- Select housing variables option. A window as shown below will pop up



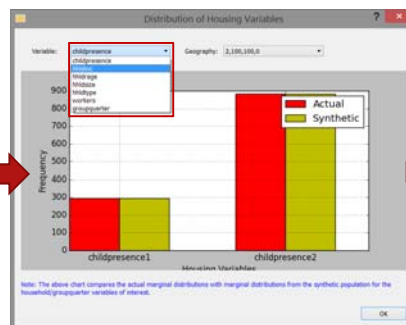
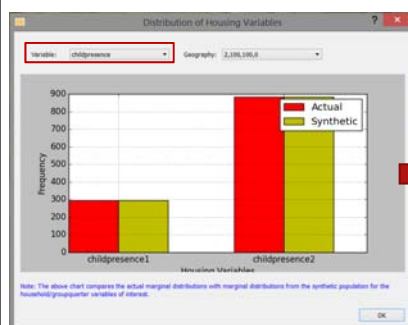
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Distribution of Housing Variables

Child Presence

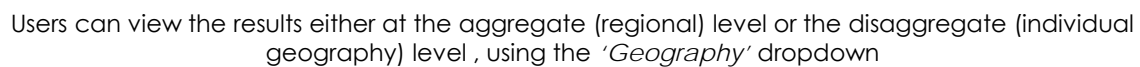
Select Variable from Dropdown

Household Income



Users can compare marginal and synthetic population distributions using the 'Variable' dropdown

Individual Geography Level



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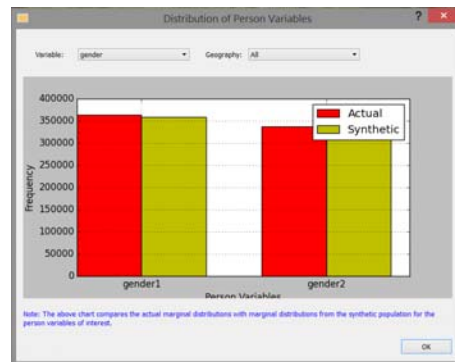
- Click **OK**, when done



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Distribution of Person Variables

- ▶ Person level distributions can be compared by choosing, *"Results → Regional Statistics → Distribution of Person variables"*



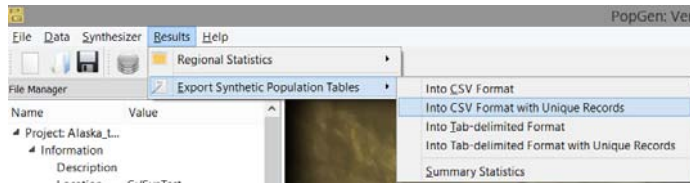
For larger synthetic populations, the person level queries might take some time to execute. This is 'OK'.

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Exporting Synthetic Population Tables

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Exporting Synthetic Population Tables



To export synthetic population data, go to "Results → Export Synthetic Population Tables → Into CSV Format with Unique Records"

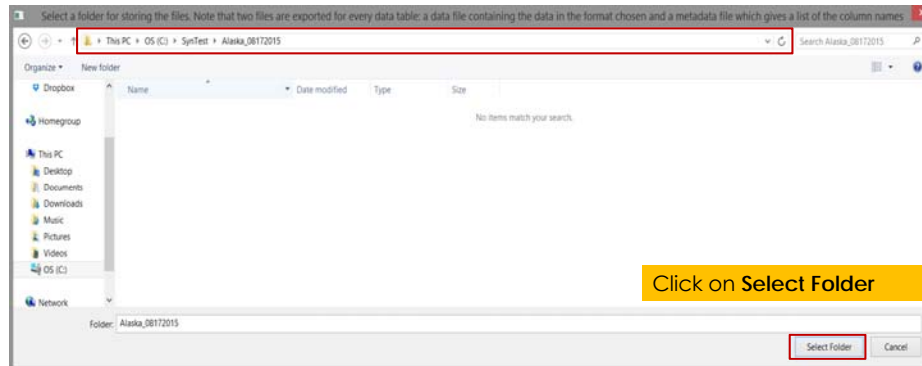
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Exporting Synthetic Population Tables

- ▶ The options 'Into CSV Format with Unique Records (1)' and 'Into CSV Format (2)' essentially point to the same synthetic population
- ▶ In the first (1) case, the resultant file will have a unique record for each household/person in the synthetic population
- ▶ In the second(2) case, a representative population file will be downloaded, with a weight variable (labeled 'frequency') appended to each record pointing to the number of such records in the synthetic population
- ▶ It is advised that the user's download the file with unique records for completeness
- ▶ The files mentioned above can also be downloaded in 'tab-delimited' format by selecting the corresponding option

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Exporting Synthetic Population Tables

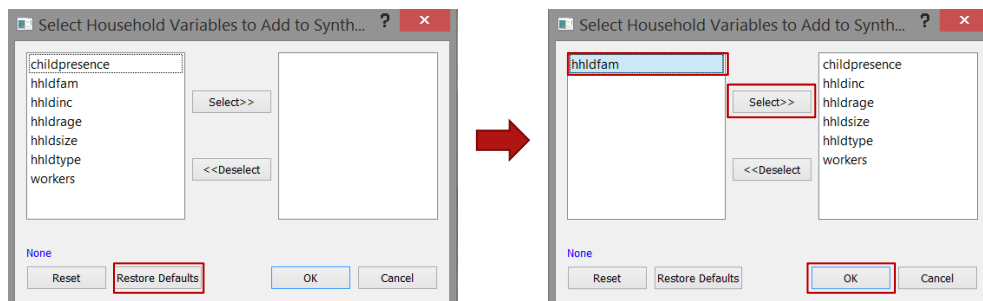


- Select a folder for storing files. Note that two files will be exported for every data table; one file containing the data and a metadata file which gives a list of the column names in the first file

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Exporting Synthetic Population Tables

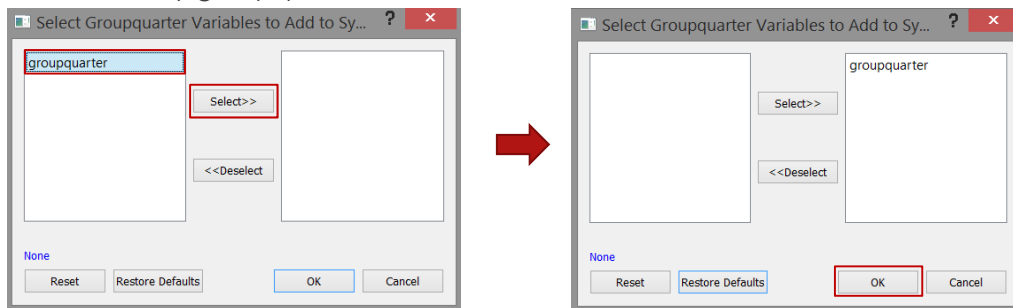
- In the resulting window, click on **Restore Defaults** and then click **OK**
- If the user wishes to select only a few variables for the synthetic population, It can be done by clicking on the variable of interest and clicking **Select**



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Exporting Synthetic Population Tables

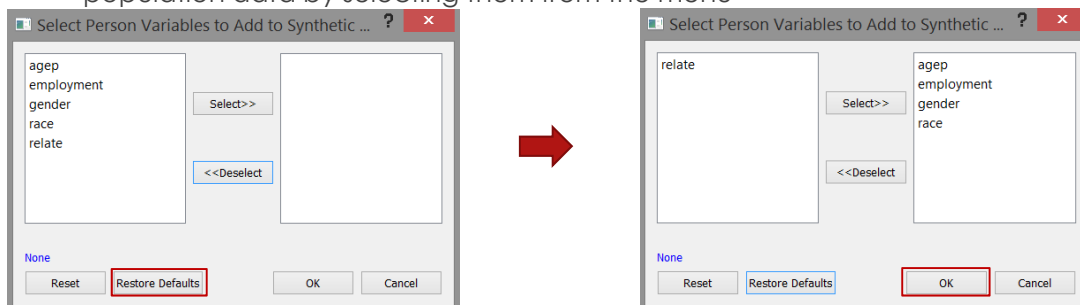
- Repeat the same for groupquarters. Note that groupquarter households will be included in the synthetic household file with a column (labeled 'groupquarter') to identify groupquarters



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Exporting Synthetic Population Tables

- Repeat the same (restore defaults) for person level synthetic data
- If any uncontrolled variables are available, they can be added to the synthetic population data by selecting them from the menu



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Exporting Synthetic Population Tables

- ▶ The data folder that the user selected will be populated with four files

- ▶ Two data files
- ▶ Two metadata files pointing to the names of the columns in the corresponding data files

<input checked="" type="checkbox"/>	housing_synthetic_data.csv	8/17/2015 3:06 PM	Microsoft Excel Co...	13,046 KB
<input checked="" type="checkbox"/>	person_synthetic_data.csv	8/17/2015 3:14 PM	Microsoft Excel Co...	29,720 KB
<input checked="" type="checkbox"/>	housing_synthetic_data_meta.txt	8/17/2015 3:06 PM	Text Document	1 KB
<input checked="" type="checkbox"/>	person_synthetic_data_meta.txt	8/17/2015 3:14 PM	Text Document	1 KB

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Thank You!