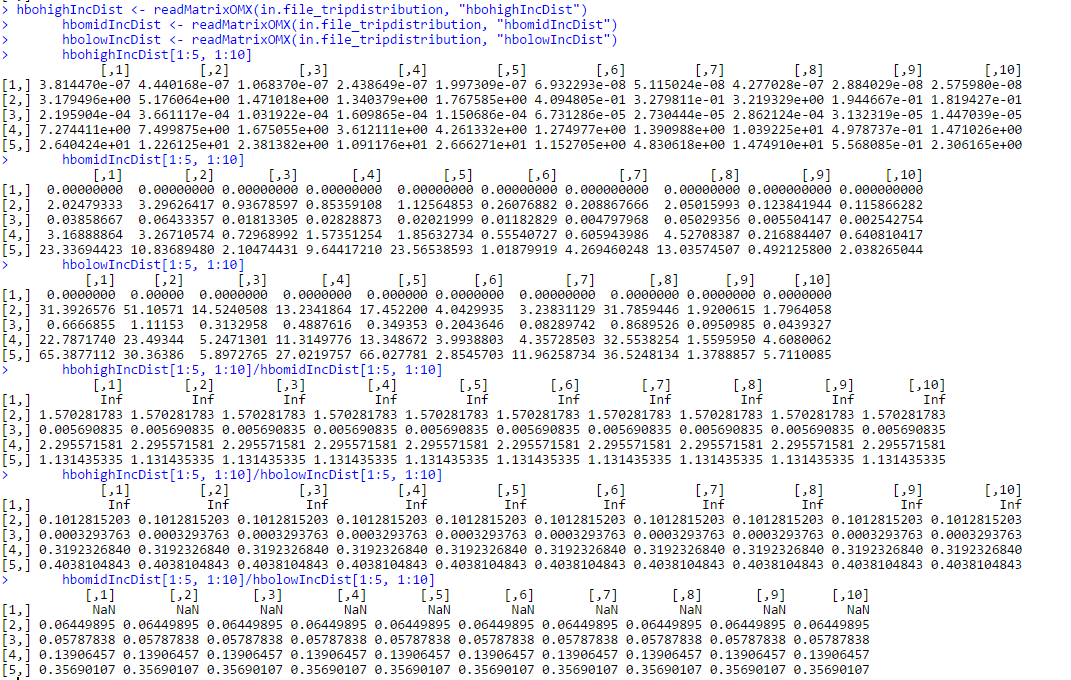
1. The weighted travel time for hbo purpose by driveAlone is equal for middle and low income group.



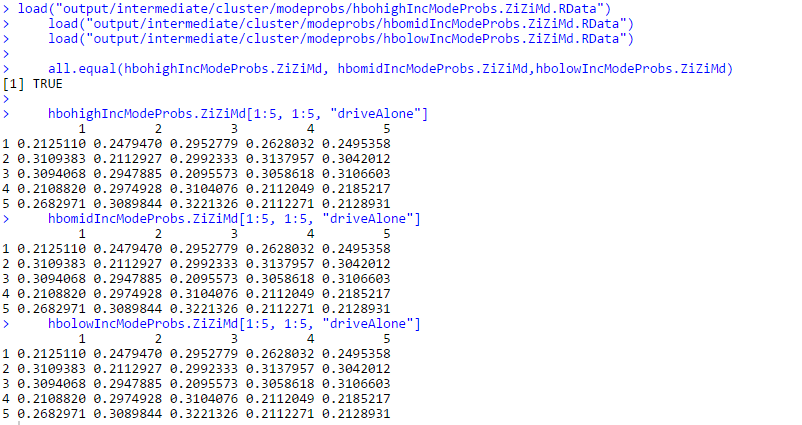
Because travel time does not differ by income group, the weighted time depends on the **distribution** of trips among TAZs of centers.

2 Check trips by income groups

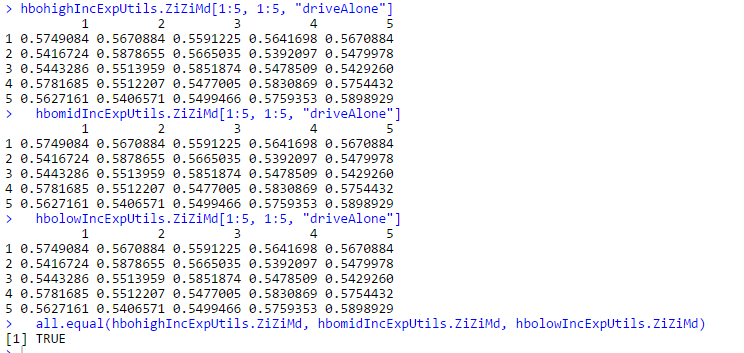
2.1 The ration between trips by income groups does not differ by destination TAZ.



2.2 Possibility does not differ by income group

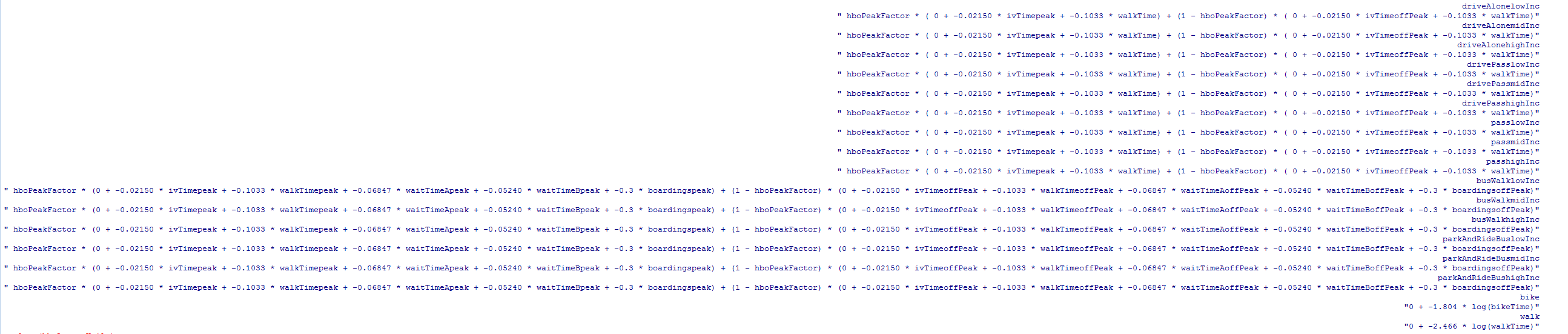


3 The utility does not differ by mode



4 The formulas for calculating utility do not differ by income group

Following formulas are from original TCI, and the formulas do not differ by income group.



Then I check the utility calculation formula from 2013 *Trip-Based Travel Demand Model Methodology Report*, and find that the formula diff by income group. Because some variables are not available, I still need your help to simplify the formulas.