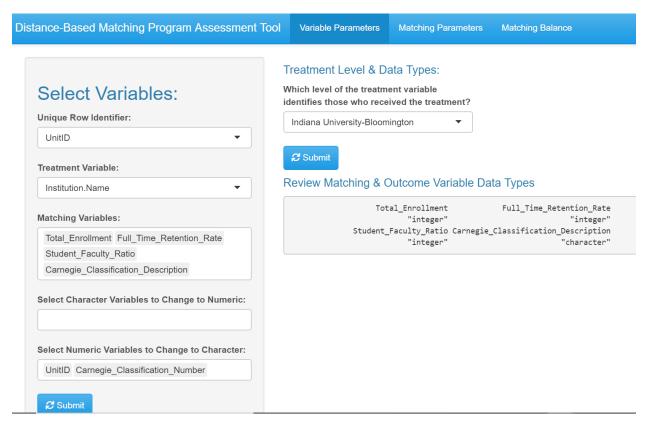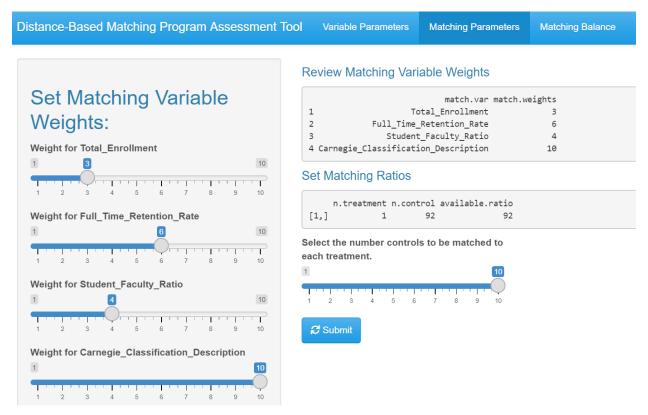# Notes for Using Matching Tool for Creating Peer Groups

In general, refer to the program assessment user guide when using the matching tool application as it provides the most details about how to run the application and how to set parameters in the application. This user guide is a supplemental document which serves to provide an example of how one might use the application to create a peer group.

In the "Variable Parameters" tab, I set 1) a variable which identifies a unique row (IPEDS institution UnitID), 2) a variable I want to use to identify the treatment (IPEDS Institution Name), and 3) a set of variables for which I want to create a combined distance measure based on (Total Enrollment, Full Time Retention Rate, Student/Faculty Ratio, and Carnegie Classification). Then, I select the level of the treatment variable that identifies the treatment (or, in this case the reference institution that I am creating a peer group for – Indiana University Bloomington).

On the "Matching Parameters" tab, I set the weights for each of those matching variables or variables that I am creating a distance measure on. Note that the matching algorithm (choice of optimal or nearest neighbors algorithm) doesn't really apply in this use case as we only have one treatment (one institution – IU Bloomington). Thus, do not worry about editing the choice of the matching algorithm parameter in the application. For "Set Matching Ratios", set the ratio to select the the size of the peer group for which you would like the original dataset returned on (i.e. the ratio below is set to 10, so this

will produce the underlying original dataset for the 10 matches or the ten closest institutions to IUB with respect to the characteristics selected). Note that the application will allow you to download the distances for all potential matches which you can sort in ascending order by distance, so you do not need to necessarily worry too much about setting the ratio in this use case.

On the "Matching Balance" tab, use the menus to download the matched data and the pairwise distances. In the use case of creating a peer group, the most important file will probably be the pairwise distances file. This will allow you to sort peer institutions in ascending order by distance in order to determine the "top X" peers with respect to underlying variables that were combined in the distance measure and their combined relative importance as set by the weights in the application. Always download a copy of the matching parameters selected in the application for documentation purposes.