Workflow for generating the network graph:

Created by Tenzin Choeden 07/29/20

GEPHI:

1. Load the original .csv file into gephi

2. In the data laboratory we need to make some modification as follow:

A. Impute the missing values: For size : Fill 'U' for all the missing values

B. From the menu bar, we will start creating the edges using 'add edges'. Do this for all the relationships.

C. Since we need to specify the relationship between the nodes by edges, we will add a new column called "Relation type". Fill the cell with appropriate relationships. For eg: Geo unit, Time unit or other crosswalks

D. We will also add a column called "label" to specify the name of a particular relationship. For eg: If relation type is Geo then label can be state, county, zip etc.

3. Once we have both the nodes and edges setup, We will go to the overview tab. Here will create the graph layout as follow:

A. From the layout window, we will apply "force atlas 2" with the following parameter:

Tolerance Speed: 1.0

Approximate Repulsion : True

Approximation: 1.2

Gravity: 5.0

LinLog Mode: True

Prevent Overlap: True

You can leave the other parameter unchanged.

B. From the appearance window, we will following settings:

I. Select Nodes, Partition, select category from the drop down list, select a suitable palette and apply

II. Select Nodes, Ranking, select size from the drop down list and apply

III. Select Edges, Partition, select Relation type from dropdown list and apply

4. Finally in the Preview tab, set the following parameters:

Show labels: True

Font : Arial 18pt

Show Edges: True

Thickness: 3

Color: Original

5. Then export the gephi file as SVG.

ILLUSTRATOR:

1. Create a new document of letter size (can be any appropriate size)

2. Open the SVG file and copy the graph to the new document, adjust the size of the graph (leave some space for legends).

3. Since we know the access type of each dataset, we can manually delete the border of nodes with private access.

4. Create legends for the graph

5. Save the image by exporting it as JPG/PNG or any other desired format.