

DEPARTMENT OF HISTORY—WESTERN WASHINGTON UNIVERSITY

**HIST 490/507: Digital Methods in History**

**Data Analysis Worksheet**

**Student Name:**

**Database Information:**

What information is presented on the [NPS NAGPRA](#) website about NAGPRA legislation, who it applies to, and what the process entails? (200–400 words)

**Inventory Database:**

How is [data inventoried](#)? How is different data organized, and how do these categories reflect NAGPRA legislation (see legislation handout)? (100–300 words)

**Data Analysis:**

1. Download an excel dataset from [NPS NAGPRA inventory](#). Select “All Human Remains” option and include all agencies and all geographic origins. \*Note\* make sure to select the option to show “All” entries in the window before downloading the excel file (download will take a moment).
2. Delete the top two rows and freeze the top row (under “View” select “Freeze Top Row”)
3. Calculate the total minimum number of Associated Funerary Objects of AFOs (“Funerary Objects”) currently included in the list of unrepatriated holdings (click on an open cell below the data and enter “=SUM()” with the range of numbers highlighted within the brackets → an easy tip, after typing the first bracket, click on the bottom cell in the range, and then SHIFT+COMMAND+UP ARROW. Hit enter).
4. Calculate the average number of AFOs currently held by each institution in the list (using “=AVERAGE()” with the range of numbers highlighted within the brackets → an easy tip, after typing the first bracket, click on the bottom cell in the range, and then SHIFT+COMMAND+UP ARROW).

- Sort the list to show the institutions with the largest unrepatriated holdings of AFOs (select the column by clicking on the letter at the top, then select “Data” and “Sort Largest to Smallest” → the icon has a Z above an A with a down arrow). When prompted, select the option to “Expand the Selection”.

What observations have you made so far about the dataset? How many AFOs are held by institutions, and which institutions have the largest collections? (200–400 words)

### Charting Holdings:

- Calculate the total minimum number of AFOs currently included in the list of holdings by state. Begin by creating a list of categories that excel will use to calculate this information. Click on empty cell G2 and enter “=UNIQUE()” with the range of entries in the State column highlighted within the brackets.
- Copy the resulting list into column H by selecting column G, selecting “Edit” and “Copy”, and then selecting “Paste Special”. When the Past Special window opens, select the option to paste “Values”.
- Select the open cell next to Alabama (I2). Enter “=SUMIF(range of State, H2, range of Funerary Objects)”. Make sure to add dollar signs (\$) into the range numbers in the equation (you can manually type it in before each letter and each number; DON’T add it to the middle element of H2, just the ranges in the first and third parts). If you downloaded all holdings in the database, this will look like:  
=SUMIF(\$A\$2:\$A\$13010,H2,\$D\$2:\$D\$13010)
- Once this is entered in the first cell (I2), click on that cell and hover over the bottom right corner of the cell. A little + icon should appear. Click on this, hold it, and drag it down to fill in all the cells next to the state names. When you select each new cell now filled with results, the formula should be the same with the exception of the middle part (in red), which should now read the number of the row (H2, H3, H4, etc.).
- Now copy the columns with the state names and the resulting sums into a new sheet (you can add a sheet using the + symbol at the bottom of the excel window). Remember to use the “Paste Special” and “Values” settings as above.
- In the new sheet, highlight the state names, select “Data”, and change the data type to “Geography” (depending on the excel version you are working with, you may see a

small window with icons for “Organization”, “Stocks”, etc.; expand this box and select Geography)

7. Now highlight the data (all the states and numbers), select “Insert”, select “Maps”, and select “Filled Maps” (it will insert a choropleth map)
8. You can update the Chart Title by clicking on it.
9. You can format the chart by right clicking on the chart background and selecting “Format Chart Area” (to add borders etc.) or by right clicking on the map and selecting “Format Data Series” (you can change the colours, gradation scale, etc.).
10. Right click on the chart and select “Save as Picture”

Post your map here. What observations do you have about this map? Is the map potentially misleading in any way? Is a choropleth map a good way to display this information (e.g., magnitude data)? What can you infer about the history of collecting and NAGPRA compliance from this map? (200–400 words)

11. Calculate the average minimum number of AFOs currently by each institution by state. Select an open cell in the same row as Alabama from the category list created for sum totals (row 2). Enter “=AVERAGEIF(range of State, H2, range of Funerary Objects)”. Make sure to add dollar signs (\$) into the range numbers in the equation (you can manually type it in before each letter and each number; DON’T add it to the middle element of H2, just the ranges in the first and third parts). If you downloaded all ancestral holdings, this will look like:  
`=AVERAGEIF($A$2:$A$13010,H2,$D$2:$D$13010)`
12. Once this is entered in the first cell (M2), click on that cell and hover over the bottom right corner of the cell. A little + icon should appear. Click on this, hold it, and drag it down to fill in all the cells next to the state names. When you select each new cell now filled with results, the formula should be the same with the exception of the middle part (in red), which should now read the number of the row (H2, H3, H4, etc.).
13. Now copy the columns with the state names and the averages just calculated into a new sheet (you can add a sheet using the + symbol at the bottom of the excel window). Remember to use the “Paste Special” and “Values” settings as above. \*Pro Tip\* – use a different sheet for each activity / map and name the sheet with the analysis included (right click on the sheet label and select “Rename” to change it)
14. In the new sheet, highlight the state names, select “Data”, and change the data type to “Geography” (depending on the excel version you are working with, you may see a

small window with icons for “Organization”, “Stocks”, etc.; expand this box and select Geography)

15. Now highlight the data (all the states and numbers), select “Insert”, select “Maps”, and select “Filled Maps”
16. You can update the Chart Title by clicking on it.
17. You can format the chart by right clicking on the chart background and selecting “Format Chart Area” (to add borders etc.) or by right clicking on the map and selecting “Format Data Series” (you can change the colours, gradation scale, etc.).
18. Right click on the chart and select “Save as Picture”

Post your new map here. What observations do you have about this map? How does the map of average holdings by institution vary from the map of total numbers of holdings? Is the map potentially misleading in any way? Is a choropleth map a good way to display this information (e.g., magnitude data)? What can you infer about the history of collecting and NAGPRA compliance from this map? (200–400 words)

## **Assessing Displacement**

1. Go to the [NPS NAGPRA Summaries](#) page and select the “Lummi Tribe of the Lummi Reservation” from the option under “Indian Tribe or NHO”. Scroll down the list of institutions.

What observations do you have about the institutions that have reported holdings of ancestral human remains or AFOs of the Lummi Tribe? (100–200 words).

2. Deselect the Lummi Tribe (reselect “ALL”) and select the option to show the first 200 entries. Download the excel file.
3. Select all rows that are not related to Washington State institutions and delete them. Once you have deleted the data from other states, delete the first column (the “State” column)
4. Delete the top two rows and freeze the top row and first column (under “View” select “Freeze Top Row”)
5. Select all cells with data in the “Museum or Federal Agency” column and “Sort”  
When prompted, select “Expand Current Selection”. In the Sort function window

that pops up, make sure to select the “My list has headers” box, and select the “Museum or Federal Agency” column.

6. Select all cells with data in the “Indian Tribe or NHO” column (column C). Under the “Data” tab, select “Text to Columns”. Choose the “Delimited” option and click “Next”. Select “Semicolon” as the Delimiter and click “Finish”. Each parsed component contents should now be in its own cell (e.g., each Tribe from which the institution has reported holdings).
7. Insert a column to the left of the “Indian Tribe or NHO” column. Enter a Count If function to calculate the number of tribes from which the institution has holdings: =COUNTIF(D2:AGT2,"\*"). Here D2 is the first cell with data in the “Indian Tribe or NHO” column, and AGT is the furthers potential column populated by data in the table.
8. Once you have entered this information, drag the formula down through the rest of the column to the last row of the table.

What observations do you have about the ancestral human remains and AFOs that have been held in institutions in Washington State? How many different communities have been impacted by the displacement of these holdings? (100–200 words)

1. Select the row for the Seattle Art Museum, copy the contents, and paste it into a column in a new sheet using the Paste Special function (make sure to select the box to “transpose” the contents).
2. Scroll down through the list of Tribes and NHO listed.

What observations do you have about the Seattle Art Museum holdings that were documented under NAGPRA legislation (in 1994)? Is the Seattle Art Museum listed in the current NAGPRA inventory list? If you do a search related to the Seattle Art Museum and repatriation, are there ongoing / recent developments relating to the museum’s Indigenous holdings? (100–300 words)