**Tomahawks Project Outline**

**August 21, 2019 – Scope Update**

Group:

Rob Chesser, Michael Bell, Adam Durar, Regina Foster

\*\*Note\*\*

\*All content is suggestive and should be considered for inclusion by group agreement – this is to get started

\* We may need to select a specific wine type to base the questions related to comparisons

\*Plot - Geographic locations of top producers

\*Graph - Quantity of Wine Producers in United States

\*Graph – Wine production by State

\*Pie Chart – Top Producers by State

\*Trend line – U.S. Wine Production 2008 – 2018

\*\*Obstacles to gathering data\*\*

\*Exploration for data presented limited free-access to datasets for annual sales per Producer

\*Manual extraction of select data from pdf – Adobe PDF used for conversions

Topic:

Comparative Wine Quality - per State and Select Country

(Wine rating scores will be researched to determine if preference can be determined from data found)

Hypothesis/Objective:

Option 1: “Wine enthusiasts in the United States prefer varieties produced in which State?”

Option 2: What state produces highest scored wine?

Option 3: Open for discussion

Due Days as Suggestion by Nelson:

By Saturday – Solid dataset cleaned and ready for analysis

By Monday - Finishing analysis rendering

By Wednesday – Start working on presentation

Questions

State production by bulk and bottled wine? - Find state annual sales by bulk and bottle

<https://www.ttb.gov/statistics/2017/final17wine.pdf>

What wine type are most preferred? – dataset is based on taste scores – define taste ratings

<https://www.kaggle.com/lezhili/most-common-wine-scores>

What state produces the most preferred wine type – cross reference wine scores against production

<https://www.kaggle.com/zynicide/wine-reviews/downloads/wine-reviews.zip/4>

Questions:

1. How many wine Producers are available in the US?

<https://catalog.data.gov/dataset/bonded-wine-producers-count-by-state-1999-june-30-2017> (xls and json )

Analysis Codes:

Total Producing States – count column

Total Count of Producers per year – sum column

Count of Producers by State – sum row

Graph – Total # of Producers by year

Graph –2018 # of Producers by State

\*Geographic Coverage – scatter plot across US map

During 2018 there were \_\_\_\_\_ Wine Producers in the United States that produced \_\_\_\_\_\_ gallons of \_\_\_\_\_ wines, \_\_\_\_wines, and \_\_\_\_ wines. Collectively, wineries across the US sold \_\_\_\_\_\_ bottles of wine generating \_\_\_\_\_\_\_\_ million in annual sales nationally with exported wine products increasing revenue by approximately \_\_\_\_\_\_\_\_\_ million.

1. How much wine is produced per Producer?
2. What obstacles are faced by wine Producers?

Story that supports data on sales strategies – DTC, Crop Damage, Consumer Preference Changes

1. What is the average cost of import wines per Producer?
2. What is the average cost of local wines per Producer?
3. What is the average cost of wine per Country?
4. Which Producer is the top selling wine producer in the U.S?
5. Which Producer is the top selling wine producer internationally?
6. How do the top Producers compare based on product sales?
7. Wine Producer websites - <https://data.world/arthur/wineries/workspace/file?filename=united+states.xlsx>

Data Needed:

List of Wine Producers in business 10 years or more

Wine sales by Producer

Wine sales by Country

<https://www.census.gov/data/tables/2017/econ/arts/annual-report.html>

Import/Export volume by Producer

Import/Export volume by Country

Consumer ratings on wine products by Producer