**NASS** 9/4/2024

**General Summary Overall Tasks:**

Work with data from QuickStats

Comparing either county to county or state to state1

Skeleton from USFS and Covid Between the coasts as a guideline2

Look at comparisons between counties/states3

Look at the timeline of a singular county/state3

Determine states for project – pipeline using SQL (and relational databases) could reduce storage difficulties4

What does NASS want to know?

What can we hope farmers will learn from our output?

Allowing farmer to track statistics throughout growing season?

Choose few things to look at initially – geared to our interest?

Census data is complete for every county?

Identical data points each year, but only every 5 years.

Monthly estimates at state level

County estimates (not all counties in estimate program)

Visualization on crop production/economics of farming

Looking to see:

Range of possibilities students could produce – Visualize crop progress like projected yield (using past years is extrapolation for future) on a weekly basis? We don’t have that data.

Franklin County: change in agriculture. They noticed sweet beans is becoming more popular in the area as corn popularity decreases. They are doing data analysis on this. Include other crops as well (obvious one) Percent of acres used per crop?

Data User could be economic development coordinator looking to see how other counties go about crop production or economic outputs. Looking at how much of each crop is in each area. Given a location could inventory of ag production be calculated? This would be very difficult to go to areas smaller than the county. (lots of work with polygon/multipolygon and 3d analysis, maybe using arcgis?)

PDF records are difficult to analyze – made clear that they would appreciate graphs and visualizations

**Roles**

**Questions for meeting:**

What states should initially be covered?

What does Value and CV mean?

Units? Multiplier?

Is there certain information/stats that would be especially helpful for farmers? – **Somewhat answered**

Could you give a quick explanation about the difference between census and survey data?

**Possible Project Steps:**

Using Census data to divide states by county and display summary information in a tabular format of each sector being studied.

1Check if there is data for each county, it might not be inclusive enough to do entire state counties

2Utilize tools to use in our rshiny project because they have lots of good features we could apply to our data

3Line graph vs side-by-side graphs

4Utilize knowledge about how relational databases work, this could reduce county, state, watershed, etc. because indexing can be used where there is more than one observation of a type

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