Midterm Reflection

At this point in the quarter, I think I am still earning a B +. I feel much more comfortable in R than I did in week 3, and the rate at which I can pick up new skills in R has increased today compared to week 3. Progression in R, that leads to feeling more comfortable, is a given for most people who are completing the assignments; it is the quicker rate of learning new skills in R that I am prouder of and what I would like to highlight in this reflection. A technique that I picked for learning new code is creating my own data short data frames, or tibbles, with the as_tibble( ) command to manipulate on the side while I work on a assignment. I will read the built-in help page in R then, with an idea of what the function is supposed to do, I will build a data frame and use the code to manipulate it. I found this helped me create a good mental picture of the computer was doing (I am a visual learner) because I had to formulate what I wanted to do before creating the data frame. I could then manipulate the assignment's data set with more confidence. I found myself employing this technique frequently when working with the join functions and the restructuring functions. This also helped in improving explinations to my teammates, less of me saying "I don't know it just worked".

As I look over the learning targets, I feel that I have gained a better grasp of the ones that were covered up to week 3 and feel confident in many of the ones we have covered since week 3. I feel confident in comprehension of all of the learning targets listed under the Working with Data category and that I have shown my understanding with my work in lab 4. I imported data in my set_up code chunk, I renamed and changed character types in my data_clean, I created a new variable via a mutation in my OrganicVsConventional code chunk, I did multiple joins from data sets I created to join data sets in the OrganicVsConventional code chunk as well, and in my state_comparison code chunk I filtered out non-metro areas from a data set. I feel confident that I can do the same functions on other data set if I can reference this .qmd file. Also, evident throughout my lab4 file is a restraint to write many objects. I found that I tend to create too many objects and data frames. Refraining from this has made my code more resistant to changes in

inputs and makes it easier to track down changes when there are errors messages about missing object or incorrect variable types – this addresses the R-3 learning objective. Also demonstrated, in lab 4, is my effort to write tidy code (the R-2 learning target). I refrain from using the same line of code multiple times. I tried to eliminate any code that runs on from the line above it, instead opting to return onto a new line and indent so lists and arguments are not interrupted. The R-1 learning target is met by the overall render of lab4 that folds each code chunk, display only the relevant analysis, and includes descriptions where necessary. The data targets listed under working with data and reproducibility are all ones I feel comfortable with.

The Data Visualization and Summarization list of learning target are well met by work in lab 5. In lab 5 I plot using a variety of variable types and change variable type where required to be able to plot, addressing DVS-1. I used plot modification (reordering, grouping, and jittering my data points) to make my visualization clear to the reader, addressing DVS-2. For DVS-3, I showed creativity by both switching my axis in the 3rd graph so the axis labels would not be squished, and in my first graph by coloring just the jitter points so the graph that it would any overlap between different species data points would be clear. In lab 3 I demonstrated hitting learning targets DSV-5 and DSV-6. My code for part 7 in lab 3 shows I can calculate summaries across variables by outputting relevant summary statistics for the variable sex, age and ethnic in the same line of code, demonstrating DSV-5 and DSV-6. I still need to work on creating creative table to meet learning target DVS-7, as well as, work on turning in more revisions. Overall I think I put in enough time, effort, and reflection to earn a B+.