Stephen Mattingly 10/2/2023 Proponent Testimony – HB 27

Chair Cirino, Vice Chair Rulli, Ranking Member Ingram, and honorable members of the Senate Workforce & Higher Education Committee, thank you for reading my testimony today. In the process of earning my Ph.D in Cognition, Brain, and Behavior from the University of Notre Dame, and in writing dozens of scholarly peer reviewed publications, I have worked extensively with data and the processes to convert, rearrange, or otherwise shape data into forms that it needs to be to execute tasks with data. I was asked to imagine a few scenarios in which I would be provided data inputs of university and major, and would need to match those inputs to a database that included that information and the 25th percentile and 75th percentile incomes at 1 and 5 years out. I was asked to consider a university provided database, and to consider publicly available census data. After matching, I would return the income values in a form that could be broken up into individual letters. I spent a few hours generating examples and writing code that would deliver the request.

I believe this task to be relatively straightforward, affordable, simple, and secure, and I can demonstrate how one could accomplish this task using a few common tools such as R, a free open source software with the tidyverse package, and Microsoft word with a mail merge function. I use these tools for convenience, but believe other software could be used to accomplish similar tasks, such as Microsoft excel.

I believe a few hours of work with an appropriately skilled individual could satisfactorily complete this task. If I were to be asked to do this task in actuality, I would probably ask for a \$1,000 initially to set it up, \$200 an hour for any consultations required or calculations performed (e.g. Training in the use of mail merge, if different logic was required, screening data for misspellings, calculating averages rather than returning matched values, etc.), and charge \$1 a completed record match. I imagine the first year would cost a university about \$20,000 and each subsequent year \$10,000.

I have provided supplemental examples of my work to Representative Mathews' office. If there are any questions, he has expressed willingness to discuss those with you at your convenience.

Thank you for your time and consideration.