SAS GRAPH Animation Examples used in Data Visualization of Analytical Procedures with Public Federal Data

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CHAIR: Wendy Martinez, U.S. Bureau of Labor Statistics

PLATFORM: Microsoft Teams - Click here to join the meeting

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join/19%3ameeting_YWIzMGFhOGEtMmJIYy00YmU0LThiZGQtODQ3OWRhM2Y1MTMw%40thread.v2/0?context=%7b%22Tid%22%3a%22ed5b36e7-01ee-4ebc-867e-

e03cfa0d4697%22%2c%22Oid%22%3a%226ef789f5-388a-4664-ace5-925221013d1d%22%7d)

ABSTRACT: This presentation is an update of the paper that was originally presented at the Southeast SAS Users Group 2020; and includes examples of SAS GRAPH Animation GIF files. Data visualization using animation is a newer tool to enhance the capability of analyzing data. This can be done by dynamic graphs to visualize changes. This presentation explores this method using SAS/GRAPH animation and Census data and other public Federal data with SAS GRAPH Animation** in data visualization analytical procedures. The source of the data is from public Federal sources such as Bureau of the Census, Bureau of Labor Statistics, Federal Financial Institutions Examination Council, and the Federal Reserve Board. The presentation explores geographic changes over time, Venn Diagrams, data from the American Community Survey (ACS), Home Mortgage Disclosure Act (HMDA), Community Reinvestment Act (CRA), PUMA and dual PUMAs changes and more. A method to explore probability distributions will be presented as well as others, all using SAS GRAPH animation.

Your comments and questions are valued and encouraged. Contact the author: Martha D. Pohl, 703-403-4249; maze44@verizon.net.

*U.S. Department of Justice, retired. <u>Disclaimer</u>: Any opinions expressed in this paper are those of the author and do not constitute policy or opinion of the U.S. Department of Justice or any of its subcomponents.

**Using SAS 9.4 TS Level 1M4 X64_7 PRO platform.

<u>BIOGRAPHY</u>: Martha D. Pohl is currently enrolled in the Master of Science in Data Science program at the American University (AU) in Washington, DC (a joint graduate program of the CAS Mathematics and Statistics and School of Public Affairs taught

primarily in R). She has a Bachelor of Science in a double major of Mathematics and Statistics and additional Graduate coursework in Statistics, both at AU.

Martha has been a Mathematical Statistician for several federal agencies, including about 30 years at the U.S. Department of Justice. She has been a SAS user for most of her career.