EXHIBIT D

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MARYLAND

LA UNIÓN DEL PUEBLO ENTERO, et al.,

Plaintiffs,

v.

DONALD J. TRUMP, sued in his official capacity as President of the United States, et al.,

Civil Action No. 8:19-CV-02710-PX

Defendants.

DECLARATION OF AMY O'HARA

I. QUALIFICATIONS

1. I am a Research Professor in the Massive Data Institute at the McCourt School of Public Policy at Georgetown University and Executive Director of Georgetown's Federal Statistical Research Data Center. I have been in this role at Georgetown since 2018, where I focus on the secure and responsible use of administrative data for research and statistical purposes. I lead a team that develops governance models, data access protocols, and research methods to advance ethical and privacy preserving data uses. I have a Ph.D. in economics from the University of Notre Dame. A copy of my CV is attached to this declaration.

2. Prior to entering academia, I worked at the U.S. Census Bureau for fourteen years. I am the former chief of the Center for Administrative Records Research and Applications (CARRA), where I designed and led the data acquisition, linkage, and research activities using federal, state, and local administrative data. As the senior executive over administrative data, I negotiated access and uses of data from dozens of agencies, and oversaw the data processing to enable matching across files. I designed and led the work on administrative records during the 2020 Research and Testing Program through 2012, and led negotiations to obtain administrative data for decennial census planning and operations through 2017. I have received the Department

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of Commerce Gold Award for negotiating access to tax data for the 2020 census, and Census Bureau Bronze Award for work with administrative data. I was also awarded the 2012 Arthur S. Flemming Award for my leadership in expanding the use of administrative data in federal statistics.

3. I was retained by the plaintiffs in *La Unión del Pueblo Entero, et al., v. Trump, et al.*, No. 8:19-CV-02710 (D. Md.), to provide my expert opinion on the policies and procedures involving administrative records at the U.S. Census Bureau, and on the extent to which the Commerce Department and Census Bureau policies and protocols affect the accuracy of the 2020 Census.

4. I am being compensated at a rate of \$150 per hour.

II. SUMMARY AND CONCLUSIONS

5. Based on my experience and knowledge, the decision by the Census Bureau to end field operations and compress post data collection activities (referred to herein as "postprocessing") to deliver apportionment data by December 31, 2020 will require excessive reliance on administrative data and imputation methods that are very likely to produce undercounts through failure to enumerate individuals.

6. Based on my experience and knowledge of administrative data sources and quality, it is my opinion that truncating field operations and post-processing will strain currently developed methods and processes that are used to fill-in missing data and will reduce the accuracy of census counts and characteristics in the following ways:

a. Shorter fieldwork may reduce the number of in-person or proxy responses obtained; this will then require more imputation.

- b. The administrative data sources currently planned for count imputation use have insufficient coverage for low-income and highly mobile households.
- c. Reduced fieldwork cannot be remedied by using administrative data.

III. PLANNED USES OF ADMINISTRATIVE RECORDS

7. The Census Bureau acquired administrative records from 2010 onwards, for research and testing, in order to determine how to assess quality and a source's fitness for use (e.g., different data are valuable for different uses, like filling in missing age or sex, or to help determine whether a unit is vacant). Data sources were identified, then data sharing agreements were negotiated between the Census Bureau and the relevant agency. Files were delivered, reviewed, and assessed to see how complete and accurate their data were. A set of data from federal, state, and commercial sources were built into an operational database for the 2020 census. These records were harmonized, or uniformly processed and ready to plug into census operations. The system was developed and tested over the past several years, and at the start of 2020 the system was expected to receive updates from its component sources during the year. The scale of data preparation was unprecedented for census operations, requiring billions of records to be normalized and readied for multiple uses. A typical census schedule required the parallel development of the MAF and field operations, but 2020 innovations also required coordination of the administrative data system and online response system. This was a huge and complex undertaking that received less testing than originally planned and had system integration challenges.

8. The pandemic rattled this undertaking. COVID-19 altered the economy, society, and census. Shifts in residential patterns, school closings, community lockdowns, and disruption of government programs and services were just a few of the factors that affected data streams

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and census plans. Some families moved away from viral hotspots, families decided how to cohabitate to care for children and elders, higher education institutions sent students home, and many aspects of life shifted online as non-essential businesses were ordered closed in many places. Many government agencies and departments limited services, allowing extensions on everything from income tax filings to driver's license renewals. The economic shutdown caused a crush of filers and applicants for unemployment benefits and food assistance programs. All of this affected the both the data landscape and the enumeration itself. The Census Bureau faced uncertainty and delay over how the census fieldwork could occur, and has not released updated plans on how administrative data will be used. Based on my experience and knowledge, the policy setting and decision-making processes at the Census Bureau are unable to adapt quickly to address the effects of the pandemic.

9. According to Census Bureau plans, they hoped to have a self-response of 60% by mid-May, then send more than 420,000 field staff to conduct NRFU over a 15-week period from mid-May to mid-August 2020. That would have allowed the Census Bureau approximately twenty weeks (mid-August to December) to process the data to prepare the apportionment counts by December 31, 2020.

10. The Census Bureau announced it will end fieldwork on September 30, 2020, yet the counts are still due December 31, 2020 and the Census Bureau has hired far fewer enumerators than planned.

IV. AFFECT OF THE PANDEMIC ON THE INTENDED USE OF ADMINISTRATIVE RECORDS

11. Administrative data cannot fix all the issues created by the pandemic and the truncated schedule. Adhering to the end of year deadline compresses not only the fieldwork, but

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also reduces the post-processing time. These two issues compound the risk of an inaccurate count. The goal of fieldwork is to obtain a count for each housing unit that has not yet responded. By limiting the number of weeks in the field, the Census Bureau risks its ability to visit housing units to assess whether they are vacant or occupied, and to arrange visits to obtain proxy responses from building managers in multi-unit buildings. If there are sections of cities or rural communities that fail to receive in-person visits, the Census Bureau will need to fill in missing data during post-processing in a time period of only about 13 weeks (October to December) to meet a December 31, 2020 apportionment count deadline. To recap, the Census Bureau was supposed to have 15 weeks in the field and will now have seven. They were supposed to have 20 weeks of post-processing and will now have 13.

12. After fieldwork is done, the Census Bureau needs to deal with missing data: If there is no self-response (from internet, phone, paper, or fieldwork) or proxy response for a housing unit, the Census Bureau will need to assess whether a non-responding unit was vacant or occupied. A number of administrative and commercial data sources are prepared for this assignment, but they have never been tested for the large volume of cases that will need to be processed. This brings a risk of using uneven USPS "vacant" designations from across the country and from differing types of addresses (e.g., non-city style addresses, apartment buildings with mail drops), and IRS data that may non-representative of the full population, undercounting minority groups.

13. Several of the administrative data sources tested for this use have had COVID challenges. The Census Bureau plan for count imputation is highly reliant on individual income tax data from the Internal Revenue Service (IRS). IRS data have substantial coverage of the U.S. population – hundreds of millions of records reflect person-address data on W-2s, information

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returns about interest, mortgages, student loans, Social Security benefits, and contracting income. IRS income tax returns, filed on Form 1040s, often list an entire family or household and on-time returns are typically filed in early April, lining up well with Census Day of April 1. The pandemic affected timely filing, with business closures limiting the number of low-income filers who could visit retail tax preparers (or volunteer tax preparers at local libraries) in person. IRS offered a filing extension through July 15, 2020, though many individuals filed earlier to obtain their refunds or the economic stimulus payment that was administered through the tax system this spring. This stimulus payment may have increased the value of IRS records for the 2020 census, provided they arrive in time. The economic stimulus rebate administered during the last recession induced filing of millions of additional returns. However, IRS processing was disrupted due to the pandemic. A lack of transparency into the volume, coverage, and timeliness of administrative data like the IRS returns prompt questions over Census's possible expanded reliance on such sources.

14. The bulk of the tax records were expected in May and June. If the records come in late, post-processing will suffer delays and disruption. This calls into question whether the Census Bureau has adopted policies to address changes to administrative data delivery, content, or composition, and whether they can do all this work by December 31, 2020.

15. The Census Bureau invested in administrative data and methods expecting a much smaller workload to designate vacant, occupied, or delete status since they planned on being in the field for complete Non-Response Follow-Up operations. Given that the fieldwork will be cut short, the volume of addresses for which vacant/delete status must be identified will be greater.

V. ALTERNATIVE APPROACHES TO RESPOND TO THE PANDEMIC

16. The Census could use administrative data as planned to fill in missing data, but there are significant concerns about data availability. For example, as noted above, the Census Bureau's plans rely on heavy use of tax data, which does not include all households or children. With a larger than expected amount of missing data, this will result in biased responses and undercounts.

17. In order to maximize use of the administrative data, the Census Bureau would need to review the existing policies, assumptions, and rules of thumb embedded in their decisions. The Census Bureau has acquired, harmonized, and readied dozens of source files; many were evaluated during the decade and tested against 2010 or survey data, but were not deemed as highest quality by decennial planners. The 30+ administrative data sources ready for production¹ were assembled to support different operations. For example, some sources were tested and readied for vacant/delete checks, others were prepared for count imputation, and still other sources were best for characteristic imputation (e.g., where a household responds with a count but does not complete information on household member age or race). Operational tests had required the presence of two corroborating data points from the same or different data sources for inclusion in imputation processing.

18. Thus, it is possible that expanded administrative data use to fill in missing data could occur before traditional hot deck imputation. Hot deck imputation assigns a missing value (whether a household count, age, or sex) from another census record with similar characteristics. The "hot deck" is a set of records with similar variables such as age, race, and sex that provide

¹ "Intended Administrative Data Use in the 2020 Census," Karen D. Deaver, U.S. Census Bureau, May 1, 2020, https://www2.census.gov/programs-surveys/decennial/2020/program-management/planning-docs/administrative-data-use-2020-census.pdf.

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the donor records for assignment. The Census Bureau has not released details on the characteristics of respondents or detailed geography of response patterns to demonstrate that available responses to act as donor households are sufficient for an increased use of imputation. In past censuses, the Census Bureau has imputed whole households, though at very low rates in any geography. Hot deck imputation at a greater level than previously applied could be risky during this census, especially with truncated fieldwork. This is because households who completed the census may not be representative of households who did not respond.

19. The 2020 census has been atypical in its conduct, timeline, response patterns, and underlying residential stability due to the pandemic. Based on my experience and knowledge, I do not believe that combining self-reported, proxy, and administrative data information was tested by the Census Bureau for imputation. The lack of uniform quality across sources, when census data were collected, the reference dates for administrative data, and lack of transparency about post-processing applied, leads to questionable overall data quality across the country and within population groups. Given these issues with administrative records, the lack of testing, and a drastically compressed schedule, based on my experience and knowledge, I do not believe maximizing administrative records use will be possible without serious risk to conducting an actual enumeration in the 2020 Census.

VI. CONCERNS WITH AVAILABLE ADMINISTRATIVE RECORDS

20. Census memos and publications have not described how the sources that have been prepared for operational use reflect the diverse population in the U.S. This calls into question the Census Bureau's ability to impute all ethnicity and race groups, and all age groups for every geography.

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21. Earlier studies reveal that administrative data have lower coverage of groups including non-white and high mobility young adults.² An array of sources is needed to reflect the U.S. population, or you risk the results found in the 2010 Census Match Study³ that I designed and conducted with Sonya Porter and my staff in CARRA at the Census Bureau. That study, the first national assessment of how close an administrative data census could come to a traditional enumeration, revealed that administrative data were useful but the combination used in that study did not result in population totals that were consistent with a traditional census. The combination of commercial and federal administrative data sources provided low coverage of Hispanics, Native Hawaiian or Other Pacific Islander, and American Indian or Alaska Native race groups. These groups were also challenging to match across sources due to the Census Bureau's approach to person validation and linkage. A 2014 study noted that young children, minorities, residents of group quarters, immigrants, recent movers, low-income individuals, and non-employed individuals were less likely to receive a validated person linkage identifier.⁴ This is the same methodology being used for person validation and linkage for the 2020 census.

22. After the 2010 Census Match Study, the Census Bureau made efforts to improve administrative data coverage of the population, and to find sources of administrative data where earlier studies had revealed weaknesses. The composition of the records needs to be understood by age, sex, race, and Hispanic origin. Tax data misses many individuals who are not in the labor force, and will miss children in many households. This is why the now-dismantled Center for

³ "2010 Census Match Study," Sonya Rastogi and Amy O'Hara, U.S. Census Bureau, November 16, 2012, https://www.census.gov/2010census/pdf/2010_Census_Match_Study_Report.pdf.

² See Brittany Bond, J. David Brown, Adela Luque, Amy O'Hara, The Nature of the Bias When Studying Only Linkable Person Records: Evidence from the American Community Survey, U.S. Census Bureau (April 22, 2014), https://www.census.gov/content/dam/Census/library/working-papers/2014/adrm/carra-wp-2014-08.pdf.

⁴ Britta ny Bond, J. David Brown, Adela Luque, Amy O'Hara, The Nature of the Bias When Studying Only Linkable Person Records: Evidence from the American Community Survey, U.S. Census Bureau (April 22, 2014), https://www.census.gov/content/dam/Census/library/working-papers/2014/adrm/carra-wp-2014-08.pdf.

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Administrative Records Research and Applications pursued state health and human services program data. Dozens of datasets from state Supplemental Nutrition Assistance Programs, Women, Infant, and Children programs, and Temporary Assistance for Needy Families programs were accessed and harmonized. But according to its May 2020 memo, the Census Bureau does not plan to use any of these files for 2020 count imputation.

23. Increased reliance on administrative data in the post-processing period would require careful combination of sources and sufficient time to do it right. With the truncated schedule, there is not sufficient time. How administrative data would be summed when household members appear in multiple program files would need to be resolved. Adding sources together to get a total count may be appropriate in some households, but could erroneously reflect household size and composition in others. For example, a multigenerational household may have multiple tax returns, Medicare, and Housing and Urban Development mortgage administrative data, all reflecting a family under one roof. If the Census Bureau only counts one or two of these sources, family members would be missed and administrative data business rules would exacerbate an undercount. Research from Pew Research Center indicates that many multi-generational households are households with Hispanic, Black, and Asian heads, as well as immigrant households.⁵ Based on my knowledge and experience, it is unlikely that the Census Bureau has developed business rules or algorithms that properly blend sources together to accurately reflect household rosters. Such business rules and algorithms were not in place when I left in 2017 and have not been publicly shared since.

⁵ Paul Taylor, et al., Fighting Poverty in a Tough Economy, Americans Move in with Their Relatives, Pew Research Center, Chapter 3: Demographics of Multi-Generational Households (Oct. 3, 2-11),

https://www.pewsocialtrends.org/2011/10/03/chapter-3-demographics-of-multi-generational-households/.

VII. CONCLUSION

24. Because of insufficient quality administrative records available to address the various shortcomings resulting from a truncation of field operations and post-processing, based on my experience and knowledge, the Census Bureau must adhere to the requested plan extending statutory deadlines. Based on my knowledge and experience, the truncated schedule does not provide adequate time to meet these challenges, particularly given that career professionals at the Census Bureau said they needed until April 30, 2021, and the result of adhering to the truncated schedule will be a failure to conduct an actual enumeration of the population.

I declare under penalty of perjury that the foregoing is true and correct.

Any Haven

Amy O'Hara

Executed on August 31, 2020 at Silver Spring, Maryland.

APPENDIX 1

August 2019

AMY O'HARA

Curriculum Vitae

Massive Data Institute Georgetown University Washington DC 20057 650-680-5075 amy.ohara@georgetown.edu

EMPLOYMENT

Georgetown University Research Professor, Massive Data Institute, 2018 - present Director, Federal Statistical Research Data Center, 2018 - present

Stanford University

Senior Research Scholar, Stanford Institute for Economic Policy Research, 2017- 2018 Associate Director for Data, Stanford Center for Population Health Sciences, 2017-2018

U.S. Census Bureau

Chief, Center for Administrative Records Research and Applications, 2014-2017 Acting Chief, Center for Administrative Records Research and Applications, 2011-2014 Economist and Statistician, 2004-2011

EDUCATION

University of Notre Dame Ph.D. in economics, 2003 M.A. in economics, 1998 State University of New York College at Buffalo B.S. in economics, 1996

PUBLICATIONS

Medalia, Carla, Bruce Meyer, Amy O'Hara, and Derek Wu. 2019. "Linking Survey and Administrative Data to Measure Income, Inequality, and Mobility." *International Journal of Population Data Science*, 4(1):1-8.

Massey, Catherine, Katie Genadek, J. Trent Alexander, Todd Gardner, and Amy O'Hara. 2018. "Linking the 1940 U.S. Census with Modern Data." *Historical Methods: A Journal of Quantitative and Interdisciplinary History*, 51(4):246-257.

O'Hara, Amy, and Carla Medalia. 2018. "Data Sharing in the Federal Statistical System: Impediments and Possibilities." *The ANNALS of the American Academy of Political and Social Science*, 675(1):138-150.

Culbertson, Adam, Satyender Goel, Amy O'Hara et al. 2017. "The Building Blocks of Interoperability: A Multisite Analysis of Patient Demographic Attributes Available for Matching." *Applied Clinical Informatics* 8(2):322-336.

O'Hara, Amy, Rachel Shattuck, and Robert Goerge. 2017. "Linking Federal Surveys with Administrative Data to Improve Research on Families." *The ANNALS of the American Academy of Political and Social Science* 669(1):63-74.

Jarmin, Ron, and Amy O'Hara. 2016. "Big Data and the Transformation of Public Policy Analysis" and "Counterpoint to 'Big Data For Public Policy: The Quadruple Helix. "*Journal of Policy Analysis and Management* 35(3): 715-721 and 725-727.

Jones, Maggie, and Amy O'Hara. 2016. "Do Doubled-Up Families Minimize Household-Level Tax Burden?" *National Tax Journal* 69(3): 613-640.

Johnson, David, Catherine Massey, and Amy O'Hara. 2014. "The Opportunities and Challenges of Using Administrative Data Linkages to Evaluate Mobility." *The ANNALS of the American Academy of Political and Social Science* 657(1): 247-264.

WORKS IN PROGRESS

Fidler, Fiona, Simine Vazire, Alexander Etz, Gary Klein, Richard Lempert, Arthur Lupia, Amy O'Hara et al. "Developing, Validating, and Obtaining Stakeholder Buy-in for Criteria for Applying Social Science to Policymaking." OSF Preprints.

O'Hara, Amy. "Administrative Data Censuses in US States." In preparation. O'Hara, Amy and Quentin Brummet. "The Differential Privacy Corner: What Has the US Backed Itself Into?" In preparation.

O'Hara, Amy. "Observing and Linking Household Relationships Across US Data Sources." In preparation. Uses decennial census, IRS 1040, Medicare, and Social Security Administration data.

REPORTS AND PERMANENT WORKING PAPERS

Postsecondary Data Infrastructure: What is Possible Today. Institute for Higher Education Policy. June 2019.

Developing, Validating, and Obtaining Stakeholder Buy-in for Criteria for Applying Social Science to *Policymaking*. With Fiona Fidler, Simine Vazire, Alexander Etz, Gary Klein, Richard Lempert, and Arthur Lupia. OSF Preprints. November 2018.

Preliminary Research for Replacing or Supplementing the Income Question on the American Community Survey with Administrative Records. With C. Adam Bee and Joshua Mitchell. 2016. American Community Survey Research and Evaluation Report Memorandum Series #ACS16-RER-6.

Using the Census to Evaluate Administrative Records and Vice Versa. With J. David Brown and Jennifer H. Childs. 2015. Proceedings of the 2015 Federal Committee on Statistical Methodology Research Conference.

Challenges to Evidence-Based Policy Making in the Decentralized U.S. Statistical System. With Nancy Potok and Ron Jarmin. 2014. Invited Paper for the Ninth International Conference on Teaching Statistics.

Person Matching in Historical Files using the Census Bureau's Person Validation System. With Catherine G. Massey. 2014. Center for Administrative Records Research and Applications Working Paper No. 2014-11.

The Nature of the Bias When Studying Only Linkable Person Records: Evidence from the American Community Survey. With Brittany J. Bond, J. David Brown, and Adela Luque. 2014. Center for Administrative Records Research and Applications Working Paper No. 2014-08.

2010 Census Match Study. With Sonya Rastogi. 2012. 2010 Census Program of Evaluations and Experiments, 2010 Census Planning Memoranda Series No. 247.

Taking Account of Housing in Measures of Household Income. With Kathleen Short and Scott Susin. 2007. Social, Economics, and Household Statistics Division Working Paper No. 2007-02.

The Effects of Taxes and Transfers on Income and Poverty in the United States: 2005. With Joseph Dalaker. 2007. P-60 Census Bureau Report.

Allocated Values in Linked Files. 2007. Proceedings of the 2007 Federal Committee on Statistical Methodology Research Conference.

Tax Variable Imputation in the Current Population Survey. 2006. Proceedings of the 2006 IRS Research Conference.

Evaluation of CPS Tax Simulation Using Administrative IRS Data. 2005. Proceedings of the 2005 Federal Committee on Statistical Methodology Research Conference.

New Methods for Simulating CPS Taxes. 2004. Census Bureau Working Paper.

ORIGINAL DATA RESOURCES

Census Longitudinal Infrastructure Project (CLIP), Preliminary Release. U.S. Census Bureau. 2015. Co-founded CLIP to provide linked microdata from three decennial censuses, two household surveys (Current Population Survey and American Community Survey), and administrative records files from seven federal programs for researchers.

Parent-Child Pointer File (Census Kidlink), Preliminary Release. U.S. Census Bureau. 2013. The Census Kidlink file consists of parent-child linkages observed in Social Security card application data validated with IRS 1040 data. Census Bureau linkage keys are appended to mother-child and father-child relationships. The data are currently used in research projects, survey operations, and decennial census operations.

INVITED PRESENTATIONS

How Might Government Data be Leveraged for the Public Good? Brown Policy Lab, Rhode Island Office of Management and Budget. June 2019.

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Supporting Data Access Within and Across Agencies. Committee for National Statistics. National Statistics for Public Policy Seminar. May 2019.

Implementation Issues for Secure Multiparty Computation. Will Secure Multiparty Computation Reshape Data Privacy? Open Technology Institute. April 2018.

Merging "Organic" and Administrative Data with Traditional Social Science Data. National Science Foundation Directorate for Social, Behavioral, and Economic Sciences Advisory Committee Meeting. October 2017.

The New Multiple Data Sources Paradigm for Federal Statistics: Progress and Prospects. Joint Statistical Meetings. August 2017.

The U.S. Census Bureau's Linkage Infrastructure: Overview and New Challenges. Data Linkage: Techniques, Challenges, and Applications, Newton Institute for Mathematical Sciences. September 2016.

The Opportunities and Challenges of Using and Linking Data. White House Office of Social Innovation Workshop. September 2016.

The Census Bureau Linkage Infrastructure. Joint Statistical Meetings. August 2016.

The Census Bureau Linkage Infrastructure. Pay for Success Convening, U.S. Department of Education. June 2016.

Use of Administrative Records to Reduce Burden and Improve Quality. Workshop on Respondent Burden in the American Community Survey. March 2016.

Census Bureau Efforts to Utilize and Share Data. The Promises and Challenges of Administrative Data in Social Policy Research, Department of Health and Human Services. October 2015.

Person Identification Validation System: the 2010 Census and the Coverage of Administrative Records. Inter-American Development Bank Conference on the Statistical Use of Administrative Registers. September 2015.

American Community Survey Administrative Records Research, Association of Public Data Users. September 2015.

Help Wanted. Keynote for Federal Computer Assisted Survey Information Collection Workshop. March 2015.

Data Integration to Evaluate Food Security Programs. Staff briefing for House Agriculture Committee. March 2015.

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Data Access for Statistical Use of the National Directory of New Hires. Staff briefing for Senate Finance Committee. May 2015.

Information is Driving Innovation: How the Census Bureau is Integrating Administrative Records in the 2020 Census and Beyond. Staff briefing for House Appropriations Committee. March 2015.

Census Bureau Uses of New Data Sources. Privacy Working Group. February 2014.

Acquiring and Protecting Administrative Records: Current Programs and the Future. Future of Privacy Forum. September 2014.

GRANTS AND INSTITUTIONAL AWARDS

State Population Estimate Benchmarking (Co-Principal Investigator), funding by the Alfred P. Sloan Foundation, 2019-2021, \$600,000

Administrative Data Research Institute (Principal Investigator), funded by the Alfred P. Sloan Foundation, 2018-2020, \$1.7 million

2013 Gold Medal, U.S. Department of Commerce

2012 Arthur S. Flemming Award for Leadership and Management in Government Service 2010 Bronze Medal, U.S. Department of Commerce

PROFESSIONAL SERVICE

Invited Member, Health and Retirement Survey Data Monitoring Committee, 2019-2021 Invited Member, Evaluation Advisory Group, Future Skills Centre, 2019-2024 Canadian Future Skills Centre Evaluation Advisory Committee, 2019-present Dutch Open Data Infrastructure for Social Science and Economic Innovations Advisory Board, 2020-2024 Invited Member, Panel on Improving Consumer Data for Food and Nutrition Policy Research for the Economic Research Service, 2018-present

Member, National Bureau of Economic Research Conference on Research in Income and Wealth Invited Member, Panel on Modernizing the Nation's Crime Statistics, National Academies of Science, Engineering, and Medicine, 2013-2018

Criminal Justice Administrative Records System Board of Directors, University of Michigan, 2016-present Manuscript reviewer for Journal of Human Resources, International Journal of Population and Data Science, Journal of Research on Educational Effectiveness, and Statistics and Public Policy