- 33. These COVID-19 delays forced the Census Bureau to carry out field operations during hurricane season. Devastating hurricanes in the Gulf Coast area, in particular, limited and slowed the Census Bureau's ability to conduct NRFU operations. Additionally, in large areas of the West Coast, field operations were hampered by conflagrations that caused health alerts due to fire and smoke. And in cities across the country, demonstrations and riots caused further difficulties for in-person enumeration. These challenges forced the Census Bureau to adapt, including by sending travel teams of enumerators to lagging areas.
- 34. In light of the COVID-19 delays, on April 13, 2020, the Secretary of Commerce and the Director jointly announced a new Census Schedule and stated that they would seek statutory relief from Congress of 120 additional calendar days. This new schedule set a completion date for field data collection and self-response of October 31, 2020. The proposed schedule called for the delivery of apportionment counts to the President by April 30, 2021 (120 days after the statutory deadline) and redistricting data files to the states no later than July 31, 2021. Congress did not pass such a statute.
- 35. The Secretary and the Director then announced on August 3, 2020 a "Replan Schedule" designed to meet the Census Bureau's statutory deadline for reporting apportionment data of December 31, 2020. Litigation ensued, and the Census Bureau was enjoined from attempting to meet the Replan Schedule. After a Supreme Court ruling, the Census Bureau ceased data collection operations on October 15, 2020, having resolved 99.9% of all housing units in the process.

Census Step 5: Post-Data Collection Processing

36. After the Census Bureau completed data collection, the next major step was what we call post processing, which refers to the Census Bureau's procedures to summarize the individual and household data that we collect into usable, high-quality tabulations. Our post processing procedures and systems are meticulously designed, tested,

and proven to achieve standardized, thoroughly vetted, high-quality data products that we can stand behind.

- 37. The Census Bureau is processing the data from the 2020 Census with all possible speed and care, consistent with the production of high-quality data products. The computer processing systems at Census Headquarters were optimized in partnership with industry leaders to use the latest hardware, database, and processing technology available. Taking advantage of this processing power and speed, we are working with all possible dispatch.
- 38. However, the processing phases build upon each other and fully rely on iterative steps that require computer processing followed by expert human review and validation. When review and validation discover possible data issues, we resolve them. We then test and validate the resolution, and repeat processing steps as required.
- 39. As described above, through 2020 the Census Bureau faced unprecedented circumstances that impacted our data collection and processing schedules. In response, the Census Bureau has made every attempt to curtail, eliminate, re-order, or run processing operations in parallel to deliver census results as early as possible. The Census Bureau is aware that states and other entities rely on our data products and expect those data products to be both timely and of high quality.
- 40. Despite the Census Bureau's best efforts, the delays caused by COVID, hurricanes and wildfires, along with the normal issues commonly encountered during census processing made it impossible for the Census Bureau to finish apportionment processing and deliver accurate and complete apportionment counts before April 30, 2021 (four months after the December 31, 2020 statutory deadline). However, more important in the context of this declaration is that delivery of apportionment data will occur a month later than the statutory due date for delivering *redistricting* data.
- 41. The order of phases and operations for processing allows no possible way to deliver redistricting data before apportionment data, as one depends and builds upon

the other. Further, the complex processing steps that occur between the apportionment delivery include contingency time for rework if it is required, and the delivery of the complete complement of redistricting products cannot be meaningfully shortened or curtailed without unacceptable risk to the accuracy of the data.

42. Below, I generally describe the post processing operations and schedule. While certain steps in different processing operations may sound similar they are in fact quite different because the steps are iterative. For example, we identify unique persons for the purposes of population count in the early phases, while in the later phases we verify and determine demographic characteristics of every unique person.

A. Incorporate address updates from the field data collection operations into MAF/TIGER

Dates: February 6 – September 27, 2020

- 43. During the data collection operations, the census field staff can update address, update physical location information, and add addresses. These changes are incorporated into our address and geo-spatial MAF/TIGER databases.
- 44. Once updated, each address must be associated to the correct state, county, tract, block group and block. Since it is critical for many of our data products (including redistricting data) to associate each address to the correct geography, we verify that the address and geo-spatial updates are incorporated correctly.

B. Produce the Final Collection Address Data Products from MAF/TIGERDates: September 27 – Oct 14, 2020

45. Once the benchmark has been created, the final collection geographic data files are produced and verified.

C. Produce and review the Decennial Response File 1 (DRF1)

Dates: October 29 – December 26, 2020

- 46. The verified final collection geography data are integrated with the response data and we verify our work to ensure accuracy. The next set of activities involves the standardization of the collected information.
- 47. First, we determine the final classification of each address as either a housing units or a group quarters facility, which is necessary because addresses can change from a housing unit to group quarters and vice versa as a result of field observations. Initial status is set at the start of the data collection operations as either a housing unit or group quarters, but during the enumeration operations, we collect information that informs that classification. For a small number of addresses the classification may change, for example a housing unit may have been turned into a small group home.
- 48. Next we identify persons in housing unit and group quarters returns. As part of NRFU operation, we reinterview a sample of cases to ensure quality. We incorporate the results of the reinterview for further action in subsequent steps.
- 49. As part of the Internet self-response option and telephone operation, respondents can provide their data without their Census Identification Number (ID). These cases are assigned an ID which associates them to the final collection geography.
- 50. We collect data in many ways in the Group Quarters operation, for example on-line, over the phone, on a paper questionnaire, electronic administrative files, and in person using an electronic questionnaire. As a result, we need to standardize the responses across the modes of collection. This step ensures all the data are formatted in the same way for subsequent processing.
- 51. Finally, for the operations that collect data on a paper questionnaire, some housing units have more people than can fit on one paper questionnaire. The census field staff will use multiple paper questionnaires to enumerate the house. We have to link these continuation forms to form one household.

D. Produce and review the Decennial Response File 2 (DRF2)

Dates: December 26, 2020 - February 26, 2021

- 52. Once the previous step has been verified, we incorporate the results from the Self-Response Quality Assurance operation that occurred during the data collection phase. This quality assurance operation ensures that data determined to be falsified or incorrect are not added to the Census.
- 53. As part of the group-quarters operations—a special enumeration procedure used for group housing, such as prisons and colleges—we enumerate domestic violence shelters. Their locations and data are highly sensitive and are handled with special procedures both in the field and in processing. Their data are incorporated at this point in the process due to their sensitivity.
- 54. Also at this stage in the process, we select a form that will be used as the enumeration of record for those small number of addresses where we receive multiple returns—for example, where one person in a house completes the form online, and another completes the paper questionnaire. This is another important step to avoid duplication, and was particularly important for the 2020 Census, given the multiple modes of response that were offered and the ability to respond without an assigned identification number.
- 55. As with the prior steps, we continue in the DRF2 file to identify, review, and resolve data anomalies to ensure that the data are accurate.

E. Produce and review the Census Unedited File (CUF)

Projected Dates: February 27, 2021 - March 26, 2021

56. It is in the CUF that we began to incorporate administrative records data as the response data for housing units where we do not have an enumeration but where we have high-quality administrative records data. Incorporating this information thus helps

the Census Bureau achieve a more complete census. Administrative record data can include information previously collected by other federal or state agencies, including the Internal Revenue Service and the Social Security Administration.

- 57. Next, we finalize the status for every housing unit as occupied, vacant or non-existent. Non-existent units are removed from future processing. For every occupied housing unit, we determine the population count.
- 58. For every housing unit and group quarter, the location is processed by state, county, tract, block group, and block. Then we verify the status (occupied, vacant or non-existent) for every housing unit and group quarter. And in all occupied addresses, we verify the number of persons. For a small number of individuals who live in transitory locations such as campgrounds and marinas, this information will be added later in the process.
- 59. For unresolved housing units -i.e., those we believe to be occupied but do not have respondent data after all collection operations end we use a statistical method called count imputation to assign a population count. This was done for less than one half of one percent of housing units in the 2010 Census.
- 60. The result of these processes is a file that contains records for every housing unit and group quarters along with person records for the people associated with the addresses, although some of the demographic and tenure information may still be missing by this step.
 - 61. As of the date I execute this declaration CUF processing is complete.
- 62. All of the processes involved in CUF creation are critical predecessors to the subsequent processing operations, including those needed for redistricting.

F. Produce, review and release the Apportionment Counts

Scheduled Dates: March 27 - April 30, 2021

63. On completion of the CUF, we verify and incorporate into the state population counts data that includes the Federally Affiliated Overseas population (such as

military personnel serving overseas), the results of the Enumeration of Transitory Locations for each State, and any addresses added late in census data collection.

- 64. Next, we determine the apportionment counts. Since all housing units and group quarters have a population count linked to a State, we can feed their tabulation into the state-level population counts.
- 65. To ensure accuracy in the apportionment numbers, the state counts including the overseas population and apportionment numbers are verified by independent teams using different methods. The results of the independent verifications are compared and reconciled, if necessary.
- 66. We produce the apportionment results using the method of equal proportions. We deliver the apportionment package to the Secretary of Commerce who then delivers them to the President. The President then reports the numbers to Congress.
- 67. Once again, the Census Bureau does not believe it can deliver apportionment counts sooner than its current working schedule.

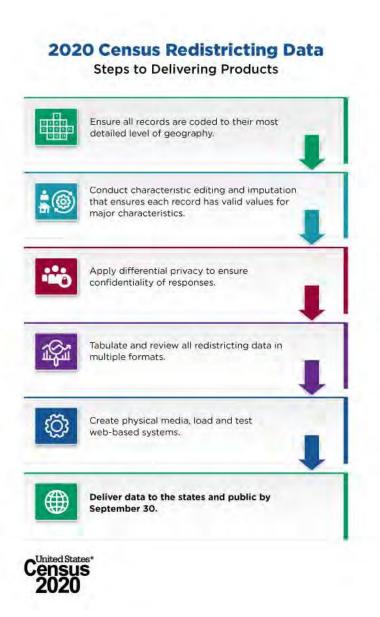
G. Produce and Review Census Edited File (CEF)

Scheduled Dates: April 20 – June 24, 2021

- 68. The next stage is the creation of the Census Edited File (CEF). Whereas the CUF was the basis for the apportionment counts, the CEF provides for the much-more detailed and voluminous data required for redistricting. This process adds any remaining missing values, rectifies conflicting information, and overall ensures a complete set of records for subsequent production of redistricting data.
- 69. It is at this stage that the detailed information about individuals living in the households is compiled (as opposed to the simple population count). This includes complex processing for the race and ethnicity and age information that states must have in order to conduct redistricting.

- 70. Because processing for apportionment only requires accurate population count data, the detailed respondent information needed for this phase can still be conflicting or contradictory and requires further processing with complex editing rules. Additionally missing data are accounted for using a statistical process called characteristic imputation.
- 71. This is a highly complex operation that involves iterative run and review cycles to ensure processing is occurring as designed. And as anomalies are uncovered and corrected, the data must be re-processed.
- 72. Due to the complexity of the operation, and the iterative cycles of review, it is not possible to accelerate the production of the CEF without unacceptable risks to data quality.

73. The general steps to move from this point forward to production of the redistricting data are depicted in the following graphic and discussed in detail in the paragraphs that follow.



H. Produce and Review Microdata File (MDF)

Scheduled Dates: June 25 – July 18

- 74. The next stage of the process is to create the privacy-protected Microdata Detail File. At this stage the Census Bureau applies formal privacy protections to prevent revealing respondent information.
- 75. Application of these protections is not optional. The Census Bureau is required by law to protect the confidentiality of the information provided by respondents. Consistent with that requirement, the Census Bureau has designed the 2020 Census Disclosure Avoidance System (DAS) are to ensure equal privacy protections for every enumerated person in the country, irrespective of where they live, and that the accuracy of any statistic that we publish will improve as the number of people being measured increases. Our disclosure avoidance approach accomplishes these objectives by taking detailed privacy-protected measurements of the population at all levels of geography, from the nation down to the individual Census block, and processing these data in descending order from the nation down to the individual block.
- 76. Because of how the method works, the disclosure avoidance algorithm must be applied to the full census data set (i.e., the entire nation) in order to function correctly. Processing these measurements in a top-down fashion, starting at the national level, allows the algorithm to improve the accuracy of the statistics at all geographic levels without impacting the privacy guarantee by leveraging the accuracy of statistics at higher geographic levels. This stage also requires careful review—and, if necessary, re-processing of the data—to ensure the system is functioning as designed. Additionally, any redesign of the top-down (full nation) approach would require complex software changes and testing of those changes that would add even more time to the processing schedule.
- 77. The nature of the disclosure avoidance algorithm thus means that individual states cannot be processed separately in order to finish the process earlier.

I. Produce and Review Tab file

Scheduled Dates: July 19 - August 16

- 78. Next, the Census Bureau conducts the tabulation and review of the tabulated census data. Tabular data are easily understandable and usable data tables that the public expects from the Census Bureau. Prior to tabulation, the census data are still in a largely unusable form that would require significant expertise and manipulation on the part of data users to select and understand useful information. Tabulation (literally, formatting and summarizing data into 'tables') makes census data easily accessible by state officials or the public. Published tables must be created from the processed data; must be accurate and complete; and must integrate geography, population, and characteristics in myriad combinations.
- 79. The voluminous and detailed nature of tabulation requires rigorous review and validation that cannot be skipped or shortened without significant risk to the accuracy of these products.
- 80. During tabulation we also add new fields in the data that make future extraction, summation, and deeper understanding easier for data users to achieve. For example, we may need to add a "voting age" field and update our system so that all records for people age 18 or over have the that value. This enables "filtering" for the characteristic of "voting age."
- 81. If the Census Bureau were to prioritize one State's redistricting data (to the detriment of the other 49 states), it may be able to deliver that data a few days earlier than other States, at most.

J. Produce, Load, and Disseminate Redistricting Data

Scheduled Dates: August 17 – September 30

82. The final stage is the review, preparation, loading, and delivery of the official redistricting data. This stage involves the creation of dissemination materials to send the states, the loading of web-based systems, the testing of those materials and systems

to ensure they are functioning correctly, and the actual delivery of the data to the states and the public.

- 83. At this stage we test our materials and systems to ensure they are functioning correctly. We then create redistricting materials to send to the States. In order to provide convenient access to data users, we also load these data products to our web-based systems. And we deliver the data to the states and the public.
- 84. While this is happening, we are loading the data.census.gov Data Explorer tool with the entire nation's data and metadata that allows the system to properly pull and display data. This too must be carefully verified to ensure that data for every geographic level and every table is being properly pulled by the application and displayed. Once all of these materials are ready for release, the physical materials are mailed via overnight mail and the web-tool is made available to the official recipients.
- 85. If the Census Bureau were to prioritize the DVD/Flash Drive and the data.census.gov webpage for one State's redistricting data (to the detriment of the other 49 states), it would not be able to deliver the data more than a few weeks earlier than a single national release.

Commitment to Data Quality

- 86. The Census Bureau is committed to unprecedented transparency about the quality of the 2020 Census. The Deputy Director set up a Data Quality Executive Guidance Group (EGG) in April 2020 to evaluate the quality of the 2020 Census. The EGG draws upon expertise of career employees within the Census Bureau in the fields of census operations, statistical methodology, acquisition and use of administrative records, and in the social, economic, and housing subject areas. The group has been meeting continuously since that time and fully supports of the processing steps and the timeline described above to ensure that 2020 Census data are accurate and complete.
- 87. The Census Bureau is now collecting data for its formal coverage measurement study, the Post-Enumeration Survey. That effort will provide estimates late in 2021

of coverage errors (both undercounts and overcounts) for States and for various demographic groups, similar to what we released after the 2000 and 2010 Censuses.

- 88. In December 2020, the Census Bureau released the 2020 Demographic Analysis (DA) estimates. DA estimates consist of national-level estimates of the population by age, sex, race, and Hispanic origin as of April 1, 2020. These estimates are developed from current and historical vital statistics: birth and death records, estimates of international migration, and Medicare records. The Demographic Analysis estimates are independent from the 2020 Census and are used to calculate net coverage error, one of the two main ways the Census Bureau evaluates the coverage of the census.
- 89. The 2020 Census has been the most challenging census in modern history. The Census Bureau has faced an unprecedented pandemic, natural disasters, and civil unrest in addition to the already-complicated task of collecting and processing data for nearly 150 million households across 3.8 million square miles. Despite these challenges, the Census Bureau resolved 99.9% of all housing units in the nation and it has planned a schedule that is designed to achieve the complete and accurate data that will guide the country for the next ten years.
- 90. I respectfully submit that the intentions of the dedicated professional staff at the Census Bureau will always be to deliver accurate data about the U.S. population and economy, and we continue to do so as we work through the challenges we as a nation have faced over the last year.

I have read the foregoing and it is all true and correct.

DATED and SIGNED:

MICHAEL THIEME Digitally signed by MICHAEL THIEME Date: 2021.03.12 21:48:28 -05'00' Michael Thieme

Assistant Director for Decennial Census Programs, Systems, and Contracts United States Bureau of the Census

IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF OHIO WESTERN DIVISION AT DAYTON

STATE OF OHIO,

Plaintiff,

v.

GINA RAIMONDO, in her official capacity as Secretary of Commerce,* et al.,

Defendants.

Case No. 3:21-cv-00064-TMR

District Judge Thomas M. Rose

DECLARATION OF JAMES WHITEHORNE

^{*} Gina Raimondo was recently confirmed as the Secretary of Commerce and has been automatically substituted for Wynn Coggins, the former Acting Secretary of Commerce, under Federal Rule of Civil Procedure 25(d).

I, James Whitehorne, make the following Declaration pursuant to 28 U.S.C. § 1746, and state that under penalty of perjury the following is true and correct to the best of my knowledge and belief:

- 1. I am the Chief of the Census Redistricting and Voting Rights Data Office at the U.S. Census Bureau. I have occupied this position since July 2015. Prior to that, I served as the Assistant Chief in the same office from April 2010 until becoming Chief. As Chief of the Census Redistricting and Voting Rights Data Office I am responsible for management of the Census Bureau's redistricting data program and for implementation of 13 U.S.C. § 141(c). I am knowledgeable about the Census Bureau's redistricting data program.
- 2. I am making this Declaration in support of Defendants' Opposition to Ohio's preliminary-injunction motion. All statements in this Declaration are based on my personal knowledge or knowledge obtained in the course of my official duties. In this declaration I:
 - Provide background on the Census Bureau's redistricting data program;
 - Explain the process by which the Census Bureau established September 30,
 2021 as the working schedule date by which we would complete delivery of redistricting data, and our reasons for establishing this schedule;
 - Explain why it is impossible for the Census Bureau to comply with the statutory deadline set in § 141(c); and
 - Explain the likely effect of any order compelling production of redistricting data for Ohio prior to the completion of processing.

Background on the Redistricting Data Program

3. Section 141(c) of the Census Act requires the Secretary of Commerce ("the Secretary") to establish a program allowing States to identify the geographic areas for

which specific tabulations of population are desired. Section 141(c) also directs the Secretary to deliver basic tabulations of population, and geographically specific tabulations for those States participating in the program, to the Governor and officers or public bodies having responsibility for legislative apportionment or districting within one year from the decennial census data (which is April 1).

- 4. The Census Bureau established the program after passage of Public Law 94-171 in 1975, codified at 13 U.S.C. § 141(c). The States generally use redistricting data produced under § 141(c) to redistrict for state and congressional elections, although they are not required to do so by any federal law. The U.S. Department of Justice also uses redistricting data to enforce of the Voting Rights Act.
- 5. Section 141 requires the Census Bureau to conduct the program in a non-partisan manner. We accomplish this by asking each State to assign a non-partisan liaison or liaisons at the start of the program each decade. The redistricting data program asks that the majority and minority leadership in all chambers of the state legislatures sign off on the individuals they feel can represent the State in a non-partisan manner. The redistricting data program then works with those people (or their successors) for the lifecycle of the program.
- 6. The redistricting data program (RDP) works to ensure the states are informed about the decennial census and the RDP. We started the 2020 RDP by offering in-person briefings to each state, eventually providing information about the 2020 Census and the 2020 Redistricting Data Program to the 26 states that accepted. We have continued to conduct state briefings when requested. We keep as many states as possible informed through our regular interactions with umbrella organizations such as the National Conference of State Legislatures. We also interact directly with our program liaisons in each state.
- 7. When the Census Bureau first requested a four-month statutory extension from Congress in April 2020, we called our liaisons in New Jersey and Virginia because

those two states require redistricting data prior to our statutory deadline. We also emailed all of our liaisons over the month of May 2020 to try to understand the impact of that extension request. Some States were able to act on that information, such as New Jersey where voters approved a constitutional amendment that allowed the State to use previous district maps until the new maps are in effect for the 2023 elections. And in California, the state legislature sought and obtained at least a four-month delay of its redistricting deadlines from the California Supreme Court.

- 8. More recently, we notified all of our liaisons on January 28, 2021 that the redistricting data would be delivered later than July 31, 2021, and we have been providing a direct line of support for the states and our liaisons when they come to us with census-related questions. For example, we worked with the Secretary of State's office in Idaho to help them identify data that will allow them to perform a series of initial draft plans, thereby reducing their workload by 50% when the official data is provided. *See* Webinar, Comments by Jason Hancock, Deputy Secretary of State, Idaho (March 5, 2021).
- 9. The 2020 Census redistricting data program is being conducted in five phases. The first two phases are the Block Boundary Suggestion Project and the Voting District Project. These two phases were conducted in advance of the decennial census in the years 2015 through 2020 to provide States the opportunity to identify the geographic areas for which specific tabulations of population are desired. The third phase of the program is delivering redistricting data to the states. In the fourth phase, the Census Bureau collects the newly redistricted congressional and state legislative districts created by the States after the Census Bureau delivered the redistricting data. This phase is also used to collect changes every subsequent two years if States redistrict again during the decade. In phase five, the Census Bureau evaluates the previous decade's program, incorporating feedback from the States, and develops an outline for the next decennial's redistricting data program.

- 10. Currently, the Census Bureau is in phase three, the data delivery phase. We provided the States with geographic support products in January and February of this year. State and local governments use these products in their redistricting efforts. The products contain newly created 2020 Census blocks and updated block groups, census tracts, voting districts, and current boundaries for legal governments and school districts referenced to January 1, 2020. Using the information that each State provided, we have now delivered the geographic information that will help them plug in the actual 2020 Census data and do their work of redrawing district boundaries. We are now preparing to deliver the official data, once it has been processed and cleared for publication.
- 11. This data will be delivered to the States in two methods. The first method is on DVDs and Flash Drives. These physical devices will have an integrated software browsing tool that will allow intuitive browsing of the data. They also contain a custom extraction menu that allows for the extraction of large datasets from the device. Those extractions can then be imported easily into a Geographic Information System or database. The second method is using our data.census.gov webpage. This webpage is a data browsing tool where data users can access many different census datasets, including the redistricting data. It has custom filters that allow the user to filter on those geographic and characteristic data for which they are interested. For example, a State could filter the data and easily identify the number of voting-age residents by race or ethnicity in each and every block within a census tract, county, or even for the entire state. Data users can view, map, and download these datasets once they have set the filters with their choices.

Impossibility of Complying with the Statutory Deadline

12. Based on my knowledge of decennial census data processing, producing redistricting data by, or even close to, the statutory deadline of March 31, 2021 is not possible under any scenario, and the Census Bureau would be unable to comply with any such order from the Court. Simply put, it would be a physical impossibility.

- 13. As explained in depth by the Assistant Director for Decennial Census Systems and Contracts, Michael Thieme, the Census Bureau must complete a series of interim steps prior to delivering the redistricting data:
 - On completion of the initial CUF, we incorporate the Enumeration of Transitory Locations data, and any addresses added late in census data collection into the detailed final version of the CUF, scheduled to be completed by April 19, 2021.
 - The Census Edited File (CEF) in the working plan is scheduled to be completed by June 23, 2021. To produce the CEF, the final CUF needs to go through the editing and imputation process which ensures all records have valid values.
 - The Microdata Detail File (MDF) in the working plan is scheduled to be completed by July 17, 2021. Census data is protected by Title 13 and cannot be disclosed until Census completes disclosure avoidance processing. The output of those privacy protections is the MDF. Disclosure avoidance involves a privacy budget based on complex algorithms that requires the entire national set of CEFs as its input. In other words, it is impossible for this step to be completed until CEF data from all states are done processing.
 - The tabulation system then uses the MDF to append more detailed geographic information and then generate the tabulated versions of the data in all of their needed formats. These formats include the text-based summary files and the Application Programming Interface format that drive the data.census.gov website. These formatted tabulations are then reviewed by subject matter experts to ensure the tabulations were performed correctly. In the working plan, this review completes on August 13, 2021.
 - The final activity is the production, loading, and testing of the actual dissemination materials and system. The materials are DVDs/Flash Drives with custom browsing software to make accessing the data user friendly. This requires another format conversion of the tabulated data. The system is the data.census.gov platform that provides access to the data for the states and the public. These materials need to be created, system loaded, and all reviewed and tested prior to being provided to the states.

- 14. Each of these interim steps, in order, is required to move to the next. And the processing for each of these interim steps are interrelated, so changing something in one would impact each subsequent step and threaten the success of the overall process. In the working plan, the Census Bureau is scheduled to complete production of redistricting data no later than September 30, 2021.
- 15. The current working schedule for producing the redistricting data is not set in stone, however. The schedule builds in time to account for multiple reviews on the assumption that anomalies will be discovered and must be corrected prior to publication. Anomalies found in processing are not errors in the census, but they can turn into errors if we don't review and resolve them. In a perfect world where every single step of the processing occurs with no additional anomalies or impediments, it may be possible to deliver redistricting data weeks before September 30. But it has been our experience with the 2010 Census processing, with the first half of the 2020 Census processing, and with the issues we already know we will encounter in the second half of the 2020 Census processing, that there is little to no chance of encountering this perfect world. This is a dynamic process and the Census Bureau is doing everything in its power to produce high-quality redistricting data as quickly as possible.

The September 30, 2021 Delivery Date

16. The Census Bureau's original plan was to release the redistricting data in a staggered fashion, releasing a group of states each week between February 18, 2021 and March 31, 2021. But by early 2021 it was clear that the Census Bureau could not meet its statutory deadline for delivering redistricting data to the states. Around the same time, my office received questions from our state liaisons about when we could deliver the data, and we wanted to provide this information to the States so that they could plan for the delay. The Census Bureau therefore sought to establish an achievable schedule for redistricting data that built in sufficient time for review and revision, and produced redistricting data that States could use with confidence.

- 17. To create the current working schedule, I coordinated with many different components of the Census Bureau about the time each office needed to perform its part of the process. These areas include: Decennial Response Processing System, Decennial Statistical Studies Division, Economic Reimbursable Surveys Division, Production Environment for Administrative Records Staging Integration and Storage, Demographic Directorate, Disclosure Avoidance System, Tabulation System, Center for Enterprise Dissemination Services and Consumer Innovation, Application Development and Services Division, Decennial Census Management Division, and the Census Redistricting and Voting Rights Data Office.
- 18. Recognizing that processing schedules are a snapshot based on past and current experiences, the working schedule that we created—estimating completion by September 30, 2021—takes into account the Census Bureau's processing experiences thus far (such as the discovery of anomalies) and allows time for subject matter review and reruns of files, if necessary. To the fullest extent possible, it adjusts the sequencing and durations of some operations to achieve efficiencies. For example, the working schedule has allowed us to prepare ancillary files needed for creation of the CEF, while waiting for receipt of the CUF. Originally, these were to be processed after receipt of the CUF. This change allowed us to "save" several weeks in expected processing time.
- 19. But as discussed above and by Mr. Thieme, this highly complex operation involves iterative and interrelated review cycles to ensure processing is occurring as designed. This is crucially important because the finished CEF becomes the source of all decennial data for the next ten years. After completion and validation of the CEF, it is also essential that the Census Bureau process the country as a nation through the disclosure avoidance process to protect the confidentiality of all census respondents. These two necessities (completion of CEF and privacy protections) in particular push us deep into the planned schedule, well beyond the statutory deadline.

- 20. In addition, critical decisions are made using the data produced by the Census Bureau for the decade following their publication. The processing work that leads to the redistricting data products ensures the eventual quality of not only the redistricting data but all of the major decennial data releases that are used throughout the decade for public policy, funding formulas, business decisions, and many other uses.
- 21. To help states and the public plan, on February 12, 2021 the Census Bureau announced the new working schedule and published a blog (available here) that I had written describing our process and rationale.
- 22. Originally, we planned a staggered delivery so that we could order states based on their redistricting deadlines, prioritizing states that needed the data sooner. In our efforts to keep the redistricting schedule as short as possible while maintaining the quality of the data, however, we determined that a single national delivery would provide an overall shorter timeframe than a staggered release. That's because a single national release will enable us to compress several production and review activities. For example, by moving to a single national release, DVD/Flash Drive creation and review went from 37 days to 28 days; review of the tabulated data went from 36 days to 20 days; and the load-and-review process for the data.census.gov data website went from 42 days to 23 days.
- 23. The single national release will also allow the Census Bureau to ensure the delivery of redistricting data with finality, possibly saving time over a staggered release. When performing data reviews, there may be an error in one State that is not apparent except when viewed in another State or multiple States. These findings act as triggers to perform additional reviews to identify whether it is a systematic error that may require reprocessing of all States' data or if it only affects the State in which it was found. So a single national release allows the Census Bureau to complete the review of all the dissemination materials prior to release, thus reducing the likelihood of finding an error after the data for one State was released that would require us to retract that data, conduct

additional processing, and reproduce that State's corrected data much later. Because the Census Bureau will be unable to meet the statutory deadline to provide the redistricting data to the States, and with the urgency of supplying all States their data as soon as possible, it is thus more efficient for all States' data to be reviewed prior to dissemination.

- 24. The Census Bureau is aware that there are now a number of States, including Ohio, that will have to address statutory or state constitutional issues resulting from our delayed delivery of the redistricting data. Based on the National Conference of State Legislature's webpage titled 2020 Census Delays and the Impact on Redistricting, at least 27 states have a requirement for redistricting to be completed in 2021 (either explicitly or implicitly). And each state has its own constitutional and statutory requirements, some of which include public meetings, data modification, and other requirements. So, with the delay in the delivery of the redistricting data, there are now too many states (at least 27) to prioritize, in a fair, logical, and data-driven manner.
- 25. It would be possible to have fully reviewed redistricting data for all States available by mid to late August, but the data would be in an older format of data the Census Bureau developed decades ago. These are a difficult-to-use series of files that are used in databases capable of creating relationships between tables and files. In order to be used correctly, the files must be imported into a database, relationships must be established between the files, and the State must pull a subset of records in those files and fields for only the geography and data categories the State wants to use. Given the difficulty in using data in this format, any State using this data would have to accept responsibility for how they process these files, whether correctly or incorrectly. The official census user-friendly DVDs/Flash Drives and data.census.gov webpage that States expect for redistricting and do not require those types of databases or technical expertise would still only be available on our current working schedule, as discussed above.
- 26. If the Census Bureau were to prioritize the DVD/Flash Drive and the data.census.gov webpage for one State's redistricting data (to the detriment of the other

49 states), it would not be able to deliver the data more than a few weeks earlier than a single national release. If the Census Bureau were to prioritize the older, more-complicated file format for one State's redistricting data (to the detriment of the other 49 states), it may be able to deliver that data a few days earlier than other States, at most. As explained above, the Census Bureau cannot produce data for any State until after the disclosure avoidance (privacy protections) have been applied, which requires processing data for all States at once. As a result, even if the Census Bureau prioritized the redistricting data for one State, it could only focus on that State after privacy protections (i.e., disclosure avoidance) are applied, and we would still need to create and review the data tabulations thereafter. However, if one State were prioritized through those reviews, the resulting data may have uncaught errors from being been rushed through review without the benefit of review all States at once, perhaps ultimately sacrificing both accuracy and time (as discussed above).

- 27. Prioritizing one state would also divert the use of resources and systems that are needed for the national release and delay the release of data for the other 49 states. That's because prioritizing one State would mean focusing the Census Bureau's resources on that review and processing, delaying review for all other States. So even if the prioritized one State's data could advance the DVD/Flash Drive and data.census.gov webpage release by several weeks, the same data for the other 49 States would be delayed.
- 28. The Census Bureau's working schedule does not contemplate advantaging one State over the other 49. So the full extent of any additional delays resulting from the prioritization of one State over the other 49 would have to be determined by recreating the working schedule with the one prioritized State ahead of all others. Based on my current knowledge, attempting to prioritize one State may cause an additional delay by as much as several weeks, causing even further disruptions for the remaining 49 States' redistricting processes.

- 29. The current situation is understandably frustrating to Ohio, and to the majority of States. As the officer within the Census Bureau charged for advocating on behalf of the States in regard to the redistricting data program, I understand and share their frustration. But dedicated Census Bureau professionals are working as diligently and efficiently as possible to ensure that the data we provide for redistricting are produced as quickly and as accurately as we can accomplish.
 - 30. I have read the foregoing and it is all true and correct.

DATED and SIGNED:

JAMES WHITEHORNE Digitally signed by JAMES WHITEHORNE

Date: 2021.03.12 20:58:37 -05'00'

James Whitehorne

Chief, Census Redistricting and Voting Rights Data Office United States Bureau of the Census

EXHIBIT B