2020 Census LUCA Training Workshop Script for Digital/Paper participants

Slide 1 – Cover/Opening

Thank you for attending the 2020 Census Local Update of Census Addresses Operation (LUCA) training for participants choosing digital address materials and paper map materials.

Slide 2 – Intended audience: Product Preference Form – "Digital/Paper"

The U. S. Census Bureau has designed individual trainings for each of the seven product preference combinations that discuss the review and update of the 2020 LUCA materials unique to each product preference selection. Participants who registered and completed the Product Preference Form with "Digital" chosen in Section A and "Paper" in Section B should view this presentation.

If your jurisdiction registered for a product preference different from "Digital/Paper", you should not view this presentation. Instead, refer to the presentation that matches the product preference combination from your *Product Preference Form (D-2003).*

Slide 3 – Agenda

During today's presentation, we will introduce the 2020 Census and 2020 LUCA, discuss some review and update strategies, and introduce the materials and suggested setup for the digital materials. We will describe the acceptable updates to the materials, show examples of updates to both the address and map materials, and outline the submission process. Lastly, we will discuss how to receive support and assistance during the LUCA operation and provide details for how to stay connected to the Census Bureau through several social media sources as well as Census Bureau subscriptions. Throughout the presentation, you will hear repeated reference to the Respondent Guide that accompanies the materials.

The 2020 LUCA materials and operational instructions are subject to change between the LUCA training timeframe and the time you receive your materials for review in the spring of 2018; therefore, the examples shown in the various training modules may differ from the official materials.

Slide 4 – In this section (Introduction)

As part of the introduction, we will discuss, at a high level, the decennial census and 2020 LUCA, identify a few commonly used words of Census terminology, and discuss preparations for participation in 2020 LUCA.

Providing background on the decennial census and 2020 LUCA lays the foundation for the subsequent slides. Keep this background in mind as you begin to formulate a plan for participation and conducting your review.

Slide 5 – The decennial census

The purpose of the decennial census (also known as the 2020 Census for this decade) is to conduct a census of population and housing and disseminate the results to the President, the States, and the American people. The United States Constitution mandates an actual count of every person residing in the United States every 10 years. The Census Bureau counts individuals within households and typically collects information about the housing structure and the housing unit.

The primary use of census data is to provide the population counts needed to apportion seats in the U.S. House of Representatives among states as mandated by Article 1, Section 2 of the Constitution, but additional data uses include:

- Drawing congressional and state legislative districts, school districts and voting precincts by tribal, state, and local governments.
- Enforcing voting rights and civil rights legislation by the Department of Justice.
- Distributing over $675 billion dollars in federal funding, EACH YEAR, to tribal, state, and local governments. *Missing a housing unit, and the associated population, during the decennial census may result in a missed opportunity for governments to benefit from federal funding.*

Lastly, census data plays a role in informing the decisions of governments, businesses and non-profits regarding numerous topics such as community and regional development, education, agriculture, energy, and environmental programs, as well as other community improvements and enhancements.

To conduct the decennial census, the Census Bureau utilizes its census address list. A review and update of the census address list is the focus of LUCA.

Slide 6 – 2020 Census Design

This graphic illustrates the 2020 Census Design process and why building a strong geographic foundation is so important.

Starting at the bottom left of the slide, the Census Bureau must Establish Where to Count by identifying all the addresses where people could live. The census address list contains the residential addresses that form the "where to count." A complete and accurate address list ensures that all households are included in the Census in the correct location.

Moving up from the bottom left to the top left, the Census Bureau must Motivate People to Respond by conducting a nationwide communication and partnership campaign. This campaign utilizes the census address list to send materials that invite and encourage households to respond.

Moving across to the top right corner of the graphic, the Census Bureau must Count the Population by collecting data from all households, including group quarters and unique living arrangements. The Census Bureau uses the address list and maps to send enumerators to collect interview data from nonresponding households.

Finally, moving down from counting the population, the Census Bureau must Release Census Results by using the address list and geographic boundaries to process, tabulate, and disseminate apportionment counts to the President by December 31, 2020, redistricting data to the States by April 1, 2021, and high

quality data to the public. An accurate address list ensures that all households are counted in the correct geographic location.

In this presentation and others you may receive throughout this year, the Census Bureau provides examples regarding the importance of LUCA participation and a successful 2020 Census that result AFTER the "Release Census Results" section of this slide. While the examples on the previous slide are all valid reasons for participating in LUCA, this graphic illustrates why your LUCA participation is so fundamentally important.

LUCA offers eligible entities the opportunity to provide their input into the address list that serves as the foundation of the entire 2020 Census Design process. Participants in the 2020 LUCA operation have a direct influence on the quality and completeness of the census address list.

Slide 7 – LUCA background

The Census Address List Improvement Act of 1994, which became Public Law 103-430 in October 1994, authorized the Census Bureau to share its address list with governments who sign a confidentiality agreement.

First implemented in support of the 2000 Census, LUCA was later refined to support the 2010 Census, and now the 2020 Census.

LUCA provides a voluntary, once-a decade, opportunity to tribal, state, and local governments to review and comment on the Census Bureau's residential address list for their jurisdiction prior to the decennial census. The Census Bureau relies on a complete and accurate address list to reach every living quarters and associated population for inclusion in the census.

Slide 8 – What's new for 2020 LUCA

The 2020 LUCA operation offers streamlined participation through a full address list review, provides the digital address materials in a convenient standard software format, and includes "unable to geocode" addresses for state and county participants. For those of you that may be unfamiliar with the term 'geocode,' in Census terms it identifies addresses with census geography codes for the state, county, tract and block. "Unable to Geocode" records are missing the tract and block information. Also new for 2020, is the requirement for multi-unit structure identifiers. This new requirement is important to mention because it may require special attention for participants that do not store individual unit information.

The 2020 LUCA materials include Census Bureau residential structure coordinates, if they are available, and allows participants to submit their own residential structure coordinates to accompany their LUCA submission. Lastly, the 2020 LUCA operation also allows participants to supply non-city style addresses, with corresponding map spots or latitude and longitude coordinates. The Census Bureau cannot accept PO Box information.

Slide 9 – Title 13 U.S.C. – confidentiality and security

Title 13 U.S.C. protects information provided to and from LUCA. It requires the Census Bureau ensure the confidential treatment of census related information, including individual addresses and structure

points (also known as map spots on the paper LUCA materials), and maintain the confidentiality of all information it collects. LUCA requires all liaisons, reviewers, and anyone with access to the Title 13 materials abide by the *Confidentiality and Security Guidelines* and requires all LUCA participants (liaison and reviewers) sign the *Confidentiality Agreement Form.*

For Digital/Paper participants, the Address List is Title 13 material and requires protection. The guidelines document that accompanied the LUCA invitation/registration materials is included in the Respondent Guide. If changes occur to staff that have access to the Title 13 materials, the jurisdiction must provide updated Confidentiality Forms as the changes occur, throughout the LUCA operation timeframe.

Slide 10 – Title 13 U.S.C. – confidentiality and security (cont'd)

Title 13 provides the following protections to individuals and businesses:

- The Census Bureau never publishes private information. It is against the law to disclose or publish any private information that identifies an individual or business, including names, addresses (including GPS coordinates), Social Security Numbers, and telephone numbers.
- The Census Bureau collects information to produce statistics. No government agency or court can use personal information against respondents.
- The Census Bureau staff is legally required to maintain the confidentiality of your data. Every person with access to your data is sworn to protect Title 13 data (and the data you share) for life. They understand that the penalties for violating this law are applicable for a lifetime.
- Violating the law is a serious federal crime. Anyone who violates this law will face severe penalties, including a federal prison sentence of up to five years, a fine of up to $250,000, or both.

Slide 11 – 2020 LUCA schedule

A final point of the 2020 LUCA section of this introduction, before moving into Census terminology is the schedule. Keeping the schedule in mind prepares you for upcoming tasks and actions.

- January 2017 – Advance Notice mailing conducted. The purpose of the Advance Notice mailing was to bring awareness to 2020 LUCA and its schedule so governments could begin preparing to participate. The Census Bureau asked contacts to review the LUCA Information Guide and to confirm/correct their contact information. The Census Bureau sent a large number of Advance Notice materials in order to build a solid courtesy copy base for the invitation mailing that occurred in July 2017. Nearly 83,000 contacts were shipped the Advance Notice mailing which covered just over 40,000 governments and organizations.
- March 2017 – LUCA promotional presentations began. The six regional offices conducted these presentations. Promotional workshops concluded in December to transition to the training workshops.
- July 2017 – LUCA invitation mailing (which included registration materials) conducted. The invitation mailing included a letter, four forms necessary for LUCA registration, a document with instructions for registration, and a copy of the Confidentiality and Security Guidelines.

- October 2017 – LUCA training workshops began. As with the promotional workshops, the six regional offices manage the scheduling and conduct the training workshops. Direct questions regarding the training workshops to the GEO 2020 LUCA email at: <GEO.2020.LUCA@census.gov> and/or call the Geographic Programs Support Desk at 1-844-344-0169.
- December 15, 2017, was the 2020 LUCA registration deadline.
- February - April 2018 – 2020 LUCA materials begin to ship to participants. Participants begin their review and have 120 calendar days to complete.
- March - September 2018 – Census Bureau processes 2020 LUCA submissions.
- April 2018 – May 2019 – Census Bureau validates 2020 LUCA addresses.
- Summer 2019 – Census Bureau delivers LUCA feedback to participants (the Appeals process is still under development, but has a very short review timeframe).
- April 1, 2020 is CENSUS DAY!

Slide 12 – Census Bureau terminology

The Census Bureau uses numerous terms and acronyms. As part of the introduction, it is important to become familiar with some common Census Bureau terminology used during the 2020 LUCA operation. This slide lists some of the most commonly used terms for LUCA. These terms and others are included in the Respondent Guide. The next several slides define the terms shown on this slide and provide examples of acceptable and unacceptable housing units, group quarters and transitory locations.

Slide 13 – Housing Unit (HU)

Understanding how the Census Bureau defines the term Housing Unit (HU) is critical to the success of participating in the 2020 LUCA operation.

The Census Bureau defines a housing unit as a single-family house, townhouse, mobile home, trailer, apartment, group of rooms, or a single room occupied as a separate living quarter or, if vacant, intended for occupancy as a separate living quarter.

A separate living quarter is one in which one or more occupants (or intended occupants, if vacant) live separate from any other individual(s) in the building and have direct access to the living quarter without going through another living quarter, such as from outside the building or through a common hall.

Slide 14 – Acceptable HUs for LUCA

The following types of housing units are acceptable for inclusion as part of your 2020 LUCA submission.

- Houses, including townhomes, condominiums, and apartments.
- Living quarters within a nonresidential structure, i.e., an apartment within a church or above a business.
- Mobile homes or trailers occupied as separate permanent living quarters, even if vacant. Empty trailer pads and mobile home sites intended to be permanent sites are also acceptable for LUCA, if the site has utility connections.
- HUs under construction that will be habitable by Census Day, 4/1/2020.

Slide 15 – Group Quarters (GQs)

The Census Bureau defines Group Quarters as a place where people live or stay, in a group living arrangement owned or managed by an entity or organization providing housing and/or services for the residents.

This is not a typical household-type living arrangement. These services may include custodial or medical care as well as other types of assistance, and residency is commonly restricted to those receiving these services. Residents of group quarters are usually unrelated.

Slide 16 – Acceptable GQs for LUCA

The following types of group quarters are acceptable for 2020 LUCA:

- Correctional facilities such as federal or state prisons, local jails, and correctional residential treatment facilities.
- Juvenile facilities both correctional and non-correctional.
- Group homes, such as halfway houses, homes for people with special needs, or homes for the mentally and/or physically disabled.
- Nursing homes, either regular or skilled. Skilled nursing facilities provide rehabilitative services while regular nursing facilities do not.
- Homeless shelters.

Slide 17 – Acceptable GQs for LUCA (cont'd)

Continued from the previous slide, these additional types of group quarters are also acceptable: hospitals, dormitories at colleges or universities, fraternity houses, sorority houses, worker dormitories, religious group quarters (such as a convent or monastery), and any GQ under construction expected to be habitable by Census Day, 4/1/2020.

Should your jurisdiction choose to review GQs as part of 2020 LUCA, all of the GQ types, mentioned on both slides, are acceptable for inclusion in your submission.

Slide 18 – Transitory Locations (TLs)

Transitory Locations (TLs) are sites that contain transient, movable or mobile housing, or portable housing units, including boats, motorized recreational vehicles (RVs), tents, trailers that are pulled by cars or trucks, or any other type of portable housing used as a living quarters. Transitory locations also include hotels or motels if being occupied on a transitory basis because the occupants have no other residence.

Slide 19 – Acceptable TLs for LUCA

The following TLs are acceptable for inclusion in 2020 LUCA: RV parks, campgrounds, hotels, motels, and marinas. Only include the main address (i.e., the office address) for the transitory location.

Slide 20 – Unacceptable HUs, GQs, and TLs for LUCA

Exclude the following unacceptable types of HUs and GQs from your Address List:

- HUs, GQs, or TLs condemned or scheduled for demolition;
- Transitory units within TLs such as RV pad sites or marina slips. These transitory unit addresses are identified and documented during the Enumeration of Transitory Locations (ETL) operation;
- HUs, GQs, or TLs under construction or remodeling for nonresidential purpose, used solely for nonresidential storage or as office/business, or used solely for ceremonial purposes;
- HUs, GQs, or TLs under construction and NOT habitable by Census Day, 4/1/2020.

If addresses described in the first bullet appear on the census address list, mark them for deletion with Action Code "D." If transitory unit addresses are included in the Address List, and you are certain the transitory unit does not exist, mark them for deletion. If addresses described by the two nonresidential status bullets appear, mark them as nonresidential with Action Code "N." Do not add addresses that will not be habitable on Census Day, April 1, 2020.

Slide 21 – City style address

The Census Bureau defines city style addresses as those that have a house number and street name for their complete address. In some instances, the house number may also include an alpha character such as 35A Fourth Ave W. City style addresses are generally mailing address, but some are also used to provide a location for emergency services, such as police, fire, and rescue, i.e., E-911 addresses.

Of special note, for 2020 LUCA, participants who wish to add multiunit addresses must provide the unit identifiers. Ensure that all your apartment buildings, especially small multiunit buildings (3-4 units), such as large houses subdivided into apartments, have a separate address line for each unit that includes the basic street address and the individual unit designation.

Slide 22 – Non-city style address

The Census Bureau defines non-city style addresses as those that do not have a house number and street name for their complete address or that may have incomplete house number and street name information.

Frequently used non-city style addresses in the Census Bureau data include location descriptions with map spots, rural route and box addresses, and highway contract route and box addresses.

Slide 23 – LUCA liaison

For 2020 LUCA, each government entity that registers must designate a LUCA liaison. The liaison is an individual assigned/appointed to the position by the Highest Elected Official and serves as the main point of contact. The Census Bureau ships all of the LUCA materials to the liaison's attention. The liaison is responsible for safeguarding the materials throughout the entire LUCA operation. At the conclusion of the LUCA operation, the liaison is responsible for destroying (preferred) or returning Title 13 materials and signing out of 2020 LUCA by using the *Destruction or Return of Title 13 Materials Form (D-2012)*.

Slide 24 – LUCA reviewer

A LUCA reviewer is an individual selected by the HEO or LUCA liaison to help conduct the LUCA review. Each entity may designate multiple LUCA reviewers. As a precaution, the Census Bureau suggests anyone with intentions of viewing the census address list become a LUCA reviewer. All reviewers must sign the confidentiality agreement form prior to beginning a review of the LUCA materials. After doing so, they may review the materials in addition to the LUCA liaison. As with the liaison, they are responsible for safeguarding the LUCA materials and, at the conclusion of LUCA, they must sign out of 2020 LUCA by using the *Destruction or Return of Title 13 Materials Form (D-2012).* If a reviewer listed on the confidentiality agreement form no longer works with the entity, the liaison can sign out for them.

Slide 25 – Census geography hierarchy diagram

This diagram of Census Bureau geographic entities hierarchy illustrates the nesting relationship of various geographies. In the spirit of LUCA, the main line through the middle of the diagram depicts the census block as the smallest element in the hierarchy, nesting within block groups (not important for 2020 LUCA), census tracts, counties, and states.

This hierarchy manifests in the LUCA address data in the form of a geocode. Each address included on the 2020 LUCA Address List for your entity will include the state, county, tract, and block codes where the address is physically located. The first digit of the block number equates to the block group number.

Slide 26 – Census geography hierarchy graphic

This slide depicts a rough map graphic overview of some of the geographic relationships, similar to the hierarchy diagram on the previous slide, but in a different visual format.

These are merely examples, and not all of these relationships hold true across the hierarchy as a rule (for example, places are not always contained within MCDs, or even counties, and tracts do not always nest cleanly within places) but it works as an example to make sense of the relationships we are attempting to maintain.

Slide 27 – GEOID

As illustrated in the previous two slides, the Census Bureau uses its own geography in order to tabulate data and create a unique code to represent each area.

- Each state has its own unique two-digit code. For example, Pennsylvania is 42.
- Each county within a state has a unique three-digit code. For example, Philadelphia County is 101.
- Combined, these codes form the unique state/county code, 42101.
- Census tracts nest within counties. They are small, relatively permanent statistical subdivisions of a county. Numbered uniquely within each county, they generally have a population size between 1,200 and 8,000 people, with an optimum size of 4,000 people. Census tracts consist of six digits, a four-digit base number, including leading zeroes, plus a two-digit number suffix. An example of a census tract code is 0001.01, shown as 000101 in the LUCA data.
- Census blocks are a geographic area bound by both visible (streets, streams, railroads) and invisible (city limits) features. Census blocks are the smallest area for which the Census Bureau tabulates data. They have a four-digit code. Similar to the relationship between counties and

tracts, blocks nest within and are unique within each tract. Each tract only has one block 1001 and all tracts have a block 1001.

These four codes (state, county, tract, and block) combine to create a unique 15 digit GEOID that represents one specific block within the entire country. Using the information in the example above the nationwide unique GEOID for the block is 421010001011001. This code happens to represent the GEOID of the block in which the Philadelphia Regional Census Office is located.

Slide 28 – Preparations for 2020 LUCA participation

The Census Bureau offers early tools that provide participants the opportunity to begin LUCA preparation in advance of materials receipt. Since January 2017, residential address block counts were available for download on the 2020 LUCA website. The Census Bureau uses the geocodes of the individual addresses in the Master Address File (MAF) to derive the residential block counts. This is the first time the Census Bureau has provided this type of information in advance of the LUCA operation. The Census Bureau provides the Address Count List with the 2020 LUCA materials for reference purposes only.

The 2017 version of this product contained seven fields of information and was a pipe-delimited text file. The 2018 version, updated in January 2018, is comma-delimited and contains 13 fields of information. This updated file is the actual Address Count List material that accompanies participants' official LUCA materials.

Potential participants can compare the Census Bureau's address count data to their local data. They can join the Address Count List to 2010 tabulation block geography to create an overlay for analysis prior to receiving actual LUCA materials. Discrepancies between the census and local counts may be a result of incorrect geocoding or missing information from the census address list.

The Census Geocoder tool allows users to upload a file of addresses (or enter in an individual address) to obtain census geography and approximate coordinates based on the address ranges within the MAF/TIGER System. The Census Bureau offers support for the Census Geocoder through email to <geo.geocoding.services@census.gov>.

The Census Geocoder takes individual addresses, or file of addresses, and obtains census geography and approximate coordinates. It can process files up to 10,000 records at a time. The Census Bureau also offers Geocoding Services for larger files using the Secure Web Incoming Module, known as SWIM.

Geocoding a local address list using Census Geocoder is another way to begin early preparations for LUCA because it standardizes local data into the format the Census Bureau needs for LUCA processing and provides the census block geocode for the records submitted in the local address list file. Participants may use the geocode information to generate their own local block count tallies for comparison to the Census Bureau's block count file discussed. Participants can also generate geocodes using their own geographic information system (GIS), but this tool may help smaller entities or entities that do not have access to their own GIS.

For those not using a GIS, TIGERweb is an interactive web service for use, in advance of receiving LUCA materials, to view the features (roads, blocks, etc.) within jurisdictions. Used interactively with the

Address Count List, it allows users to identify blocks that have high or low address block counts. Documentation is located within the same URL as the TIGERweb application.

Slide 29 – In this section (Review and update strategies)

With the foundation laid with background on the 2020 Census, 2020 LUCA, and Census terminology, it is important to transition from the basics to thinking about how to conduct the review and update. For that reason, this review and update strategies section identifies things to consider, potential address sources available to your jurisdiction to conduct your review, encourages the identification of priority areas of review, and discusses how to begin your review.

Slide 30 – Things to consider

When preparing for your LUCA review, consider your time and staff resources. The 2020 LUCA operation allows 120 calendar days to review and provide the Census Bureau with your submission. The review time begins upon receipt of materials. If your entity decides to switch product preferences, the 120 days does not reset after receipt of new materials, nor does it pause while waiting for new materials. Time does not reset if you experience technical issues, so please contact the Census Bureau immediately if you experience problems with the materials (digital or otherwise).

Consider the availability of a local address list or other source of address information. If a local address list exists, does it include multiunit structure identifiers, such as Apt 1, Unit A2, #4? This information is required for 2020 LUCA submissions when adding new records to the census address list or updating the existing records within the census address list. Does the local address list include both residential and commercial addresses; and if so, are the residential addresses distinguishable? The Census Bureau only wants residential addresses for LUCA, so additional work may be necessary to prepare the local address list for use in 2020 LUCA review.

Slide 31 – Potential address sources

There are many possible sources of local address information, so this alphabetic list of potential sources may not be comprehensive. Some of these sources may not match the Census Bureau's address list exactly, but they are a good indication of where change is taking place and can help identify addresses that need to be added to the census address list.

Slide 32 – Identify priorities

When deciding how to conduct the LUCA review, consider your time, staff, and available local address information. If a complete review is not possible, focus your review on these areas, choosing the areas or addresses that are most important to your government to review. This list is in alphabetical order, not priority order for the Census Bureau

- Apartments or areas of concentrated multiunits.
- Areas along governmental boundaries.
- Areas of new residential construction.

- Blocks with the greatest difference between the Census count and the local counts. The blocks with differences highlight areas missing addresses or areas with misgeocoded addresses. These may prove to be high priority areas for many participants.
- E-911 address conversions.
- Group Quarters.
- Mobile home parks or blocks with a concentration of new/scattered mobile homes.
- Single family homes converted to multifamily and vice versa.
- Warehouse (Commercial) conversions to residential.

Slide 33 – Beginning your review

As you begin your review, assemble all of your local sources of information (local address sources and local map sources). Take time to read the 2020 LUCA Respondent Guide that accompanies the materials. Review the online presentations when they become available.

Familiarize yourself with your specific LUCA materials. For digital participants, check your Address List to ensure it imported properly (e.g., leading zeros are present and data is in the appropriate fields). To check the connection between Address List and the Address Count List, scroll to the bottom of your Address List. If you subtract one (for the presence of the header row) from the last row number, you will have the tally of addresses (housing unit and group quarters) for your jurisdiction. This number should match the "Total" information at the end of your digital Address Count List. These are all checks that participants can perform upon receipt of materials to ensure your materials are complete and correct. Review the Address Count List to ensure it includes all of its blocks. Review your paper maps to ensure all are included and legible. Check a few blocks on the Block to Map Sheet Relationship list by locating them on the respective large format map(s).

Organize your LUCA materials based on the priority areas your jurisdiction established and focus on those areas. Do not become distracted by the additional materials for other areas or other addresses. If you complete the priority areas, you can always choose additional addresses to review.

An organized approach to conducting your LUCA review will yield a successful LUCA submission for your jurisdiction.

Slide 34 – In this section (Setup and materials introduction)

This section of the presentation discusses the delivery of materials and introduces the address and map materials. It discusses the DVD layout and content, the suggested system setup, and data installation for the digital address materials.

For more detailed information and instruction, refer to the Respondent Guide that accompanies the materials.

Slide 35 – Delivery of materials

The Census Bureau delivers the materials via traceable delivery methods such as those used by FedEx or U.S. Postal Service (USPS). For Digital/Paper participants, the digital address materials are located on one DVD that contains both Title 13 and non-Title 13 data. The paper map materials arrive along with

the digital address materials. For security purposes, the digital materials are unavailable through download (ftp or internet) or through email.

Slide 36 – DVD layout and content

Digital/Paper participants receive one DVD. The root directory of the DVD contains five files:

The *2020LUCA_<EntityID>_address_countlist.csv* is the digital Address Count List. It is not Title 13 material.

The *2020LUCA_digital_respondent_guide.pdf* is the pdf version of the respondent guide for participants receiving digital address materials. A paper copy is not provided.

The *2020LUCA_header_file.txt* is a template participants may use to import their local address list into the Census Bureau's address list layout.

The *LUCA20_inventory.pdf* is a digital inventory form to use when providing your submission to the Census Bureau. The final section of this presentation on the submission of updated materials discusses how to send in this form.

The *Readmefirst4.txt* includes specific instructions for this product preference.

The "shape" folder contains *2020LUCA_<EntityID>_DISK1of2.exe* that includes the digital version of the Title 13 Address List.

Slide 37 – Suggested setup of local system

Upon receipt of the DVD, if it is damaged, incomplete, or if the files are corrupted, contact the Geographic Programs Support Desk at 1-844-344-0169 immediately for assistance and potential replacement of DVD.

The Census Bureau recommends that you make a copy of each of the files and place them on the hard drive of a computer, only after ensuring you can adhere to the *Confidentiality and Security Guidelines*. Retaining a copy will preserve the original files should you need to look at an original record or require another original copy of the file. If your jurisdiction cannot meet the digital security requirements, please do not install the data. Contact the Census Bureau immediately to discuss alternatives.

To keep your work organized, create a new directory/new folder on your hard drive. We suggest naming it "2020LUCA". Copy all of the contents from the DVD into the newly created folder on your local system.

Participants should refer to the Readmefirst4.txt, the Quick Start guide, and the Respondent Guide included with the materials for detailed instructions. Consider the Respondent Guide the source for answering questions regarding the LUCA operation. Call the Geographic Programs Support Desk at the number listed above or send an email the LUCA staff at <GEO.2020.LUCA@census.gov> if questions still exist.

Slide 38 – Data installation

Navigate to the 2020LUCA folder on your local system. Locate and double click on the .exe file, "*2020LUCA_<EntityID>_DISK1of2.exe*". A command prompt window opens. The command prompt window, like the one shown on this slide, requests a password. Enter the password provided by the Census Bureau separately from your LUCA materials. The password is not visible when entering into the command prompt window. The command prompt window shows the progress of the file extraction and closes upon completion. This action has effectively unzipped and unencrypted the Title 13 Address List for your jurisdiction.

Slide 39 – Address materials

This section describes properly opening the digital address materials and provides information on file layouts. It describes the digital address materials and shows examples to provide an introductory visual.

Slide 40 – Opening .csv files in Microsoft Excel: Data – Get External Data – From Text

It is important to open the Address List .csv file in a particular manner so the field structure is preserved and data content is not corrupted. The next three slides of information were created using Excel 2016. Because software versions and vintages may display information differently, please keep this in mind while viewing these examples.

After launching Microsoft Excel, open a blank workbook. Choose from the *Data* menu to *Get External Data* from *Text*.

Slide 41 – Opening .csv files in Microsoft Excel: Navigate - Import

Navigate to the "2020LUCA" folder on your local system, choose the Address List .csv to open, and then choose *Import*.

Slide 42 – Opening .csv files in Microsoft Excel: Text Import Wizard

Follow the Import Wizard by selecting the following choices:

- Original data type = *Delimited* and choose *Next*
- Change Delimiter from Tab to *Comma* and choose *Next*
- Select all of the fields in the Data preview window and change the data format to *Text*, and choose *Finish* (Setting the fields to *Text* preserves the leading zeros in the value fields)

For the *Import Data window,* participants may choose "*New worksheet"* to have the information imported into a blank new worksheet. If they choose *"Existing worksheet",* make sure the field beneath is set to the upper left cell, *=A1*

Now that importing is complete, the next few slides introduce the digital address materials.

Slide 43 – Address List – Title 13

The Census Bureau's Address List contains all of the residential (city-style and non-city style) addresses known to the Census Bureau within your jurisdiction, reservation or off reservation trust lands. It also

contains census geographic codes (state, county, census tract, census block) that indicate the location of each address.

The Address List is a comma delimited text file (.csv) and contains 24 fields of information. It is critical to follow the procedures that discuss "importing" the .csv rather than simply opening by using the File-Open method or double-clicking the file.

Each address record in the Address List is a maximum of 649 characters. The character length of each record may vary. The first row, or header row, of the file displays the field names for each data column in the file. Plan to remove spaces that exist in the header row for effective use in ArcGIS.

Slide 44 – File naming convention – Address List

This slide explores the various naming conventions for the Address List based upon the entity types, state, county, incorporated place, minor civil division and federally recognized tribes with reservation and/or off reservation trust lands.

ST20 identifies a state address list for Kansas. CO20001 identifies a county address list for Allen County KS. PL2000125 identifies an incorporated place address list for Abilene city KS. MC2000120550 identifies a minor civil division address list for Elm township KS. TR0197TA2980 identifies a tribal address list for Prairie Band of Potawatomi Nation Reservation, where TR0197 is the tribal identification code for Prairie Band Potawatomi Nation and TR2980 represents the Prairie Band of Potawatomi Nation Reservation, the geographic area associated with the Prairie Band Potawatomi Nation.

Slide 45 – Address List record layout

The slide illustrates a portion of Table 3 from the Respondent Guide. It depicts the record layout of the 2020 LUCA Address List. As mentioned on the previous slide, there are 24 fields of information. Participants can review the Respondent Guide for a complete, clearer visual of the record layout for the digital Address List.

Slide 46 – Address List – Microsoft Excel example **No Title 13 Data Displayed**

After properly importing the .csv into Microsoft Excel or other spreadsheet/database software, the 24-field Address List appears similar to this example. It is important to mention this data is fictitious. It does not include any Title 13 information.

Slide 47 – Address Count List

The Census Bureau's Address Count List contains the number of housing unit and group quarters addresses on the Address List for each census block within your jurisdiction. It is not Title 13 material.

Developed as an early tool for LUCA preparation and for use with Geographic Update Partnership Software (GUPS), digital participants may use it for reference purposes only. The Address Count List can identify inconsistencies between the Census Bureau's housing units and/or group quarters address counts and your housing unit and/or group quarters address counts.

Like the Address List, the Address Count List is a comma delimited text file (.csv). It is critical to follow the procedures that discuss "importing" the .csv rather than simply opening by using the File-Open method or double-clicking the file.

The Address Count List contains 13 fields of information, with a maximum of 140 characters per record. The first row, or header row, of the file displays the field names for each data column in the file. The last row of the file is a Total row that sums all of the housing units and group quarters block counts for the jurisdiction.

The last important point to mention is that the Address Count Lists for state and county participants include an "unable to geocode" tally on the next to last line of the file. This row summarizes the ungeocoded address records, by housing unit and group quarters, included in the Address List. To reiterate, ungeocoded records are only available to state and county participants.

Slide 48 – File naming convention – Address Count List

The Address Count List follows the same naming convention as for the Address List, except for reference to the "countlist" in the file name.

Slide 49 – Address Count List record layout

The slide illustrates a portion of Table 4 from the Respondent Guide. It depicts the record layout of the 2020 LUCA Address Count List. As mentioned on the previous slide, there are 13 fields of information. Participants can review the Respondent Guide for a complete, clearer visual of the record layout for the digital Address Count List.

The first five fields are the census geographic codes for state, county, tract and block, with the fifth field being a concatenation of the previous four fields to form the 15-character GEOID field.

Digital/Paper participants should place their focus on the two "ORIGINAL" fields: one for HUs and one for GQs. GUPS uses the six "CURRENT", "LOCAL", and "DIFFERENCE" fields for its processing; therefore, participants that do not use GUPS to review the LUCA materials can ignore those six fields.

Slide 50 – Address Count List – Microsoft Excel example

After properly importing the .csv into Excel, the Address Count List appears similar to this example.

Slide 51 – Map materials

This section describes the paper map materials and shows examples to provide an introductory visual of map sheets provided for your jurisdiction.

Slide 52 – Large format maps

The large format maps do not include map spots, so they are not Title 13.

The Census Bureau provides large format paper maps to all participants that selected Paper maps on their Product Preference Form during 2020 LUCA registration. The large format maps are a reference used to identify the census geocode information for addresses on the Address List.

While helpful, map updates are only required to indicate new, or updates to existing, non-city style address records. Participants choosing the "Digital/Paper" product preference that wish to make a map update to accompany their Address List updates, must use the large format Parent sheet (or Inset sheet) maps for their map updates. Please do not allocate much of your 120-day review period attempting map updates. Focus the review on the Address List.

Large format paper maps are 36"x32" in size and may include one or more sheets. There are three types of large format paper maps: Index sheets, Parent sheets, and Inset sheets. Subsequent slides of this presentation detail these three types. The last slide in this section of the presentation provides an example of a large format map legend.

Slide 53 – Large format maps – content detail

The large format maps used for 2020 LUCA show some of the same information found on a typical road map, such as streets and roads, water features, and legal boundaries. However, the LUCA map displays this information using symbols unique to the Census Bureau.

This zoomed section example of a Parent sheet from a large format map displays the following information:

- Entity boundary.
- Entity name and FIPS entity code.
- Census tract boundaries and numbers.
- Census block boundaries and numbers.
- Streets and street names.

Other features not shown on this example, but could be on other Parent sheets, include railroads and water features.

Slide 54 – Large format maps – Index sheet

Index sheets are for reference only and used with jurisdictions containing more than one Parent sheet. They cover the entire extent of a jurisdiction. Blue-outlined, numbered grids correspond to the Parent sheets.

Slide 55 – Large Format maps – Index sheet example

This slide shows an example of a large format map Index sheet and a zoomed section of the same map. The Index sheet is one page. Notice the blue-outlined, numbered grids. The bottom right margin of the Index sheet identifies the total number of sheets that comprise the entire large format map set, breaking it down into the three categories: Index, Parent and Inset. This example has NINE sheets total: one Index sheet, six Parent sheets, and two Inset sheets.

Index sheets are always numbered as the "000" sheet. The barcode along the bottom contains the entity code (88009) and the sheet code information (000). The map type identifier, in this case "(INDEX)", is above the barcode along with reference to 2020 LUCA.

Slide 56 – Large format maps – Parent sheet

Parent sheets correspond to the grid and grid number on the Index sheet for your jurisdiction. They provide a detailed view of a section of your jurisdiction. They identify the census tract and blocks on the Parent sheet. Participants use them in conjunction with the Block to Map Sheet Relationship List discussed in an upcoming slide. Parent sheets depict detail excluded from the Index sheet for features such as roads, streams, water bodies, railroads, etc., and geographic areas such as city limits, county boundary, parks, etc.

It is important to note that blocks affected by boundary improvements since the 2010 Census contain an alpha suffix. These suffixed blocks appear on Parent sheets (and Inset sheets), but do not appear in the address materials. Suffix information is not required when performing address updates. See the Respondent Guide for an example of a suffixed block.

Slide 57 – Large format maps – Parent sheet example

This slide shows an example of a large format map Parent sheet (Parent sheet 4) and a zoomed section of the same map. The Parent sheet is one page. The bottom right margin of the Parent sheet shows a "key to adjacent sheets" that mimics the blue grid pattern on the Index sheet. It also identifies the total number of sheets that comprise the entire large format map set, breaking it down into the three categories: Index, Parent and Inset. This example has NINE sheets total: one Index sheet, six Parent sheets, and two Inset sheets.

The barcode along the bottom contains the entity code (88009) and the sheet code information (004). The map type identifier, in this case "(PARENT)", is above the barcode along with reference to 2020 LUCA.

Slide 58 – Large format maps – Inset sheet

Inset sheets do not exist for every jurisdiction, and if they exist, they do not necessarily exist on every Parent sheet. They show the detail of the congested area. Like the Parent sheets, they depict the features for roads, water, rail and various geographic areas. They correspond to a highlighted, fill patterned area on a Parent sheet and include an alpha character, such as "B". Due to the level of congestion, these may also be multi-sheeted (B1, B2, etc.).

As with the Parent sheets, blocks affected by boundary improvements since the 2010 Census contain an alpha suffix appear on Inset sheets, but do not appear in the address materials. Suffix information is not required when performing address updates. See the Respondent Guide for an example of a suffixed block.

Slide 59 – Large format maps – Inset sheet example

This slide shows an example of a large format map Inset sheet (Inset B, 1 of 2 INSET sheets) and a zoomed section of the same map. The Inset sheet is one page. The bottom right margin of the Inset sheet identifies the total number of sheets that comprise the entire large format map set, breaking it down into the three categories: Index, Parent and Inset. This example has NINE sheets total: one Index sheet, six Parent sheets, and two Inset sheets.

The barcode along the bottom contains the entity code (88009) and the sheet code information (004). The map type identifier, in this case "(INSET)", is above the barcode along with reference to 2020 LUCA.

Slide 60 – Large format maps – Index→Parent→Inset

To summarize the linkage between the large format map types, this slide depicts the three large format map types, Index, Parent, and Inset. The left portion of this slide depicts a zoomed section of the Index sheet with blue grid 4, Parent sheet 4, and Inset B notated. The middle image shows Parent sheet 4 with Inset B notated. The image on the far right shows full Inset sheet B.

Slide 61 – Large format map legend

For all three map types (Index, Parent and Inset), in the upper right hand corner, on each of the map sheets, a large format map legend exists. The legend has three columns: symbol description, symbol, and name style.

- **Symbol Description** includes type of features boundaries and geography shown on the map.
- **Symbol** shows the symbols representing the feature in the symbol description.
- **Name Style** shows an example of the name of a particular feature displayed on the map in the specific font and style for that feature.

There are five groups of information spanning these three columns: boundaries, transportation, other features, landmarks, and various footnotes or notes. These five groups listed within the legend appear in this exact order.

- **Boundaries** refer to the different boundary types or geographic area shown on the map. Each has a distinct color and symbol.
- **Transportation** represents the various types of transportation features. Thicker lines identify major roadways such as interstates and U.S. highways while thinner lines represent secondary roads and city streets. Other transportation features are identified in the legend in addition to road features.
- **Other Features** represent other feature types such as pipelines, streams, and nonvisible boundaries.
- **Landmarks** represent the various landmarks on the map such as rivers, lakes, airports, military installations, etc.
- **Footnotes and Notes** provide additional information and details on geographic relationships, boundaries, and symbology.

An appendix within the Respondent Guide describes the format and content of the legend in detail, so please make sure to review it for clarity of large format map content.

Slide 62 – Block to Map Sheet Relationship List (D-2010)

The Block to Map Sheet Relationship List identifies the large format Parent map sheet or sheets in which each census block is located for the given jurisdiction. The sort for this product is by census tract number and census block number in ascending order.

Census blocks are unique within a census tract, so block numbers do repeat within jurisdiction. In this example, census block 1002 in census tract 45 is located on Parent sheets 2 and 4. Census block 1002 of census tract 54.02 is located on Parent map sheet 5.

Slide 63 – Setup and materials summary

To summarize this section, confirm the digital address materials imported properly and display field content correctly. The MAFID field is the quickest way to determine the file was properly imported. If it appears as scientific notation, the import process was unsuccessful. Confirm receipt of all of the paper map materials (all of the large format maps and the Block to Map Sheet Relationship List). Review the "*Readmefirst4.txt*" text file included in the root directory of your DVD. Please plan to review this presentation again and use it in conjunction with the Respondent Guide as resources for getting started. Be on the lookout for a hardcopy *2020 LUCA Quick Start Guide* that accompanies the materials, as it will contain tips on organizing and handling the digital materials.

Slide 64 – In this section (Acceptable updates and examples)

We are entering the section of the presentation that deals with specific examples for updating the LUCA materials. Please remember, LUCA is an address-focused operation. Some map updates intertwine with some of the examples, but the focus of this section of the presentation details permissible actions that can occur to the Address List.

There are five acceptable action codes used to edit the census address list, A, C, D, J, and N. Participants enter the action codes into the ACTION field. All five action codes may be used with city style addresses (e.g., 1000 Main St), non-city style addresses (e.g., RR 3 Box 34) and ungeocoded addresses.

For the training examples, city style addresses are the focus, but an example of a non-city style address is included within the "A" action code section. As work begins on Address List updates, the Census Bureau encourages participants to save their work often to preserve changes. Saving often ensures work is not lost. Keeping an original in a secure location also ensures the recreation of updates if something necessary. Lastly, please use caution when re-sorting the Address List. Capture all 24 fields before re-sorting the list. Accidentally not capturing all of the fields during a sort action will jumble the records, thereby corrupting the information.

Slide 65 – "A" action code

Participants use the "A" action code to add residential addresses that are new or missing from the Address List. Participant may also use the "A" action code along with the "D" action code for records on the Address List with incorrect house numbers or incorrect apartment/unit numbers, as those two fields cannot be edited. The Census Bureau terms this action a "Delete/Add". Find examples of "Delete/Add" within the "D" action code section. The upcoming slides present participants with examples of adding city style housing units, non-city style housing units, and city style group quarters.

Please be aware the "A" action code updates may result in updates to both the Address List and large format maps.

Slide 66 –Address List: “A” action code – adding city style HUs **No Title 13 Data Displayed**

During a participant’s review, they may find addresses missing from the Address List located on streets that are partially or entirely missing from the maps. For this example, the participant discovers Proto Pl addresses and an extension of the street are missing from both the Address List and large format maps. The next two slides for this example depict adding the addresses and street, Proto Pl, to both.

On the Address List, create SIX new records or start/insert the new records for adding the missing section of Proto Place records.

Copy the **ENTITY** code from an existing record.

Enter an “**A**” in the **ACTION** field.

Enter/Copy the required address information in the appropriate fields for each new address:

- State Code in the **STATEFP** field. *(88)*
- County Code in the **COUNTYFP** field. *(009)*
- Census Tract Number in the **TRACT** field. *(0054.00)*
- Census Block Number in the **BLOCK** field. *(1009)*

Enter the complete house number in the **HOUSENUMBER** field. *(201 – 206)*

Enter the complete street name in the **STREETNAME** field. *(Proto Pl)*

Enter the **ZIP,** if known. *(99997)*

Enter the address use information, in the **USE** field, if known: *(B)*

- M—mailing purposes.
- L—location purposes, including emergency services.
- B—both mailing and location purposes.

If known, enter the structure latitude in the **LAT** field and the structure longitude in the **LONG** field. Please note, by including the **LAT** and **LONG** information, participants can exclude the **STATEFP, COUNTYFP, TRACT**, and **BLOCK** geocode information. This example depicts inclusion of both sets of information.

Leave the **MAPSPOT** field blank because the inclusion of latitude and longitude information is the map spot coordinate information.

Leave the **CITY_STYLE** field blank.

Once complete, the Address List for this example will contain six new housing unit records for Proto Pl with all appropriate fields entered.

Slide 67 – Map: adding a street

Proto Place extends north from Larme Ave and intersects Nale Pl. On the large format map, using a colored pencil, draw the extension of Proto Place in tract 0054.00 block 1009. Though not evident from the zoomed image, this update is on an Inset sheet. Participants can make updates to either the Parent sheets or Inset sheets.

Slide 68 – Address List: "A" action code – adding city style GQs **No Title 13 Data Displayed**

The same process explained for adding a housing unit applies to adding group quarters, with a few additional requirements. If participants enter a "**Y**", for the Group Quarters Flag (**GQ_FLAG**) they must provide a group quarters name and a facility name if the group quarters are associated with a facility (e.g., Group Quarters Name – Pandora Hall Bldg 1; Facility Name – Aristotle University). The Census Bureau will not process an added GQ record without a GQ name.

This example demonstrates how to add three new GQs. Aristotle University constructed three new residence halls, Pandora Hall, Buildings 1, 2, and 3 at 225, 227, and 229 Achilles Dr. The street already exists and is correct on the large format maps, so there is no action required on the map product.

In the Address List, create/insert three new records/rows for this example for the three new buildings located on Achilles Drive (225, 227, and 229).

Copy the **ENTITY** code from an existing record in the Address List.

Enter an "**A**" in the **ACTION** field.

Enter the required geocode information in the appropriate fields for each new address:

- State Code in the **STATEFP** field. *(88)*
- County Code in the **COUNTYFP** field. *(009)*
- Census Tract Number in the **TRACT** field. *(0054.00)*
- Census Block Number in the **BLOCK** field. *(2001)*

Enter a "**Y**" in the **GQ_FLAG** field for each unit added.

Enter the complete house number in the **HOUSENUMBER** field. *(225, 227, and 229)*

Enter the complete street name in the **STREETNAME** field. *(Achilles Dr)*

If known, enter the city style mailing ZIP Code in the **ZIP** field. *(99997)*

Enter the Group Quarters name in the **GQ Name** field. *(Pandora Hall Bldg 1, Pandora Hall Bldg 2, and Pandora Hall Bldg 3)*

Enter the **Facility Name**, if the GQ is associated with a facility. *(Aristotle University)*

If known, enter the address use in the **USE** field: *(L)*

- M—mailing purposes.
- L—location purposes, including emergency services.
- B—both mailing and location purposes.

If known, enter the structure latitude in the **LAT** field and the structure longitude in the **LONG** field. For this example, each of buildings will have a unique latitude/longitude value.

Leave the **MAPSPOT** field blank because the inclusion of LAT/LONG information is effectively the map spot coordinate information.

Leave the **CITY_STYLE** field blank.

Once complete, the Address List for this example will contain three new GQ records Aristotle University with all appropriate fields entered.

Slide 69 – Address List: "A" action code – adding non-city style HUs **No Title 13 Data Displayed**

Recall from the introduction section of this presentation, the Census Bureau classifies addresses that do not include a house number and/or street name as non-city style addresses. These may also include a complete house number or street name. For participants to add non-city style addresses in 2020 LUCA, they must provide a well-defined description of the address location and identify the approximate location on the large format map by adding a map spot. If the scale of the large format maps prevents the addition of map spots, participants can provide the latitude and longitude coordinates for each non-city style address they add. An ideal submission from a participant includes both map spot on the paper map and latitude/longitude coordinates in the Address List.

For this example, an area north of Aca Street includes three new housing units that have non-city style addresses in the form of a location description. There are also four new rural route non-city style addresses along Olympus Highway. The streets are correct on the large format maps, so there is no map update necessary.

Create a new record or start/insert a new record. For this location description example, you need to create THREE new records.

Copy the **ENTITY** code from an existing record.

Enter an "**A**" in the **ACTION** field.

Enter the required address information in the appropriate fields for each new address:

- State Code in the **STATEFP** field. *(88)*
- County Code in the **COUNTYFP** field. *(009)*
- Census Tract Number in the **TRACT** field. *(0054.00)*
- Census Block Number in the **BLOCK** field. *(1000)*

For the records with only a location description, enter the complete street name in the **STREETNAME** field. *(Aca St)*

Enter the well-defined location description in the **LOCATION DESCRIPTION** field.

Enter the non-city style mailing ZIP Code in the **NONCITYSTYLE** ZIP field, if known. *(99997)*

Enter the address use in the **USE** field, if known: *(L)*

- M—mailing purposes.
- L—location purposes, including emergency services.
- B—both mailing and location purposes.

Enter the structure latitude in the **LAT** field.

Enter the structure longitude in the **LONG** field.

For non-city style addresses, the latitude and longitude information or map spot information is required.

Leave the **CITY_STYLE** field blank.

For the rural route records in this example, you need to create FOUR new records.

Copy the **ENTITY** code from an existing record.

Enter an "**A**" in the **ACTION** field.

Enter the required address information in the appropriate fields for each new address:

- State Code in the **STATEFP** field. *(88)*
- County Code in the **COUNTYFP** field. *(009)*
- Census Tract Number in the **TRACT** field. *(0046.00)*
- Census Block Number in the **BLOCK** field. *(2000)*

Enter the complete street name in the **STREETNAME** field. *(Olympus Hwy)*

Enter the **NONCITYSTYLE ADDRESS (RR# HCR#).** Do not use commas.

Enter the non-city style mailing ZIP Code in the **NONCITYSTYLE ZIP** field, if known. *(99997)*

Enter the address use in the **USE** field, if known: *(M)*

- M—mailing purposes.
- L—location purposes, including emergency services.
- B—both mailing and location purposes.

The USPS uses rural route addresses for mail purposes, so notice the use of "M" instead of the "L" in the USE field for the four rural route "Adds".

Enter the structure latitude in the **LAT** field.

Enter the structure longitude in the **LONG** field.

As stated with the location description added records, non-city style addresses require either the map spot information **OR** the latitude and longitude information. Additionally, inclusion of the latitude and longitude coordinates allows participants to exclude the state, county, tract, and block geocode information. However, this example is excellent because it shows all of the geographic fields (STATEFP, COUNTYFP, TRACT, BLOCK, LAT, and LONG) populated. The more information participants' supply for non-city style addresses helps the Census Bureau process these records and successfully deliver questionnaires.

Slide 70 – "C" action code

The next few slides illustrate the proper use of the "**C**" action code on the Address List and corresponding large format map(s).

Participants use the "C" action code to update the Address List in the following situations: to correct incorrect state codes, county codes, census tract numbers, census block numbers, street names (including directional and street type information), and ZIP Code information. Participants can include the latitude and longitude coordinate in lieu of the tract and block numbers for ungeocoded records. These are the only fields eligible for update during 2020 LUCA**.**

The presentation includes three examples of using the "C" action code, shown in **bold** on the slide.

- Correction of an incorrect census block number.
- Correction of an incorrect street name.
- Inclusion of tract and block geocodes (or latitude and longitude coordinates) for "unable to geocode" records.

*Unable to geocode (ungeocoded) records are missing the tract and block geocode information. These records exist for state and county participants. Though ungeocoded records can use all action codes, the most informative update for the Census Bureau is inclusion of the tract and block geocode (or coordinates) information that provides the necessary geocode information to distribute a questionnaire. This edit corresponds to a "C" action code.

Slide 71 – Address List: "C" action code – correcting block number **No Title 13 Data Displayed**

In this before and after example, the Census Bureau's Address List and large format map show South Holdener Street located in block 1003. According to local sources, South Holdener Street is located in the same tract, but just south Pampas Street, in census block 1009. Participants need to update the Address List and, if possible, the large format maps to correct this error.

In the Address List, enter a "**C**" in the **ACTION** field for the address records located on S. Holdener St in block 1003.

In the **BLOCK** field for the incorrect record, enter the correct block number, 1009.

Participants are not required to make updates to the map spot or coordinates fields within the Address List since the map spots are not on the large format maps. Editing the existing coordinate information could introduce errors, so the Census Bureau recommends not editing those fields.

Please note, the "before" content is for illustration purposes only. After correction, the Address List contains the records with the "C" action code and edited information.

Slide 72 – Map: correcting block number

This slide shows the corresponding large format map update for correcting the location of South Holdener Street. Participants use a colored pencil to mark out and redraw the feature in its correct location.

Participants should note this example is for a move to an adjacent block. For updates that span several blocks or map sheets, drawing the line/arrow is unnecessary and improbable.

Slide 73 – Address List: "C" action code – correcting street name **No Title 13 Data Displayed**

In this before and after example, the Census Bureau's Address List and large format map incorrectly show 7th Pl instead of Vic Ct, the correct street name.

In the Address List, enter a "**C**" in the **ACTION** field for all FOUR addresses located on 7th Pl. In the **STREETNAME** field for those incorrect records, enter the correct name, Vic Ct.

The "before" content is for illustration purposes only and would not appear in the Address List after correction. The Address List contains the records with the "C" action code and edited information.

Slide 74 – Map: correcting street name

On the large format map, using a colored pencil, draw line through 7th Pl and enter the correct street name above (or below, wherever it fits best).

Slide 75 – Address List: "C" action code – correcting ungeocoded addresses **No Title 13 Data Displayed**

As mentioned in the beginning of this section, the Address List for state and county participants may contain "unable to geocode" (ungeocoded) address records. If so, these appear at the end of the Address List file. Consider reviewing these addresses to determine if they are valid residential addresses. If they are, use the "C" action code to provide either the census tract and census block geocode information OR the latitude and longitude coordinates for these records to ensure an accurate enumeration in the correct location.

If participants determine ungeocoded records do not exist, are invalid, are out of the jurisdiction, or are nonresidential, they may mark them according to guidance in upcoming slides for the D, J and N action codes and as described in the Respondent Guide.

In this example, the Address List for Winter County contains several new addresses that are missing geocodes. Participants know the necessary information to correct the ungeocoded addresses along Nassau Loop.

Enter a "**C**" in the **ACTION** field.

Enter the required information in the appropriate fields for each ungeocoded address:

- Census Tract Number in the **TRACT** field. *(0014.00)*

- Census Block Number in the **BLOCK** field. (*2009* for EVEN addresses and *2010* for ODD addresses)

Participants can choose to include the **Map Spot** information and corresponding update on the appropriate large format map, or they can include the latitude and longitude values in the **LAT** and **LONG** fields, respectively, as shown in this example.

There are no map updates shown for this example, but please notice the different block geocodes for the even and odd addresses in this example.

Slide 76 – "D" action code

Participants use the "D" action code to flag residential address records that no longer exist, are uninhabitable or are duplicates on the Address List. They also use the "D" action code to flag residential addresses along streets that no longer exist, as well as to flag records with incorrect house numbers or incorrect apartment/unit numbers. Lastly, participants use the "D" action code in instances of residential address conversion (e.g., housing units converted to multiunit structure or group quarters; multiunit structure converted to a housing unit or group quarters; group quarters converted to a housing unit or multiunit structure).

In the cases of incorrect house number, apartment numbers and conversions, participants must add the corrected addresses that correspond to the records marked for deletion. The Census Bureau terms this type of update a "delete/add" action combination.

Besides updating the "**D**" in the **ACTION** field, participants must not make any additional modifications for these records on the Address List.

The presentation includes three examples of proper use of the "D" action code, shown in **bold** on the slide.

- Deletion of address records along street that does not exist.
- Deletion of records with an incorrect apartment/unit number and the corresponding "Add" action.
- Deletion of housing unit converted to multiunit structure and the corresponding "Add" action.

Slide 77 – Address List: "D" action code – deleting addresses **No Title 13 Data Displayed**

In this example, a portion 155th Pl in census tract 0018.00 block 1005 no longer exists and the four housing units along this section were demolished.

In the **ACTION** field, enter a "**D**" for the four addresses that no longer exist.

Take no other action on the records.

Slide 78 – Map: deleting portion of street

On the large format map, mark X's through the section of street that no longer exists, denoting the start with double hash marks.

Slide 79 – Address List: “D” and “A” action codes – deleting incorrect and adding correct apartment units **No Title 13 Data Displayed**

For this example, the units at 3567 Achilles Drive are incorrect as listed on the Address List. Instead of single digit apartment numbers, local sources indicate the apartment units are three digits, numbered with four units per each floor of the building (101-104, 201-204 and 301-304). Because participants cannot edit the apartment/unit information field on the Address List, they must delete the incorrect records and add the correct records. There is no action required on the large format maps for this example.

The Census Bureau calls this a “delete/add” action.

In the Address List, enter a “**D**” in the **ACTION** field of the TWELVE addresses on 3567 Achilles Drive with the incorrect apartment information. Take no other action on those records.

Next, in the Address List, create TWELVE new records.

Enter an **“A”** in the **ACTION** field for the new records as well as the correct apartment information in the **APARTMENT UNIT** field and the optional **USE** information, if known.

Assuming no other problems exist with the deleted records, copy/paste or re-enter the information from the following fields of the deleted records: ENTITY, STATEFP, COUNTYFP, TRACT, BLOCK, HOUSENUMBER, STREETNAME, ZIP, LAT, and LONG.

DO NOT copy the LINE_NUMBER, MAFID, GEOID, MAPSPOT or CITY_STYLE fields.

Slide 80 – Address List: “D” and “A” action codes – deleting HU converted to multiunit and adding multiunit **No Title 13 Data Displayed**

In this example, the single housing unit at 105 Minoan Pkwy recently converted to a multiunit structure containing two apartments, apartments 105 A and 105 B, respectively. There is no action required on the large format map for this example.

In the Address List, enter a “**D**” in the **ACTION** field of the address on Minoan Pkwy. Take no other action on the record.

Next, in the Address List, create two new records.

Enter an **“A”** in the **ACTION** field for the new records as well as the correct apartment information in the **APARTMENT UNIT** field and the optional **USE** information, if known.

Assuming no other problems exist with the deleted records, copy/paste or re-enter the information from the following fields of the deleted records: ENTITY, STATEFP, COUNTYFP, TRACT, BLOCK, HOUSENUMBER, STREETNAME, ZIP, LAT, and LONG.

DO NOT copy the LINE_NUMBER, MAFID, GEOID, MAPSPOT or CITY_STYLE fields.

Slide 81 – "J" action code **No Title 13 Data Displayed**

During the review and update strategies section of this presentation, the Census Bureau identified blocks that span jurisdiction boundaries as potential priorities for review. Keep these "boundary" blocks in mind while conducting the LUCA review. Participants may find these errors in blocks that contain street features that split a legal boundary (reservation, county, minor civil division, or place).

Participants use the "J" action code to flag residential addresses that are not in their jurisdiction, meaning the address does not fall within the legal boundary of the jurisdiction. Participants can use the "J" action code for city style, non-city style, and ungeocoded address records (state and county participants only). When used, participants must not make any other corrections to the address record.

For this example, the two addresses on Pueblo Trail are not in Winters County, so they were marked with the "**J**" **ACTION**. There is no map update required with this example.

Slide 82 – "N" action code **No Title 13 Data Displayed**

Use an "N" action code to flag addresses listed on the Address List, but used for any purpose other than residential such as businesses, schools, churches, and government offices.

Before entering an "N" action code, ensure that the structure does not contain a housing unit. Some structures can contain both residential and nonresidential units even though they have a single address such as an apartment over a store or a home with an office.

Like the other action codes, participants may use this action code for city style, non-city style, and ungeocoded address records (state and county participants only).

Do not make corrections to any other fields for nonresidential addresses.

In this example, one address on Cassiopeia Drive is nonresidential. Enter an "**N**" in the **ACTION** field and make no other changes to the record. There is no map update required with this example.

Slide 83 – Summary of Address List updates

Only a sample of the updates performed in the previous slides are included in this example because of the size of the slide. The important point of this partial image and summary is to emphasize the presence of codes in the **ACTION** field, which leads right into the last presentation regarding preparing the updated file for submission. To prepare for submitting the updated Address List records, participants should re-sort the Address List by the **ACTION** field. This sorting promotes all records with an **ACTION** present to the top of the Address List for ease of selection and saving into the jurisdiction's Address List file submission.

Slide 84 – In this section (Submission)

The next few slides discuss preparing and submitting updated materials and the accompanying paperwork necessary for a successful submission to the Census Bureau. It touches briefly on the next steps after the successful submission of your updates.

For more detailed information and instruction, refer to the Respondent Guide that accompanies the materials.

Slide 85 – Preparing update materials for submission

The next few slides discuss elements of the first bullet from the previous slide, preparing the updated materials for a successful submission.

Slide 86 – Address materials – sorting and saving

Ensure you have completed your review and all of the updates you wish to submit. Re-sort the Address List by the ACTION field. This promotes all of the address records in the Address List with an action code to the top. These are your updated address records. The Census Bureau only wants the updated records returned for processing. Select and save the address records with an entry in the ACTION field. Name the file "*luca20_<EntityID>_changes_addresses.xxx*", where EntityID is the entity identification code from the LUCA materials and the xxx represents the file extension. It could be .csv, .txt, .xls, or .xlsx. Save this newly created file to a location for easy retrieval for submitting.

Slide 87 – Address materials – keeping secure

Make a copy of the new file for your records and for use during the feedback phase, scheduled for summer of 2019. Title 13 protects this copy and the original Address List provided by the Census Bureau. Participants are required to keep these materials secure throughout the duration of the 2020 LUCA operation by following the instructions in the *Confidentiality and Security Guidelines*.

Slide 88 – Address materials – assembling and organizing

Navigate to the directory where the Address List changes file, "*luca20_<EntityID>_changes_addresses.xxx*", is located.

Zip the file and name it "*luca20_<EntityID>_changes_addresses_return.zip*". It is necessary to password protect the file because it contains Title 13 information. Use the password that accompanied your original materials as the password for the file. If you have misplaced this information, please contact the Census Bureau's Geographic Programs Support Desk at 1-844-344-0169. Note, there are many different zip software products and all are adequate for this zipping task. Follow the software instructions for proper zipping of the contents.

Copy the zip file to a CD/DVD if you intend to ship your LUCA materials. If you intend to use the Census Bureau's secure, online web application for posting your files, ready the zip file for that task. Discussion of this online web process is forthcoming.

Slide 89 – Map materials – sorting and keeping secure

As with the Address List, ensure you have completed your review and all of the map updates you wish to submit.

Separate the updated large format maps from the ones without updates. Make a copy of the section of the maps with updates for your records and for use during the LUCA feedback phase, scheduled for summer of 2019.

Keep the originals and all copies in a secure location.

Slide 90 – Map materials – assembling and organizing

Bundle and return only updated maps to Census Bureau. Organize your updated maps numerically, by Parent sheet and then Inset sheet. For an example: A large format map set contained eight total map sheets, one Index, five Parent sheets and two Inset sheets. The participant made updates to Parent sheet 2 and 4 and Inset A1. Participants should organize their originals by Parent sheets 2 and 4 followed by Inset sheet A1.

Slide 91 – Accompanying paperwork

Please include the Inventory Form (D-2011) with your submission. A paper form, similar to this image, is included with the original materials. A digital inventory form is included on DVD and available online.

Participants may choose to include the completed paper form with the CD/DVD shipping package, or they may zip the completed digital form into its own zip file, "*LUCA20_<EntityID>_inventory_return.zip*". Include this zip file on the same CD/DVD with the other LUCA submission materials or return it using the SWIM process.

Remember to keep a copy of all accompanying paperwork for your records.

Slide 92 – Submitting updated materials

This slide serves as a transition from discussing preparation of your materials for shipment into the actual instructions for updated materials submission. This section of the presentation covers shipping instructions and instructions for using SWIM. Numerous screenshots of the SWIM process are included.

Slide 93 – Shipping instructions

Participants must ensure they follow procedures for shipping Title 13 materials as outlined in the *Confidentiality and Security Guidelines*.

Include the CD/DVD of the zipped updated Address List records in the shipping envelope/container. Include the *D-2011 Inventory Form for the Return/Submission of LUCA Updated Materials* as a hardcopy or as its own zip file on the same CD/DVD as the Address List. Lastly, include all updated large format maps. Participants that do not perform any map updates can disregard reference to including updated map materials.

Use the pre-printed CD/DVD mailer included with the original materials to protect the return CD/DVD the LUCA submission to the National Processing Center.

Consult the 2020 LUCA Respondent Guide for additional information and if any questions arise, please do not hesitate to contact the Census Bureau.

Slide 94 – Title 13 details – double-wrap visual

This slide depicts an example of the envelopes used for double wrapping the updated Title 13 LUCA materials. Please reuse the original materials mailer. If you do not use the mailing label shipped with your original materials, and ship your LUCA submission using a service that provides tracking information, such as USPS trackable delivery, FedEx, United Parcel Service (UPS), or similar service to the address shown on the Outer Envelope portion of this slide.

Slide 95 –SWIM introduction

The next section discusses the SWIM process, which permits secure web method of submitting updated LUCA materials. The Census Bureau cannot accept materials by email, nor navigate to your FTP site and download your submission.

Participants may submit their zipped updated materials (Address List) through the SWIM, the official web portal for uploading partnership materials to the Census Bureau. The Census Bureau utilizes SWIM for other Census partnership programs, so you may already have a SWIM account. SWIM accounts are associated with individuals, not with entities.

If no one listed on your jurisdiction's Confidentiality Agreement Form has a SWIM account, use the 12-digit registration token provided to you by the Census Bureau in the "password letter" (D-2080) to establish an account. SWIM only accepts .zip files and cannot accept zip files over 250 megabytes. Our experience has been if the submission includes only changed records, this size limitation is not a problem. If your jurisdiction's zip file is larger than 250 megabytes, contact the Census Bureau for additional guidance.

Slide 96 – SWIM account login and welcome screens

If you are a participant in another Census Bureau partnership program and already have a SWIM Account, access SWIM at <https:/respond.census.gov/swim/> and enter your email address and SWIM password. Click the **Login** button. The **Welcome** screen opens. To begin an upload, click the **Start New Upload** button.

Slide 97 – SWIM account registration screens

If you do not yet have a SWIM Account, have the 12-digit registration token provided to you by the Census Bureau ready for your account registration. You can register for a SWIM account by choosing the Register Account button on the main SWIM page. The **Account Registration** screen opens.

All fields on the **Account Registration** screen are required. Participants will not be able to move to the next screen until completing all fields. On the **Account Registration** screen, first, enter the 12-digit token provided by the Census Bureau. Then enter your name, agency, and email in the appropriate fields. Next, create a password. Set up a security question. Click the arrow on the right of the **Security Question** box, select a question in the drop-down list, and enter an answer in the **Answer** box.

When you have finished, click the **Submit** button. A screen (not shown on the slide) opens to confirm that you have successfully registered. On the **Confirmation** screen, click 'Login' in the phrase 'Go to Login'.

Slide 98 – SWIM login and welcome screens after account registration

Successful SWIM account registration returns users to the initial **Login** screen. From it, enter your email and password, and then click the green **Login** button. The **Welcome** screen opens. To begin an upload, click the **Start New Upload** button.

Slide 99 – SWIM start new upload screen

The "**What Census program are you reporting data for?"** screen opens. On this screen, click **Local Update of Census Addresses (LUCA)** radio button, then click the **Next** button at the bottom of the screen.

Slide 100 – SWIM type of LUCA entity screen

The "**What type of LUCA entity are you reporting for?**" screen opens. Click the radio button next to the governmental entity for which you are reporting data, and then click the **Next** button. Use the EntityID information for your jurisdiction to help choose the proper selection (ST for state, CO for county, PL for place and consolidated city, MC for minor civil division and TR for tribal area). When submitting for more than one entity, for instance a regional planning agency contact person may be the LUCA liaison for several of their member cities, make multiple SWIM submissions. Do not upload all of the entities in one SWIM process. The Census Bureau needs a SWIM transaction for each of the entities represented by the regional planning agency to reconcile the processing systems.

This example shows selection of the **Place** radio button. After selecting the **Next** button, another window opens allowing you to choose your entity name from a group of pull-down menus. These menus differ based upon the entity type chosen. In this case, participants selecting **Place** must choose the **State** and then the **Place** information from that subsequent window (not shown in this example).

Slide 101 – SWIM select a .zip to upload screen

After choosing the Next button, the "**Select a .ZIP file to upload**" screen opens. To upload a file, click the **+ Add File** button on the screen and then the **Next** button.

Slide 102 – SWIM choose .zip to upload screen

The File Upload window opens and allows you to navigate on your computer to the .zip file's location.

In this example, choose the "*luca20_<EntityID>_changes_addresses_return.zip*" and the "*luca20_<EntityID>_inventory_return.zip*", if you chose to create it. The "*luca20_<EntityID>_ln_changes_return zip*" depicted on the slide is not applicable to Digital/Paper participants. Please disregard that zip file in the image.

Slide 103 – SWIM .zip file upload status screen

If participants do not select all of the files intended for upload, please choose **+Add File** until all files you intent to SWIM into the Census Bureau appear ready for upload. It is very important to select and upload all of the files as part of one SWIM action. Once all files are added and ready for upload, the **Status** section reflects **Success**. Participants may choose to include a description in the **Comments** field, otherwise, choose the **Next** button to upload the files.

Slide 104 – SWIM thank you confirmation screen

Upon successful upload completion, SWIM returns a **Thank You** message. Participants can choose the **Log Out** link to log out of the SWIM session. This completes the SWIM portion of the presentation. Are there any questions before we move into the final section of the presentation?

Slide 105 – Next steps – Census Bureau

Once the Census Bureau receives your submission, they will process it for validation. After validation concludes in the summer of 2019, the Census Bureau prepares the LUCA feedback materials for shipment soon after.

The Census Bureau begins outreach to close out the LUCA operation and confirm the destruction (preferred method) or return of all Title 13 materials for participants that did not provide a 2020 LUCA submission or for those that indicate they do not wish to receive feedback.

The Census Bureau must receive a signed *Destruction or Return of Title 13 Materials Form (D-2012)* which confirms destruction or return of the Title 13 materials, as required by law. This form was included with the original LUCA materials but is also included in the Respondent Guide. The *Confidentiality and Security Guidelines* outlines the process for both the destruction and the return of Title 13 materials.

Slide 106 – Next steps – participant

Filing an appeal is optional and is not a requirement of the LUCA operation.

If participants agree with the Census Bureau's feedback materials, then their LUCA participation ends. Participation concludes by providing the completed D-2012, *Destruction or Return of Title 13 Materials Form*, discussed on the previous slide as soon as possible to eliminate your entity from Census Bureau follow-up. If the choice is to return the LUCA materials, rather than destroy them, participants must follow the shipping instructions outlined in the *Confidentiality and Security Guidelines* to ensure protection of the Title 13 materials.

Notify the LUCA Appeals Office, managed by the Office of Management and Budget (OMB), of disagreement with feedback materials. They will work with participants and the Census Bureau to resolve all disagreements. After a determination to accept or reject disputed addresses by the Appeals Office, the Census Bureau includes address accepted by the Appeals Office into the 2020 Census enumeration universe. Once the appeals process concludes, the Census Bureau will notify the participants to destroy or return Title 13 materials to the Census Bureau and submit a signed *Destruction or Return of Title 13 Materials Form (D-2012)* as required by law.

Slide 107 – Next steps – *Destruction or Return of Title 13 Materials Form (D-2012)*

As mentioned on the previous slide, the D-2012 is part of the closeout process for 2020 LUCA. This form completes necessary paperwork for 2020 LUCA closure and confirms either the destruction or return of all original, and copies, of the LUCA Title 13 materials. The LUCA liaison, all reviewers, and anyone listed on the *Confidentiality Agreement Form (D-2005)* are required to sign and date this form. The LUCA liaison may sign-out any reviewers that are no longer employed with your jurisdiction. Contact the Census Bureau with any questions regarding the use of this form.

Slide 108 – Support and assistance

As we wrap up the presentation, the Census Bureau wants to ensure all participants are aware of the ways to get support and assistance for the 2020 LUCA operation. Please visit the 2020 LUCA website first for information and instructions. A Frequently Asked Questions document serves as a thorough resource because it contains many of the most common questions and answers. If participants cannot find the answers or information they need, they may call the Geographic Programs Support Desk, toll free, at 1-844-344-0169 or email them at <GEO.2020.LUCA@census.gov>.

Slide 109 – Connect with us

For those of you wanting to learn more or using social media, please feel free to 'connect with us' through these URLs and social media sites. Thank you again for attending today's 2020 LUCA training workshop.