2020 Census LUCA Training Workshop Script for Paper/Digital participants

Slide 1 – Cover/Opening

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

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

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 "Paper" chosen in Section A (regardless of the sort option chosen) and "Digital" in Section B should view this presentation.

If your jurisdiction registered for a product preference different from "Paper/Digital", 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. We will describe the acceptable updates that can be made to the materials as well as showing 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 preparing 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 United States 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 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 Paper/Digital participants, the Address List and Address List Add Pages are Title 13 material and require 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 includes 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 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 your government. 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 group quarters as part of 2020 LUCA, then all of the group quarter 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 housing units and group quarters addresses 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 on the address list, 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 hierarch 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. 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 an address list or other source of address information. If an 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 address list or updating the address list. Does the 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 participants receiving paper address materials, check the paper address list for the sort option noted at the top of each page. Check to see that all the pages (e.g., 1 of 345 through 345 of 345) are included and that none are missing. If pages are missing or the sort option is not what you need/expect, contact the Census Bureau immediately for a replacement. As stated on a previous slide, your 120 days does not pause or reset when you receive your new materials. The Census Bureau suggests you move forward with your review while you await your new materials. These are all checks that participants can perform upon receipt of materials to ensure your materials are complete and correct. Make copies of a blank Address List Add Page if you expect to add more than 20 records. Review the Address Count List to ensure it includes all of its pages. Setup your TIGER Partnership shapefile material for potential updates to the edges shapefile.

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 (Materials introduction and setup)

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 map materials.

Throughout the presentation, please remember the Respondent Guide contains more specific content than included in this training presentation.

Slide 35 – Delivery of materials

The Census Bureau delivers the materials via traceable delivery methods such as FedEx or U.S. Postal Service (USPS). For Paper/Digital participants, the paper address materials arrive double-wrapped to ensure protection during shipping. The digital map materials arrive on one DVD along with the paper address materials. For security purposes, the digital materials are unavailable through download (ftp or internet) or through email.

Slide 36 – Address materials

This section of the presentation introduces the paper address materials, identifies those protected by Title 13 and shows examples to provide an introductory visual of each.

Slide 37 – Address List (D-2007) – Title 13

The Address List is Title 13 material. It contains all of the residential addresses (city style and non-city style) known to the Census Bureau within your jurisdiction. It also contains census geographic codes (state, county, census tract, census block) that indicate the location of each address.

The D-2007, the paper address list, is on 8 ½ x 14 inch (legal size) paper. Each sheet contains six addresses.

There are two sort options: Street Name/House Number and Census Tract/Census Block

Consider your ability to re-sort your local address list. If you cannot change the sort of your local list, then choose the sort option that most closely resembles the sort of your local list.

Following procedures described in the Respondent Guide, participants perform edits to this address material as they discover errors/discrepancies.

Slide 38 – Address List (D-2007) – example **No Title 13 Data Displayed**

This slide depicts an example of page from a D-2007 paper Address List**.** In this slide and all of the forthcoming slides that include examples of the Address List and Address List Add Pages, the address records are fictitious. There is no display of Title 13 data on these slides. The Respondent Guide details the address materials and discusses each of the column's content and intent on the Address List.

Slide 39 – Address List Add Page (D-2008) – Title 13

Participants use the Address List Add Page to add residential addresses not shown on the Census Bureau's address list. Participants also use the Add Page to add records in need of correction on the census address list. Not all of the columns on the address list are eligible for edits, so if a correction is necessary to an un-editable column, participants delete the incorrect record and use the Add Page to add the correct record. Details on the editable columns are in the Acceptable Updates section of this presentation. Once an Add Page contains address information, it is Title 13 material.

The Address List Add Page is letter size, 8.5" x 11" for ease of photocopying, with space for FOUR addresses per page.

The Census Bureau provides five (5) copies of the Address List Add Page with materials. If you anticipate that you will be adding more than 20 addresses during LUCA, we suggest that you make additional copies before recording any updates.

For your convenience, a blank Address List Add Page is included in the Respondent Guide. In addition, a blank Address List Add Page is on the LUCA website at <http://www.census.gov/geo/partnerships/luca.html>.

Slide 40 – Address List Add Page (D-2008) – example

For the Address List Add Page, participants populate the header information on the page to include the Entity Name and Entity ID code, as well as page information, name of preparer and date prepared. As noted on the bottom, Title 13 U.S.C. prohibits disclosure. Once these blank pages contain address information, they become Title 13 material. Protect these pages in the same manner as the Address List.

Slide 41 – Address Count List (D-2009)

The Address Count List contains the number of residential housing unit and group quarters addresses on the address list for each census block within your jurisdiction.

The Address Count List is for reference only. Participants use it to identify inconsistencies between the Census Bureau's address counts for housing unit and/or group quarters and their housing unit and/or group quarters address counts.

The product is 8.5"x11" letter sized, and contains 72 census blocks per page.

The last important point to make regarding the Address Count List is to mention that for state and county participants the address count list includes an "unable to geocode" tally on the next to last line. This row summarizes the ungeocoded address records included in the address list by housing unit and group quarters. We provide the tallies at the state and county level because we receive the USPS Delivery Sequence file by state, county and ZIP Code. We cannot provide these tallies below the county level.

Slide 42 – Address Count List (D-2009) – example

Participants can refer to this list to help identify areas that need special attention or a closer review of the address list. For example, if block 2044 in tract 0045.00 has housing units, participants can determine from the address count list that the Census Bureau does not have any housing units or group quarters geocoded to that census block and they can choose to focus on that area for their LUCA review. Conversely, if they notice too many housing units/group quarters geocoded to a block, they can choose to focus on that area for their LUCA review in order to correct the improperly geocoded address records. Establishing priorities for your LUCA review, discussed earlier in the presentation, is important.

Slide 43 – DVD layout and content

The DVD contains a digital copy of the Respondent Guide, a digital inventory form (*LUCA20_inventory.pdf)* to use when providing your submission to the Census Bureau, and a readme file (*Readmefirst3.txt)* for this specific product preference in the root directory of the DVD. The Respondent Guide is included as a pdf in addition to the paper copy received with your paper address related materials.

The "shape" folder contains the *2020LUCA_<EntityID>_DISK2of2.exe.* It includes the TIGER Partnership shapefiles and a digital, courtesy copy of the Address Count List. Note, the exe file name refers to Disk 2 of 2, even though there is only one disk. This is because this same file structure exists for partners that

do receive two disks and for our systems programming, we were unable to rename the file for this product preference.

Slide 44 – Suggested setup of local system

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

The Census Bureau recommends that you make a copy of each of the files and place them on the hard drive of a computer. 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.

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 needing assistance should refer to the Readmefirst3.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 45 – Data installation

Navigate to the 2020LUCA folder on your local system. Double click the .exe file, "*2020LUCA_<EntityID>_DISK2of2.exe*". With the executable, a command prompt opens. The command prompt window shows the progress of the file extraction and closes upon completion. A password is unnecessary for the DISK2of2 executable since there is no Title 13 material on the DVD.

Slide 46 – Map materials

The digital maps provided by the Census Bureau on DVD in support of 2020 LUCA are the TIGER Partnership shapefiles. This section introduces the TIGER Partnership shapefile materials, details opening .shp files in Esri ArcGIS, and provides high-level information regarding editing the shapefiles.

Slide 47 – TIGER Partnership shapefiles

The digital maps provided by the Census Bureau in support of the 2020 LUCA operation are the TIGER Partnership shapefiles. The Census Bureau's MAF/TIGER System is the source for these shapefiles. TIGER Partnership shapefiles require the use of a GIS. The TIGER Partnership shapefiles created for LUCA match the "*2018 Partnership Shapefiles for the 2018 BAS and the VTD Annotation Phase*" currently available for download from the "Maps & Data" section of the Census Bureau's Geography website: <https://www.census.gov/geo/maps-data/data/partnership.html>. Be aware creation of the Partnership Shapefiles occurs twice yearly. While the vintage that matches the LUCA products is the current vintage, new vintages continue to post to the website for public use. If your government chooses to make road feature updates, please use the shapefiles included with your LUCA materials.

The Census Bureau provides county-based shapefile layers regardless of whether or not the entity is a tribal nation, state, county, or incorporated place participant. This means tribal participants receive county shapefiles that cover the extent of their reservation and off-reservations trust lands. State participants receive county shapefiles for the counties they wish to review and update. Likewise, the incorporated place participants receive county shapefiles for each county within which their jurisdiction falls within. The Census Bureau also includes state level shapefiles for reference and query purposes.

The TIGER Partnership shapefiles do not contain structure points (map spots), so they are not Title 13 material.

For 2020 LUCA, the Census Bureau intends to use the same vintage of blocks, 2010 blocks, for the feedback materials as with the initial materials. This decision helps with comparability of geography during the feedback phase in 2019.

Slide 48 – Shapefile naming convention

Numerous files accompany the county-based TIGER Partnership shapefiles for LUCA, but the two of importance are the edges and tabblock2010 shapefiles within each of the county folder(s). The edges shapefile is the only file edited during the 2020 LUCA operation. Use it to make road feature updates resulting from address list updates**.** Use the tabblock2010 shapefile for geocoding purposes, as it is the block base for the 2020 LUCA operation. Make no updates to the tabblock2010 file. The Respondent Guide that accompanied materials, and located on the LUCA website, includes many details excluded from this presentation. Please review the shapefile chapter and appendices within the Respondent Guide.

Programmed to use both state level and county level shapefiles, the Census Bureau provides GUPS state level shapefiles as part of the LUCA TIGER Partnership shapefiles. These state level files are for reference only. Make no updates to any of the shapefiles located within the state folder. These files can, however, be used for reference purposes.

As an example, for an incorporated place that crosses county lines, they may wish to use the state level incorporated place shapefile (e.g., PVS_17_v2_place_20.shp) to help them identify the 2010 tabulation blocks for their entity. Since incorporated place boundaries do not cross state lines, the state level file for incorporated places shows the place boundary in its entirety, without fragmenting at the county boundary. Using the PVS_17_v2_place_20001.shp would only show the Allen County KS portion of any split boundary places.

Slide 49 – Opening .shp files in Esri ArcGIS: Launch ArcGIS – ArcMap

The Census Bureau uses Esri's ArcGIS ArcMap version 10.4.1. Please note different versions of ArcGIS yield different actions and screen visuals. These screenshots provide only one method for setting up your digital map materials. This presentation does not discuss editing the shapefiles. The "Acceptable Update" presentations discuss editing the shapefiles.

From the Start Menu or by selecting a shortcut icon on the desktop, launch ArcMap. A window appears while loading the document.

Slide 50 – Opening .shp files in Esri ArcGIS: Setting up .mxd

After the "Loading Document" window closes, a blank map document, or .mxd, will open. Click the ***Add*** button, represented as a plus sign in the ArcMap software as shown in the image on the right side of the screen.

Slide 51 – Opening .shp files in Esri ArcGIS: Browse and add data

Browse for your shapefile data, extracted after execution of the "*2020LUCA_<EntityID>_DISK2of2.exe*" file. Select the edges shapefile and the tabblock2010 shapefile for your jurisdiction and click ***Add***.

Slide 52 – Opening .shp files in Esri ArcGIS: Add Data resulting visual

A visual very similar to this image appears after successfully adding the edges and tabblock2010 shapefiles to the blank map document.

Slide 53 – Edits to the TIGER Partnership shapefiles

It is very important to note that LUCA is an address focused operation, and address list review its priority; however, some address list updates may require map updates, e.g., missing addresses from the address list may mean a missing road feature in the TIGER Partnership shapefiles.

Shapefiles allow participants to submit feature updates electronically if they follow Census Bureau requirements. In order to submit digital feature information, participants must have a GIS capable of importing Esri shapefiles, editing the features, and exporting layers back into Esri shapefile format.

All linear features in the MAF/TIGER System are contained in the edges shapefile. LUCA participants use the edges shapefile to add lines, delete lines, or change linear feature attributes for the road features impacted by an address list update. The Census Bureau does not expect, and will not process, updates to the edges shapefile for features other than roads. Participants use the tabblock2010 shapefile for geocoding addresses for inclusion or update to the address list.

For details on the contents of the shapefiles, review Chapter 5 of your Respondent Guide and the "*Readmefirst3.txt*" file that is included on the DVD.

Slide 54 – Materials and setup summary

Upon receipt of the LUCA materials, confirm the receipt of the three types of paper address materials, Address List, Address List Add Page, and Address Count List. Review the "R*eadmefirst3.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 material.

Slide 55 – 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. The focus of this section of the

presentation details permissible actions that can occur to the Address List and the Address List Add Page. There are four acceptable action codes used to edit the census address list- C, D, J, and N. Upcoming slides discuss each in detail. All four 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 (available for state and county level participants only).

Upcoming examples depict both city style and non-city style addresses within the Address List and Address List Add Page sections. Discussion of ungeocoded addresses (for state and county participants) occurs while reviewing the C action code.

Lastly, this section completes with discussion of the acceptable change type codes used in the TIGER Partnership edges shapefile.

Slide 56 – "C" action code

Participants use the "C" action code to update the census 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 the tract and block geocodes (or latitude and longitude coordinates) for "unable to geocode" address records

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

The next few slides illustrate the proper use of the "C" action code on the address list and corresponding map updates.

Slide 57 – Address List: "C" action code – correcting block number **No Title 13 Data Displayed**

In this example, the census block for the address records along South Holdener Street do not exist in block 1003. The street exists in the adjacent block, block 1009.

Print a "**C**" in the **Action Code,** column 3. In the **Census Block** (4c) column, cross out 1003 and print 1009.

Notice the use of the “arrow down”, so all information does not have to be written on each record. Ensure the action code and other corrected information appears for the first and last record for which that update applies.

While helpful, map updates are only required to indicate new, or updates to existing, non-city style address records; otherwise, map updates are optional. No change to the Map Spot Number (8) column is required if map updates are performed.

Slide 58 – Address List: “C” action code – correcting street name **No Title 13 Data Displayed**

In this example, the address records in block 2001 along Nail Street have the incorrect street name of Nale Place.

Print a “**C**” in the **Action Code** (3) column for the first and last addresses that are affected by the street name correction and “arrow down” from the first entry to the last entry.

In the **Complete Street Name** (4b) column, cross out the incorrect name, in this example, Nale Place, and print the correct name, Nail Street, above it for the first street name and the last street name that needs corrected and “arrow down” from the first entry to the last entry. If the street extends into multiple blocks, repeat this procedure for all the Address List sheets containing the street name in need of correction.

Participants should update the street name in the TIGER Partnership shapefile. Later in this presentation includes examples of permissible line edits to the shapefiles.

Slide 59 – Address List: “C” action code – correcting ungeocoded addresses **No Title 13 Data Displayed**

As mentioned in the beginning of this section, the census 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. 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 city style addresses that are ungeocoded, i.e., missing geocodes.

Print a “**C**” in the **Action Code** (3) column for the first and last addresses that need geocodes added and “arrow down” from the first entry to the last entry.

Print the census tract number in the **Census Tract** (4b) column and the census block number in the **Census Block** (4c) column and “arrow down” in each column from the first entry to the last entry.

Optional: If participants know the approximate location of each address, they can include the latitude and longitude coordinate information in the **Map Spot ID Coordinates** section, column 10a and 10b respectively. This example excludes the coordinate information. Participants do not update the shapefiles with map spot coordinate information.

Slide 60 – "D" action code

Use the "D" action code to flag residential address records on the census address list that no longer exist, are uninhabitable, or are duplicates. Participants may 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 apartment/unit numbers. 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 use the paper *Address List Add Page (D-2008)* to 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 column 3 with the "D" action code, participants must not make any additional corrections for these records on the address list.

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

- Deletion of address records along portion of street that no longer exists.
- Deletion of records with an incorrect house number and the corresponding "Add" action.
- Deletion of housing unit converted to multiunit structure and the corresponding "Add" action.

This section of the presentation will discuss the proper use of the "D" action code and provide images to illustrate several examples of proper use.

Slide 61 – Address List: "D" action code – deleting addresses **No Title 13 Data Displayed**

In this example, a section of South Holdener Street in census block 1003 no longer exists and the four housing units along this section were demolished.

Print a "**D**" in the **Action Code** (3) column for the first and last addresses that need deletion and "arrow down" from the first entry to the last entry. If these addresses spanned more than one page, participants should repeat this procedure for all the Address List sheets containing the addresses that need deletion. No other action is necessary for these four records.

Slide 62 – Address List: "D" action code – deleting incorrect house numbers **No Title 13 Data Displayed**

In this example, a review of the census address list uncovers an error with the house numbers on Ionia Avenue. They are four digit and not three digit. All other fields of information for these records are

correct. Since participants cannot edit the house number field, they must delete these addresses and add the correct records using the Address List Add Page.

Print a "**D**" in the **Action Code** (3) column for the first and last incorrect house number addresses that need deletion. Draw an arrow from the first entry to the last entry for all the Address List records containing the incorrect house numbers that need deletion. Make no further update to these records.

Slide 63 – Address List Add Page: adding correct house numbers **No Title 13 Data Displayed**

To complete the corresponding add action for the deleted records on the Ionia Ave, enter the appropriate heading information including entity name, entity ID code, page number, name of the preparer, and the date. Please note the preparer is required to have signed Confidentiality Agreement Form.

Enter the appropriate **Line Number** in column 1.

Using the information from the Address List, enter the information in section 2, **Census Geographic Location of Address**, including the **State County Code** (2a) number. If there are multiple entries, print the information in the first and last lines needed and "arrow down" from the first entry to the last entry.

Enter the correct house number for each address in the **Complete Address Number** (4a) column.

Enter the street name in the **Complete Street Name** (4b) column in the first and last lines needed and "arrow down" from the first entry to the last entry.

Enter the **Mailing ZIP Code** (4g) in the first and last lines needed and "arrow down" from the first entry to the last entry.

Though optional, if the location of the map spots for these records is correct, copy the map spot information from the column 8 to the **Unique Map Spot (5)** for each respective address. This example omits that information.

Enter the **Address Use** (6) only if known. Use "**M**" for mailing, "**L**" for location, or "**B**" for both. You may enter the address use in the first and last lines needed and "arrow down" from the first entry to the last entry if the address use is the same for all the addresses added.

Repeat this procedure for all the Address List Add Page sheets necessary to complete the "Add" action.

Slide 64 – Address List: "D" action code – deleting incorrect apartment units **No Title 13 Data Displayed**

In this example, the units at 3567 Achilles Drive are incorrect as listed on the census address list. Because participants cannot edit the apartment/unit information field on the address list, they must delete the incorrect records and add the correct records on an Address List Add Page.

Print a "**D**" in the **Action Code** (3) column for the first and last addresses that need correction and "arrow down" from the first entry to the last entry. Repeat this procedure for all the Address List sheets

containing the addresses that need correction. Complete the corresponding “Add” action as shown on the next slide.

Slide 65 – Address List Add Page: adding correct apartment units **No Title 13 Data Displayed**

To add the correct apartment or unit numbers to the Address List Add Page, enter the appropriate heading information including your entity name, entity ID code, page number, name of the preparer, and the date.

Enter the appropriate **Line Number** in column 1.

Using the information from the Address List, enter the information in section 2, **Census Geographic Location of Address**, including the **State County Code** (2a) number, **Census Tract Number** (2b), and **Census Block Number** (2c). If there are multiple entries, print the information in the first and last lines needed and “arrow down” from the first entry to the last entry.

Enter the house number in the **Complete Address Number** (4a) column in the first and last lines needed and “arrow down” from the first entry to the last entry.

Enter the street name in the **Complete Street Name** (4b) column in the first and last lines needed and “arrow down” from the first entry to the last entry.

Enter the correct apartment or unit number for each address in the **Apt/Unit Number** (4f) column.

Enter the **Mailing ZIP Code** (4g) in the first and last lines needed and “arrow down” from the first entry to the last entry.

Enter the **Address Use** (6) only if known. Use “**M**” for mailing, “**L**” for location, or “**B**” for both. You may print the address use in the first and last lines needed and “arrow down” if the address use is the same.

Repeat this procedure for all the Address List Add Page sheets necessary to complete the “Add” action.

Slide 66 – Address List: “D” action code – deleting HU converted to multiunit **No Title 13 Data Displayed**

In this example, the single housing unit at 105 Minoan Pkwy recently converted to a multiunit structure with two apartments, apartments 105 A and 105 B, respectively.

Print a “D” in the Action Code (3) column for the converted housing unit address, 105 Minoan Pkwy. Do not make any additional updates to this address record.

Slide 67 – Address List Add Page: adding converted multiunit **No Title 13 Data Displayed**

To add the two new corresponding records to the Address List Add Page, enter the appropriate heading information including your entity name, entity ID code, page number, name of the preparer, and the date.

Enter the appropriate **Line Number** in column 1.

Using the information from the Address List, enter the information in section 2, **Census Geographic Location of Address**, including the **State County Code** (2a) number, **Census Tract Number** (2b), and **Census Block Number** (2c). If there are multiple entries, print the information in the first and last lines needed and "arrow down" from the first entry to the last entry.

Enter the house number for each address in the **Complete Address Number** (4a) column.

Enter the street name in the **Complete Street Name** (4b) column in the first and last lines needed and "arrow down" from the first entry to the last entry.

Enter the correct apartment or unit number for each unit in the **Apt/Unit Number** (4f) column.

Enter the **Mailing ZIP Code** (4g) in the first and last lines needed and "arrow down" from the first entry to the last entry.

Enter the **Address Use** (6) only if known. Use "**M**" for mailing, "**L**" for location, or "**B**" for both. You may print the address use in the first and last lines needed and "arrow down" if the address use is the same.

Repeat this procedure for all the Address List Add Page sheets necessary to complete the "Add" action.

Slide 68 – "J" action code

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 may 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.

This section of the presentation will discuss the proper use of the "J" action code and provides an example.

Slide 69 – Address List: "J" action code – out of jurisdiction **No Title 13 Data Displayed**

In this example, two addresses on Pueblo Trail are not within the jurisdiction of Winters County.

Print a "**J**" in the **Action Code**, column 3. If there were more than two entries, print the information in the first and last lines needed and arrow down from the first entry to the last entry. Make no other corrections to these two address records.

Slide 70 – "N" action code

Use an "**N**" action code to flag addresses 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.

Use the “N” action code for city style, non-city style, and ungeocoded address records (state and county participants only).

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

This section of the presentation will discuss the proper use of the “N” action code and provides an example.

Slide 71 – Address List: “N” action code – nonresidential **No Title 13 Data Displayed**

In this example, one address on Cassiopeia Drive is nonresidential. Print an “**N**” in the **Action Code,** column 3. Make no other corrections to the address record.

Slide 72 – Address List Add Page: adding city style HUs **No Title 13 Data Displayed**

Recall from the introduction section of this presentation, city style addresses are the most common form of addresses in the MAF. Defined earlier, they have a house number and street name for their complete address.

The next several examples depict “Add” situations using the Address List Add Page for city style addresses.

For this example, participants need to add four addresses along a new portion of Olisan Street to the census address list. In order to add addresses, participants use the Address List Add Page.

Enter the appropriate heading information including your entity name, entity ID code, page number, name of the preparer, and the date.

Enter the appropriate **Line Number** in column 1.

Using the information from the TIGER Partnership shapefile, enter the information in section 2, **Census Geographic Location of Address**, including the **State County Code** (2a) number, **Census Tract Number** (2b), and **Census Block Number** (2c). If there are multiple entries, print the information in the first and last lines needed and “arrow down” from the first entry to the last entry.

Enter the **Complete Street Name** (4b) in the first and last lines needed and “arrow down” from the first entry to the last entry.

Participants may choose to include the latitude and longitude coordinates of the buildings in section 4 since they cannot include the **Unique Map Spot Number** (5).

Enter the **Mailing ZIP Code** (4g) in the first and last lines needed and “arrow down” from the first entry to the last entry.

Enter the **Address Use** (6) only if known. Use “**M**” for mailing, “**L**” for location, or “**B**” for both.

Slide 73 – Address List Add Page: adding city style multiunits **No Title 13 Data Displayed**

In this example, a new two-story multiunit building at 2014 Maople Rd contains four apartments, two on the first floor and two on the second floor, in block 1002 of tract 54 that are not listed on the Address List.

Enter the appropriate heading information including your entity name, entity ID code, page number, name of the preparer, and the date.

Enter the appropriate **Line Number** in column 1.

Using the information from the TIGER Partnership shapefile, enter the information in section 2, **Census Geographic Location of Address**, including the **State County Code** (2a) number, **Census Tract Number** (2b), and **Census Block Number** (2c).). Enter the same information in the last line and "arrow down".

Enter the house number in the first and last line needed in the **Complete Address Number** (4a) column and "arrow down".

Enter the street name in the first and last lines needed in the **Complete Street Name** 4b) and "arrow down".

Enter the **Apt/Unit Number** (4f) for each apartment or unit.

Note: You must provide unit the actual identifiers (Apt 1, Apt 2, Unit A, Unit B, etc.) for multiunit buildings. 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.

Participants may choose to include the latitude and longitude coordinates of the buildings in section 4 since they cannot include the **Unique Map Spot Number** (5).

Enter the **Mailing ZIP Code** (4g) in the first and last lines needed and "arrow down".

Enter the **Address Use** (6) only if known. Use "**M**" for mailing, "**L**" for location, or "**B**" for both. You may enter the address use in the first and last lines needed and "arrow down" from the first entry to the last entry if the address use is the same for all the addresses added.

On the next page of the Address List Add Page, repeat the instructions until all of the buildings and their individual units are added.

Slide 74 – Address List Add Page: adding city style GQs **No Title 13 Data Displayed**

Although adding a group quarters address is similar to adding a housing unit, group quarters addresses require a group quarters name, facility name, and a GQ flag. This example demonstrates how to add a group quarters address that contains three individual buildings

For this example, Aristotle University constructed three new residence halls, Pandora Hall, Buildings 1, 2, and 3 at 225, 227, and 229 Achilles Drive.

On the Address List Add Page, enter the appropriate heading information including your entity name, entity ID code, page number, name of the preparer, and the date.

Enter the appropriate **Line Number** in column 1.

Using the information from the TIGER Partnership shapefile, enter the information in section 2, **Census Geographic Location of Address**, including the **State County Code** (2a) number, **Census Tract Number** (2b), and **Census Block Number** (2c). If there are multiple entries, print the information in the first and last lines needed and arrow down from the first entry to the last entry.

Enter a "**Y**" in column 3, Enter **"Y"** if this is a **Group Quarters,** to flag that this is a group quarters.

Enter the address number for each building, 225, 227, and 229 in column 4a, **Complete Address Number.**

Enter the street name, Achilles Drive, in column 4b, **Complete Street Name**.

Enter the name of the group quarters in column 4d, **Group Quarters Name**. In this example, the name is Pandora Hall and the building number.

Enter the **Facility Name** in column 4e, if the group quarters are associated with a facility. In this example, the facility is Aristotle University.

Note: If you enter a "**Y**" in column 3, you must provide a group quarters name (column 4c) and a facility name (column 4d) if the group quarters are associated with a facility (e.g. Group Quarters Name – Pandora Hall; Facility Name – Aristotle University). The Census Bureau will not process an identified group quarters address record without a group quarters name.

Enter the **Mailing ZIP Code** (4g) in the first and last lines needed and arrow down.

Participants may choose to include the latitude and longitude coordinates of the buildings in section 4 since they cannot include the **Unique Map Spot Number** (5).

Enter the **Address Use** (6) only if known. Use "**M**" for mailing, "**L**" for location, or "**B**" for both. You may enter the address use in the first and last lines needed and arrow down from the first entry to the last entry if the address use is the same for all the addresses added.

Slide 75 – Address List Add Page: adding non-city style physical location description records (with latitude and longitude) **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. In addition to the required state, county, census tract, and block codes, for participants to add non-city style addresses in 2020 LUCA they must provide a well-

defined description of the address location and provide the latitude and longitude coordinates for each non-city style address they add within section 4 of the Address List.

In this example, an area north of Aca Street includes three new housing units. The physical location descriptions are missing from the Address List.

Enter the appropriate heading information including your entity name, entity ID code, page number, name of the preparer, and the date.

Enter the appropriate **Line Number** in column 1.

Using the information from the TIGER Partnership shapefile, enter the information in section 2, **Census Geographic Location of Address**, including the **State County Code** (2a) number, **Census Tract Number** (2b), and **Census Block Number** (2c). If there are multiple entries, print the information in the first and last lines needed and "arrow down" from the first entry to the last entry.

Enter the **Complete Street Name** (4b) for each new location description address.

Identify each new housing unit with a **Physical Location Description** (4e). Provide a well-defined description.

Enter the **Mailing ZIP Code** (4g) in the first and last lines, if known, and "arrow down" from the first entry to the last entry.

Enter the **latitude and longitude coordinates** in column 4 for each new location description address. **This information is required for adding non-city style addresses.**

Enter the **Address Use** (6) only if known. Use "**M**" for mailing, "**L**" for location, or "**B**" for both.

Slide 76 – Address List Add Page: adding non-city style rural route and box number records (with latitude and longitude) **No Title 13 Data Displayed**

For this example, all of the mailing addresses in Winter County are non-city style in the form of rural route and box numbers. Several addresses along Olympus Hwy are missing on the Address List.

Enter the appropriate heading information including your entity name, entity ID code, page number, name of the preparer, and the date.

Enter the appropriate **Line Number** in column 1.

Enter the **RR or HCR and Box Number** (4c) for each address.

Enter the **Mailing ZIP Code** (4g) in the first and last lines, if known, and "arrow down" from the first entry to the last entry.

Enter the **latitude and longitude coordinates** in column 4 for each new location description address. **This information is required for adding non-city style addresses.**

Enter the **Address Use** (6) only if known. Use "**M**" for mailing, "**L**" for location, or "**B**" for both. In this example, since the addresses are Rural Route and Box Number, they are for mailing "**M**".

Slide 77 – TIGER Partnership shapefiles – edges shapefile

As previously mentioned, LUCA is an address-focused operation. However, if participants discover streets that are missing, misplaced, or incorrectly name, they may modify the TIGER Partnership shapefile, edges shapefile.

There are three acceptable change type codes used to edit the edges shapefile; Add Line (AL), Delete Line (DL), and Change Attribute (CA). Each updated road feature in the edges shapefile must contain one of the change type codes in the CHNG_TYPE field. The following slides show examples of making updates to the edges shapefile.

Slide 78 – Edges shapefile: "AL" change type – adding a street

For this example, a participant needs to digitize a missing road feature. They added the associated addresses to the Address List.

In the edges shapefile, digitize the feature. In the edges attribute table, enter the **MTFCC**, which is "S1400", **FULLNAME**, which is "Crystal Ave", and **CHNG_TYPE**, which is "AL". For this example, there will be a new road added to the attribute table from the digitization of the feature and all fields, except the MTFCC, FULLNAME, and CHNG_TYPE information remain blank.

The image illustrates the newly added street in the edges shapefile and the three fields of required information in the edges shapefile attribute table.

Slide 79 – Edges shapefile: "DL" and "AL" change type – correcting block number

For this example, the participant notices the improper placement of a road feature, which caused incorrect geocoding of the associated address. After correcting the Address List, if time permits, the participant should update the edges shapefile as well.

In the edges shapefile, select the incorrectly placed Court Street in tract 5003.00 block 2024.

In the attribute table for the incorrectly placed feature, enter **"DL"** in the **CHNG_TYPE** field to show the feature marked for deletion. Do not perform the actual deletion of the feature because that would also delete the attribute record needed to identify all changes to the edges shapefile.

In the edges shapefile, digitize Court Street in its correct location in block 1036, south of Brass Alley.

In the attribute table for the newly digitized record, enter the **MTFCC, FULLNAME, and CHNG_TYPE** fields, "S1400", "Court St", and "AL" respectively.

The image illustrates the correctly placed street in block 1036, the incorrectly placed street in block 2024, and the three fields of required information in the edges shapefile attribute table.

Slide 80 – Edges shapefile: "CA" change type – correcting street name

During the review of the Address List, the participant notices the incorrect name of a road feature and corrects the street name within the Address List. If time permits, they should also make the correction in the edges shapefile.

In the edges shapefile, select all of the segments for the feature in need of correction, in this case Mount Rd.

Edit the **FULLNAME** field, correcting it from Mount Rd to Mountain St.

Enter **"CA"** in the **CHNG_TYPE** field to show a change to the attribution.

The image illustrates the correctly named street (Mountain St), and shows the corrected **FULLNAME** field and "**CA**" **CHNG_TYPE** field in the edges shapefile attribute table.

Slide 81 – Summary of edges shapefile updates

This slide provides a summary visual of the edges shapefile updates performed in the previous three slides. Please note discussion of updating Donahue Street and Oak Street did not occur, though they appear in this visual.

The yellow features represent road features to add, flagged with "**AL**". The orange features represented road features with changed attribution, flagged with "**CA**". The red features represent road features flagged for deletion, shown in the attribute table as "**DL**".

Slide 82 – In this section (Submission)

In this section of the presentation, we will discuss preparing and submitting updated LUCA materials and briefly touch on the next steps after the successful submission of your updated materials.

Slide 83 – Address materials – sorting and keeping secure

Ensure you have completed your review and all of the updates you wish to submit. Separate the updated address list pages from the pages without updates. Ensure all Address List Add Pages are properly complete with accurate heading information.

Make copies of the updated pages for your records and for use during the feedback phase, scheduled for summer of 2019. Title 13 protects the copies 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*. The LUCA invitation letter included a copy of these guidelines. In addition, these guidelines are in the Respondent Guide that accompanied the materials.

Slide 84 – Address materials – assembling and organizing

Bundle and return only the updated original pages for both the Address List and Address List Add Pages to prepare for shipping. Organize the pages, in numeric order, by the updated Address List and then the completed Address List Add Pages. Ready the bundled, organized materials for shipment to the Census Bureau.

Slide 85 – Map materials – exporting updates

This screenshot example depicts this action using Esri's ArcMap software. Ensure you have completed your review and all of the updates you wish to submit. Select the edges with an entry in the CHNG_TYPE field. Export the selected edges into a new shapefile by right clicking on the edges layer in the table of contents and select ***Data***, then ***Export Data*** as shown in the image to the right.

Slide 86 – Map materials – saving updates

Continuing with the Esri software example, ensure the ***Selected Features*** remains in the ***Export*** section of the ***Export Data*** window. Name the new shapefile "*luca20_<EntityID>_ln_changes.shp*", where the EntityID is the entity identification code from the LUCA materials. Save this newly created shapefile to a location for easy retrieval for submission and the next steps in the 2020 LUCA operation. Because the shapefiles do not contain Title 13 information, they do not fall under the same Title 13 restrictions as the digital address materials. Please do protect the file from harm, so that is readily accessible during the feedback phase.

The newly exported shapefile only includes the updated edges. This shapefile is your 2020 LUCA digital map submission that accompanies the updated paper address materials.

Slide 87 – Map materials – assembling and organizing

Navigate to the directory where you saved your shapefile changes. Zip the "*luca20_<EntityID>_ln_changes.shp*" and all associated metadata and component files (.cpg, .dbf, .prj, .sbx, .shx, .shp, etc.). Please note to ensure accurate processing upon receipt, participants using Esri software should utilize ArcCatalog to ensure the necessary file components are bundled in the zip file appropriately. Participants using other GIS software must ensure all of the components are included in the zip file.

Name the file "*luca20_<EntityID>_ln_changes_return.zip*". There is no need to password protect this file because it does not contain any Title 13 information. Copy the zipped file to a CD/DVD submission.

Slide 88 – Accompanying paperwork

Please include the *Inventory Form for the Return/Submission of LUCA Updated Materials (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 the DVD and available online to print if the printed copy is lost during the review timeframe.

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 updated edges shapefile.

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

Slide 89 – Shipping instructions

For shipping updated LUCA paper address materials to the Census Bureau, specific Title 13 protections are required. Participants must ensure they follow procedures for shipping Title 13 materials as outlined in the *Confidentiality and Security Guidelines* provided with the registration materials and as Appendix A of the Respondent Guide.

Double wrap the updated Title 13 address materials by using an inner and an outer envelope (or container), one within the other. The envelopes/containers should be durable enough to prevent someone from viewing or tampering with the enclosed material. Label both sides of the inner envelope (or container) with the notice: **"DISCLOSURE PROHIBITED BY Title 13, U.S.C.".** Place the inner envelope (or container) into the outer envelope.

Slide 90 – Shipping instructions (cont'd)

Include the D-2011 Inventory Form. If there were updates made to the digital maps, include the CD/DVD with the TIGER Partnership shapefile edits. Paper address participants that do not perform any digital map updates can follow the shipping instructions on the previous slide and disregard reference to the updated shapefiles on this slide.

Use the mailing label that accompanied the original materials to return 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 91 – 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, 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 92 – 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 as Appendix H. The *Confidentiality and Security Guidelines (D-2004)* in Appendix A outlines the process for both the destruction and the return of Title 13 materials.

Slide 93 – 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 94 – 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 95 – 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 96 – 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.