An Introductory Guide to Submitting Longitudinal Systems Analysis (LSA) Data for the AHAR

Version 1.0
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1. Introduction
This guidebook provides background information and guidance on the Longitudinal Systems Analysis (LSA) and the use of this LSA data for the Annual Homeless Assessment Report (AHAR) to Congress. The guide describes the LSA data submission requirements and reviews the data submission process via the Homelessness Data Exchange, version 2.0 (HDX 2.0), a web-based data collection tool. Beginning with fiscal year 2018, all LSA data submissions must occur through the new HDX 2.0.

This chapter provides a general overview of the LSA and its use in the AHAR, including a brief discussion of the origins of the project, the types of communities that participate, and the uses of LSA data. The remainder of the guide proceeds as follows:

- **Chapter 2** details the LSA submission schedule and reporting requirements;
- **Chapter 3** focuses on accessing and managing your profile in the HDX 2.0;
- **Chapter 4** focuses on the LSA submission and data cleaning process via the HDX 2.0; and
- **Chapter 5** presents additional resources for the LSA and the AHAR.

At some point in the future, HUD anticipates adding modules to the HDX 2.0 that will address the following:

- HIC and PIT count data submission
- HIC, PIT count, and LSA data visualizations
- Data-driven System Improvement Action Planning
- Optimized System Modeling

Additional chapters or sections may be added to this user guide as those modules become available.

1.1 - What is the AHAR?
Every year, the U.S. Department of Housing and Urban Development (HUD) submits an Annual Homeless Assessment Report (AHAR) to the United States Congress. The AHAR is a national-level report that provides information about homeless service providers, people and households experiencing homelessness, and various characteristics of that population. It informs strategic planning for federal, state, and local initiatives designed to prevent and end homelessness.

HUD selected a research team from Abt Associates and the University of Pennsylvania to complete the AHAR. The AHAR research team collects, reviews, and analyzes HMIS data that Continuums of Care (CoCs) report to HUD via the HDX 2.0. The team supports CoCs throughout the data collection and cleaning process to review the data and resolve any data quality flags. Once the data collection and cleaning process has closed, the research team analyzes the data and prepares the annual reports, which have historically been published each summer/fall and provide an overview of homelessness during the previous year.
1.2 - What data are reported for the AHAR?

Nationwide, HUD has tasked CoCs with coordinating homeless services in specific geographic areas. HUD bases the AHAR on three separate aggregate data submissions provided by these CoCs: the LSA, Point-in-Time (PIT) counts, and the Housing Inventory Count (HIC). In addition, U.S. Census and other data are used for contextual analysis.

The LSA data provided by CoCs contains community-level information on people and households served by continuum projects over the course of one year. Formerly, these data were simply referred to as “AHAR data.” However, because the scope of this annual report is expanding significantly beginning with fiscal year 2018, CoCs are now expected to submit much more granular data that will be used to inform the written AHAR to Congress. The change from calling these data “AHAR data” versus “LSA data” reflects the fact that this expanded scope will allow CoCs to use this community-level information for a range of purposes beyond submitting data for the AHAR to Congress.

For those people and households served by continuum projects during the fiscal year, the LSA includes:

- Demographic characteristics like age, race, gender, and veteran status;
- Length of time homeless and patterns of system use;
- Information specific to populations whose needs and/or eligibility for services may differ from the broader homeless population, such as veterans, people and households experiencing chronic homelessness, and others; and
- Housing outcomes for those who exit the homeless services system.

In addition to providing information for the cohort served during the report period, the LSA includes additional data about households and populations who exited the system in three discrete periods—the cohort that exited two years prior to the report period, the cohort that exited one year prior to the report period, and the cohort that exited in the first six months of the report period. The LSA provides information about patterns of system use prior to exit, destination types, and, for those who were served again later by continuum projects, lengths of time between exit and re-engagement or returns to homelessness.

More information about changes from the previous AHAR process to the new LSA process can be found in the following resource: Understanding the FY18 Changes: AHAR vs. LSA.

1.4 - Who should participate in submitting the LSA?

All CoCs are encouraged to participate in submitting the LSA through their CoC or HMIS leads (this is not a project-level submission). The number of CoCs submitting data for the AHAR has grown dramatically since HUD completed the first report in February 2007. While the data submission process has changed dramatically beginning in FY18, HUD hopes that CoCs will continue to participate so this data can inform national priorities for preventing and ending homelessness. As with past AHAR data submissions, HUD may consider participation in the LSA submission process as a scoring factor in the application for funding that CoCs submit to HUD each year.
It is also important to note that all CoCs may participate in the LSA, regardless of their HMIS bed coverage rate. All CoCs are encouraged to run their LSA and use the HDX 2.0, as described in this manual, to view and understand their LSA data. While HMIS bed coverage will continue to be an important factor, usability will be judged principally on data quality and completeness. As in past years, not all Official HUD Submissions that are submitted, completed, and confirmed will be used in the AHAR to Congress.

1.5 - How will the LSA be used?
The AHAR to Congress is the only source of data that is available annually on the extent and nature of homelessness nationwide. As such, the LSA submission from your CoC is critical to providing federal and local policymakers with a deeper understanding of who is homeless and how homelessness changes over time. This information can be used to inform the public and help policymakers craft appropriate intervention strategies to prevent and end homelessness in the United States. Indeed, LSA data used in the AHAR will assist in tracking progress against the federal strategic plan to prevent and end homelessness.

The FY18 AHAR to Congress will look differently than past reports, given this new dataset; however, all past reports to Congress can be found on the [HUD Exchange](https://www.hudexchange.info). The FY18 report, and all subsequent reports, will also be posted on the site.

The LSA can also be used by local communities who want to better understand the number, characteristics, and service needs of people using homeless services. For example, the LSA can provide local communities with a data-driven understanding of their homeless population, which can be used to inform local homeless assistance planning efforts. The HDX 2.0 will allow CoCs to upload and review “local use only” LSA data year-round, similar to how the HDX Sandbox previously functioned. In addition, CoCs can run the LSA report from their HMIS for any time period and any combination of projects. Communities may wish to use the HDX 2.0 results from a local-use LSA report for their CoC application, community planning activities, coordinated entry system planning, strategic plans to end homelessness, consolidated plans, or funding applications.

2. Overview of the LSA Submission Process
This chapter provides an overview of the LSA submission process. This includes: the schedule for this year’s process, what CoCs can expect in terms of support from the review team during the upload phase, and how the review team will conduct the data cleaning phase after the initial upload window has passed.

2.1 - LSA Submission Cycle
Typically, HUD will open the HDX 2.0 for CoCs to upload official use LSA data for the AHAR on October 1 each year. This is because the 12-month estimates of sheltered homelessness follow the federal fiscal calendar and are based on HMIS data on the use of homeless residential programs from October 1 of the previous year through September 30 of the current year. October 1 is an important date because it marks both the start of a new reporting cycle and the start of data collection from the previous 12-month reporting period.

Due to the programming complexities of the new LSA reporting specifications, HUD delayed the 2018 opening to October 31 to be able to continue to work closely with vendors and data collection staff on finalizing the reporting process for this first year of LSA data submission.
Subject to extensions for technical issues, the annual LSA submission cycle covers the following key milestones and support:

**Test Upload**: deadline for uploading an LSA file to the HDX 2.0
- When the HDX 2.0 officially opens for submission each year, CoCs will be able to upload an official use LSA file for the appropriate reporting period to the HDX 2.0.
- Within **ten days** after the HDX 2.0 opens for the official submission cycle, CoCs should have at least logged in to the HDX 2.0 and completed a test upload. If the upload fails due to fatal errors, CoCs should immediately work with their vendor to resolve formatting or programming issues with the file export.
- Note: There are two submission types — **Local Use Only** and **Official HUD Submission**. CoCs can use the Local Use Only type for upload attempts and to review their data and make any needed adjustments before changing the upload to an Official HUD Submission. Only Official HUD Submissions can be submitted for the review team to assess.

**Submission Deadline**: deadline for submitting an Official HUD Submission LSA to the HDX 2.0
- CoCs will be given **four weeks** from the opening date to submit the official LSA file for review. The LSA upload is extracted directly from each CoC’s HMIS. Therefore, any errors identified through the upload process will need to be corrected in the HMIS and a new (corrected) LSA file will need to be uploaded to the HDX 2.0. CoCs should expect to upload and review several LSA files in the HDX 2.0, replacing old uploads with new uploads, until they have resolved any warnings and confirmed that the summary data accurately reflect the number, characteristics, and system use of those served within their homelessness system for that year.
- Unlike prior AHAR submissions, **changes to data cannot be made manually**. Therefore, to resolve data quality flags, CoCs will either need to write notes to explain why the data are accurate as they are, or fix any issues within their systems and re-upload the LSA files to the HDX 2.0. Notes entered into one LSA upload on the HDX 2.0 will not carry over to new LSA uploads, so CoCs may want to wait to enter notes until the file is ready to be marked as an “Official HUD Submission,” or otherwise

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**Summary of Steps to the LSA Submission Process**

1. **Upload**: Upload your .zip file of the 10 required .csv files to the HDX 2.0.
2. **Review Upload within CoC**: Use the HDX 2.0 functionality to review the LSA output from your HMIS, as well as any warnings associated with your upload. Leave notes for warnings in the HDX 2.0, or make corrections in the HMIS and re-upload, as needed.
3. **Submit Official LSA for Review Team’s Assessment**: Once you’ve resolved any warnings flagged through the initial upload process and marked your upload as the Official HUD Submission, click the “submit” button and wait to hear more from the review team.
4. **Work with Data Liaison to Clean Submission**: You will be contacted by a Data Liaison to work with one-on-one to clean the data, resolve remaining questions, and confirm the data.
5. **Celebrate!** You have completed this year’s LSA submission process. Thank you for participating.
keep a record of their notes so they can easily copy and paste them into the new file if they are still relevant for that new upload.

✓ If the CoC originally uploaded their file as “Local Use Only” in order to review and resolve issues, the CoC will need to change the “Submission Type” to “Official HUD Submission” before they will be able to submit it.

✓ If a CoC encounters an issue during this time and requires technical assistance, the CoC should submit its issue or question to HUD’s Ask A Question (AAQ) HDX desk. CoCs should also work closely with their vendors during this time to resolve any issues that go beyond the HDX 2.0.

✓ A CoC must click the “Submit” button by the deadline established by HUD each year to be considered “participating” in the LSA submission process.

**Data Assessment and Cleaning:** review team assesses CoC uploads for data quality and follows up with CoCs to resolve data quality flags

✓ After submission, the HDX 2.0 will be closed for updated LSA Official HUD Submissions while the review team runs additional data quality checks on CoC LSA uploads.

✓ Once this assessment is complete, a Data Liaison from Abt Associates or the University of Pennsylvania will be assigned to each CoC. This liaison will provide one-on-one support throughout this data cleaning phase to help CoCs resolve lingering questions from the review team. Outreach to CoCs will likely begin four to six weeks after the official data submission period closes.

✓ Data cleaning is expected to be an iterative process. CoCs should expect to communicate back and forth with their Data Liaison throughout this data cleaning window to resolve any remaining data quality issues. This may require CoCs to upload a revised LSA file. CoCs will be given a deadline to respond to any data quality issues flagged by their Data Liaison. Once the data cleaning process is finished, the Data Liaison will mark the official LSA dataset as “Complete.”

**Final Confirmation:** deadline for completing data cleaning and marking uploads as confirmed

✓ A CoC must click the “Confirm” button within three business days of the dataset being marked “Complete” to be considered participating in the LSA submission process. A CoC cannot confirm their data until it is marked “Complete” by the Data Liaison. Therefore, CoCs need to ensure they are actively engaged in resolving issues during the data cleaning phase.

✓ The review team will use the confirmed submission to assess overall usability of the data for the analysis and report writing phase of the AHAR.

CoCs can expect to hear about the review team’s usability assessment of their data within approximately four weeks of the confirmation date. These deadlines are scheduled to support the preparation of the AHAR, which must be submitted to Congress annually and is generally published in the late summer or fall of each year.
2.2 - Anticipated Timeline for 2018 LSA Submission Process

The timeline for the 2018 LSA submission process is subject to change at HUD’s discretion. Specific dates and deadlines will be announced via the HUD Exchange listserv, as well as posted on the HDX 2.0 homepage. Always check these resources for the most up-to-date information.

The anticipated dates for the 2018 LSA submission process are listed below:

- **October 31, 2018**: HDX 2.0 opens for official LSA submissions
- **November 9, 2018**: Test LSA upload deadline
- **November 30, 2018**: Official LSA submission deadline
- **Late December**: Outreach to CoCs from Review Team Data Liaisons begins
- **Late January**: Deadline to resolve data quality flags with your assigned Data Liaison and mark your data complete; must confirm data within 3 business days of completion
- **Late February**: Data usability determinations are communicated to CoCs

2.3 - Additional Notes on the LSA Review Process

In April 2018, HUD issued [LSA Report Specifications and Tools](#) to support HMIS software providers in programming the HMIS-based LSA report file. These materials have been updated several times to correct issues identified by vendors during the programming process. HUD appreciates the software providers’ ongoing feedback as they prepare this complex report.

The LSA report generated from the HMIS is a .zip file comprising 10 CSV files with potentially thousands of rows of numerical output. Instead of reviewing these files directly, CoCs will need to upload the file to the HDX 2.0 and review the results within the HDX 2.0 Summary Data Display. There, results are calculated by the HDX 2.0 and displayed by reporting category and system use. If errors are found with the uploaded data, users must correct the client data in the source HMIS and re-upload corrected files, or resolve warnings they cannot correct by adding explanatory notes. Users may upload multiple LSA files in the HDX 2.0 until they are satisfied that they accurately reflect the CoC.

Notes entered into one LSA upload on the HDX 2.0 will not carry over to new LSA uploads, so CoCs may want to wait to enter notes until the file is ready to be marked as an “Official HUD Submission,” or otherwise keep a record of their notes so they can easily copy and paste them into the new file if they are still relevant for that new upload.

Vendors have not been asked to create an LSA report within the HMIS for CoCs to review the data prior to submission in HDX 2.0. This is because doing so would replicate the tens of thousands of calculations contained in the HDX 2.0 and introduce the potential for discrepancies between the official HDX 2.0 display and the vendor calculations.

2.4 - LSA Reporting Requirements

The LSA submission process will require the upload of:

- Five tables of aggregate report data – counts of people and households grouped by combinations of values in every table column – in LSA CSV files which must be produced by an HMIS application; and
- Five tables of HMIS project descriptor data for relevant projects exported in the existing standard HMIS CSV 6.11 format.
Detailed descriptions of the five LSA CSV files and parameters for export of project descriptor data are in the LSA Programming Specifications document on HUD Exchange. The HDX 2.0 will use the counts in these files to produce readable display tables for the research team and community users. Data will be viewable, but not editable in HDX 2.0.

3. Setting Up and Managing Your Account in HDX 2.0
This chapter describes how to access and manage your profile in the HDX 2.0. The HDX 2.0 is a dynamic, web-based data collection tool that was designed specifically to collect data on homeless programs for HUD. It is an updated platform from the previous version of the HDX where CoCs have historically submitted their AHAR data, as well as PIT count and HIC data. All LSA submissions occur through the HDX 2.0. In the future, the PIT count and HIC data will be submitted through the HDX 2.0, as well.

3.1 - Getting Started in HDX 2.0
If you are just getting started in the HDX 2.0, you will first need to make sure that your account is set-up, and may need to reset your password.

Creating an Account
Please note that if you previously had an account on the original HDX site, you will already have an account set up on the HDX 2.0. If this is your first time logging into the system, however, you will need to reset your password. We do not store, and thus did not transfer, passwords from HDX 1.0 into the HDX 2.0 site. As a result, you essentially have no password in the new system until you have set up a new one.

Please follow the instructions in the How to Login to the HDX 2.0 and Resetting Your Password sections below for more information.

If you are brand new to submitting data through either the HDX 1.0 or HDX 2.0 sites, welcome! You will need to follow the steps below to create your account:

1. Open your browser and navigate to the HDX 2.0 site: https://hudhdx2.info/. This URL will take you to the main page.
2. In the upper right-hand corner of the homepage, you will see a link in white text that reads “Create an Account.” Click on this link.
3. This link will take you to a page where you will need to provide some information for your new account, including fields such as name, email address, organization, and state. You will also be asked the CoCs to which you would like to request access. Fill out these fields, check the box on the screen ensuring you are not a robot, and then click the blue button that reads “Register” at the bottom of the form.

4. You are now set to login to the HDX 2.0. You should receive a confirmation email that your account has been created.

5. If, through the account setup screen, you have chosen a CoC with which to be affiliated, the CoC’s Primary Contact will also receive an email to let them know that you would like to be added to the CoC in the HDX 2.0. The CoC Primary Contact will need to grant you access to the CoC before you will be able to review or edit any LSA data.

6. If you do not receive the automatically generated email from the HDX 2.0, your organization’s spam filter may be blocking the email. If this is the case, you will need to check your spam folder and work with your IT department to troubleshoot the issue. Your IT department may need to tell your system to allow emails from the HDX email address. The email address your IT department may need to “white list,” or add to your address book is: automail@hudhdx2.info. You are also encouraged to check with other users within your organization to see if they have been able to receive emails from the system.

How to Login to the HDX 2.0
1. Open your browser and navigate to the HDX 2.0 site: https://hudhdx2.info/. This URL will take you to the main page.
2. Click on the “Login” button located in the upper left-hand side of the screen.
3. If you previously had an account on the original HDX and have not yet reset your password, please follow the Resetting Your Password instructions below before continuing.

4. If your account is already created and up-to-date for the new system, then simply enter your email address associated with the account and your password into the text fields on the screen and then click the blue button that reads “Login.” This will take you into your account.

**Resetting Your Password**

Use these instructions to reset your password in the case that you have forgotten it, or in the case that you previously had an account on the original HDX, but this is your first time logging into the HDX 2.0.

1. After navigating to the login page, as described in the section above, click on the link that reads “Forgot Your Password?” in blue text below the login text fields.

2. This link will take you to a page with a textbox requesting your email address. Enter your email address into the field and click the blue “Send Password Reset Link” button.

3. After following these steps, you should receive an email that will include instructions on how to reset your password. Follow these instructions until you are logged into the site.

4. If you do not receive the email, please see step 6 under Creating an Account.

If you have not forgotten your password, but would like to reset it to something new, follow the steps below to do so.

1. Once logged into the site, you will see a link in the top right-hand side of the screen that reads “Hello, [your name].” Hover over this link. You will see a dropdown menu appear. From that dropdown menu, select “My Account.”

2. Scroll to the bottom of the form that appears. The last row in the form, labeled “Password,” will include a link next to it that reads, “Change password.” Click on this link and enter the required information requested on the next screen in order to update your password to your preference.
3.2 - Understanding Your HDX 2.0 Dashboard

Once you log in, you will land on your HDX 2.0 home screen labeled “Dashboard.” From here, you can keep up-to-date on current deadlines, and view your LSA submission status for any CoC with which you are affiliated. If the deadlines are extended, those extensions will be added here, as well.

Your Dashboard includes three widgets – one for the LSA, one for the HIC, and one for the PIT count. Currently, only the LSA widget is functional. Once you upload an official LSA, this widget will show you the status of the data review, progress toward addressing warnings in the dataset, and your selected reporting status for each reporting category.

If you are affiliated with more than one CoC, you can change the Dashboard view from one CoC to another selecting the “Status For” dropdown menu in the middle of the screen, and choosing the CoC you wish to see.

Note that, regardless of which CoC you are looking at on the Dashboard, you can always upload, view, and filter all of your CoC’s LSA data files within the LSA module.

When functionality is added to submit the HIC and PIT count data via the HDX 2.0, status updates will be provided for those modules.

3.3 - Managing Users in HDX 2.0

A “CoC Primary Contact” is designated for each community based on the Primary Contact listed in a community’s CoC registration page on e-snaps. This person is marked as the CoC Primary Contact in the HDX 2.0. It is important to note that the CoC Primary Contact is the only person who can confirm the LSA upload as accurate and final.

In addition, only the CoC Primary Contact has the ability to add other users to their CoC and assign different levels of access to the system for each user. These different levels of access include “read,” “write,” or “submit” privileges for the LSA, and will include them for the HIC, PIT count, and SYS PM uploads, as well, once those become active in the HDX 2.0. While communities’ data submissions may be improved by allowing additional stakeholders to view and comment on the data, each CoC should limit the number of users with “write” access who can edit their data to ensure that the data remain secure and accurate.

Levels of Access in HDX 2.0

1. **CoC Primary:** The CoC Primary has rights to assign read, write, and submit access to people registered with their CoC on HDX. The CoC primary is the only one with rights to “confirm” the data.
2. **Write:** Users can view, edit, or add data for submission.
3. **Read:** Users can view the data, but cannot edit data in the HDX.
4. **Submit:** User has sole ability to submit a category of data in the HDX.
CoCs should also have a backup plan in place in case the individual associated with your CoC who has submit authority is not available to submit data on or before a deadline. The person assigned with “submit” rights for the LSA will appear on the review team’s HDX 2.0 “CoC Status Summaries” page and is expected to be the person who will work most closely with one of the review team’s Data Liaisons during the post-submission data cleaning portion of this process.

**Managing Users in HDX 2.0 as the CoC Primary Contact**

If you are the CoC Primary Contact, you can use the instructions below to make any needed updates to the users in your CoC.

1. Login to your account on the HDX 2.0 following the instructions in the previous sections of this user guide.
2. Once logged into the site, you will see a link in the top right-hand side of the screen that reads “Hello, [your name].” Hover over this link. You will see a dropdown menu appear. From that dropdown menu, select “Administration.”
3. Click on “Manage My Users” in the left menu panel. This will take you to a page where you will see all of the users currently assigned to your CoC, as well as whether they have “read,” “write,” or “submit” access for HIC, PIT count, LSA, and Sys PM uploads. Remember, only LSA data will be submitted in the LSA at this time. HIC, PIT count, and Sys PM submissions will continue to be submitted through the HDX 1.0 until further notice.

4. If you manage multiple CoCs, you can view your users for other CoCs by selecting the CoC name from the dropdown menu in the upper left corner of the listing of users’ names.

5. If you would like to adjust the level of access for a particular user in the list, simply select the appropriate checkmarks for that user across their designated row. Once you are satisfied with the updates, click the blue “Save” button located on the top right-hand side of the user information table. Note that CoC Primary Contacts cannot change the CoC Primary Contact designation; a request must be submitted via the HUD Exchange AAQ as described in the next section **How to Change Your CoC Primary Contact in HDX 2.0.**
A few things to note in regards to assigned access levels include:

- Anyone to whom you grant “write” access will automatically be granted “read” access.
- Anyone to whom you grant “submit” access will automatically be granted both “read” and “write” access.
- Only one user can have “submit” access per module (LSA, HIC, etc.).
- Only the access to the LSA module is currently functional. Other modules can be assigned, but they have no function in the site.

6. If you would like to add a user to your CoC, the user must first set up their own account in the HDX 2.0 following the instructions in the Getting Started in HDX 2.0 section of this user guide. Once they have an account in the system:
- Click on the blue “+Add User” button located on the top right-hand side of the user information table.
- Using the “Users” or “Email” fields at the bottom of the screen, search for the name or email of the user(s) you would like to add to your CoC.
- Select the checkbox to the left of their name, then click the blue “Add Selected User(s) to CoC” button located on the top right-hand side on the user information table.
- Check to make sure the user you selected on the previous screen is now listed on the “Manage My Users” page.
- You may now update that user’s level of access, as needed, by following the instructions in Step 3 of this list.

7. Note that any user can request to have access to your CoC, but only the CoC Primary Contact can grant access. No one who requests access will be able to see your data until you grant them at least “read” level access.
How to Change Your CoC Primary Contact in HDX 2.0

Use the instructions below if you need to:

− Request a change for your CoC Primary Contact in HDX 2.0; or
− Request to assign write and submit rights to another contact when your CoC Primary Contact will be unavailable for a significant period of time.

Requests must be submitted to HUD through the HUD Exchange Ask A Question (AAQ) virtual help desk located at: https://www.hudexchange.info/get-assistance/my-question/. Navigate to this link in your browser and you will be taken to a page with “Step One” of a two-step submission process. The text below details this two-step process for submitting a question. See the screenshot of “Step Two” for reference.

In “Step One” of the AAQ submission page, fill out your contact information and then click the green “Step 2 >” button at the end of the form to be taken to the next page.

Once the “Step Two” AAQ page had loaded, follow these steps to complete the presented form:

1. For the “My question is related to” field: use the dropdown menu to select “HDX: Homelessness Data Exchange (including PIT, HIC, AHAR, Sys PM, LSA, and PDX)” under the “Reporting Systems” category.
2. Next, you will need to fill out the text box for the subject line. Depending on your request, make your subject line one of the following:
   − “Accessing/Changing CoC Primary Contact in HDX” or
   − “Reassigning AHAR Submission Rights in HDX”
3. Use the large text box to include your question and any relevant or useful information.
4. Under “Upload related documents,” you must also upload a written PDF of your request for the following two situations:
   − **When requesting change of Primary Contact** – Written request should be on CoC letterhead and contain the following information:
     i. Name of former CoC Primary Contact and new CoC Primary Contact
     ii. Continuum of Care name and CoC number
     iii. New CoC Primary Contact’s contact information, including: phone, position, email address, mailing address, etc. (Please make sure the new CoC Primary Contact has already set up an account on the HDX 2.0: https://hudhdx2.info/)
     iv. Reason for request
v. Signature of an authorized person – board chair, executive director, etc.

- **When requesting reassignment of “read/write” or “submit” rights when a CoC Primary Contact is unavailable for a significant period of time** – Written requests should be on CoC letterhead and contain the following information:
  i. Name of CoC Primary Contact and name of person needing rights
  ii. Continuum of Care name and CoC number
  iii. User’s contact information, including: phone, position, email address, mailing address, etc.
  iv. Type of rights requested
  v. Reason for request
  vi. Signature of an authorized person – board chair, executive director, etc.

5. When you have completed the form, click on the blue button that reads “Submit Your Question” at the bottom right corner of the form. You will receive a confirmation email that your question has been submitted, as well as a reference number that has been assigned to your question.

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**4. Using the HDX 2.0 for the LSA Submission**

The first step to participating in the LSA is to upload your CoC’s LSA files to the HDX 2.0. Once uploaded, the HDX 2.0 system will allow you to do an initial review of your data before submitting it to the review team for additional data quality checks. During this phase of the LSA process, support is available to you through HUD’s Ask A Question desk on the HUD Exchange.

A note about how the HDX 2.0 is set up to accommodate year-round and official submission use: Every time you upload an LSA file to the HDX 2.0, you will need to indicate whether it is intended for **Local Use Only** or **Official HUD Submission**.

- The **Local Use Only** option will allow CoCs to upload and review LSA data for local use year-round, similar to how the HDX Sandbox previously functioned. You may use this as practice for official submissions, or to upload and store LSA files you run for shorter time periods or smaller geographic regions. You may upload and store as many LSA files in the HDX 2.0 as you wish. The results will be calculated and displayed for each one, as described in this section, except that no data quality or usability assessments will be provided by the AHAR review team.

- During official HUD submission periods, CoCs can also designate an upload as **Official HUD Submission** for LSA files that will be officially submitted to the review team for use in the AHAR. You may prefer to upload a file as **Local Use Only** at first, then change the file to an **Official HUD Submission** after you have uploaded your data to the HDX 2.0. That process is described in this section. You are only permitted to upload one **Official HUD Submission** file per reporting year at a time. More information about how to replace an **Official HUD Submission** upload is provided in this section, as well.

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**4.1 - Understanding Your LSA Status and Overview Page**

1. Login to your account on the HDX 2.0 following the instructions in the previous sections of this user guide.

2. Once logged in, you will be taken to the HDX 2.0 “Dashboard” screen. In the upper right-hand portion of the screen, you will see a link that reads “LSA” to the right of the “Home” button. Click on “LSA.” You will
be taken to your “My CoC Status Summaries” page. You may also navigate to this page through the LSA box on the Dashboard using the blue button that reads “View LSA.”

3. Once you have uploaded and stored an official LSA, this screen will display the status for all your official LSA submissions for every year you submit and for any CoC with which you are affiliated. You may sort, search, and filter these results. If you manage multiple CoCs, you may find the export function useful so you can print and share status results with others outside of the HDX 2.0. The green export button can be found on the upper right-hand side of the CoC status summaries table.

4. From left to right, the CoC Status Summaries screen shows the following for each official submission upload:
   - The CoC Code and Name
   - The fiscal year covered by the submitted LSA Report (this year will display ‘2018’ only, but in future years you will see additional years)
   - The review stage – either “in progress,” “in review,” “complete,” or “confirmed”
   - The status, depending on the review stage:
     i. If the review stage is “in progress,” you will see the % of warnings completed in each reporting category
     ii. If the review stage is “in review,” you will see the % of warnings the reviewer has accepted in each reporting category
     iii. If the review stage is “confirmed,” when the reviewer has provided it, you will be able to see the usability assessment for the reporting category
   - The CoC submitter and assigned Data Liaison, as well as their contact information
   - Key dates, including: the first upload attempt, the date of submission, the date confirmed, and a rolling status check on whether the CoC has met any deadlines that have passed

5. From this page, you may view the data for each submission by clicking directly on the hyperlinked status in the row, or you may navigate to upload a new dataset or view all your datasets (Local Use and Official) in the gray left-hand menu.

4.2 - How to Upload Your LSA Files
1. From any page in the LSA module, locate the gray left-hand menu. Click on “Upload New LSA” in this menu.
On this page, you will see a table that records any past uploads, including those that were accepted, rejected, or replaced. If you need to verify the acceptance date of a particular upload, or view any old rejection reports, you may do so from this screen by clicking on the hyperlinked status in the “Upload Status” field for the upload attempt you wish to review. Any file with an upload status of “Accepted” will show the upload file name as a hyperlink. You may click on these names to view the results, or you may navigate to view all of your accepted datasets (Local Use and Official) in the gray left-hand menu by selecting “My Datasets.”

2. From this interface, you may upload an LSA file for any CoC with which you are affiliated. Click on the blue “+New File” button located at the top right-hand side of the table (circled in the previous screenshot). This will take you to a page that includes a short form requesting information about your new file upload.

3. Click the blue “Browse to find file” button located at the top of the form to navigate to the file you wish to upload. Note that the upload should be a .zip file of the 10 required .csv files. You should work with your vendor to produce the needed materials.

4. Fill in the required fields on this short form. A few key pieces to note for this form are listed below:
   
i. Here, you may select whether the upload is Local Use Only or Official HUD Submission. The Local Use Only option will allow CoCs to upload and review LSA data for local use year-round, similar to how the HDX Sandbox previously functioned. During official HUD submission periods, CoCs can also choose the Official HUD Submission selection for LSA uploads that will be officially submitted to the review team for use in the AHAR. You may prefer to upload a file as Local Use Only at first, then change the file to an Official HUD Submission from the Summary Data View tab after you have uploaded the data to the HDX 2.0.
– You are only permitted to upload one Official HUD Submission file per reporting year at a time. Once you have uploaded one, you would need to change that file to a Local Use Only status in the Summary Data View tab before you would be able to upload a new official file.

– Alternatively, you may use the “replace” functionality on the Upload New LSA page. Locate the official upload you wish to replace from the list, click the “replace” icon for that upload, and proceed through the rest of the steps as with the original submission.

– Note that if you are trying to upload a new LSA file using the Official HUD Submission designation, but already have another file still listed as the Official HUD Submission, your CoC will not show up in the dropdown list on upload form (shown in the screenshot above). To fix this, return to your uploads list and switch the designation on the current Official HUD Submission to Local Use Only before proceeding.

ii. In the Upload Name field, name the file in such a way that it will be clear to you in the future which one this is. If you plan to use the HDX 2.0 to view a number of Local Use Only files throughout the year, consider a clear naming convention that you and your colleagues can stick to over time.

iii. If you are affiliated with multiple CoCs, you will need to select among all of your affiliated CoCs in the required CoC field.

iv. CoCs can use the optional “Description” textbox to make any relevant notes about local use files throughout the year (e.g. “Service Area 1” or “this upload is our second quarter data only”). They can also use it to leave any relevant notes for the review team, such as an explanation for why the CoC is not reporting in a certain category this year.

5. Once the form is complete, click the blue “Upload” button at the bottom of the form.

6. After clicking this button, you will be taken to an “Upload Status” screen that shows the progress of your upload, and, once completed, indicates whether your upload file was accepted or rejected. This process may take up to 30 seconds depending on the size of your file.

   – If your file was rejected, you will be able to print an “Error Report” that outlines the issues with the upload file. To do so, click on the blue button reading “Print Error Report” that appears under the “Rejected” status toward the bottom of the page. Work with your HMIS software provider to make updates to your files to address these errors. Once addressed, you can either click the blue “Replace Upload” button that appears at the bottom of the rejection status page, or begin these steps again. Repeat these steps until your upload is accepted.

   – If your file was accepted, click the blue “Return” button that appears under the status at the bottom of the page.

7. Once you’ve returned to the “Upload New LSA” page, make sure the file you uploaded appears in the list on that page.

8. At any time during this process, you may navigate back to the “Upload New LSA” page via the blue hyperlink that reads “LSA” along the top of the page.
4.3 - How to Review Your LSA Files

Before submitting your LSA files as your official submission for the review team, you will need to take some time to look through your data on the HDX 2.0 site and see if there are any warnings you need to address, or other concerns you may have. All warning flags in the HDX will require a written note for the review team before you will be able to submit your data. Make sure to leave notes that will be detailed enough for the review team to gain a full understanding of your community’s data.

After following the steps from the above section on how to upload your LSA files, you will be on the “Upload New LSA” page on the HDX 2.0. From here, to view your LSA data on the HDX 2.0 platform, you may either click the hyperlinked file name for the accepted LSA upload you’d like to review in this list, or locate the gray left-hand menu, and click the “My Datasets” link for a list of only those uploads that have been accepted. From here, click on the hyperlinked name of the accepted LSA upload that you would like to review. You can use the filter and search functions on these pages to assist in locating and organizing the files in the list. These functions are circled in the screenshot below.

As a default, if your upload contains any warnings, following the steps above will take you to the “Master Warning List View” page for that dataset. If it does not have any warnings, it will take you to the “Summary Data View” page for the dataset. Each of these data views are shown as tabs at the top of the page; the active tab is the one that is highlighted. You can toggle between the two by clicking on the one you’d like to view.

The functionality for each of these tabs is described in the subsections below. Use this functionality to:

- View warnings for data quality issues flagged by the HDX 2.0 system;
- Look at a summary of your data to determine whether it looks like an overall accurate representation for your community;
- Leave notes in the HDX 2.0 to explain any warning flags for the review team; and
Download your summary data or a full analysis dataset.

**Master Warning List View**

The “Master Warning List View” displays all warnings for your dataset. If you’ve followed the first two steps in this section of the user guide to navigate to where you can view your LSA data on the HDX 2.0 platform, by default, you should now be on the tab for the Master Warning List View if your dataset contains any warnings.

All automated warnings included in the HDX 2.0 are provided for your reference in [Appendix A. LSA Warning Flags in HDX 2.0](#).

You may choose to review and respond to your warnings in this view, or you may navigate to the Summary Data View to see the warnings in the context of the data tables. This view is intended to allow you to see all warnings in one place to assess the volume of work necessary to clean the dataset. If you wish to review and address them from this interface, follow the steps below:

1. Below the text boxes on this page that show the name and status of your upload, as well as instructions, you will see a table that lists any and all data quality warnings the HDX 2.0 system was able to flag for your upload. Glance through the table to see:
   - the type of warning;
   - which reporting category has the warning;
   - the variable related to the warning;
   - any notes left on the warning from either CoC staff or the review team;
   - the status of the warning (i.e. pending, reflects our community, or unable to correct);
   - whether the warning could impact your data's usability; and
   - whether the review team has accepted the warning and your explanations for it *(after you have submitted the dataset)*.

2. You can use the search and filter functions to find specific types of warnings among your results. The search bar is in the upper right corner of the list. The filtering functionality for each column is shown at the bottom of the list. You may also sort your results by clicking on the up and down arrows located to
the right of each column’s header. Note that if more than 10 warnings are triggered by the HDX 2.0 system, the warnings will display across multiple pages. You can use the “Show [10] entries” dropdown field located at the top left corner of the warnings display table to show more warnings on the same screen, or use the grey “Next” button at the bottom right corner of the warnings display table to view the next set of warnings.

3. Focus first on warnings listed as having an impact on usability to see if you might need to work with your vendor or your HMIS data quality and then re-upload your data. To easily find these using the filter function described in Step 2 above, click on the arrow to the right of the column header labeled “Impacts Usability” and look for those flagged with “yes.”

4. A large number of warnings may reflect problems in the LSA report programming and will require a re-upload. However, other warnings are triggered simply because the information falls outside of the expected range and can potentially be resolved simply by leaving a note to explain or confirm the data. To leave a note for a warning:
   - First, find the row with the warning you would like to address.
   - Next, click on hyperlink under the “Status” column for that row (circled in the previous screenshot; the status will default to “pending”). A form will pop up that includes all of the information about the warning and includes a text box labeled “CoC Note.”
   - Type your notes about the warning into the “CoC Note” box.
   - The “Warning Status” defaults to “Pending.” In order to resolve the warning, you will need to change the Warning Status in the dropdown menu to one of the following:
     - Reflects Our Community – if the data is accurate and your note explains why that is the case; or
     - Unable to Correct – if you’ve found that the data is indeed inaccurate or problematic as described, but are unable to fix it for this year’s submission.
   - Click the blue button at the bottom right corner of the form that reads “Save Changes.”

5. At the bottom of the warnings table, you will see two progress bars. The “% Complete” progress bar tracks the percentage of your warnings that you have completed. The “% Accepted” progress bar tracks the percentage of your completed warnings that have been accepted by the review team.
6. If you would like to download or print your warnings report, you can do so by clicking on the green button that reads “Export Warnings” located on the right-hand side of the table, above the search bar.

**Data Quality View**

The data quality results from your LSA uploaded files are displayed in the Master Warning List View. These values are calculated and hard-coded as part of the LSA Report export from your HMIS. They are displayed on screen in the HDX 2.0 to help the CoC and the Data Liaison understand how representative the uploaded data are of the CoC as a whole. The LSA data quality content includes system-wide information at a much broader level than actual LSA reporting. For example, the data quality columns look at race, ethnicity, etc. for children who are not heads of household, even though demographics for those children are not included in the LSA.

More information about the content and meaning of the data quality tables included in the HDX 2.0 are provided in [Appendix B. Data Quality Table Shells](#). This appendix will be updated if any calculations or displays are changed over the years to come.

To review the Data Quality information, follow the steps below:

1. Navigate to the [Master Warning List View](#) tab. Scroll down the page. The Data Quality information is below the table listing any warnings. The Data Quality shells and descriptions are provided in detail in Appendix B.
2. Review the tables to make sure your CoC’s data appear to have uploaded correctly. If there are items in this section that look wrong, review how the measure is calculated in the tables in Appendix B, and then review the relevant specific data elements in your HMIS system. If you believe there is a discrepancy between your HMIS data and the LSA output, work with your vendor to pinpoint the issue and/or submit an AAQ.
3. There are also warnings in the HDX 2.0 associated with some of the Data Quality items. Once you have reviewed the data quality output from your HMIS, you can return to the Master Warning List and address any relevant warnings, as described in the [Master Warning List View](#) section of this user guide.

**Summary Data View**

The “Summary Data View” displays demographic and system use data calculated for your dataset. These are a small subset of the data that can be compiled from your LSA upload. For your reference, the Summary Table shells that are displayed in the HDX 2.0 are provided in [Appendix C. Summary Data View Table Shells](#).

Understanding the meaning of some of the new concepts in the LSA can be challenging, so this user guide also includes a guide to [Key LSA Concepts in Appendix D](#).

Once you’ve followed the first two steps in this section of this user guide to navigate to where you can view your LSA data on the HDX 2.0 platform, follow the steps below to review your data using the Summary Data View.

1. To the right of the default “Master Warning List View” tab, click on the “Summary Data View” tab.
2. Below the textboxes on this page
that show the name and status of your upload, instructions, and submission type, you will see a table that lists several categories, such as gender, age, and veteran status. On the top of this table, you will see 4 tabs labeled AO, AC, CO, and System Use.

You can review your data by reporting category or population group by selecting the appropriate tab. These tabs stand for:

- **AO**: Adult Only (your data for all households that do not include any children);
- **AC**: Adult and Child (your data for all households that include both adults and children);
- **CO**: Child Only (your data for all households that only include children and do not include adults); and
- **System Use**: Data by Population (your data showing how AO, AC, and CO households used the different project types in your community).

3. On each of the four tabs, you will have the option to expand and collapse the different categories displayed to see the data related to each of them.

For example, expanding the “Race and Ethnicity” row on the “AO” tab will show you the total number of heads of households and adults served by race and ethnicity for adult only households. The data is broken down by the total in ES, SH, and TH projects, those in RRH projects, and those in PSH projects.
While looking through these summary tables, some questions you may want to ask, include:

- Do these data look accurate given my knowledge of our CoC?
- Are there any numbers that stand out as being way too big or too small? (e.g. Did all of your gender data get lumped under male? Did ethnicity data get swapped?)

4. While looking through these tabs, you will also notice that the right-hand side of each row reports how many warnings the HDX 2.0 has flagged for that subset of data, as well as how many of those warnings might impact your data’s usability.

5. The total number of warnings that could impact your data’s usability are reported on the far right with a “caution” icon. Take particular note of these rows and make sure to expand them to read further details on what those warnings are. If you wish to address the warnings in this interface, you may select the Warning Status hyperlink and follow the same instructions as are provided in the Master Warning List Section. Any notes or status changes you make to the warning here will be saved, regardless of whether you access the note in the Master Warning List View or the Summary Data View.

6. For your convenience, if after reviewing your summary data, you find that you need to make changes in your HMIS and re-run/re-upload your LSA files, you can click on the gray button that reads “Replace Upload” on the top right-hand side of the summary table to begin that process.

6. If you would like to download or print your data, you can also do that from the Summary Data View tab. On the right-hand side of the summary table, you will see a green button that reads “Export.” If you click on this button, you will be presented with a dropdown menu with several options:
i. You can select “Summary Data” to download a CSV file of the data displayed in the summary data tables.

ii. You can select “Download Original Submitted Zip” to re-download your originally submitted LSA Report .zip file, should you need it for any reason.

iii. “Full Analysis File” refers to a comprehensive CSV file of the more than 60,000 calculations the HDX 2.0 has been programmed to run on the LSA upload file to calculate detailed demographics and system use data for all household types and special population groups. It is not necessary to review this export file at this time, but it is provided for your local use and analysis if you wish.

Note that the review team’s capacity to provide support in interpreting the file and helping users navigate it is limited during the official LSA submission period, so we recommend that only CoCs with interest and appropriate staffing download and attempt to use this file at this time.

The scope of the Full Analysis File is detailed in a separate set of table shells posted on the HUD Exchange. Eventually, this detailed analysis of your CoC’s HMIS data will feed data visualization tools that will be incorporated into the HDX 2.0 and accessible to all CoCs, regardless of size and analytical capacity.

You can select “Request Full Analysis File” to download this file:
- If you select this option—and it is your first time doing so for the selected dataset —it will take a few minutes to process. If you click on the dropdown menu again, you will see that the option has changed to “Processing Full Analysis.” You will receive an email when the file is done processing. Click on the link in the email and you will be taken back to the Summary Data View page for that upload again.
- Click on the green “Export” button once more and the option for that dataset will now simply read “Full Analysis File.” Click on that link and the download of your full analysis file will begin.

iv. The Bed Inventory options in this dropdown list are discussed in the Bed Inventory Data section of this user guide.

Bed Inventory Data
The HDX 2.0 calculates bed inventory and utilization data based on the Project Descriptor CSV files from your HMIS that are included in your LSA upload. These files contain information about the organizations, projects, and bed inventory for your ES, SH, TH, RRH, and PSH projects in your CoC, regardless of whether or not they are participating in HMIS.

For your reference, the Summary Table shells that are produced by the HDX 2.0 are provided in Appendix E. Summary Inventory Data Table Shells. These tables will be used by the AHAR review team to assess and understand your data more fully, so it is critical that you review your results and correct any HMIS records that might be leading to inaccuracies.

The measures reported in the bed inventory data include:

- The total number of people served over the course of the LSA report period
- HMIS bed coverage
- Bed utilization on average, per night, and at quarterly points in time
- The average length of clients’ program stays
At some point in the future, we anticipate that the summary and detailed project-level calculations produced by the HDX 2.0 will be available as part of the user interface to ease your review. For now, these results are available for download and review.

Once you’ve finished reviewing your Summary Data View, as described in this user guide, follow the steps below to review your Bed Inventory Data.

1. On the “Summary Data View” tab, on the right-hand side of the summary table, you will see a green button that reads “Export.” If you click on this button, you will be presented with a dropdown menu with several options.

2. Select “Export Bed Inventory Summary” to download a CSV file of the data indicated in Appendix E. This file summarizes your bed inventory and utilization for each reporting category product of project type (ES/SH/TH, RRH, and PSH) and household type (AO, AC, and CO).

3. If you see something in your summary data that does not appear as you would expect it to for your CoC, you may need to select the “Export Bed Inventory Detail” option. In this file, you will see all the same data points as in the summary file, but at the individual project level. These more granular data may assist you in identifying the source of issues that surface in the aggregated summary data. For instance, if the aggregate utilization is low, you may find that one project, in particular, had atypically low utilization. In CoCs with many projects, there will be a large amount of data in this detailed bed inventory file. We do not necessarily expect you to review every data point in the file. Rather, you should treat it as a reference and a troubleshooting tool.

These data are provided for your review and discussion with your Data Liaison.

4.4 - Submitting Your Official LSA Upload for the Review Team

Once your LSA upload has been accepted on the HDX 2.0 site and you have reviewed and left notes for all warnings, you can decide if your current upload is the one you’d like to submit for official assessment by the review team. Before submitting, you can also choose the reporting categories for which you will be officially reporting data.

Both of these tasks can be completed on the “Summary Data View” tab referenced earlier in this section. Once you have navigated to that page using the previous instructions on how to do so, follow the steps below to complete the remaining tasks in this section.

Selecting Reporting Status by Category

On the “Summary Data View” page, find the informational box labeled “Reporting Status” located on the right-hand side of the page above the green “Export” button. In this box, you will see three rows:

1. ES, SH, TH
2. RRH
3. PSH
Each row is connected to three columns:

1. Adult Only
2. Adult and Child
3. Child Only

Each row has a checkbox in each column. If you will be reporting data for all of the reporting categories, all checkboxes should be marked. Upon upload, the system will default to reporting in all categories.

We expect the overwhelming majority of CoCs to leave all checkboxes marked. However, if you will not be reporting data for one or more of the reporting categories, you will need to unmark the checkbox associated with that reporting category. For example, if you will be reporting “Adult Only” data for ES, SH, TH and PSH, but not for RRH, you would need to unmark the “Adult Only” checkbox in the RRH row.

After updating your reporting status information, remember to click the blue button located in the top right corner of the “Reporting Status” box that reads “Save Status.” The system will not auto-save your selections.

Given that HMIS bed coverage rates are no longer a determining factor for data usability beginning in FY18, the review team expects that it will be highly unlikely that a community will not report in one of the categories. Even if your CoC has no HMIS or non-HMIS beds for a particular reporting category, you should still leave the checkbox for that category selected to signify your participation as a “Zero Provider” (a community with no providers in that reporting category). Some reasons a CoC may choose not to report in one of the categories could include:

- The CoC knows that the HMIS data for a category was entered incorrectly and cannot clean the data in time for the submission deadline.
- The CoC feels that there is some data quality or participation issue that is not already reflected in the data quality or bed coverage data included in the upload, and wishes to warn the AHAR review team that the data is not representative of the CoC.
If not reporting in one of the categories, CoCs are encouraged to write an explanation for this decision in the “Description” textbox on the initial upload page, described in the How to Upload Your LSA Files section of this user guide, or in an appropriate warning notes popup.

Submitting Your LSA Data for Review

Remaining on the “Summary Data View” page, find the information box located directly to the left of the “Reporting Status” box. This box is labeled “Submission Type” and has two options listed: Local Use Only or Official HUD Submission. It is circled in the previous screenshot above for your reference.

Once all of your warnings have been appropriately addressed and you feel comfortable with your data upload, if your upload is currently marked as “Local Use Only,” select the bubble next to “Official HUD Submission” and then click the blue button at the button of the box that reads “Save Submission Type.”

If your upload is marked as “Official HUD Submission,” and you have resolved or left explanatory notes for all of the warnings associated with your upload, you will see the grayed out button reading “Submit for Review” on the upper right-hand side of the summary table turn blue. At this point, the button is active. Click the button to submit your data to the review team. Please note that if you have not properly addressed all of the warnings flagged for your upload in the system, the system will not allow you to submit for official review.

When the “Data Review Status” is changed to “Submitted for Review,” it will undergo an assessment by the review team. CoC users will not be able to alter the dataset during this time. If the review team needs more information, you will be assigned a Data Liaison who will place the dataset back to “In Progress,” as visible under the “Data Review Status” column of the “My Datasets” page. CoCs should wait to hear from their Data Liaison about any additional data quality flags that come up during their review. Your CoC will receive an email notification that you can alter the dataset.

At this point, from the Master Warning List View, you will be able to see which of your original warnings the review team has accepted by looking in the “Reviewer Accepted” column and using the sorting function. Any warnings that do not have a checkmark in that column have not yet been accepted. You can open those warnings by clicking on the hyperlinked status to see what notes the review team has left on the warnings for you.

Note that if you do have to upload a new LSA file as a result of the data cleaning process, your notes from prior uploads will not automatically transfer over to the new upload. If some of the same warnings appear in your new upload that had previously been addressed, you will need to copy and paste the notes over into the new file after verifying the explanations are still relevant. All of your past uploads are saved for review in the Upload New LSA page.

The post-submission data cleaning phase is expected to begin approximately one month after submission. See the anticipated timeline described earlier in this user guide for more details on this process.

Note that for the purposes of meeting the LSA submission deadline, your upload must be marked as “Submitted for Review” by the established date. You will be able to have your data marked as complete and then confirmed later on in the process after the review team has completed its assessment and resolved any additional data quality flags that may come up during that process.
Completing and Confirming Your LSA Data for Review

Once the CoC and Data Liaison agree on the finalized warnings, the Data Liaison will change the status of the final dataset to “Complete.” At this point, the CoC Primary Contact can then mark the data as “Confirmed.” It is important to note that the review team will be unable to assess the usability of your data and move along to any additional cleaning of the data until your official upload is marked as confirmed.

To do so, navigate to the “Summary Data View” tab for the submission. On the upper right-hand side of the data summary tables, there will be a blue button that reads “Confirm Data Review Complete” directly above the green “Export” button. Click this blue button. Your data is now confirmed and you have completed the year’s data submission process.

4.5 - Available Support

Especially with the LSA being new for CoCs in FY18, the review team understands that communities will need support throughout this process. The sections below describe where and how you can seek support during the LSA upload and data cleaning phases of the process.

Initial Upload Phase

The initial upload phase of the LSA submission process begins when the HDX 2.0 system opens for official submissions and CoCs begin uploading their files and resolving any warnings flagged by the system. Throughout this phase, communities can seek support via the HUD Exchange Ask A Question (AAQ) virtual help desk. This includes both questions that are specific to your CoC and your upload, as well as questions related to account access on the HDX 2.0. We know that this can be a stressful time for community leaders juggling multiple responsibilities. We greatly appreciate your work on this effort, and our team of responders will work as quickly as possible to resolve your submitted questions.

Should you incur any issues during the upload process or have any questions while completing your review of your upload in the HDX 2.0 system, please use the instructions below to submit your questions to the AAQ desk:

1. Navigate to this link in your browser: https://www.hudexchange.info/get-assistance/my-question/. You will be taken to a page with “Step One” of a two-step submission process.

2. In “Step One” of the AAQ submission page, fill out your contact information and then click the green “Step 2 >” button at the end of the form to be taken to the next page.

3. Once the “Step Two” AAQ page had loaded, follow these steps to complete the presented form:

   a. For the “My question is related to” field: use the dropdown menu to select “HDX: Homelessness Data Exchange (including PIT, HIC and AHAR)” under the “Reporting Systems” category.

   b. Next, you will need to fill out the text box for the subject line. Make this a short phrase that summarizes your issue. For example:

      i. “Reassigning AHAR Submission Rights in HDX”; or
      ii. “Receiving Error When Uploading LSA Files”

   c. Use the large text box to include your question and any relevant or useful information for the review team to consider. Try to be as specific as you can. If you received an error in the HDX 2.0,
for example, what did the error say? What task were you trying to complete when you received the error? Around what day/time did you receive the error? The more information the team has upfront, the faster your question may be able to be resolved.

d. Under “Upload related documents,” you may also choose to upload anything that may be useful to the team while considering your question. This may include screenshots or error reports. **Do not upload anything that includes Personally Identifiable Information, such as names, dates of birth, social security numbers, addresses, contact information, etc.**

e. When you have completed the form, click on the blue button that reads “Submit Your Question” at the bottom right corner of the form. You will receive a confirmation email that your question has been submitted, as well as a number that has been assigned to your question for reference. As soon as the team is able to respond to your question, you will receive a response via email through the HUD Exchange.

**Data Cleaning Phase**
As described in detail in the [LSA Submission Cycle](#) section of this user guide, after the initial upload phase closes, the HDX 2.0 will be closed for updated submissions while the review team runs additional data quality checks. Once this is complete, CoCs will be contacted to resolve any remaining data quality flags. The AAQ desk will remain open and available to CoCs throughout the year; however, during this follow-up phase of the process, each CoC will also be assigned a Data Liaison either from Abt Associates or the University of Pennsylvania to work with one-on-one to resolve these flags.

CoCs can expect to be contacted by their assigned Data Liaison via email approximately four weeks after the submission deadline, although this may occur on a rolling basis depending on the timing of the review team’s assessment. Data Liaisons will introduce themselves and summarize any remaining data quality flags for which the review team would like additional information. At this point, any questions CoC staff have about the process can be asked directly to your assigned Data Liaison.

**5. Additional Resources**
The research team is working to create additional resources that will help communities understand and work through the LSA submission process for the AHAR. If you have thoughts on resources that would be helpful for you and your community, please submit those ideas to the AAQ and the research team will take your feedback into consideration.

In addition to this user guide, below is a list of currently available resources to assist communities with the LSA submission process:

- **HUD Exchange Ask A Question (AAQ) Virtual Help Desk**: Online help desk where you can submit questions about the LSA process by selecting “HDX” from the list of options.
- **From AHAR to LSA: Understanding the FY18 Changes**: A brief document highlighting the key changes between the LSA and the former Annual Homeless Assessment Report (AHAR) processes.
- **Overview of the LSA Submission Process**: A brief document outlining the new data submission and cleaning process to help CoCs be adequately prepared.
• **Project Descriptor Data Elements: Building Projects the Correct Way for LSA, HIC, and PIT:** This presentation provides detailed clarification about project setup in the HMIS based on the October 1, 2017 data standards. The new Longitudinal System Analysis (LSA) report will require complete, correct data entry in all project descriptor data elements.

• **LSA Full Table Shells:** Set of table shells illustrating full dataset the LSA is capable of producing.

• **LSA Report Specifications and Tools:** Tools, including written specifications and SQL code, to support HMIS software providers in programming the HMIS LSA report file.

As new resources are released, they will be announced via the HUD Exchange listserv and posted on the HUD Exchange [LSA landing page](https://icfi.us5.list-manage.com/subscribe?u=87d7c8afc03ba69ee70d865b9&id=f32b935a5f). Important announcements regarding the LSA, including deadline reminders, will also be sent out via the listserv. If you are not already signed up to receive these announcements, you can join the listserv by following these steps:

1. Navigate to the following link in your browser: [https://icfi.us5.list-manage.com/subscribe?u=87d7c8afc03ba69ee70d865b9&id=f32b935a5f](https://icfi.us5.list-manage.com/subscribe?u=87d7c8afc03ba69ee70d865b9&id=f32b935a5f)
2. Fill out the textboxes on the form with your email address and zip code.
3. Check the boxes next to the topics for which you would like to receive email updates. Make sure to select the box next to “HMIS: Homeless Management Information Systems” to ensure you receive updates about the LSA.
4. Click on the gray button that reads “Subscribe to list” at the bottom of the form.

If you are already subscribed to the HUD Exchange listserv, but need to update your preferences, you can do so by following these steps:

1. Fill out the textbox for your email address and then click the gray button that reads “Subscribe to list” at the bottom of the form. You will see an error message indicating you are already subscribed to the HUD Exchange listserv.
2. Select “Click here to update your profile.” You will receive an email to update your preferences.
3. In the email, click the “Update your preferences” link.
4. Select or unselect topics for which you would like to start or stop receiving email updates.
5. Click the “Update Profile” button.
6. Once you see the “Profile Updated” page that summarizes your newly updated subscription settings, the process is complete.
## Appendix A. LSA Warning Flags in HDX 2.0

This table provides the listing of all automated warnings that may be triggered for an LSA upload by the HDX 2.0. As additional warnings are added over the years to come, the list will be updated.

See the [Master Warning List View](#) section of this user guide for further discussion about the process of reviewing and responding to warnings in HDX 2.0.

<table>
<thead>
<tr>
<th>Summary View Display Tab</th>
<th>Project Type</th>
<th>Data Point</th>
<th>Warning Displayed</th>
<th>Warning Trigger</th>
<th>Impacts Usability</th>
</tr>
</thead>
<tbody>
<tr>
<td>AO</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Total Household</td>
<td>The number of AO people per household is greater than 2. We would expect this to be lower.</td>
<td>Total # of People/Total # of Households &gt; 2</td>
<td>No</td>
</tr>
<tr>
<td>AC</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Total Household</td>
<td>The number of AC people per household is less than 2. We would expect this to be higher.</td>
<td>Total # of People/Total # of Households &lt; 2</td>
<td>No</td>
</tr>
<tr>
<td>AC</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Total Household</td>
<td>The number of AC people per household is greater than 4. We would expect this to be lower.</td>
<td>Total # of People/Total # of Households &gt; 4</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Total Household</td>
<td>The number of CO people per household is greater than 2. We would expect this to be lower.</td>
<td>Total # of People/Total # of Households &gt; 2</td>
<td>No</td>
</tr>
<tr>
<td>AO, AC, or CO</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Gender</td>
<td>All of the people fall into one category, but we expect to see more than one gender type.</td>
<td>&gt;25 people, but all of them are in a single gender category</td>
<td>Yes</td>
</tr>
<tr>
<td>AO, AC, or CO</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Gender</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid*</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Age</td>
<td>Children ages 5 and under must be accompanied by an older child (most often 13-17).</td>
<td>0 children 6-17, but more than 0 children 5 and under</td>
<td>No</td>
</tr>
<tr>
<td>AO, AC, or CO</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Age</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid*</td>
<td>No</td>
</tr>
<tr>
<td>AO or AC</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Veteran Status</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid*</td>
<td>No</td>
</tr>
<tr>
<td>AO, AC, or CO</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Chronic Status</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid*</td>
<td>No</td>
</tr>
<tr>
<td>AO, AC, or CO</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>DV Status</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid*</td>
<td>No</td>
</tr>
<tr>
<td>AO, AC, or CO</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Prior Living Situation</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid*</td>
<td>No</td>
</tr>
<tr>
<td>AO, AC, or CO</td>
<td>ES/SH/TH, RRH, or PSH</td>
<td>Destination</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid*</td>
<td>No</td>
</tr>
<tr>
<td>Summary View Display Tab</td>
<td>Project Type</td>
<td>Data Point</td>
<td>Warning Displayed</td>
<td>Warning Trigger</td>
<td>Impacts Usability</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------</td>
<td>------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Total number of clients</td>
<td>The number of unduplicated clients served in the last three reporting years should be equal to or greater than the number served in the last reporting year.</td>
<td>1-Year total people served &gt; 3-year total people served</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Total number of adults</td>
<td>The number of unduplicated adults served in the last three reporting years should be equal to or greater than the number served in the last reporting year.</td>
<td>1-Year total adults served &gt; 3-year total adults served</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Active enrollments (adult/HoH)</td>
<td>The number of unduplicated enrollments of Heads of Household and other adults in the CoC in the last three reporting years should be equal to or greater than the number enrolled in the last reporting year.</td>
<td>1-Year total HoH/adult enrollments &gt; 3-year total HoH/adult enrollments</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Active enrollments (all clients)</td>
<td>The number of unduplicated enrollments of all clients in the CoC in the last three reporting years should be equal to or greater than the number enrolled in the last reporting year.</td>
<td>1-Year total enrollments &gt; 3-year total enrollments</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Exits (all clients)</td>
<td>The number of unduplicated exits out of the CoC in the last three reporting years should be equal to or greater than the number exiting in the last reporting year.</td>
<td>1-Year total exits &gt; 3-year total exits</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Household enrollments</td>
<td>The number of unduplicated households enrolled in the last three reporting years should be equal to or greater than the number enrolled in the last reporting year.</td>
<td>1-Year total household enrollments &gt; 3-year total household enrollments</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Social Security Number</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid*</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Date of Birth</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Gender</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Race</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Ethnicity</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Data Quality Combined</td>
<td>Veteran Status</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Summary View Display Tab</td>
<td>Project Type</td>
<td>Data Point</td>
<td>Warning Displayed</td>
<td>Warning Trigger</td>
<td>Impacts Usability</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------</td>
<td>------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Combined</td>
<td>Relationship to Head of Household</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Combined</td>
<td>Disabling Condition</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Combined</td>
<td>3.917 Living Situation</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Combined</td>
<td>3.917 Length of Stay in Living Situation</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Combined</td>
<td>3.917 Date Homelessness Started</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Combined</td>
<td>3.917 Times Homeless</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Combined</td>
<td>3.917 Months Homeless</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Combined</td>
<td>Destination</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Combined</td>
<td>Heads of Household</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% of records have 0 or &gt;1 HoH in 1-year or 3-year rate*</td>
<td>No</td>
</tr>
<tr>
<td>Data Quality</td>
<td>Combined</td>
<td>Move-In Date</td>
<td>Your missing data rate is high enough that it may reflect a data quality concern.</td>
<td>&gt;17% missing/invalid in 1-year or 3-year rate*</td>
<td>No</td>
</tr>
</tbody>
</table>

* Where a category is flagged for a high “missing/invalid” rate, please see Appendix B, Data Quality Table Shells for more information about what constitutes a missing or invalid response. This determination is hard-coded in the LSA Report Programming Specifications.
Appendix B. Data Quality Table Shells

The “Data Quality View” displays the data quality portions of the LSA uploaded files. These values are calculated and hard-coded as part of the LSA export from your HMIS. They are displayed on screen in the HDX 2.0 to help the CoC and the Data Liaison understand how representative the uploaded data are of the CoC as a whole. The LSA data quality content includes system-wide information at a much broader level than actual LSA reporting. For example, the data quality columns look at race, ethnicity, etc. for children who are not heads of household, even though demographics for those children are not included in the LSA report.

**HUD does not expect data quality to be perfect**, nor does the appearance of a record in the Data Quality tables necessarily mean the data are not accurate. Instead, a data quality report is an imperfect algorithm designed to guide us to likely problems in the HMIS source data. For example, the LSA Data Quality tables include a date of birth record for any client that is 105 years or older. In general, a large percentage of such records is likely to indicate a data quality issue worth checking into. However, it may be the case that your CoC actually does have a large number of very elderly clients that were served during the reporting period. This does not indicate a problem in your system, nor in the content report. This simply means that, in your case, you can provide a comment that you have verified the data are accurate, and that information will be included in the data review.

See the Data Quality View section of this user guide for further discussion about the process of reviewing the Data Quality tables in the HDX 2.0.

Table Section 1. Record Counts

The record counts displayed in this table will become the denominators for various data quality measures that follow. These counts are provided twice except as noted: once as an unduplicated count for the report period of the LSA, and once for the full period of time included in the LSA Returns file (i.e. the report period plus the period that started 2 years prior to the report’s start date).

Active clients, households, or enrollments in the LSA are defined by the existence of at least one HMIS enrollment in the appropriate CoC in an included project type (ES, SH, TH, RRH, or PSH) that started before the report’s end date and did not end before the report’s start date.

<table>
<thead>
<tr>
<th>Record Count</th>
<th>Two Periods: Report’s Start Date to Report’s End Date</th>
<th>Two Periods: Report’s Start Date to Report’s End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of clients</td>
<td>A count of distinct Personal IDs active in the period</td>
<td>A count of distinct Personal IDs active in the period</td>
</tr>
<tr>
<td>Total number of adults</td>
<td>A count of distinct Personal IDs active in the period where the client’s age is between 18-65 at Report Start or Project Entry, whichever is later</td>
<td>A count of distinct Personal IDs active in the period where the client’s age is between 18-65 at Report Start or Project Entry, whichever is later</td>
</tr>
<tr>
<td>Active enrollments (adult/HoH)</td>
<td>A count of distinct active Enrollment IDs in the period where the client’s age is between 18-65 at the report’s start or Project Entry, whichever is later OR the client is the Head of Household as defined by a value of Self (1) in Relationship to HoH</td>
<td>A count of distinct active Enrollment IDs in the period where the client’s age is between 18-65 at the report’s start or Project Entry, whichever is later OR the client is the Head of Household as defined by a value of Self (1) in Relationship to HoH</td>
</tr>
<tr>
<td>Active enrollments (all clients)</td>
<td>A count of distinct active Enrollment IDs in the period</td>
<td>A count of distinct active Enrollment IDs in the period</td>
</tr>
<tr>
<td>Exits (all clients)</td>
<td>A count of distinct active Enrollment IDs in the period where the Exit Date falls between the report’s start and end</td>
<td>A count of distinct active Enrollment IDs in the period where the Exit Date falls between the report’s start and end</td>
</tr>
<tr>
<td>Household enrollments</td>
<td>A count of distinct Household IDs active in the period</td>
<td>A count of distinct Household IDs active in the period</td>
</tr>
<tr>
<td>Households excluded from the LSA CoC (1-year only)</td>
<td>A count of household enrollments from projects located in the CoC but that were excluded from the CoC’s LSA because they are missing an Enrollment CoC.</td>
<td>A count of household enrollments from projects located in the CoC but that were excluded from the CoC’s LSA because they are missing an Enrollment CoC.</td>
</tr>
</tbody>
</table>
Table Section 2. Social Security Data Quality
Since social security numbers (SSNs) are used for deduplication within HMIS, it is particularly important to understand the quality of these data. This table is provided once: for the report period, plus the period that started 2 years prior to the report’s start date.

<table>
<thead>
<tr>
<th>SSN Data Quality</th>
<th>Period: 2 years prior to Report’s Start Date to Report’s End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSN - client doesn’t know / refused</td>
<td>A count of distinct Personal IDs active in the period where the client either did not know or refused to provide a SSN</td>
</tr>
<tr>
<td>SSN not valid</td>
<td>A count of distinct Personal IDs active in the period with a SSN that met any of the following conditions:</td>
</tr>
<tr>
<td></td>
<td>• Is not 9 digits</td>
</tr>
<tr>
<td></td>
<td>• Is null or set to system default</td>
</tr>
<tr>
<td></td>
<td>• Begins with ‘000’, ‘666’, or ‘9’</td>
</tr>
<tr>
<td></td>
<td>• Middle 2 digits are ‘00’ (e.g. 999-00-9999)</td>
</tr>
<tr>
<td></td>
<td>• Last 4 digits are ‘0000’</td>
</tr>
<tr>
<td></td>
<td>• Contains any character other than 0-9</td>
</tr>
<tr>
<td>Clients with non-unique SSN values</td>
<td>A count of distinct Personal IDs active in the period that have the same (apparently valid) Social Security Number as one or more other Personal IDs that are active in the period</td>
</tr>
<tr>
<td># SSN values shared by &lt;1 client</td>
<td>A count of distinct (apparently valid) Social Security Number values which are shared by more than one Personal ID active in the period</td>
</tr>
</tbody>
</table>

Table Section 3. Other Universal Data Element data quality
These are the core data quality measures for the universal data elements. Each data element is assessed twice: once for the report period of the LSA, and once for the full period of time included in the LSA Returns file (i.e. the report period plus the period that started 2 years prior to the report’s start date). Errors are counted differently for each element, and the methodology is described in the table below. Each count of errors is divided by the appropriate record count from Section 1, as indicated in the table.

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Two Periods: Report’s Start Date to Report’s End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Errors (Count)</td>
</tr>
<tr>
<td></td>
<td>Divided by</td>
</tr>
<tr>
<td></td>
<td>Result</td>
</tr>
<tr>
<td>Date of Birth</td>
<td>Total number of clients with a Date of Birth that met any of the following conditions:</td>
</tr>
<tr>
<td></td>
<td>• Is missing or set to a system default</td>
</tr>
<tr>
<td></td>
<td>• Has a DOB Data Quality response of ‘client doesn’t know,’ ‘client refused,’ ‘data not collected,’ or null</td>
</tr>
<tr>
<td></td>
<td>• Is later than the client’s Entry Date</td>
</tr>
<tr>
<td></td>
<td>• Is equal to the client’s Entry Date and is marked as the Head of Household</td>
</tr>
<tr>
<td></td>
<td>• Is greater than or equal to 105 years old</td>
</tr>
<tr>
<td></td>
<td>Total number of clients</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Gender</td>
<td>Total number of clients (including children not served as head of household) where Gender is any value other than Female, Male, Trans Female (MTF or Male to Female), Trans Male (FTM or Female to Male), or Gender non-conforming</td>
</tr>
<tr>
<td></td>
<td>Total number of clients</td>
</tr>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Data Element</td>
<td>Two Periods: Report’s Start Date to Report’s End Date</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>2 years prior to Report’s Start Date to Report’s End Date</td>
</tr>
<tr>
<td>Race</td>
<td>Total number of clients (including children not served as head of household) where, regardless of any other Race value, a Race value is ‘client doesn't know,’ ‘client refused,’ or ‘data not collected,’ or the value is null</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Total number of clients (including children not served as head of household) where Ethnicity is any value other than ‘non-Hispanic/Latino’ or ‘Hispanic/Latino’</td>
</tr>
<tr>
<td>Veteran Status</td>
<td>Total number of adults where Veteran Status is any value other than ‘yes’ or ‘no’</td>
</tr>
<tr>
<td>Relationship to HoH</td>
<td>Active enrollments (all clients) where Relationship to Head of Household is any value other than ‘self,’ ‘head of household’s child,’ ‘head of household’s spouse or partner,’ ‘head of household’s other relation member (other relation to head of household),’ or ‘Other: non-relation member’</td>
</tr>
<tr>
<td>Disabling Condition</td>
<td>Active enrollments (all clients, including children not served as head of household) where Disabling Condition is any value other than ‘yes’ or ‘no’</td>
</tr>
<tr>
<td>Living Situation</td>
<td>Active enrollments (adult/HoH) where the Living Situation is ‘client doesn't know,’ ‘client refused,’ or ‘data not collected,’ or the value is null</td>
</tr>
<tr>
<td>Length Of Stay</td>
<td>Active enrollments (adult/HoH) where the Living Situation is ‘client doesn't know,’ ‘client refused,’ or ‘data not collected,’ or the value is null</td>
</tr>
</tbody>
</table>
| Date to Street/ES/SH | Active enrollments (adult/HoH) where the record met any of the following conditions:  
  • The Approximate Date Homelessness Started value is later than the client’s Entry Date  
  • The Approximate Date Homelessness Started value is null AND the Living Situation is a homeless situation  
  • The Approximate Date Homelessness Started value is null AND the Length of Stay in the Prior Living Situation is ‘one night or less’ or ‘two to six nights’ AND the value for On the Night Before Did You Stay on the Streets, ES or SH is ‘yes’ or is null  
  • The Approximate Date Homelessness Started value is null AND the Living Situation is an institutional situation AND the Length of Stay in the Prior Living Situation is ‘one week or more, but less than one month’ or ‘one month or more, but less than 90 days’ AND the value for On the Night Before Did You Stay on the Streets, ES or SH is ‘yes’ or is null | Active enrollments (adult/HoH) | %      |
<p>| Times Homeless Last 3 Years | Active enrollments (adult/HoH) where the Number of Times the Client has been on the Streets, in ES, or SH in the Past Three Years is ‘client doesn't know,’ ‘client refused,’ or ‘data not collected,’ or the value is null | Active enrollments (adult/HoH) | %      |
| Months Homeless Last 3 years | Active enrollments (adult/HoH) where the Total Number of Months Homeless on the Street, in ES, or SH in the Past Three Years is ‘client doesn't know,’ ‘client refused,’ or ‘data not collected,’ or the value is null | Active enrollments (adult/HoH) | %      |</p>
<table>
<thead>
<tr>
<th>Data Element</th>
<th>Two Periods: Report’s Start Date to Report’s End Date</th>
<th>Divided by</th>
<th>Result</th>
</tr>
</thead>
</table>
| Domestic Violence | Active enrollments (adult/HoH) where the record met any of the following conditions:  
• There is no Domestic Violence record with a data collection stage of ‘project start’  
• There is such a record, but it has a Domestic Violence Victim/Survivor value of ‘client doesn’t know,’ ‘client refused,’ or ‘data not collected,’ or the value is null  
• There is such a record and it has a Domestic Violence Victim/Survivor value of ‘yes’ but the value for Are You Currently Fleeing? is ‘client doesn't know,’ ‘client refused,’ or ‘data not collected,’ or the value is null  
*HUD is aware that this data element is not universal and may have higher missing rates than other data elements* | Active enrollments (adult/HoH) | % |
| Destination | Exits (all clients) where Destination is ‘other,’ ‘no exit interview completed,’ ‘client doesn’t know,’ ‘client refused,’ ‘data not collected’ | Exits (all clients) | % |
| <> 1 Heads of Household | Household enrollments where there is either no designated head of household or where there is more than one designated head of household | Household enrollments | % |
| RRH/PSH Move-In Date | Exits (adult/HoH) from RRH or PSH to permanent destinations where the client does not have a housing move-in date  
*This is not a crucial measure, since move-in date is not required unless the client moved into housing during the period of enrollment (i.e. at a time before the point of project exit).* | Exits (adult/HoH) from RRH or PSH to permanent destinations | % |
Appendix C. Summary Data View Table Shells

Summary Data Tables appear in four tabs in the HDX 2.0. The first three tabs show counts/demographics for each household type: Adult Only (AO), Adult and Child (AC), and Child Only (CO). The fourth tab shows some basic system use data.

<table>
<thead>
<tr>
<th>Counts and Demographics for Households Served in the System During the Reporting Period</th>
<th>Tab 1: Adult Only (AO) Households</th>
<th>Tab 2: Adult and Child (AC) Households</th>
<th>Tab 3: Child Only (CO) Households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ES, SH, RRH PSH</td>
<td>ES, SH, RRH PSH</td>
<td>ES, SH, RRH PSH</td>
</tr>
<tr>
<td>Total Number of Households Served</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of People Served</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of Unaccompanied Young Adult Households (18-24)</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>Total Number of 55+ Households</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of Veteran Households</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of Households that Experienced Chronic Homelessness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of Disabled Households</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender (HoH &amp; Adults)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transgender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does Not Identify as Male, Female, or Transgender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing, DK, or Refused</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age (in yrs of all persons in HH)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 2</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>3 to 5</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>6 to 17</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
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<tr>
<td>18 to 21</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>22 to 24</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>25 to 34</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>35 to 44</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>45 to 54</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>55 to 64</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>65 and Older</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>Missing, DK, or Refused</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Veterans Age (in yrs of all persons in HH)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 21</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>22 to 24</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>25 to 34</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>35 to 44</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>45 to 54</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>55 to 64</td>
<td></td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>65 and Older</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
<td>n/a n/a n/a</td>
</tr>
<tr>
<td>Missing, DK, or Refused</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Race and Ethnicity (of HoH and adults)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, Non-Hispanic/Non-Latino (Only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, Hispanic/Latino (Only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black or African American (Only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian (Only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counts and Demographics for Households Served in the System During the Reporting Period</td>
<td>Tab 1: Adult Only (AO) Households</td>
<td>Tab 2: Adult and Child (AC) Households</td>
<td>Tab 3: Child Only (CO) Households</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------------------</td>
<td>----------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td></td>
<td>ES, SH, RRH, PSH</td>
<td>ES, SH, RRH, PSH</td>
<td>ES, SH, RRH, PSH</td>
</tr>
<tr>
<td>American Indian or Alaska Native (Only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Hawaiian/Other Pacific Islander (Only)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple Races</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing, DK, or Refused</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Veteran Status (of HoH and adults)&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veteran</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Veteran</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing, DK, or Refused</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Veteran Characteristics&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Veterans</td>
<td>n/a n/a n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronically Homeless Veterans</td>
<td>n/a n/a n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Chronic Homelessness and Disabling Condition (of HoH and adults) - Combines Admin and 3.917 Data&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronically homeless</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not chronically homeless: Has a disabling condition and meets length requirements, but insufficient or missing occasion information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not chronically homeless: Has 12+ months of cumulative homelessness, but missing or no disabling condition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not chronically homeless: Has a disabling condition, but insufficient or missing length of time information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not chronically homeless: Missing or no disabling condition OR insufficient or missing length of time information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not chronically homeless: Missing or no disabling condition AND insufficient or missing length of time information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Domestic Violence Survivor Status (of HoH and adults)&quot;</td>
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<td></td>
<td></td>
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<tr>
<td>Not a domestic violence victim/survivor</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Domestic violence victim/survivor &amp; currently fleeing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic violence victim/survivor &amp; not currently fleeing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic violence victim/survivor &amp; missing/DK/refused current fleeing status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing, DK, or Refused</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Female DV Survivors&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic violence victim/survivor &amp; currently fleeing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic violence victim/survivor &amp; not currently fleeing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic violence victim/survivor &amp; missing/DK/refused currently fleeing status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Prior Living Situation (HoH only)&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeless - Street</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Counts and Demographics for Households Served in the System During the Reporting Period

<table>
<thead>
<tr>
<th>Destination (Households)</th>
<th>Tab 1: Adult Only (AO) Households</th>
<th>Tab 2: Adult and Child (AC) Households</th>
<th>Tab 3: Child Only (CO) Households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ES, SH, RRH, PSH</td>
<td>ES, SH, RRH, PSH</td>
<td>ES, SH, RRH, PSH</td>
</tr>
<tr>
<td>Homeless - ES/SH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeless - Interim Housing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeless - TH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary - Other not homeless situations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staying with family or friends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent Supportive Housing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent housing - Ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent housing - Rental, no subsidy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent housing - Rental, with subsidy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutions - Group/assisted care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutions - Incarceration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutions - Medical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing, DK, or Refused</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>∀ Destination (HoH only)</td>
<td>Permanent Supportive Housing</td>
<td>Permanent housing with temp. subsidy (e.g. RRH)</td>
<td>Permanent housing with temp. subsidy (e.g. RRH)</td>
</tr>
<tr>
<td></td>
<td>Permanent housing - Rent/own with subsidy</td>
<td>Permanent housing - Rent/own with subsidy</td>
<td>Permanent housing - Rent/own with subsidy</td>
</tr>
<tr>
<td></td>
<td>Permanent housing - Rent/own no subsidy</td>
<td>Permanent housing - Rent/own no subsidy</td>
<td>Permanent housing - Rent/own no subsidy</td>
</tr>
<tr>
<td></td>
<td>Staying with family or friends - Permanent</td>
<td>Staying with family or friends - Permanent</td>
<td>Staying with family or friends - Permanent</td>
</tr>
<tr>
<td></td>
<td>Institutions - Group/assisted care</td>
<td>Institutions - Group/assisted care</td>
<td>Institutions - Group/assisted care</td>
</tr>
<tr>
<td></td>
<td>Institutions - Medical</td>
<td>Institutions - Medical</td>
<td>Institutions - Medical</td>
</tr>
<tr>
<td></td>
<td>Institutions - Incarceration</td>
<td>Institutions - Incarceration</td>
<td>Institutions - Incarceration</td>
</tr>
<tr>
<td></td>
<td>Temporary - Other not homeless situations</td>
<td>Temporary - Other not homeless situations</td>
<td>Temporary - Other not homeless situations</td>
</tr>
<tr>
<td></td>
<td>Homeless - ES/SH/TH</td>
<td>Homeless - ES/SH/TH</td>
<td>Homeless - ES/SH/TH</td>
</tr>
<tr>
<td></td>
<td>Homeless - Street</td>
<td>Homeless - Street</td>
<td>Homeless - Street</td>
</tr>
<tr>
<td></td>
<td>Staying with family or friends - Temporary</td>
<td>Staying with family or friends - Temporary</td>
<td>Staying with family or friends - Temporary</td>
</tr>
<tr>
<td></td>
<td>Deceased</td>
<td>Deceased</td>
<td>Deceased</td>
</tr>
<tr>
<td></td>
<td>Missing, DK, or Refused</td>
<td>Missing, DK, or Refused</td>
<td>Missing, DK, or Refused</td>
</tr>
</tbody>
</table>

### Tab 4: System Use for All Households Served in the System During the Report Period

<table>
<thead>
<tr>
<th>System Use During the Report Period</th>
<th>All</th>
<th>AO</th>
<th>AC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Households Served Systemwide during the report period</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Total Number of People in Households Served Systemwide during the report period</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>System Engagement History</th>
<th>Based on the Household’s First Enrollment that Overlaps with the Report Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universe: Households experiencing any homelessness or RRH during the report period</td>
<td>#</td>
</tr>
<tr>
<td>Households experiencing homelessness for the first time this report period</td>
<td></td>
</tr>
<tr>
<td>Households that re-engaged in the homeless system after a previous temporary or unknown destination</td>
<td></td>
</tr>
<tr>
<td>Households that returned to homelessness this report period after an</td>
<td></td>
</tr>
<tr>
<td>Tab 4: System Use for All Households Served in the System During the Report Period</td>
<td>All</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>exit to a permanent destination</td>
<td></td>
</tr>
<tr>
<td>Household that have been continuously homeless since a prior report period</td>
<td></td>
</tr>
</tbody>
</table>

Average Length of Time Homeless for Households Served within the CoC During the Report Period
Includes All Continuous Periods of Time Served or Self-Reported Homeless that Overlap with the Report Period

<table>
<thead>
<tr>
<th>Universe: Households experiencing any homelessness or RRH during the report period</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average length of time households were served in Emergency Shelters and Safe Havens during (or continuous with) the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average length of time households were served in Emergency Shelters, Safe Havens, and Transitional Housing during (or continuous with) the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average length of time households experienced homelessness combining all ES, SH, TH, and &quot;pre-housing&quot; enrollments during (or continuous with) the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average length of time households experienced homelessness combining all ES, SH, TH, and &quot;pre-housing&quot; enrollments with self-reported 3.917 data during (or continuous with) the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Households Served in ES/SH/TH During the Report Period

<table>
<thead>
<tr>
<th>Universe: Households experiencing any homelessness or RRH during the report period</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total households served in Emergency Shelter/Safe Haven during the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total households served in Emergency Shelter/Safe Haven/Transitional Housing during the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Households Served in RRH During the Report Period

<table>
<thead>
<tr>
<th>Universe: Total households served in RRH during the report period</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households that entered an RRH project during the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households in RRH that exited without PH placement during the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households still enrolled in RRH at the end of the report period that are not yet placed in PH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households in RRH that have been placed in PH during the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households in RRH that have been placed in PH and who were exited from the program during the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households in RRH that have been placed in PH and are still receiving RRH at the end of the report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary Exit Outcomes for Households Served in Temporary Situations during the Report Period

<table>
<thead>
<tr>
<th>Universe: Households served in ES, SH, TH or RRH that exited during the report period</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households served in ES, SH, TH or RRH that exited to permanent housing destinations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Tab 4: System Use for All Households Served in the System During the Report Period

| Households served in ES, SH, TH or RRH that exited to temporary destinations | All | AO | AC | CO |
| Households served in ES, SH, TH or RRH that exited to other destinations | All | AO | AC | CO |

#### Households Served in PSH During the Report Period

**Universe: Total households served in PSH during the report period**

| Number of households already housed (i.e. already had a move-in date) in PSH at beginning of the report period | All | AO | AC | CO |
| Number of households who moved into PSH during the report period, evidenced by PH move-in date | All | AO | AC | CO |
| Total number of households that exited PSH during the report period | All | AO | AC | CO |
| Of those who exited, households that had been housed (had a move-in date) prior to the report period (out of exiters in this universe) | All | AO | AC | CO |
| Of those who exited, households that exited to permanent destinations during the report period (out of exiters in this universe) | All | AO | AC | CO |
| Of those who exited, households that exited to temporary destinations during the report period (out of exiters in this universe) | All | AO | AC | CO |
| Of those who exited, households that exited to other destinations during the report period (out of exiters in this universe) | All | AO | AC | CO |

#### The Extent to Which Households That Exited Projects in Specified Cohorts Returned to Homelessness

<p>| Households that exited within the first six months of the report period | All | AO | AC | CO |
| Universe: Total households that exited in first six months of the current report period | All | AO | AC | CO |
| Of households that exited to permanent situations, the number that returned within 180 days | All | AO | AC | CO |
| Of households that exited to temporary situations, the number that returned within 180 days | All | AO | AC | CO |
| Of households that exited to other situations, the number that returned within 180 days | All | AO | AC | CO |</p>
<table>
<thead>
<tr>
<th>Households Served in the System During Prior Report Periods</th>
<th>All</th>
<th>AO</th>
<th>AC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Households that exited in the year beginning one year prior to the start of the report period</strong></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Universe: Total households that exited one year prior to the start of the current report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to permanent situations, the number that returned within 180 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to temporary situations, the number that returned within 180 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to other situations, the number that returned within 180 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to permanent situations, the number that returned within 365 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to temporary situations, the number that returned within 365 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to other situations, the number that returned within 365 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Households that exited in the year beginning two years prior to the start of the report period</strong></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Universe: Total households that exited two years prior to the start of the current report period</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to permanent situations, the number that returned within 180 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to temporary situations, the number that returned within 180 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to other situations, the number that returned within 180 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to permanent situations, the number that returned within 365 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to temporary situations, the number that returned within 365 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to other situations, the number that returned within 365 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to permanent situations, the number that returned within 730 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to temporary situations, the number that returned within 730 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of households that exited to other situations, the number that returned within 730 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix D. Key LSA Concepts

<table>
<thead>
<tr>
<th>LSA Concept</th>
<th>Core Information Relevant to the LSA</th>
</tr>
</thead>
</table>
| Household Served | One or more clients served together in one or more continuum ES, SH, TH, RRH, and/or PSH projects at any time during the report period (or appropriate exit cohort period). Each household has a head of household and a distinct household type based on the ages of each household member.  
• Heads of household served in multiple household types represent multiple households. For example, if Bob is served alone at age 17 at the beginning of the report period and also has a later enrollment at age 18, a total of two households are counted: one Child Only household and one Adult Only household.  
• At least one household is counted for each client designated as a head of household. For example, if Anna and Charles, both adults, are served together with one enrollment with Anna as the designated head of household and another with Charles as the designated head of household, a total of two Adult Only households are counted: one represented by Anna and one represented by Charles. |
| Person Served | A client served in one or more continuum ES, SH, TH, RRH, and/or PSH projects at any time during the report period. |
| Adult Only Household (AO) | A household in which all household members have valid dates of birth and are age 18 or older at entry or report start, whichever is later. |
| Adult and Child Household (AC) | A household in which at least one household member is age 18 or older and at least one household member is age 17 or younger at entry or report start, whichever is later. AC households must include at least one adult and one child with valid dates of birth, but may also include household members of unknown age. |
| Child Only Household (CO) | A household in which all household members have valid dates of birth and are age 17 or younger at entry or report start, whichever is later. |
| Cohort | A group of clients who meet the criteria for inclusion in reporting in a specific timeframe. See also “Exit Cohorts.” |
| Enrollment | A period in which a person receives services from a given project, beginning with the Project Start Date recorded in HMIS and ending on the Project Exit Date. |
| Emergency Shelter, Safe Haven, and Transitional Housing (ES/SH/TH) | Residential project types in which all clients are homeless while enrolled. Demographics for clients served in these three project types are reported in the combined ES/SH/TH project group. |
| Exit Cohorts | Groups of households who exited from a continuum SO, ES, SH, TH, RRH, and/or PSH project in a given exit cohort period and have no record of any enrollment in an ES, SH, TH, RRH, and/or PSH project during the following 14 days. There are three exit cohort periods – and thus three exit cohorts – included in the LSA. Households that meet the criteria for inclusion in multiple exit cohorts are counted in each. |
| PSH | Permanent supportive housing for formerly homeless people.  
• PSH clients who are homeless at project entry based on 3.917 Living Situation are considered to be experiencing homelessness until a documented 3.20 Housing Move-In Date or exit, whichever comes first.  
• For clients who were in ES/SH or on the street at project entry, all time between Approximate Date Started and move-in is counted in determining chronic homelessness.  
• A client may not be counted as experiencing homelessness on any date between PSH move-in and the day prior to exit, regardless of other data. |
<table>
<thead>
<tr>
<th>LSA Concept</th>
<th>Core Information Relevant to the LSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report Period</td>
<td>The time between the report start date and report end date report parameters. For official HUD submissions, the report period must be October 1 to September 30 of the following year. The report period determines which clients to include in the current cohort (those served in a project during the report period) and exit cohorts (those served in prior periods, whose returns are reported).</td>
</tr>
<tr>
<td>Project Group</td>
<td>ES, SH, and TH (combined), RRH (only), and PSH (only). Demographics reporting for the active cohort is produced separately for each of these three project groups. People and households served in more than one project group are included in reporting for each group in which they were served.</td>
</tr>
<tr>
<td>Rapid Re-housing (RRH)</td>
<td>Rapid Re-Housing projects.</td>
</tr>
<tr>
<td></td>
<td>• RRH clients who are homeless at project entry based on 3.917 Living Situation are considered to be experiencing homelessness until a documented 3.20 Housing Move-In Date or exit, whichever comes first.</td>
</tr>
<tr>
<td></td>
<td>• For clients who were in ES/SH or on the street at project entry, all time between Approximate Date Started and move-in is counted in determining chronic homelessness.</td>
</tr>
<tr>
<td></td>
<td>• A client may not be counted as experiencing homeless on any date between RRH move-in and the day prior to exit, regardless of other data.</td>
</tr>
<tr>
<td>Population Groups</td>
<td>People in households with one or more members who have specific characteristics that may indicate that the household has needs and/or eligibility for services that differ from the broader homeless population. The LSA summary and full datasets include population-specific output for the following:</td>
</tr>
<tr>
<td>Unaccompanied Young Adult Household, 18-24</td>
<td>An AO household in which the oldest adult in the household is between 18 and 24 at entry or report start, whichever is later.</td>
</tr>
<tr>
<td>Veteran Household</td>
<td>An AO or AC household in which any member of the household has a Veteran Status of 'Yes.'</td>
</tr>
<tr>
<td>Chronically Homeless Household</td>
<td>An AO, CO, or AC household in which the head of household or any adult in the household was identified as chronically homeless based on HMIS enrollments and self-reported time on the street or in ES/SH in the three years prior to their last active date in the report period.</td>
</tr>
<tr>
<td>Disabled Household</td>
<td>An AO, CO, or AC household in which the head of household or any adult in the household has a ‘Yes’ response to Disabling Condition associated with any enrollment active in the report period.</td>
</tr>
<tr>
<td>Seniors/55+ Households</td>
<td>An AO household in which all adults in the household are 55 or older at entry or report start, whichever is later.</td>
</tr>
<tr>
<td>First-time homeless</td>
<td>An AO, CO, or AC household that entered a continuum ES, SH, TH, RRH, or PSH project during the report period and was not enrolled in such projects at any point in the two years prior to entry.</td>
</tr>
<tr>
<td>Returners</td>
<td>An AO, CO, or AC household that entered a continuum ES, SH, TH, RRH, or PSH project during the report period and has a record of a previous exit to a permanent destination from a continuum ES, SH, TH, RRH, or PSH project in the 15-730 days prior to enrollment.</td>
</tr>
</tbody>
</table>
### Appendix E. Summary Inventory Data Table Shells

Data to populate the following table shell is available for download from the HDX 2.0 Summary Data View. In a separate download, these same data points are available at the individual project level for each project included in your LSA upload file.

See the Bed Inventory Data section of this user guide for further discussion about the process of downloading and reviewing your bed data in HDX 2.0.


<table>
<thead>
<tr>
<th>Measurement Type</th>
<th>Overall</th>
<th>Dedicated Beds (total, across HMIS and non-HMIS)</th>
<th>Counts of People in Population Groups Served in the Reporting Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All People</td>
<td>HMIS Beds</td>
<td>Utilization</td>
</tr>
<tr>
<td>Unduplicated Count of People Served in the Reporting Period</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Average Per Night</td>
<td>=people/ HMIS beds</td>
<td>=HMIS/All beds</td>
<td></td>
</tr>
<tr>
<td>Average Per Night (Adjusted for floating beds)</td>
<td>=people/ HMIS beds</td>
<td>=HMIS/All beds</td>
<td>n/a</td>
</tr>
<tr>
<td>Oct. 31</td>
<td>=people/ HMIS beds</td>
<td>=HMIS/All beds</td>
<td></td>
</tr>
<tr>
<td>Jan. 31</td>
<td>=people/ HMIS beds</td>
<td>=HMIS/All beds</td>
<td></td>
</tr>
<tr>
<td>Apr. 30</td>
<td>=people/ HMIS beds</td>
<td>=HMIS/All beds</td>
<td></td>
</tr>
<tr>
<td>Jul. 31</td>
<td>=people/ HMIS beds</td>
<td>=HMIS/All beds</td>
<td></td>
</tr>
<tr>
<td>Average Length of Stay (Nights per person)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

All bed counts reported in the summary and detailed inventory data are estimates. They are derived in two different ways, depending on the project:

1. For each of the following projects, a bed is defined as available only when it was occupied (hence, utilization is, by definition, 100% for these projects): all RRH projects, tenant-based projects, ES projects where any of the inventory records active during the LSA report period featured voucher beds, and ES projects where all of the inventory records active during the LSA report period featured overflow beds. The proportions of
beds in these projects dedicated to veterans, youth, and the chronically homeless are derived from the uploaded Project Descriptor CSV data (not from the number of veterans, youth, and the chronically homeless using those beds—since dedicated beds are not defined solely by usage, but rather, by the number of beds explicitly earmarked for those populations).

2. For all other projects, the bed counts are calculated based on their reported availability (regardless of whether they were occupied). The number of beds available on average per night and at quarterly points in time are all derived from the uploaded Project Descriptor CSV data. This applies to the total number of beds overall, as well as beds dedicated to veterans, youth, and the chronically homeless. A second, adjusted version of the number of beds available on average per night is also displayed for these projects; this adjusted average treats beds as fluid across household types (as in “floating” beds) and reallocates the number of beds based on the proportion of bed nights used by household type.

Victim service providers and projects that otherwise target survivors of domestic violence are excluded from both the summary and detailed inventory data, as long as your uploaded LSA data does not report any HMIS beds or HMIS clients for these projects.