

# PREPARING FOR THE LSA: Guidance on Common Data Quality Issues



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## 1. Introduction

This resource condenses and contextualizes guidance, found primarily in the [FY2024 HMIS Data Standards Manual](#), to help Continuums of Care (CoCs) understand, prevent, and address common data quality issues. This resource can help CoCs (1) *before HDX 2.0 opens* to prepare their data, (2) *while HDX 2.0 is open* to understand data quality flags, and (3) *after HDX 2.0 closes* to contribute to continuous quality improvement efforts throughout the year.

**Note:** *Throughout this resource, the term **project** is used to reference continuum projects as they are organized in your community, and the term **HMIS project** is used to reference projects as they are set up in HMIS. For example, some projects need to be set up as multiple HMIS projects according to the FY2024 HMIS Data Standards Manual (e.g., to represent multiple bed types, the presence of service and residential components, etc.).*

## 2. Project Descriptor Data

Project Descriptor Data Elements (PDDE), as defined in the FY2024 HMIS Data Standards, are used to identify organizations, specific projects, and corresponding project details to which an individual client is associated in HMIS. At a minimum, HUD requires that CoCs collect and enter PDDE into HMIS for:

- ✓ All continuum projects within its jurisdiction participating in HMIS by collecting and entering client-level data.
- ✓ All residential continuum projects, regardless of their participation in HMIS.<sup>1</sup>

Required PDDEs include:

- ✓ Organization information
- ✓ Project information
- ✓ Continuum of Care information
- ✓ Funding Sources
- ✓ Bed and Unit Inventory information<sup>2</sup>

A **continuum project** refers to “a project within the geographic boundaries of the CoC associated with the HMIS whose primary purpose is to meet the specific needs of people who are experiencing homelessness or at risk of homelessness, by providing lodging and/or services. A continuum project is not limited to those projects funded by HUD and should include all federal partner projects and all other federally or non-federally funded projects functioning within the CoC.”<sup>3</sup>

### 2.1 – Project

#### Project Setup<sup>4</sup>

Many data quality issues identified through the Longitudinal System Analysis (LSA) data quality review process can be resolved through proper project setup. More information on how to set up projects with multiple funding sources, projects that need to be set up as multiple projects, and projects that operate in multiple CoCs can be found in the FY2024 HMIS Data Standards Manual.<sup>5</sup> We have highlighted a couple main points here.

#### Project Type and Funding Source

Each HMIS project **must have only one** project type entered.<sup>6</sup>

Funding source and HMIS project type **must** align.<sup>7</sup>

- ✓ **Example:** If Funding Source = “HUD: COC – Permanent Supportive Housing,” then project type **must** = “PH – Permanent Supportive Housing (disability required for entry).”

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<sup>1</sup> See *Project Descriptor Data Elements* in the HMIS Data Standards Manual (p. 21).

<sup>2</sup> See sections 2.01-2.07 in the HMIS Data Standards Manual (p. 20-47).

<sup>3</sup> See section 2.02 *Project Information – Continuum Project* in the HMIS Data Standards Manual (p. 28-29).

<sup>4</sup> Please refer to the [FY2024 HMIS Data Standards Manual](#) and HUD Exchange resources such as the [HMIS Project Setup Tool](#) and [HMIS Dual Enrollment and HIC Duplicate Inventory Training Resource](#) for additional project setup assistance.

<sup>5</sup> See *Projects that Operate in Multiple CoCs* in the HMIS Data Standards Manual (p. 22-23).

<sup>6</sup> See section 2.02 *Project Information* in the HMIS Data Standards Manual (p. 24-32).

<sup>7</sup> See section 2.06 *Funding Sources* in the HMIS Data Standards Manual (p. 34-38).

Funding Source	Project Type
HUD: CoC – Permanent Supportive Housing	PH – Permanent Supportive Housing (disability required for entry)
HUD: CoC – Rapid Re-Housing	PH – Rapid Re-Housing
HUD: CoC – Transitional Housing	Transitional Housing
HUD: CoC – Safe Haven	Safe Haven
HUD: CoC – Joint Component TH/RRH	Transitional Housing OR PH – Rapid Re-Housing
HUD: ESG – Emergency Shelter (operating or essential services)	Emergency Shelter – Entry Exit OR Emergency Shelter – Night -by-Night
HUD: ESG – Rapid Rehousing	PH – Rapid Re-Housing
HUD: ESG-CV	Emergency Shelter – Entry Exit OR Emergency Shelter – Night -by-Night OR PH – Rapid Re-Housing
HUD: ESG-RUSH	Emergency Shelter – Entry Exit OR Emergency Shelter – Night -by-Night OR PH – Rapid Re-Housing
HUD: HOPWA – Hotel/Motel Vouchers	Emergency Shelter – Entry Exit
HUD: HOPWA – Permanent Housing (facility based or TBRA)	PH – Permanent Supportive Housing (disability required for entry)
HUD: HOPWA – Short-Term Supportive Facility	Emergency Shelter – Entry Exit
HUD: HOPWA – Transitional Housing (facility based or TBRA)	Transitional Housing
HUD – HUD/VASH	PH – Permanent Supportive Housing (disability required for entry)
HHS: RHY – Basic Center Program	Emergency Shelter – Entry Exit
HHS: RHY – Transitional Living Program	Transitional Housing
HHS: RHY – Maternity Group Home for Pregnant and Parenting Youth	Transitional Housing
VA: CRS Contract Residential Services	Emergency Shelter – Entry Exit
VA: Community Contract Safe Haven Program	Safe Haven
VA: Grant Per Diem – Bridge Housing	Transitional Housing
VA: Grant Per Diem – Low Demand	Safe Haven
VA: Grant Per Diem – Hospital to Housing	Transitional Housing
VA: Grant Per Diem – Clinical Treatment	Transitional Housing
VA: Grant Per Diem – Service Intensive Transitional Housing	Transitional Housing
VA: Grant Per Diem – Transition in Place	Transitional Housing
VA: Supportive Services for Veteran Families	PH – Rapid Re-Housing*

The chart above only includes project types and their associated funding components that are part of LSA data collection.

\*Note: Per the [2024 HIC and PIT Count Data Submission Guidance](#) (p. 13-14) you may have an emergency shelter set up to track your Emergency Housing Assistance (EHA).

**Note:** If “HCHV,” “GPD,” “VASH,” or “SSVF” is in the project name but not listed as receiving this funding source, a warning flag will be generated even if the data (e.g., name and funding source) are correct. If correct, you can resolve the warning with a note confirming the data are correct or by changing the project name and reuploading the data.

## Addressing Projects with Multiple Funding Sources<sup>8</sup> and/or Multiple Projects Setup<sup>9</sup>

Projects may be supported by multiple funding sources. All funding sources for each project must be listed. If a project is funded by multiple grants, there are different ways of setting up the HMIS project(s) depending on the eligible use of funding. There are multiple circumstances that might result in one project being set up as multiple HMIS projects:

- ✓ Example 1: Separate HMIS projects for different eligible activities (e.g., residential operations and services).
- ✓ Example 2: Separate HMIS projects for different project types (e.g., emergency shelter and transitional housing).
- ✓ Example 3: Separate HMIS projects for different rental subsidies.
- ✓ Example 4: Separate HMIS projects for projects that operate in multiple CoCs.<sup>10</sup>
- ✓ Example 5: Separate HMIS projects for projects funded by multiple grants where different clients receive lodging and/or services under different grants.<sup>11</sup>

**Note:** *No matter the scenario, each HMIS project must be associated with one and only one organization.*

It is important that HMIS admins and housing and service providers understand reporting requirements and eligible activities when considering the appropriate project set up.

## Housing Type

All residential projects must have a single housing type:

- ✓ Site-based, single site;
- ✓ Site-based, multiple sites; or
- ✓ Tenant-based, scattered site.<sup>12</sup>

## Operating Start Dates<sup>13</sup>

The project operating start date is the first day on which a project provided (or will provide) services and/or housing. A client's project start date must be on or after the project operating start date.

**Note:** *Data quality flags will generate when a project is active during the reporting period, but no clients have been served in ES, SH or TH or housed in RRH or PSH. If an ES, SH or TH project began operating shortly before the end of the reporting period but has not served any clients you may resolve this flag with a note. If an RRH or PSH project began operating prior to the end of the period that has started providing services but has not housed anyone, you may resolve this flag with a note.*

## Operating End Dates<sup>14</sup>

The project operating end date is the last day the project provided or is expected to provide services and/or housing. A client's exit date must be on or before the project operating end date. If there are client records that

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<sup>8</sup> See section 2.06 *Funding Sources – Multiple Funding Sources* in the HMIS Data Standards Manual (p. 35-36).

<sup>9</sup> See section *Projects that Operate in Multiple CoCs* in the HMIS Data Standards Manual (p. 22-23).

<sup>10</sup> See section *Projects that Operate in Multiple CoCs* in the HMIS Data Standards Manual (p. 22-23).

<sup>11</sup> See section 2.06 *Funding Sources* in the HMIS Data Standards Manual (p. 35-36).

<sup>12</sup> See section 2.02 *Project Information – Housing Type* in the HMIS Data Standards Manual (p. 31-32).

<sup>13</sup> See section 2.02 *Project Information – Operating Start Date* in the HMIS Data Standards Manual (p. 28).

<sup>14</sup> See section 2.02 *Project Information – Operating End Date* in the HMIS Data Standards Manual (p. 28).

extend past the operating end date, those records will be shortened by the LSA Report to match the operating end date. The destinations for these shortened records are then disregarded by the LSA Report, which may result in a higher-than-expected completion rate for exit destination. You can find exact counts of clients with exit dates past a project's operating end date in your LSACalculated.csv file by filtering the column, ReportRow, for number 902. These counts are by project ID.

**Note:** *Data quality flags will generate when a project is active during the reporting period, but no clients have been housed. If your data are accurate and you have projects with an operating end date shortly after the beginning of the reporting period, but all clients exited prior to the start of the report period, you may resolve this flag with a note.*

## HMIS Participation

All CoC projects are encouraged to participate in HMIS fully, unless prohibited from participating in HMIS because the housing service provider is a victim service provider (in which case, they should be participating in a comparable database). Projects that are either required to participate in HMIS by their funding source or have agreed to enter data as part of the CoC's HMIS implementation must enter all Universal Data Elements.<sup>15</sup>

All HMIS participating projects must collect and enter the required client-level data elements according to funder requirements and local CoC policies and procedures within the CoC's designated HMIS implementation. If not entering client data directly, HMIS participating projects must submit the required data to the designated HMIS implementation at least once per year (with data covering the entire year) as required.<sup>16</sup>

- ✓ If HMIS Participation Type = "HMIS Participating," there should be client-level data in the HMIS during the period of participation. The LSA expects client-level data for each HMIS participating project that was active during the current report year and/or the two years prior to the current report year. If client-level data is not present in this situation, data quality flags may be generated (see [Change in HMIS Participation Status](#) section for more information on how to set up a project when HMIS participation changes so that the LSA only pulls data for the appropriate projects and report years). If flags are generated, but the absence of client data is correct (see [Operating Start Dates](#) or [Operating End Dates](#) sections for examples of when data might be correct), warnings can be resolved with a note explaining the situation.
- ✓ If HMIS Participation Type = "Not Participating" OR "Comparable Database Participating," then there should be no client-level data for that project during that period of non-participation in the HMIS nor the LSA. However, non-HMIS participating projects must enter Project Descriptor Data Elements (PDDEs) into HMIS.

**Note:** *The FY24 LSA Specifications automatically addresses any client enrollments that are included during a project's period of HMIS non-participation.*

## Change in HMIS Participation Status

If a project switches from non-HMIS participating to HMIS participating, the project must:

- ✓ Officially end the non-participation by entering a participation status end date to the current HMIS participation status record.<sup>17</sup>

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<sup>15</sup> See section *Universal Data Elements* in the HMIS Data Standards Manual (p. 48).

<sup>16</sup> See section 2.08 *HMIS Participation Status* in the HMIS Data Standards Manual (p. 43-45).

<sup>17</sup> See section 2.08 *HMIS Participation Status* in the HMIS Data Standards Manual (p. 43-45).

- ✓ Create a new HMIS participation status record. Set the participation status start date to be one day after the prior record's participation status end date. The HMIS participation status will be set to 'HMIS Participating.'<sup>18</sup>

#### Example: Changing HMIS Participating Status

✓ A shelter switched from non-HMIS participating to HMIS participating (everything else about the project remained the same and only their participation status changed) on 2/24/23. The HIC date for the CoC was 1/31/23. In HMIS, you would:

1. For the participation status record where HMIS Participation Type = "Not Participating," set the participation status end date to 2/23/23.
2. Create a new participation status record with a participation status start date of 2/24/2023 and HMIS Participation Type = "HMIS Participating."
3. If you set up your project like this, you will **not** get a warning flag because your HIC inventory of 60 non-HMIS beds will equal your LSA Inventory file of 60 non-HMIS beds on 1/31/23.

✗ If you had created a new participation status record but set the participation status start date as the original operating start date for the project (e.g., 6/27/15), then you would have received a warning flag because your HIC inventory of 60 non-HMIS beds ≠ your LSA Inventory file of 60 HMIS beds on 1/31/23.

**Note:** The project will have no client-level enrollments prior to 2/24/23, but the project will have client-level data starting on 2/24/23. Going through the process of ending the non-HMIS participating project and creating a new one can prevent many errors and warnings related to incorrect project set-up.

The same process of ending a participation status and creating a new participation status record occurs when a project changes from HMIS participating to non-HMIS participating. If a project changes from HMIS participating to non-HMIS participating, make sure that:

- ✓ The HMIS participating status is ended with a participation status end date on the current HMIS participation status record.<sup>19</sup>
- ✓ All clients are exited on or before the participation status end date.
- ✓ A new participation status record is created with HMIS Participation Type = "Not Participating." The participation status start date will be one day after the former participation status end date.<sup>20</sup>

<sup>18</sup> See section 2.08 *HMIS Participation Status* in the HMIS Data Standards Manual (p. 43-45).

<sup>19</sup> See section 2.08 *HMIS Participation Status* in the HMIS Data Standards Manual (p. 43-45).

<sup>20</sup> See section 2.08 *HMIS Participation Status* in the HMIS Data Standards Manual (p. 43-45).

### How to tell if [projects](#) are being set up in HMIS correctly...

HMIS data must comply with the FY2024 HMIS Data Standards Manual which requires the maintenance of historical records for project and people data in HMIS. This allows for a “**snapshot**” of what was happening in the project on any given date. For example, if a project switched from HMIS participating to non-HMIS participating on 6/1/2023, data pulled for 5/31/2023 should show a project with HMIS Participation Type = “HMIS Participating” and client-level data entered; data pulled for 6/1/2023 should show a project with a HMIS Participation Type = “Not Participating” and no client-level data.

No matter what changes occur in a project (HMIS participation, bed inventory, funding, merging/splitting, etc.), the historical records must be maintained in accordance with the data standards and local policies. If this is not true it may result in multiple data quality flags across several categories.

### Victim Service Providers

A Victim Service Provider (VSP) is defined as “a private nonprofit organization whose primary mission is to provide services to victims of domestic violence, dating violence, sexual assault, or stalking.”<sup>21</sup> VSPs are generally prohibited from participating in HMIS due to strong codified confidentiality provisions of the Violence Against Women Act (VAWA) and the Family Violence Prevention and Services Act (FVPSA). This designation is made at the organization level. Therefore, even if an organization has a project which is not dedicated to exclusively serving victims of domestic violence, dating violence, sexual assault or stalking, that project is also prohibited from entering data in HMIS.

LSA errors/warnings will populate when:

- ✓ Any VSP included in your LSA export is marked as participating in HMIS.
- ✓ Any VSP included in your LSA export includes client-level data.

Client level VSP data must be entered in a Comparable Database and is therefore not included in the LSA. For more information about which data should be entered into a Comparable Database see the [HMIS Comparable Database Decision Tree](#).

**Note:** The [FY23 LSA Specifications](#) implemented new selection criteria which excludes client records if the `VictimServiceProvider = Yes`. It is important to review this field and ensure it is accurate.

### Geography Type

All projects **must** have a geocode, ZIP code, street address\*, and geography type entered that reflects the location of the project's principal lodging site. For multiple-site projects, the geography type should reflect the area in which most of the project's clients are housed. Geography types are defined by HUD. HUD will release a regularly updated [crosswalk of ZIP codes](#) and a geography type for each. 'Geography type' must correspond to the HUD crosswalk; geography types may not be locally defined.

\*Tenant-based scattered site projects and Victim Service Providers (VSPs) are only required to complete the geocode and ZIP code fields and may use mailing or administrative address information if they wish to complete the remainder of the address fields.

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<sup>21</sup> See section 2.01 *Organization Information* in the HMIS Data Standards Manual (p. 23-24).

## 2.2 – Inventory

Many data quality issues that result in error/warning (e/w) flags [e.g., utilization and Housing Inventory Count (HIC)/ Longitudinal System Analysis (LSA) comparison flags] can be resolved through proper inventory setup.<sup>22</sup>

All residential projects (with the exception of Rapid Re-housing: Services Only projects) must have an operating start date and inventory start date. All inactive residential projects must have an operating end date and inventory end date.<sup>23</sup>

General guidelines for inventory setup include:

- ✓ Inventory start date → The first night beds were, or are, expected to be available.
  - The inventory start date must be greater or equal to the operating start date.
  - For example: If a project starts on 7/1/21, the inventory must start on or after that date.
- ✓ Inventory end date → The last night beds were available for occupancy.
  - The inventory end date must be less than or equal to the operating end date.
  - For example: If a project ends on 6/30/21, the inventory must also end prior to that date.
- ✓ When separate inventories are needed:
  - Projects **must** have separate inventories for each household type [Adult Only (AO), Adult/Child (AC), and Child Only (CO)].
  - Projects **must** have separate inventories for each bed availability (year-round, seasonal, overflow).
  - Projects that **operate in more than one CoC** must have separate Bed and Unit Inventory Information records for each Continuum of Care Information record.

**Example:** A project started on 7/1/2019 and expected to serve with **20 units and 20 beds for AO households** and **20 units and 40 beds for AC households**, then you create two inventory records, one for each household type, with an inventory start date of 7/1/2019.

Record #	Household Type	Inventory Start Date	Inventory End Date	Units	Beds
1	AO	7/1/2019	N/A	20	20
2	AC	7/1/2019	N/A	20	40

- ✓ When inventories significantly change for any reason (household type, availability, bed type), new inventory records should be started.
  - If the change is a reduction in availability, the relevant inventory should be ended.

<sup>22</sup> See section 2.07 *Bed and Unit Inventory Information* in the HMIS Data Standards Manual (p. 38-43).

<sup>23</sup> See section 2.02 *Project Information – Operating End Date* in the HMIS Data Standards Manual (p. 28); see section 2.07 *Bed and Unit Inventory Information – Inventory End Date* in the HMIS Data Standards Manual (p. 42).

**Example:** In reviewing your inventory to ensure reconciliation for the final week of October you find these beds are *actually occupied* by **25 AO households with 25 people**, and **15 AC households with 35 people**. You determine this occurred near the beginning of October. The change could be handled in the following way (not all relevant data fields are shown, for illustrative purposes only):

Record #	Household Type	Inventory Start Date	Inventory End Date	Units	Beds
1	AO	7/1/2019	N/A	20	20
2	AC	7/1/2019	9/30/2019	20	40
3	AO	10/1/2019	N/A	5	5
4	AC	10/1/2019	N/A	15	35

**Note:** *It is acceptable to use estimated dates to reflect changes in inventory.*

- ✓ Significant changes are defined by the community, but the inventory should reflect the clients being served. Small day-to-day fluctuations do not need to be changed in HMIS, but if there are relatively large and sustained differences between the inventory and the clients served, a change in inventory should be considered.
- ✓ Inventory should be accurately recorded within the last week of each of the months of January, April, July and October. Changes should be backdated to the exact or approximate date of the significant change in inventory, not the date the change was made in HMIS.

#### How to tell if [projects](#) are being set up in HMIS correctly...

HMIS data must comply with the FY2024 HMIS Data Standards Manual which requires the maintenance of historical records for project and people data in HMIS. This allows for a “**snapshot**” of what was happening in the project on any given date. For example, if a project reduced the number of AO beds available from 100 to 80 on 6/1/2021, bed inventory data pulled for that project on 5/31/2021 should show 100 AO beds; data pulled for that project on 6/1/2021 should show 80 AO beds.

No matter what changes occur in a project (HMIS participation, bed inventory, funding, merging/splitting, etc.), records must be maintained in accordance with the data standards and local policies. If this is not true, it may result in multiple data quality flags across several categories.

### Dedicated Beds for Household Types

Inventory household type should reflect the clients being served. If project inventory is fully or largely dedicated for one household type (e.g., AO) but used completely or mostly by another household type (e.g., AC), a change in inventory **should be considered**. When changing inventory, the outdated inventory record should be ended, with an inventory end date of the last date beds were used for that household type. A new inventory record should be started, with an inventory start date of the first date beds were available for the new household type. This retains the historical record of inventory.<sup>24</sup>

<sup>24</sup> See section 2.07 *Bed and Unit Inventory Information* in the HMIS Data Standards Manual (p. 38-43).

## Dedicated Beds for Subpopulations

All beds must be dedicated to a subpopulation or identified as “non-dedicated beds” in HMIS. All beds not dedicated to a specific subpopulation are considered non-dedicated beds and should be entered as such. For example, if a project has 10 total beds and 8 are dedicated to chronically homeless youth, but the remaining beds are not dedicated to any specific subpopulation, 2 beds must be logged as “non-dedicated beds.”<sup>25</sup>

## Inventory for Rapid Re-housing Projects

Beginning with the FY 2024 Data Standards, Rapid Re-housing projects record one of two RRH subtypes: “Housing with or without services” or “Services Only”. RRH: Services Only projects do not record bed and unit inventory.<sup>26</sup> RRH: Services Only projects with bed inventory records will be flagged in the FY 2023 LSA.

In prior years, Rapid Re-housing projects with no bed inventory recorded received error/warning flags in the LSA. Beginning with the FY 2023 LSA, Rapid Re-housing projects that do not provide rental assistance to **any clients** should select RRH subtype = “Services Only” to indicate that the project only provides services to clients and does not provide ongoing rental assistance or have bed inventory. This will avoid warning flags related to missing inventory.

## Federal Partner Projects

### Veterans Affairs (VA) Funded Projects

The total number of beds in projects funded by the VA should be the sum of **beds dedicated to chronically homeless veterans + beds dedicated to youth veterans + beds dedicated to any other veteran**.

### Runaway and Homeless Youth (RHY) Funded Projects

The total number of beds in projects funded by RHY should be the sum of **beds dedicated to youth veterans + beds dedicated to chronically homeless youth + beds dedicated to any other youth**.

**Note:** When counting the number of dedicated beds for youth, veterans, and chronically homeless, these beds should count BOTH beds dedicated to the head of household and their household members.

**Example:** if there is 1 unit with 4 beds for a dedicated subpopulation, all 4 beds would be counted in the dedicated bed inventory. **NOT** 1 dedicated bed and 3 non-dedicated beds.

A dedicated bed is defined as one that must serve people in those households, unless there were no such households who qualify in the local area. If there are no qualifying people or households, someone else (in a non-dedicated household type) may use that bed.

**Note:** Even if beds were occupied by clients not in dedicated household types it should still be counted in the dedicated bed inventory fields in your inventory data.

## Utilization

Utilization flags can populate due to:

- ✓ **Incorrectly entered or maintained inventory.** This can lead to low utilization rates (more units listed for a period than were available) or high utilization rates (fewer units listed for a period than were actually available).

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<sup>25</sup> See section 2.07 *Bed and Unit Inventory Information* in the HMIS Data Standards Manual (p. 38-43).

<sup>26</sup> See section 2.02 *Project Information – Rapid Re-Housing Projects* in the HMIS Data Standards Manual (p. 27); See section 2.07 *Bed and Unit Inventory Information – Project Type Applicability* in the HMIS Data Standards Manual (p. 39).

- ✓ **Missing exit dates.** If clients have exited from a project but their enrollments were not ended, the utilization rate may falsely exceed 100%.
- ✓ **Missing entry dates** for clients in Emergency Shelter (ES) (including both ES – Entry Exit (EE) and ES – Night-by-Night (NbN)), Safe Haven (SH), or Transitional Housing (TH) projects; or **missing move-in dates** for clients in Rapid Re-Housing (RRH): Housing with or without services or Permanent Supportive Housing (PSH) projects.

**Note:** Because HMIS implementations require entry dates for each enrollment, missing entry dates result in missing enrollments, meaning that there are people participating in the project who do not have HMIS enrollments and are subsequently not included in the LSA.

**Note:** Unused inventory, or inventory with lower than 65% utilization or greater than 105% will be flagged for review.

### **What if the utilization data are accurate?**

If the utilization rates reflect what has occurred in your community include a note that explains why it is accurate. For example, if you had inventory come online near the end of the reporting period and as of the end of the reporting period, no clients had accessed the available inventory, the utilization rate will be zero. Submit a note confirming that the data are accurate, up to date and a result of project start up (see [Operating Start Dates](#) or [Operating End Dates](#) sections for examples of when data might be correct).

### **HIC and Inventory Comparison**

Your submitted HIC data **should** report the number of beds available on the night of the PIT count.

The LSA Inventory file **will generally** reflect the same number as the HIC since comparisons are pulling the bed inventory from all projects in your HMIS with available beds **on the night of the PIT count** (i.e., all inventory with start dates on or before the night of the PIT count and either no end date or end dates after the night of the PIT count).

### **Emergency Shelter Bed Type**

Each emergency shelter project must have bed type recorded that is consistent with the project-level housing type. For example, the housing type of tenant-based scattered site is not compatible with a bed type of facility-based. If an emergency shelter [project](#) has more than one bed type (e.g., facility-based beds and hotel/motel vouchers) that align with different housing types, then two HMIS projects (each with a unique project ID) must be set up, one for each bed type/housing type component.<sup>27</sup>

Emergency Shelter Bed Type	Possible Housing Type(s)
Facility-based beds	Site-based, single site OR Site-based, multiple sites
Voucher based beds	Tenant-based, scattered site
Other beds	Site-based, single site OR Site-based, multiple sites OR Tenant-based, scattered site

<sup>27</sup> See section 2.07 *Bed and Unit Inventory Information* in the HMIS Data Standards Manual (p. 39).

### Example: Changing Inventory

A shelter with 60 beds is adding 20 more beds available on 2/24/21:  $60 + 20 = 80$ . On the Housing Inventory Count (HIC), you report that the shelter has 60 beds available because the new beds are not in operation as of the night of the PIT (i.e., 1/27/21). On 2/24/21, you **EITHER** maintain the inventory with 60 beds and enter a new inventory record in HMIS with a start date of 2/24/21 with 20 beds **OR** you end the inventory with 60 beds (end date = 2/23/21) and create a new inventory with 80 beds (start date = 2/24/21). In either case, total inventory will now be  $60 + 20 = 80$ .\*

*\*Note: This only works when adding bed inventory. When reducing bed inventory, you must end the outdated inventory and create a new inventory.*

✓ When the LSA Inventory File pulls your inventory data from your HMIS, it will report this project as having 60 beds because it is only looking for inventories open on the date of the PIT count (i.e., 1/27/21). If you set up your inventory like this, you **will not get a warning flag** because your HIC inventory of 60 = your LSA Inventory file of 60 for the night of the PIT count.

✗ If instead of creating a new inventory record, you had updated the one inventory record from 60 to 80, then you **will get a warning flag** because your HIC inventory of 60  $\neq$  your LSA Inventory file of 80.

The example above shows how to enter a historical record of bed inventory so that warning flags are not generated. The example below explains what to do when bed inventory is reported incorrectly on the HIC, but correctly in the LSA Inventory File.

A shelter with 60 beds is adding 20 more beds available on **1/20/21**:  $60 + 20 = 80$ . **BUT** you forgot to update the bed inventory in HMIS. Thus, on the HIC, you report that the shelter only has 60 beds available on the night of the PIT even though the new beds are in operation.

✓ On 6/24/21, you realize the bed inventory is incorrect and you follow the same procedures as above (i.e., choosing one of the options for updating bed inventory) using an end date of 1/19/21 and a start date of 1/20/21. This **will result in a warning flag** because your HIC inventory of 60  $\neq$  your LSA Inventory file of 80. However, in this example, the HIC is incorrect and cannot be fixed. Therefore, the warning is resolved through a note explaining the situation and confirming the LSA data is correct.

✗ If instead of backdating the start date of the new inventory to the date the inventory was available (i.e., 1/20/21), you entered the start date as the date you entered the inventory record (i.e., 6/24/21), you **will not get a warning flag** because your HIC inventory of 60 = your LSA Inventory File of 60 for the night of the PIT count. But this is incorrect because, although it reduces the number of flags generated, it does not accurately reflect your data.

### 3. People/Household Data

The Longitudinal System Analysis (LSA) leverages the Universal Data Elements to report on people and households served by the Continuum of Care (CoC) 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 particular 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.

The LSA also incorporates follow-up reporting on households and populations who exited the system in three discrete periods: two years prior to the report period, one year prior to the report period, and the first six months of the report period. This includes:

- ✓ Patterns of system use prior to exit;
- ✓ Destination types; and,
- ✓ Lengths of time between exit and reengagement or returns to homelessness, for those who were served again later by continuum projects.<sup>28</sup>

#### 3.1 – People

##### Dates of Birth and Social Security Numbers

Complete Dates of Birth (DOB) are needed to calculate the age of clients served in projects and determine their household type. A high percentage of missing birthdates leads to a high percentage of unclassifiable households, which has a considerable impact on data quality and usability.

Social Security Numbers (SSNs) are essential to an HMIS's ability to deduplicate client records. A high percentage of missing SSNs has a considerable impact on data quality and usability.

##### *How to Address High Missing Rates for DOBs and/or SSNs*

If your CoC has a high rate of missing DOBs and/or SSNs, seek out opportunities to learn from providers about the barriers to collecting this information. Provide technical assistance and training to address these barriers and improve the completion rate. When responding to a warning flag, confirm that the high percentage(s) is correct (i.e., it is not a programming error), whether this number can be improved, and your assessment of the quality of de-duplication in your HMIS.

##### Chronically Homeless

If there is a large difference in the number of chronically homeless adults/heads of household (HOH) in the current reporting year compared to the previous reporting year, the LSA will generate a warning flag. The warning provides an opportunity for you to confirm that the change in number/percentage represents a true increase or decrease in your community and is not the result of a calculation error in the generation of the LSA export.

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<sup>28</sup> See section 1.1 *Background: Annual Homeless Assessment Report and the Longitudinal System Analysis* in the [LSA FY 2023 HMIS Programming Specifications](#) (p. 2).

### *What if the chronically homeless data are accurate?*

If the change in number/percentage does represent a true increase or decrease in your community, you can explain this in the corresponding note field attached to the warning flag. When responding to any warning flag, it is helpful for the LSA team to understand if there are circumstances which may be contributing to the change. Some examples of explanations for considerable yet accurate changes in data include:

- ✓ A CoC's new prioritization schemas for coordinated entry increased access to resources for chronically homeless households
- ✓ A new low barrier shelter resulted in people coming into shelter who have not used shelter in the past.
- ✓ A new outreach project connected people to residential projects who previously had difficulty accessing these resources.

## 3.2 – Households

### **Exactly One Head of Household**

Each distinct HouseholdID must have one and only one client identified as the head of household (HOH). There are several reasons why a household record may mistakenly have no designated HOH or multiple people assigned as the HOH, including:

Potential Data Quality Flag Causes	Guidance
The ongoing enrollment of a household where the HOH exited, and a new HOH was not designated.	"If the head of household leaves the project while other household members remain, another member of the household currently participating in the project must be designated as the head of household (retroactively to the beginning of the household's enrollment)." <sup>29</sup>
An HMIS which assumes the household composition between enrollments does not change, but where the HOH does not enroll in the subsequent enrollment.	It is important that users are reviewing the relationship to head of household information for accuracy at enrollment.
An HMIS which assumes the household composition between enrollments does not change, but people who were previously in separate households are now presenting as a single household.	It is important that users are reviewing the relationship to head of household information for accuracy at enrollment.
Other data entry error.	Review associated data fields.

If you are uncertain how to correct household records where there is no HOH or multiple HOH, please contact your vendor for assistance.

**Note:** *There must be a head of household present for the duration of the household's enrollment.*

**Note:** *If the group of persons is composed of adults and children, an adult must be designated as the head of household.*

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<sup>29</sup> See section 3.15 *Relationship to Head of Household* in the HMIS Data Standards Manual (p. 66-68).

## Missing Enrollment CoC

As discussed above, all households must have exactly one head of household (HOH). That HOH must have a recorded enrollment CoC attached to their enrollment that represents the continuum in which they are being served. Any household missing an enrollment CoC, either because this field is null or because the household has no HOH will be flagged by the LSA as an error needing correction. If a household has one HOH and has a member with an enrollment CoC, make sure the HOH is the member with the enrollment CoC. Counts of household enrollments excluded from the LSA Report due to missing enrollment CoC are provided in LSA Calculated by project ID in Report Row 905.

## Improper Entries, Move-Ins, or Exits

All clients must have a project start date for each project and a project exit date if the client is no longer participating in that project. Clients who become housed during enrollment in Rapid Re-Housing (RRH) or Permanent Supportive Housing (PSH) must have a housing move-in date. Clients in RRH that exit directly to permanent housing must have a housing move-in date regardless of if the RRH project contributed to rental assistance for the unit.<sup>30</sup>

**Note:** *The FY2022 HMIS Data Standards specified that clients exiting directly to permanent housing from either RRH or PSH must have a housing move-in date. Because the standards did not require back data entry for this element that standard had not been reflected until FY2022 reporting. For example, if a client was enrolled in PSH and during housing search had the opportunity to move into a permanent unit subsidized by another project, per the FY2020 data standards you would not add a Housing Move-In Date upon exit. Going forward, per the FY2022 data standards, for anyone who exited after October 1, 2021, the Housing Move-In Date in this situation will be equal to the exit date.*

## Project Dates

All clients must have a **project start date** that indicates the beginning of the client's participation with a project.<sup>31</sup> Different project types define *project start date* differently, to address the difference in meaning associated with "starting" residential, service, and permanent housing projects. For example, for residential project enrollments [i.e., Emergency Shelter (ES), Safe Haven (SH), Transitional Housing (TH)], the client start date is the first night the client stayed in the project. And for permanent housing project enrollments [i.e., Rapid Re-Housing (RRH), Permanent Supportive Housing (PSH)], the client start date is the date the client was admitted into the project.<sup>32</sup>

Clients who are no longer participating in a project must have a **project exit date**. Different project types define *project exit date* differently, to address the difference in meaning associated with "ending" residential and service projects.<sup>33</sup> For example, for residential project enrollments (ES, TH, SH), the client exit date is the last day of continuous stay in the project before the client transfers to another residential project or otherwise stops residing in the project, or for night-by-night ES, the date after the last bed night. And for permanent housing project enrollments, the client exit date is the last day the client receives rental assistance or supportive services (RRH) or is provided rental assistance (i.e., tenant-based PSH, transition-in-place, or other permanent housing).<sup>34</sup>

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<sup>30</sup> See section 3.20 *Housing Move-in Date* in the HMIS Data Standards Manual (p. 69-70).

<sup>31</sup> If projects change HMIS-participation during a reporting period and project start dates are misaligned with HMIS participation start dates, please see Section 2 (p. 5) of this document on how that is addressed through the LSA export.

<sup>32</sup> See section 3.10 *Project Start Date* in the HMIS Data Standards Manual (p. 61-62).

<sup>33</sup> See section 3.11 *Project Exit Date* in the HMIS Data Standards Manual (p. 62-64).

<sup>34</sup> See section 3.11 *Project Exit Date* in the HMIS Data Standards Manual (p. 62-64).

There cannot be any open enrollments beyond the project operating end date.

A client's **Project Start Dates** must be  $\geq$  Operating Start Dates.

- ✓ If a project starts on 7/1/21, all participants must have start dates on or after that date.

A client's **Project Exit Dates** must be  $\leq$  Operating End Dates.

- ✓ If a project ends on 6/30/21, all participants have an exit date that is on or prior to that date.

### **Project Start Dates<sup>35</sup>**

Different project types use project start dates differently. The list below addresses LSA project types that include client-level data in the LSA export.

- ✓ **Emergency Shelter (ES):** Date of first night a client stayed in the shelter. Emergency Shelter – Night-by-Night allow ongoing enrollment without “exiting” and “restarting” for each stay.
- ✓ **Safe Haven (SH) and Transitional Housing (TH):** First night in residence.
- ✓ **Rapid Re-Housing (RRH) and Permanent Supportive Housing (PSH):** Date the client was admitted into the project (may or may not be first night in residence).

### **Housing Move-In Dates<sup>36</sup>**

Housing move-in dates are limited to permanent housing projects:

- ✓ **Rapid Re-Housing (RRH) and Permanent Supportive Housing (PSH):** Date the client moves into a permanent living situation whether subsidized by the current enrolled PSH or RRH project, a different project or subsidy, or without any subsidy at all.

**Note:** *The housing move-in date may be but is not necessarily the date the lease was signed or goes into effect. For example, if the lease is signed on 2/20 but the client does not move into the unit until 2/24, the “move-in date” should be recorded as 2/24.*

### **Project Exit Dates<sup>37</sup>**

Different project types use project exit dates differently:

- ✓ **Site-based residential projects:** The last day of continuous stay in the project before the client transfers to another residential project or otherwise stops residing in the project.
- ✓ **Tenant-based permanent housing projects:** The last day the client receives rental assistance or supportive services (RRH) or is provided rental assistance (tenant-based PSH, transition-in-place, or other permanent housing).

**For Emergency Shelter – Night-by-Night projects:** the CoC should determine how long a client's enrollment should remain open after a length of absence. At that point (e.g., 90 days from last bed night), the client should be exited from the project with an exit date back dated to the **day after the last bed night**. This can be done manually or through the auto-exit functionality if offered by the HMIS. If you are uncertain how to implement an auto-exit functionality, please contact your vendor for assistance. Counts of clients in Night-by-Night shelters with exit dates extending for 90 days or more past their most recent bed night date are provided in

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<sup>35</sup> See section 3.10 *Project Start Date* in the HMIS Data Standards Manual (p. 61-62).

<sup>36</sup> See section 3.20 *Housing Move-In Date* in the HMIS Data Standards Manual (p. 69-70).

<sup>37</sup> See section 3.11 *Project Exit Date* in the HMIS Data Standards Manual (p. 62-64).

LSACalculated by project ID in ReportRow 903. Clients with exit dates in Night-by-Night shelters, but no bed night date on the night prior are reported by Project ID in ReportRow 904.

## Overlapping Enrollments

Most overlapping enrollments are indicators of data quality issues. A small percentage of overlapping enrollments is considered possible, and a threshold of 1% has been implemented this year to account for these rare occurrences. If the percentage of overlapping enrollments is above this threshold, an error flag will populate indicating the need for data cleaning. If the percentage of overlapping enrollments is below the threshold, a warning flag will populate. If a warning flag populates, you should still review your data to see if there are any data quality issues. However, if the overlapping enrollments are related to special circumstances that follow guidance in the FY2024 Data Standards Manual for entering data, warnings can be resolved with a note.

In general, we do not expect overlapping days in project among and between the following project types:

- ✓ Emergency shelter,
- ✓ Safe haven, or
- ✓ Transitional housing.

Examples of overlaps:

Project Type 1	Dates	Project Type 2	Dates	Overlap	Potential Data Quality Issue
Emergency Shelter – Entry Exit	Entry: 1/1/2021 Exit: 1/7/2021	Emergency Shelter – Entry Exit	Entry: 1/5/2021 Exit: 1/15/2021	1/5/2021 - 1/7/2021	Yes
Emergency Shelter – Entry Exit	Entry: 1/1/2021 Exit: 1/7/2021	Emergency Shelter – Entry Exit	Entry: 1/7/2021 Exit: 1/15/2021	No overlapping nights	No
Emergency Shelter – Entry Exit	Entry: 1/1/2021 Exit: 1/7/2021	Emergency Shelter – Night-by-Night	Bed nights: 1/4/2021	1/4/2021 – 1/5/2012	Yes
Emergency Shelter – Entry Exit	Entry: 1/1/2021 Exit: 1/7/2021	Transitional Housing	Entry: 1/5/2021 Exit: Still Active	1/5/2021 – 1/7/2021	Yes

Additionally, we do not expect any overlapping enrollments in the following scenarios:

- ✓ Within the same ProjectID and PersonalID, an overlap between Entry Date and Exit Date or end of period is **not permitted for any project type**.
  - This means that the same person is enrolled in the same project more than one time during the same period of time – this is an impossibility.

Project ID 1	Personal ID 1	Dates	Project ID 2	Personal ID 2	Dates	Potential Data Quality Issue
123	1234	Entry: 1/1/2021 Exit: 1/20/2021	123	1234	Entry: 1/1/2021 Exit: 1/20/2021	Yes
123	1234	Entry: 1/1/2021 Exit: 1/20/2021	123	1234	Entry 1/7/2021 Exit 1/14/2021	Yes
123	1234	Entry: 1/1/2021 Exit: 1/20/2021	123	1234	Entry: 2/3/2021 Exit: 2/19/2021	No

- ✓ Enrollment in multiple PSH projects at once – Move In Date to Exit Date or end of period.

Project ID 1	Personal ID 1	Dates	Project ID 2	Personal ID 2	Dates	Potential Data Quality Issue
123	1234	Move In: 1/4/2021 Exit: Still Active	124	1234	Move In: 1/4/2021 Exit: Still Active	Yes
123	1234	Move In: 1/4/2021 Exit: Still Active	124	1234	Move In: 1/7/2021 Exit: 9/14/2021	Yes
123	1234	Move In: 10/4/2019 Exit: 1/20/2021	124	1234	Move In: 2/3/2021 Exit: Still Active	No

## 4. Resources

The data quality issues included in this guide represent those commonly identified during the LSA reporting process. However, it does not reflect all the data quality issues communities may encounter. Other resources, listed below, can be helpful as you plan for your 2024 LSA submission.

This guide will be updated over the course of data collection and reporting.

- ✓ [FY2024 HMIS Data Standards Manual and related resources](#)
- ✓ [HUD Exchange Resources related to the LSA](#)
- ✓ [Notice for Housing Inventory Count \(HIC\) and Point-in-Time \(PIT\) Data Collection for Continuum of Care \(CoC\) Program and the Emergency Solutions Grants \(ESG\) Program.](#)