

State Housing Finance Agency Low
Income Housing Tax Credit Data
Transfer Standard
V 4.0

Data Dictionary
FINAL
January 25, 2016

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1. Change Record

Each change to this document once it is initially approved will be recorded in this Change Control record. All changes made to this document will be reflected here.

Approval Date	Author	Version	Change Reference
	Tim Clark TCG Technologies	1.1	Tim Clark TCG Technologies
06/28/2013	Jose Santin WHEDA (Wisconsin Housing and Economic Development Authority)	3.0	First draft version 3.0 of the XML Data Dictionary.
10/21/2013	Paul Perpich Spectrum Enterprises	3.0	Second draft version 3.0 of the XML Data Dictionary.
11/21/2013	Paul Perpich Spectrum Enterprises	3.0	Final version 3.0 of the XML Data Dictionary and related XSD files.
12/23/2013	Paul Perpich Spectrum Enterprises	3.0	<p>Corrections to the 11/21/2013 Final Version 3.0 documentation:</p> <p>1) Corrections to the 'RaceType' section of the <i>DefaultEventsV3.0.xsd</i> document to include "NH" - Native Hawaiian/Other Pacific Islander in the 'Accepted Values' section.</p> <p>2) Correction of a typo error in the 'AHD PAMGIPercentage' type definition in the <i>DefaultTypes3.xsd</i> file.</p> <p>In the comment section the expected 'AHD PAMGIPercentage' was mislabeled as 'AMGIPercentage'.</p> <p>3) The re-inclusion of the SubsidyType description in this <i>Data Dictionary Document</i> that was inadvertently removed during the update to version 3.0 process.</p>
4/1/2014	Paul Perpich Spectrum Enterprises	3.0	Publication of all documents related to Version 3.0.

Approval Date	Author	Version	Change Reference
7/24/2014	Paul Perpich Spectrum Enterprises	3.1	<p>Change the name and type of <i>SubsidyType</i> type to <i>OtherSubsidyType</i> as a standard string type and drop the enumerated list aspect.</p> <p>Correct all references to "positiveInteger" to "xs:positiveInteger" in the <i>DefaultTypes3.0.xsd</i> file.</p> <p>Remove the section entitled "<i>SOURCES OF FEDERAL RENT ASSISTANCE</i>" on page 29 of version 3.0 of the this Data Dictionary. The structures and elements described were never implemented in the xsd file(s).</p> <p>Update this Data Dictionary to reflect the above changes.</p>
11/13/2015 DRAFT	Paul Perpich Spectrum Enterprises	4.0	<p>1) Addition of new "A" - Asian and "NH" - Native Hawaiian/Other Pacific Islander related race designations. (See pg. 14)</p> <p>2) Removal of the certain Income Sources from the existing <i>IncomeType</i> enumerated list. (See pg. 13)</p> <p>3) Minor modifications to descriptions of the <i>Adjustment</i> and <i>InitialCert</i> types in <i>DefaultEvents</i> (See pg. 17)</p> <p>4) Archiving versions 1.1, 2.0 and 3.0 of the standard along with the document entitled "<i>NAHMA XML Standard Version History (Sept 2015).pdf</i>" that memorializes the files that make up the standard as well as a description of the changes made to each version.</p> <p>5) Update this Data Dictionary to reflect the above changes</p> <p>6) Add a section to the Introduction of this document discussing the <i>Standard Update and Work Process</i> as well as the <i>Publication Schedule</i>.</p>
1/25/2016	Paul Perpich Spectrum Enterprises	4.0	Publish Final v4.0 Documents

2. Introduction

The state housing finance agencies, property owners and managers, software providers, and related industry trade associations have developed an XML data transfer standard for compliance reporting for properties participating in the Low Income Housing Tax Credit program. The standard is comprised of three XSD files that work in conjunction with one another.

DefaultTypesV4.0.xsd

The file DefaultTypesV4.0.xsd contains all of the data type definitions as well as the definitions for the enumerations. This file can be cloned to produce an agency specific version.

An agency could for example, decide to remove many of the coded elements that are not used in their area. Perhaps add codes for specific needs such as emergency relief.

DefaultEventsV4.0.xsd

The file DefaultEventsV4.0.xsd contains the 6 different event structures that correspond to the 6 events (Move In, Move Out, Transfer In, Transfer Out, Recertification, Adjustment, Initial). Each event is tailored so that only the data required for the event is included.

In addition to defining the event types, this file also defines the MemberType, AuxDataType, RaceType and ProgramType. The MemberType is a node structure that defines all of the data pertaining to an individual in the household to include any income sources and assets. The AuxDataType is a flexible and dynamic place for non-compliance related data to be transmitted in the file without breaking the schema validation. The RaceType is a node for each Race that applies for the household member. The collection of Races is required and it must contain between one and 6 of "Race" nodes, inclusive. The ProgramType is a node structure that defines the data pertaining to the program or programs that relate to an event.

IndustryStandardV4.0.xsd

The IndustryStandardV4.0.xsd file is the base transmission file. There is a base node of the Project. The project node contains attributes which identify the vendor who created the submission file, the project ID, property name, vendor name, creation date of the file as well as a date range of the events contained within the file. Also within the project is a collection of Buildings with attributes. Each Building contains a collection of Units with attributes. Each Unit contains a collection of Events with attributes. Each type of event and the data it contains is defined in the DefaultEventsV4.0.xsd.

As this standard may be used by a large number of organizations, it required some built in flexibility to allow for individual organizations to collect data unique to a situation or region. To allow for a level of customization by individual agencies, the primary constructs have been added to the separate sub files: DefaultTypesV4.0.xsd and DefaultEventsV4.0.xsd. If needed a separate version of the files can be maintained for each agency.

These are still part of the master specification and changes can still be tracked by the standards body. If it is decided that a particular request should not be included in the master specification a copy of the include files are made and modified to meet the particular need. This new draft will be reviewed, approved and published. Once published each agency has only to utilize the files that relate directly to their own custom, or default values.

Standard Update and Work Process

The *State HFA-LIHTC Data Transfer Standard*, used for compliance reporting to the state administrative agencies that oversee the Low Income Housing Tax Credit program, is managed by the National Affordable Housing Management Association (NAHMA).

The standards group communicates, works on and publishes updates and final documentation to the standard through the following portals:

- 1) The Yahoo based *LIHTC Data Transfer Discussion Forum* located at:
<https://groups.yahoo.com/neo/groups/LIHTC-Data-Transfer/info>

This forum is used for the publication of working documents and related information as well as requests for updates to the standard. Membership is open to any and all interested parties and the forum is not moderated.

- 2) NAHMA organized conference calls
Conference calls are hosted by NAHMA and are regularly scheduled for early January and early July every year to start the conversation regarding updates to the standard. Work on the any updates begins after the initial call with any subsequent calls scheduled as needed.
- 3) Publication of Finalized Version Documents
Finalized documents for each version of the standard are hosted by the *National Multifamily Housing Council (NMHC)* at: <http://www.nmhc.org/MITSApproval.aspx?refid=883>

Publication Schedule

The following schedule is taken directly from the document entitled "*Process Outline for Updating the State HFA LIHTC Data Transfer Standard*" which was published by NAHMA as part of the originating document set for the standard. It is available at: <http://www.nmhc.org/MITSApproval.aspx?refid=883>

II. Timeline for Review and Implementation of Recommended Revisions

- 1) Recommended revisions may be submitted at any time, and the State HFA LIHTC Data Transfer Standard Work Group will review and discuss the recommendations as they are proposed. The average time required to reach consensus on a recommended revision is one or two months, but this is dependent on the complexity of the recommendation.
- 2) Updates to the standard will be made by the State HFA LIHTC Data Transfer Standard Work Group twice a year, and posted to the MITS website on January 15 and July 15 each year.
- 3) Implementation of the updated standard will be accomplished on a six-month schedule as well, with a target implementation deadline of July 15 for updated standards issued on January 15, and a target implementation deadline of January 15 for updated standards issued on July 15.

For example, for an updated standard posted on January 2007, the target implementation deadline would be July 15, 2007. For an updated standard posted on July 15, 2007, the target implementation deadline would be January 15, 2008.

3. DefaultTypesV4.0.XSD

Type Name: ProjectID

Description: This field contains the ID of the project contained in the transmission file.

Data Type: String(50), min length 2

Type Name: PropertyName

Description: This field contains the name of the property contained in the transmission file.

Data Type: String(100), min length 0

Type Name: VendorName

Description: This field contains the Name of the software vendor who created the transmission file.

Data Type: String(50), min length 1

Type Name: BIN

Description: This field contains the Building Identification Number as assigned by the state housing finance agency.

Data Type: String(20), min length 1

Type Name: StreetAddress

Description: This field contains the street address of the building contained in the transmission file.

Data Type: String(100), min length 2

Type Name: City

Description: This field contains the street address of the property contained in the transmission file.

Data Type: String(50), min length 2

Type Name: StateCode

Description: This field contains a list of the valid state codes.

Data Type: Enumeration of String

"AL" - Alabama

"AK" - Alaska

"AZ" - Arizona

"AR" - Arkansas

"AS" - American Samoa

"CA" - California

"CO" - Colorado

"CT" - Connecticut

"DE" - Delaware

"DC" - District Of Columbia

"FL" - Florida

"GA" - Georgia

"HI" - Hawaii

"ID" - Idaho

"IL" - Illinois

"IN" - Indiana

"IA" - Iowa

"KS" - Kansas
"KY" - Kentucky
"LA" - Louisiana
"ME" - Maine
"MD" - Maryland
"MA" - Massachusetts
"MI" - Michigan
"MN" - Minnesota
"MS" - Mississippi
"MO" - Missouri
"MT" - Montana
"NE" - Nebraska
"NV" - Nevada
"NH" - New Hampshire
"NJ" - New Jersey
"NM" - New Mexico
"NY" - New York
"NC" - North Carolina
"ND" - North Dakota
"OH" - Ohio
"OK" - Oklahoma
"OR" - Oregon
"PA" - Pennsylvania
"PR" - Puerto Rico
"RI" - Rhode Island
"SC" - South Carolina
"SD" - South Dakota
"TN" - Tennessee
"TX" - Texas
"UT" - Utah
"VT" - Vermont
"VI" - Virgin Islands
"VA" - Virginia
"WA" - Washington
"WV" - West Virginia
"WI" - Wisconsin
"WY" - Wyoming

Type Name: PostalCode

Description: This attribute contains the street address of the property contained in the transmission file.

Data Type: String of in the following formats where "x" is a number between 0 and 9:

"xxxxx"

"xxxxxxxxx"

"xxxxx-xxxx"

Type Name: FederalIncomeDesignation

Description: This attribute contains the Federal Project Set-Aside percentage set by project owner(s) for the building as recorded on IRS form 8609 and contained in the transmission file.

Data Type: OwnerDesignation

Type Name: UnitNumber
Description: This holds the unit number description for the unit. This is the friendly unit number that appears on the TIC. This should match the unit number that the State Housing Finance Agency has on file.
Data Type: String(20), min length 1

Type Name: EventType
Description: A list of the valid event types. This field is required for each event.
Data Type: Enumeration of String
"MI" - Move In
"MO" - Move Out
"TI" - Transfer In
"TO" - Transfer Out
"R" - Recertification
"A" - Adjustment
"IC" - Initial

Type Name: Name
Description: Used to hold the FirstName or LastName of the a household member
Data Type: String(50), min length 1

Type Name: Initial
Description: Used to hold the middle initial of the a household member
Data Type: String(1), min length 0

Type Name: SSN
Description: Used to hold the last four(4) digits of the social security number for a household member. Cannot be blank. If the SSN is unknown, send 0000 do not send 9999. NOTE, no dashes are accepted, numbers only.
Data Type: String(4) of all decimals between 0 and 9

Type Name: Gender
Description: A list of the valid gender choices.
Data Type: Enumeration of String
"NA" - Not Applicable
"M" - Male
"F" - Female

Type Name: Ethnicity
Description: A list of the valid ethnicity choices.
Data Type: Enumeration of String
"H" - Hispanic or Latino
"N" - Not Hispanic or Latino
"TDR" - Tenant Declined to Respond
"MISSING" - Missing

Type Name: isDisabled
Description: A list of the valid disability choices.
Data Type: Enumeration of String
"Y" - Yes
"N" - No
"TDR" - Tenant Declined to Respond
"Missing" - Missing

Type Name: MaritalStatus
Description: A list of the valid marital status choices.
Data Type: Enumeration of String
"NA" - Not Applicable
"M" - Married
"S" - Single
"D" - Divorced
"SE" - Separated
"UN" - Unmarried
"UC" - Unmarried Couple
"W" - Widowed

Type Name: UnitType
Description: A list of the valid unit type choices. This is identifying how the unit is being utilized in conjunction to the event that is being transmitted.
Data Type: Enumeration of String
"LI" - Low Income
"MKT" - Market Rate
"EMP" - Employee Unit

Type Name: StudentCode
Description: A list of the valid student code choices. When a household is comprised of all full-time students, one of these exception codes need be present in order for the household to qualify for the Tax Credit program.
Data Type: Enumeration of String
"NA" - Not a household comprised entirely of full-time students
"TANF" - Student household receiving Temporary Assistance for Needy Families
"JTPA" - Student household enrolled in a Job Training Partnership Act program
"MFJT" - Student household in which the members are married and file a joint tax return
"SPWM" - Student household comprised of a single parent with minor children
none of which are claimed on another person's tax return
"FOST" - Student household comprised of a former recipient of foster care
"1530" - Student household during extended use period.

Type Name: Relationship
Description: A list of the valid relationship choices.
Data Type: Enumeration of String
"C" - Child/Dependent
"F" - Foster Child/Adult
"H" - Head of Household
"K" - Co-Head
"L" - Live-In caretaker
"N" - None of the above
"O" - Other family member
"S" - Spouse
"U" - Unborn Child/Anticipated Adoption or Foster

Type Name: AlienRegNbr
Description: Used to hold the alien registration number for a household member. Can be blank.
NOTE, no dashes are accepted, numbers only.
Data Type: A string using the following pattern:
"Axxxxxxxx" - Where x is '0' through '9'

Type Name: SpecialStatus
Description: A list of the valid special status choices.
Data Type: Enumeration of String
"AL" - Assisted Living
"BI" - Brain Injury
"BW" - Battered Women
"D" - Disabled
"DD" - Developmental Disabled
"DI" - Displaced Individual(s)
"DR" - Drug Dependency
"DV" - Victims of Domestic Violence
"E" - Elderly
"E55" - Elderly 55 and Over
"E62" - Elderly 62 and Over
"EA" - Elderly Amenities
"ES" - Elderly Set Aside
"F" - Family
"FWH" - Farm Worker Housing
"H" - Handicapped
"HIV" - Aids/HIV Related Illness
"HL" - Homeless
"HO" - Hollman
"J" - Joint Custody
"MI" - Mental Illness
"ND" - Not Disabled
"O" - Other
"S" - Fulltime Student
"SR" - Single Room Occupancy
"TP" - Teen Pregnancy/Parenting
"U" - Undesignated

Type Name: AssetType

Description: A list of the valid asset type choices. This identifies what is the type of the asset.

Data Type: Enumeration of String

"CSH" - Cash/Demand Deposit Accounts
"CD" - CDs/Time Deposits
"MKT" - Marketable Securities
"IRA" - IRA/Keogh Account
"RET" - Retirement/Pension Fund
"REL" - Real Estate, Equity
"GEM" - Gems/Jewelry
"COL" - Coins/Stamp Collections
"ART" - Art/Antiques
"ATO" - Automobiles - Antique
"LMP" - Lump Sum Receipts (Not Income)
"TRS" - Trust/Available Principal
"OTH" - Other

Type Name: AssetStatus

Description: A list of the valid asset status choices. This identifies how the income of the asset was determined.

Data Type: Enumeration of String

"C" - Current
"I" - Imputed
"A" - Average

Type Name: AssetVerificationSource

Description: A list of the valid verification source choices. This identifies how the value and income of the asset was determined.

Data Type: Enumeration of String

"AA" - Accountant's Affidavit
"BA" - Bank's Affidavit
"ES" - Account/Earnings Statement
"MS" - Published Market Standards
"NV" - Not Verified
"O" - Other
"OA" - Owners Affidavit
"QA" - Qualified Appraisal
"TXA" - Bank/Tax Assessment

Type Name: IncomeType

Description: A list of the valid income type choices. This identifies what is the type of the income being reported.

Data Type: Enumeration of String

"B" - Business (including distributed profits and net income from business)

"CS" - Child Support

"F" - Federal Wage

"G" - General Assistance

"I" - Indian Trust

"M" - Military Pay

"N" - Other Non Wage Source (including alimony, unemployment benefits)

"PE" - Pensions (including veterans pensions, military retirement, and income from all other pensions and annuities)

"SI" - Supplemental Security Income (both personnel benefit and state supplements administered by SSA) (SSI)

"SS" - Social Security (both personal and dual entitlements)

"T" - TANF (Temporary Assistance for Needy Families)

"U" - Unemployment

"W" - Non-Federal Wage (including salaries, tips commission bonuses, and other income from employment)

Type Name: IncomeVerificationSource

Description: A list of the valid income verification source choices. This identifies how the income projection was determined.

Data Type: Enumeration of String

"AS" - Attorney's Statement

"BC" - Copy of Benefits/Payment Check

"BV" - Bank/Trustee Verification

"CPA" - Accountant/CPA Statement

"CS" Check Stubs/Earning Statement

"EV" - Employer Verification

"NV" - Not Verified

"O" - Other

"PA" - Payer/Benefactor Affidavit

"PV" - Benefits Provider Verification

"SS" - Separation/Divorce Settlement

"TXB" - Tax Returns - Business

"TXI" - Tax Returns - Individuals

Type Name: HouseholdType
Description: A list of the valid household type choices. The household type identifies how the household should be categorized.
Data Type: Enumeration of String
"NA" - Not Applicable
"EL" - Elderly
"FA" - Family
"HO" - Homeless
"RC" - RCAC
"DS" - Displaced
"SN" - Special Needs

Type Name: EmploymentType
Description: A list of the valid employment type choices. For households which have employment income, this will identify the type of employment that is present.
Data Type: Enumeration of String
"NA" - Not Applicable
"A" - Agriculture
"B" - Business/Office
"FTS" - FT Student, No Special Conditions
"GS" - Government/Public Service
"HM" - Homemaker
"IM" - Industrial/Manufacturing
"NE" - Not Employed
"NS" - Not Skilled/Unskilled
"R" - Retired
"SE" - Self Employed "SS" - Skilled/Specialized
"TP" - Technical/Professional

Type Name: OwnerDesignation
Description: This type is used for reporting the Income Set-Aside and Rental Set-Aside percentages.
Data Type: Decimal, 2 fractional digits, min value of 0.00, max value of 150.00

Type Name: RaceType
Description: A list of the valid race type choices.
Data Type: Enumeration of String
"A" - Asian
"AIND" - Asian Indian
"ACH" - Chinese
"AF" - Filipino
"AJ" - Japanese
"AK" - Korean
"AV" - Vietnamese
"AO" - Asian Other
"AI" - American Indian/Alaskan Native
"B" - Black/African American
"NH" - Native Hawaiian/Other Pacific Islander
"PNH" - Native Hawaiian
"PGC" - Guamanian or Chamorro

"PS" - Samoan
"PO" - Pacific Islander Other
"O" - Other
"W" - White
"TDR" - Tenant Declined to Respond
"MISSING" - Missing

Type Name: BinaryDigit
Description: This is used to create a Boolean type
Data Type: Integer, non-negative, max value of 1 inclusive
0 = False
1 = True

Type Name: STDDate
Description: Date field which is strongly typed to ensure only valid dates are submitted.
Data Type: String, containing only valid dates in the format MM/DD/YYYY.

Type Name: OptionalDate
Description: Date field which is strongly typed to ensure only valid dates are submitted.
Data Type: String, containing only valid dates in the format MM/DD/YYYY. Can be blank.

Type Name: STDMoney
Description: A type for sending money as a decimal
Data Type: Decimal, 2 fractional digits, minimum value of -1 inclusive

Type Name: integerOpt
Description: Unbound optional integer
Data Type: String of numbers between 0 and 9 without a maximum length.

Type Name: AMGIPercentage
Description: A list of the valid area median gross income percentages
Data Type: Enumeration of String
"1" = 50%
"2" = 60%
"3" = 80%
"4" = OI**

Type Name: AHDPAMGIPercentage
Description: A list of the valid Affordable Housing Disposition Program area median gross income percentages
Data Type: Enumeration of String
"1" = 50%
"3" = 80%
"4" = OI**

Type Name: yesno
Description: This is used to create a set of valid answers for a question.
Data Type: Enumeration of String
"1" = Yes
"2" = No
"8" = Declined to Respond
"9" = Missing

Type Name: OverIncomePercent
Description: This is used to report the over income percentage at certification.
Data Type: Enumeration of String
"140" = 140%
"170" = 170%

Type Name: FederalSubsidyType
Description: A list of the valid federal subsidy type choices. This is identifying what type of federal subsidy is being received by the household in this event.
Data Type: Enumeration of String
"1" – HUD Multi-Family Project-Based Rental Assistance (PBRA)
"2" – Section 8 Moderate Rehabilitation
"3" – Public Housing Operating Subsidy
"4" – HOME Rental Assistance
"5" – HUD Housing Choice Voucher (HCV), tenant-based
"6" – HUD Project-Based Voucher (PBV)
"7" – USDA Section 521 Rental Assistance Program
"8" – Other Federal Rental Assistance (Same as existing NAHMA type)

Type Name: OtherSubsidyType
Description: This field contains the name of Other Subsidy Types that are Non-Federal.
Data Type: String(100), min length 0

4. DefaultEventsV4.0.XSD

The DefaultEventsV4.0.xsd file defines each of the event types that are allowed to be transmitted via the standard. Many of the data elements for each of these events are defined in the DefaultTypesV4.0.xsd.

- Include DefaultTypesV4.0.xsd

Name: MoveIn

Description: This complex type is used to report all data associated with a MoveIn event.

Data Type: Complex Type

Name: MoveOut

Description: This complex type is used to report all data associated with a MoveOut event.

Data Type: Complex Type

Name: TransferOut

Description: This complex type is used to report all data associated with a TransferOut event. Unit transfers are comprised of two events a TransferOut from the old unit and a TransferIn for the new unit.

Data Type: Complex Type

Name: TransferIn

Description: This complex type is used to report all data associated with a TransferIn event. Unit transfers are comprised of two events a TransferOut from the old unit and a TransferIn for the new unit.

Data Type: Complex Type

Name: Recertification

Description: This complex type is used to report all data associated with an Annual Recertification event.

Data Type: Complex Type

Name: Adjustment

Description: This complex type is used to report all data associated with an event that is not covered by any other existing event type.

Data Type: Complex Type

Name: InitialCert

Description: This complex type is used to report all data associated with an InitialCert event. Use this event type for a household which currently resides on the property as a market rate household who is now becoming a tax credit household or is a tax credit household changing to a market rate household.

Data Type: Complex Type

Name: MoveInDate
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: The date the household moved into the unit for this event.
xml Type: element
Data Type: STDDate
Required: yes

Name: LIHTCQualificationDate
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: The most recent qualification date for this event.
xml Type: element
Data Type: STDDate
Required: no

Name: HouseholdIncomeAtMostRecentQualificationDate
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: Household income at the time of the most recent LIHTC qualification date.
xml Type: element
Data Type: STDMoney
Required: no

Name: HouseholdSizeAtMostRecentQualificationDate
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: Household size at the time of the most recent LIHTC qualification date.
xml Type: element
Data Type: xs:PositiveInteger
Required: no

Name: EffectiveDateofMostRecentIncomeCertification
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: The effective date of the most recent certification of LIHTC income. This is populated in an event where income is not actually certified such as a self certification event.
xml Type: element
Data Type: STDDate
Required: no

Name: HouseholdSizeAtMostRecentIncomeCertification
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: The size of the household on the effective date of the most recent certification of LIHTC income. This is populated in an event where income is not actually certified such as a self certification event
xml Type: element
Data Type: integer
Required: no

Name: UnitType
Category: MoveIn, MoveOut, TransferOut, TransferIn, Recertification, Adjustment, InitialCert
Description: Identifies how this unit is being utilized
xml Type: element
Data Type: UnitType
Required: yes

Name: NumOccupants
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: How many people are living in the unit – excludes L-live in attendants and N-None of the above
xml Type: element
Data Type: Positive Integer
Required: yes

Name: MostRestrictiveIncomeDesignation
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: The most restrictive income set-aside percentage that is being applied to the household. This value may be the same as the FederalIncomeDesignation or a lesser amount. Use 0 for market rate household
xml Type: element
Data Type: OwnerDesignation
Required: yes

Name: MostRestrictiveRentDesignation
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: The most restrictive rental set-aside percentage that is being applied to the household. This value may be the same as the FederalIncomeDesignation or a lesser amount. Use 0 for market rate household
xml Type: element
Data Type: OwnerDesignation
Required: yes

Name: FederalMaxEligibleIncome
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: Maximum LIHTC income for the household based on household size and the FederalIncomeDesignation percentage for the household.
xml Type: element
Data Type: STDMoney
Required: yes

Name: FederalMaxEligibleLIHTCRent
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: Maximum LIHTC rent for the household based on household size and the FederalIncomeDesignation percentage for the household.
xml Type: element
Data Type: STDMoney
Required: yes

Name: MostRestrictiveMaxLIHTCIncome
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: The LIHTC maximum allowable income for the unit based on an IncomeDesignation percentage that is lower than the FederalIncomeDesignation.
xml Type: element
Data Type: STDMoney
Required: no

Name: MostRestrictiveMaxLIHTCRent
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: The LIHTC maximum allowable gross rent for the unit based on the number of bedrooms and an IncomeDesignation percentage that is lower than the FederalIncomeDesignation.
xml Type: element
Data Type: STDMoney
Required: no

Name: AnnualIncome
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: The projected annual income for the household for the duration of the compliance period including income from assets.
xml Type: element
Data Type: STDMoney
Required: yes

Name: TenantRent
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert,
Description: The portion of the rent paid by the tenant.
xml Type: element
Data Type: STDMoney
Required: yes

Name: UtilityAllowance
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert,
Description: The amount of utilities, for a particular unit, set by a utility allowance schedule which is published either by HUD, Rural Development or the Public Housing Authority, or a letter from the utility company which states the rates
xml Type: element
Data Type: STDMoney
Required: yes

Name: FederalRentAssistanceAmount
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: Federal rental subsidy amount
xml Type: element
Data Type: STDMoney
Required: yes

Name: SourcesOfFederalRentAssistance
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: The single program under which the federal subsidy portion of rent is being paid.
xml Type: element
Data Type: FederalSubsidyType
Required: yes

Name: TotalMonthlyRentAssistance
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: The total amount of both federal and non federal rental assistance.
xml Type: element
Data Type: STDMoney
Required: yes

Name: OtherNonFederalRentAssistance
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: The non federal portion of the rent paid by a third party such as a housing authority.
xml Type: element
Data Type: STDMoney
Required: yes

Name: SourceOfOtherNonFederalRentAssistance
Category: Initial, MoveIn, TransferIn, Recertification and Adjustment
Description: The program under which the non-federal subsidy portion of rent is being paid.
xml Type: element
Data Type: OtherSubsidyType
Required: yes

Name: NonOptionalCharges
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert,
Description: The amount of non-optional charges, such as mandatory garage rent, storage lockers, charges for services provided by the development, etc.
xml Type: element
Data Type: STDMoney
Required: yes

Name: MaxLIHTCRent
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert,
Description: The LIHTC maximum allowable gross rent for the unit based on the number of bedrooms and IncomeDesignation percentage.
xml Type: element
Data Type: STDMoney
Required: yes

Name: HouseholdType
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: Household designation
xml Type: element
Data Type: HouseholdType
Required: yes

Name: AllStudentHousehold
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: If all household members are full-time students, set as True. If at least one household member is not a full time student, set as False.
xml Type: element
Data Type: BinaryDigit
Required: yes

Name: StudentUseCode
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: If all household members are full-time students, identify the qualifying exception. Enter NA for a household which is not comprised of all full-time students.
xml Type: element
Data Type: StudentCode
Required: yes

Name: EmploymentType
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: The type of employment worked by the household.
xml Type: element
Data Type: EmploymentType
Required: yes

Name: HeadOfHousehold
Category: MoveIn, MoveOut, TransferOut, TransferIn, Recertification, Adjustment, InitialCert,
Description: The member node for the head of household
xml Type: element
Data Type: MemberType
Required: yes

Name: ProgramType
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert,
Description: The type of program or programs for which this event is qualified.
xml Type: element
Data Type: ProgramType
Required: yes

Name: WagesTotal
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: Total amount of wages for the whole household.
xml Type: element
Data Type: STDMoney
Required: no

Name: SocialSecTotal
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: Total amount of social security benefits received by the whole household.
xml Type: element
Data Type: STDMoney
Required: no

Name: PublicAssistTotal
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: Total amount of public assistance received by the whole household.
xml Type: element
Data Type: STDMoney
Required: no

Name: OtherTotal
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: Total amount of other assistance received by the whole household.
xml Type: element
Data Type: STDMoney
Required: no

Name: AssetCashValueTotal
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: Total cash value for all assets for the whole household.
xml Type: element
Data Type: STDMoney
Required: no

Name: AnnualAssetIncomeTotal
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: Total amount of other assistance received by the whole household.
xml Type: element
Data Type: STDMoney
Required: no

Name: SourcesOfFederalRentAssistance
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: A collection of SourceOfFederalRentAssistance
xml Type: ComplexType
Required: yes

Name: Members
Category: MoveIn, TransferIn, Recertification, Adjustment, InitialCert
Description: A collection of MemberTypes
xml Type: ComplexType
Required: yes

Name: Member
Category: MoveIn:Members, TransferIn:Members, Recertification:Members, Adjustment:Members, InitialCert:Members
Description: The member nodes for all household members except the head of household.
xml Type: MemberType
Required: no

Name: AuxiliaryData
Category: MoveIn, MoveOut, TransferOut, TransferIn, Recertification, Adjustment, InitialCert, MemberType
Description: A collection of AuxDataType
xml Type: ComplexType
Required: yes

Name: AuxilData
Category: MoveIn:AuxiliaryData, MoveOut:AuxiliaryData, TransferOut:AuxiliaryData, TransferIn:AuxiliaryData, Recertification:AuxiliaryData, Adjustment:AuxiliaryData, InitialCert:AuxiliaryData, :AuxiliaryData, MemberType:AuxiliaryData
Description: Auxiliary data item nodes
xml Type: AuxDataType
Required: no

Name: TransferBIN
Category: TransferOut, TransferIn
Description: TransferOut: The BIN to which the household on this transfer-out event has transferred.
TransferIn: The BIN from which the household on this transfer-in event has transferred.
xml Type: element
Data Type: BIN
Required: yes

Name: TransferUnit
Category: TransferOut, TransferIn
Description: TransferOut: The Unit to which the household on this transfer-out event has transferred.
TransferIn: The Unit from which the household on this transfer-in event has transferred.
xml Type: element
Data Type: string
Required: yes

Name: OldMoveInDate
Category: TransferIn, Recertification, Adjustment, InitialCert
Description: The original move in date for the household for which this event is reporting.
xml Type: element
Data Type: STDate
Required: yes

MEMBER TYPE

Name: MemberType
Description: This complex type holds a member of the household, all income and asset information for this person.
xml Type: ComplexType

Name: FirstName
Category: MemberType
Description: The first name of the household member.
xml Type: attribute
Data Type: Name
Required: yes

Name: MiddleInitial
Category: MemberType
Description: The initial for the middle name of the household member.
xml Type: attribute
Data Type: Initial
Required: no

Name: LastName
Category: MemberType
Description: The last name of the household member.
xml Type: attribute
Data Type: Name
Required: yes

Name: SSN
Category: MemberType
Description: The social security number of the household member.
xml Type: attribute
Data Type: SSN
Required: no

Name: AlienRegNbr
Category: MemberType
Description: The alien registration number of the household member.
xml Type: attribute
Data Type: AlienRegNbr
Required: no

Name: Gender
Category: MemberType
Description: The gender of the household member.
xml Type: element
Data Type: Gender
Required: yes

Name: Ethnicity
Category: MemberType
Description: The ethnicity of the household member.
xml Type: element
Data Type: Ethnicity
Required: yes

Name: isDisabled
Category: MemberType
Description: Disability status.
Xml Type: Element
Data Type: isDisabled
Required: yes

Name: DateOfBirth
Category: MemberType
Description: The date of birth of the household member.
xml Type: element
Data Type: STDDate
Required: yes

Name: Age
Category: MemberType
Description: The age of the household member.
xml Type: element
Data Type: positive integer
Required: yes

Name: Relationship
Category: MemberType
Description: The relationship of the household member.
xml Type: element
Data Type: Relationship
Required: yes

Name: MaritalStatus
Category: MemberType
Description: The marital status of the household member.
xml Type: element
Data Type: MaritalStatus
Required: yes

Name: FullTimeStudent
Category: MemberType
Description: The full-time student status of the household member. 1 for full-time, 0 for other
xml Type: element
Data Type: BinaryDigit
Required: yes

Name: Incomes
Category: MemberType
Description: A collection of “Income” which holds a separate node for each income source for the household member. The collection is required. The collection may contain zero or more nodes.
xml Type: complex type
Required: yes

Name: Income
Category: MemberType:Incomes
Description: A node for each income source for the household member.
xml Type: complex type
Required: no

Name: IncomeType
Category: MemberType:Incomes
Description: An attribute which identifies the type of income of this node.
xml Type: attribute
Data Type: IncomeType
Required: yes

Name: IncomeVerificationSource
Category: MemberType:Incomes
Description: The income verification source indicates how the income information was obtained.
xml Type: element
Data Type: IncomeVerificationSource
Required: yes

Name: Amount
Category: MemberType:Incomes
Description: The annual income amount for this income source.
xml Type: element
Data Type: STDMoney
Required: yes

Name: Assets
Category: MemberType
Description: A collection of “Asset” which holds a separate node for each asset for the household member. The collection is required. The collection may contain zero or more nodes.
xml Type: complex type
Required: yes

Name: Asset
Category: MemberType:Assets
Description: A node for each asset recorded on the TIC for the household member.
xml Type: complex type
Required: no

Name: IncomeType
Category: MemberType: Assets
Description: An attribute which identifies the type of asset of this node.
xml Type: attribute
Data Type: AssetType
Required: yes

Name: AssetStatus
Category: MemberType: Assets
Description: The element explains how the asset income value was determined: Current income, imputed calculation or average income calculation.
xml Type: element
Data Type: AssetStatus
Required: yes

Name: AssetVerificationSource
Category: MemberType: Assets
Description: The asset verification source indicates how the asset information was obtained.
xml Type: element
Data Type: AssetVerificationSource
Required: yes

Name: CashValue
Category: MemberType:Incomes
Description: The computed cash value of the asset.
xml Type: element
Data Type: STDMoney
Required: yes

Name: AnnualIncome
Category: MemberType:Incomes
Description: The computed annual income projection of the asset for the next year.
xml Type: element
Data Type: STDMoney
Required: yes

Name: SpecialStatuss
Category: MemberType
Description: A collection of "SpecialStatus" which holds a separate node for each SpecialStatus for the household member. SpecialStatus is an enumeration which holds descriptors (elderly, disabled, homeless, etc.) for the applicant. The collection is required, but can contain zero nodes if there are no SpecialStatus codes applied to the household member.
xml Type: complex type
Required: yes

Name: SpecialStatus
Category: MemberType: SpecialStatus
Description: An individual SpecialStatus element in the collection that apply for the respective household member.
xml Type: element
Data Type: SpecialStatus
Required: no

Name: Races
Category: MemberType
Description: A collection of "Race" which holds a separate node for each Race that applies for the household member. The collection of Races is required and it must contain between one and 6 of "Race" nodes, inclusive.
xml Type: complex type
Required: yes

Name: Race
Category: MemberType: Races
Description: An individual Race element in the collection that apply for the household member.
xml Type: element
Data Type: RaceType
Required: yes

AUX DATA TYPE

Name: AuxDataType

Description: The usage of AUX data allows the creator of the XML file to include additional data that is not part of the standard. Usage of the AUX data should NOT be used for compliance related data. If there is a deficiency in the XML standard, this should be brought to the attention of the standards committee for review. The AUX data is comprised of two elements – a choice of the type of data, and then a string to hold the name of the data being sent.

xml Type: choice: MoneyData, DataData, StringData, IntData

Name: MoneyData

Category: AuxDataType

Description: If the AuxDataType is a money or numeric value with two decimal places value, then use this element for the choice.

xml Type: element

Data Type: STDMoney

Required: no

Name: DateData

Category: AuxDataType

Description: If the AuxDataType is a date value, then use this element for the choice.

xml Type: element

Data Type: STDDate

Required: no

Name: StringData

Category: AuxDataType

Description: If the AuxDataType is a string or text value, then use this element for the choice.

xml Type: element

Data Type: string

Required: no

Name: IntData

Category: AuxDataType

Description: If the AuxDataType is an integer (numeric with no decimal places) value, then use this element for the choice.

xml Type: element

Data Type: integer

Required: no

Name: DataName

Category: AuxDataType

Description: When an AuxDataType node is added, the DataName field is required. This is a string value that holds the name of the data that is being sent.

xml Type: attribute

Data Type: string

Required: yes

PROGRAM TYPE

Name: ProgramType
Description: This complex type holds the information about which program or programs for which an event is qualified.

xml Type: ComplexType

Name: TaxCredit
Category: ProgramType
Description: Tax Credit Program
xml Type: element
Data Type: yesno
Required: yes

Name: HOME
Category: ProgramType
Description: HOME Program
xml Type: element
Data Type: yesno
Required: yes

Name: HomeIncomeStatus
Category: ProgramType
Description: AMGI Percentage for Home Program Income
xml Type: element
Data Type: AMGIPercentage
Required: yes

Name: TaxExempt
Category: ProgramType
Description: Tax Exempt Program
xml Type: element
Data Type: yesno
Required: yes

Name: TaxExemptIncomeStatus
Category: ProgramType
Description: AMGI Percentage for Tax Exempt Program Income
xml Type: element
Data Type: AMGIPercentage
Required: yes

Name: AHDP
Category: ProgramType
Description: AHDP Program
xml Type: element
Data Type: yesno
Required: yes

Name: AHDPIncomeStatus
Category: ProgramType
Description: AMGI Percentage for AHDP Program Income
xml Type: element
Data Type: AHDPAMGIPercentage
Required: yes

Name: OtherPrograms
Category: MemberType
Description: A collection of “OtherProgram” which holds a separate node for each OtherProgram for the event. OtherProgram is an enumeration which holds descriptors (name of the program, income status) for the program. The collection is optional.
xml Type: complex type
Required: no

Name: OtherProgram
Category: ProgramType
Description: This complex type holds the information about other programs for which an event is qualified. Can have a maximum of 10 OtherPrograms
xml Type: ComplexType
Required: no

Name: NameOfTheProgram
Category: ProgramType: OtherProgram
Description: Other Program Name
xml Type: element
Data Type: xs:string
Required: yes

Name: IncomeStatus
Category: ProgramType:OtherProgram
Description: Other Program Income Status
xml Type: element
Data Type: integerOpt
Required: yes

5. IndustryStandard V4.0.XSD

The IndustryStandardV4.0.xsd is the document which defines the transmission file to hold all data. This file uses the events defined in the DefaultEventsV4.0.xsd and data elements defined in the DefaultTypesV4.0.xsd. The file will contain a series of events that took place over a date range.

- Include DefaultTypesV4.0.xsd
- Include DefaultEventsV4.0.xsd

This file contains a root node for the Project. A file can only contain one Project. The Project node contains the following attributes.

Name: ProjectID
Category: Project
Description: This field contains the ID of the project contained in the transmission file. This will be assigned to the management company by the respective State Housing Finance Agency.
xml Type: attribute
Data Type: ProjectID type. See DefaultTypesV4.0.xsd.
Required: yes

Name: PropertyName
Category: Project
Description: This field contains the name of the property contained in the transmission file.
xml Type: attribute
Data Type: PropertyName type. See DefaultTypesV4.0.xsd.
Required: no

Name: VendorName
Category: Project
Description: This field contains the name of the software vendor who created the XML transmission file.
xml Type: attribute
Data Type: VendorName type. See DefaultTypesV4.0.xsd.
Required: yes

Name: CreateDate
Category: Project
Description: The date the transmission file was created
xml Type: attribute
Data Type: STDDate type. See DefaultTypesV4.0.xsd.
Required: yes

Name: ReportingStartDate
Category: Project
Description: The beginning date of the date range for the transmission file.
xml Type: attribute
Data Type: STDDate type. See DefaultTypesV4.0.xsd.
Required: yes

Name: ReportingEndDate
Category: Project
Description: The ending date of the date range for the transmission file.
Data Type: STDDate type. See DefaultTypesV4.0.xsd.
Required: yes

There is one data element for the Project node:

Name: Buildings
Category: Project
Description: This is a collection of Building types. There can only be one collection of buildings within the project.
xml Type: Complex Type
Data Type: collection
Required: yes

The Buildings has one element, a Building:

Name: Building
Category: Project:Buildings
Description: This is an individual Building within the Buildings collection. There can be multiple Building nodes within the Buildings collection.
Data Type: Complex Type
Required: yes

A Building has the following attributes:

Name: BIN
Category: Project:Buildings:Building
Description: This holds the Building Identification Number that is assigned to each building from the State Housing Finance Agency.
xml Type: attribute
Data Type: BIN type. See DefaultTypesV4.0.xsd.
Required: yes

Name: StreetAddress
Category: Project:Buildings:Building
Description: This holds the street address where each building is located.
xml Type: attribute
Data Type: StreetAddress type. See DefaultTypesV4.0.xsd.
Required: no

Name: City
Category: Project:Buildings:Building
Description: This holds the city where each building is located.
xml Type: attribute
Data Type: City type. See DefaultTypesV4.0.xsd.
Required: no

Name: State
Category: Project:Buildings:Building
Description: This holds the state where each building is located.
xml Type: attribute
Data Type: StateCode type. See DefaultTypesV4.0.xsd.
Required: no

Name: PostalCode
Category: Project:Buildings:Building
Description: This holds the postal code where each building is located.
xml Type: attribute
Data Type: PostalCode type. See DefaultTypesV4.0.xsd.
Required: no

Name: FederalIncomeDesignation
Category: Project:Buildings:Building
Description: This holds the Federal Project Set-Aside percentage set by project owner(s) for the building as recorded on IRS form 8609 and contained in the transmission file.
xml Type: attribute
Data Type: OwnerDesignation Type. See DefaultTypesV4.0.xsd.
Required: yes

There is one data element for the Building node:

Name: Units
Category: Project:Buildings:Building
Description: This is a collection of Units. There can be only one Units collection within each Building. The collection of units will be the units, by building, that have any units to be reported over this report date range.
Data Type: Complex Type
Required: yes

There is one data element for the Units node:

Name: Unit
Category: Project:Buildings:Building:Units
Description: This is an individual Unit within the Units collection. There can be multiple Unit nodes within the Units collection.
Data Type: Complex Type
Required: yes

A Unit has the following attributes:

Name: UnitNumber
Category: Project:Buildings:Building:Units
Description: This holds the unit number description for the unit. This is the friendly unit number that appears on the TIC. This should match the unit number that the State Housing Finance Agency has on file.
xml Type: attribute
Data Type: UnitNumber type. See DefaultTypesV4.0.xsd.
Required: yes

Name: Bedrooms
Category: Project:Buildings:Building:Units
Description: This holds the number of bedrooms for the unit.
xml Type: attribute
Data Type: xs: integerOpt
Required: no

Name: SqFt
Category: Project:Buildings:Building:Units
Description: This holds the area in square feet for the unit.
xml Type: attribute
Data Type: xs:positiveInteger
Required: no

There is one data element for the Unit node:

Name: Events
Category: Project:Buildings:Building:Units:Unit
Description: This is a collection of Events. There can be only one Events collection within each Unit. The collection of events will be the events, by unit, by building, that have any units to be reported over this report date range.
xml Type: Complex Type
Data Type: collection
Required: yes

There is one data element for the Events node:

Name: Event
Category: Project:Buildings:Building:Units:Unit:Events
Description: This is an individual Event within the Events collection. There can be multiple Event nodes within the Events collection.
Data Type: Complex Type
Required: yes

An Event has the following attributes:

Name: EventDate
Category: Project:Buildings:Building:Units:Unit:Events:Event
Description: This is the actual date that this compliance event occurred.
xml Type: attribute
Data Type: STDType type. See DefaultTypesV4.0.xsd.
Required: yes

Name: EventType
Category: Project:Buildings:Building:Units:Unit:Events:Event
Description: This explains the type of event being reported.
xml Type: attribute
Data Type: EventType type. See DefaultTypesV4.0.xsd.
Required: yes

Name: IsCorrection
Category: Project:Buildings:Building:Units:Unit:Events:Event
Description: This explains the type of event being reported.
xml Type: attribute
Data Type: BinaryDigit type. See DefaultTypesV4.0.xsd.
Required: yes

Name: OriginalEventDate
Category: Project:Buildings:Building:Units:Unit:Events:Event
Description: This is the original date that this compliance event occurred. xml
Type: attribute
Data Type: OptionalDate type. See DefaultTypesV4.0.xsd.
Required: yes

Name: CorrectionEffectiveDate
Category: Project:Buildings:Building:Units:Unit:Events:Event
Description: This is the date when the correction occurred.
xml Type: attribute
Data Type: OptionalDate type. See DefaultTypesV4.0.xsd.
Required: yes