

High Cost Universal Broadband (HUBB) Data Formatting Instructions

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Version History

Date	Change Description
1/23/2017	<ol style="list-style-type: none">1. Added new validations to both the HUBB2. For each validation error code, we've listed which software application can detect that specific error
3/30/2017	<ol style="list-style-type: none">1. Added new validations for ACAM and CAF II late locations2. Added new validation for CAF I duplicate check for CAF II carriers3. Added column to distinguish validation errors from warnings
5/3/2017	Added HUBB ID error information
12/31/2018	Added Alaska Plan speed tier table

HIGH COST HUBB DATA FORMATTING INSTRUCTIONS

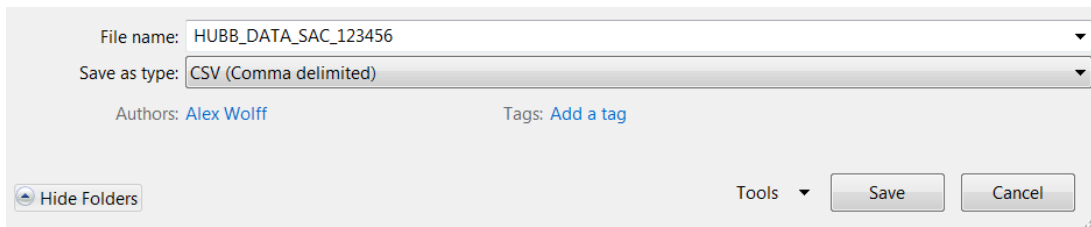
Preparing Your Data Upload

Use the USAC Template

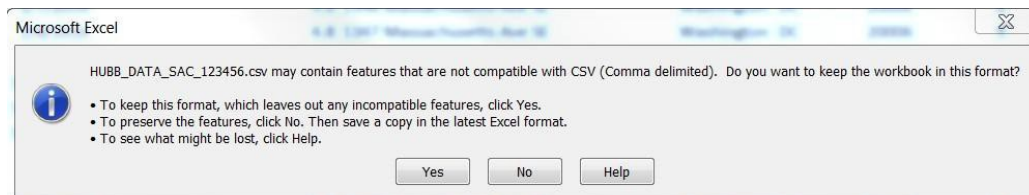
The USAC template shows all the fields that you must include and how you need to format them according to the Data Specification guide below. You can download the template from the HUBB Tool. Please limit the file name to <50 characters or it will not be accepted.

Use the Correct File Format

You must upload your location data to the HUBB as a plain-text, comma-separated (CSV) file. To convert a Microsoft Excel (.xlsx) into a CSV file, within Excel, select **File** > **Save As**, choose **CSV (Comma delimited)** and select **Save**.



Microsoft Excel may prompt you to confirm the file type. If you see the following pop-up box, select **Yes**.



Include the Template Header Row

You must include the column headers used in the CSV template in the first row of each file you upload. If your file's header row does not match our CSV template exactly, the file will not upload. If this happens, correct the header and then try uploading it again.

Use Quotes for Fields with Commas

If the Address and/or City fields, as shown in the Data Specification guide below, contain commas, you must wrap the content in double quotes e.g., "123 Main St, Building 1." Most software applications will do this automatically. Commas are only allowed in the Address and City fields.

Data Specification

Below is a guide to the fields you need to include in your data upload and how you should format the location data. To determine which locations “qualify” and must be reported in a particular reporting period, please review Commission guidance and relevant orders.

Field = required	Description	Entry Type	Max Length	Example
Study Area Code*	The 6-digit Study Area Code (SAC) for the study area containing the location. <i>Note: For CAF II and ACAM, carriers that chose one “administrative” SAC per state for their statewide obligation should only use the “administrative” SAC number.</i>	Integer	6	579999
Latitude*	Latitude of the location to which you have made service available. It must have at least 6 decimal places. Coordinates must be in the WGS84 or NAD83 geographic coordinate system.	Float	N/A	39.509220
Longitude*	Longitude of the location to which you have made service available. It must have at least 6 decimal places. Coordinates must be in the WGS84 or NAD83 geographic coordinate system.	Float	N/A	-98.433700
Date of Deployment*	The date on which you made service available to this location. Service is “available” if the location can receive service within 10 business days of a service request. While the year must be 4 digits, you can enter single digit months e.g., 01/01 or 1/1 = January 1.	Date	10	02/28/2017 or 2/28/2017

Field	Description	Entry Type	Max Length	Example																											
Download/ Upload Speed Tier*	<p>Speed/bandwidth threshold of the Internet access service deployed to this location. Enter a Speed Tier ID from the table below.</p> <p>The bandwidth offered at this location should meet or exceed the bandwidth indicated by the Speed Tier ID and the carrier’s deployment and/or reporting obligations. For example, recipients of Phase II model-based support (CAF II) must provide and report service at or above 10/1 Mbps, but if the service at a location is 25/3 Mbps, the carrier could enter Speed Tier ID 3 or 4. A location with a Speed Tier ID of 2 would be rejected as too low for CAF II.</p> <p>The following chart should be used by recipients of all funds EXCEPT Alaska Plan</p> <table border="1" data-bbox="422 834 1446 1412"> <thead> <tr> <th data-bbox="422 834 644 906">Speed Tier ID</th> <th data-bbox="644 834 976 906">Download Speed</th> <th data-bbox="976 834 1446 906">Upload Speed (Meets or Exceeds)</th> </tr> </thead> <tbody> <tr> <td data-bbox="422 906 644 971">1</td> <td data-bbox="644 906 976 971">1 Mbps</td> <td data-bbox="976 906 1446 971">256 kbps</td> </tr> <tr> <td data-bbox="422 971 644 1036">2</td> <td data-bbox="644 971 976 1036">4 Mbps</td> <td data-bbox="976 971 1446 1036">1 Mbps</td> </tr> <tr> <td data-bbox="422 1036 644 1101">3</td> <td data-bbox="644 1036 976 1101">10 Mbps</td> <td data-bbox="976 1036 1446 1101">1 Mbps</td> </tr> <tr> <td data-bbox="422 1101 644 1166">4</td> <td data-bbox="644 1101 976 1166">25 Mbps</td> <td data-bbox="976 1101 1446 1166">3 Mbps</td> </tr> <tr> <td data-bbox="422 1166 644 1230">5</td> <td data-bbox="644 1166 976 1230">25 Mbps</td> <td data-bbox="976 1166 1446 1230">5 Mbps</td> </tr> <tr> <td data-bbox="422 1230 644 1295">6</td> <td data-bbox="644 1230 976 1295">100 Mbps</td> <td data-bbox="976 1230 1446 1295">20 Mbps</td> </tr> <tr> <td data-bbox="422 1295 644 1360">7</td> <td data-bbox="644 1295 976 1360">100 Mbps</td> <td data-bbox="976 1295 1446 1360">25 Mbps</td> </tr> <tr> <td data-bbox="422 1360 644 1412">8</td> <td data-bbox="644 1360 976 1412">1 Gbps</td> <td data-bbox="976 1360 1446 1412">500 Mbps</td> </tr> </tbody> </table>	Speed Tier ID	Download Speed	Upload Speed (Meets or Exceeds)	1	1 Mbps	256 kbps	2	4 Mbps	1 Mbps	3	10 Mbps	1 Mbps	4	25 Mbps	3 Mbps	5	25 Mbps	5 Mbps	6	100 Mbps	20 Mbps	7	100 Mbps	25 Mbps	8	1 Gbps	500 Mbps	Integer	1	3
Speed Tier ID	Download Speed	Upload Speed (Meets or Exceeds)																													
1	1 Mbps	256 kbps																													
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3	10 Mbps	1 Mbps																													
4	25 Mbps	3 Mbps																													
5	25 Mbps	5 Mbps																													
6	100 Mbps	20 Mbps																													
7	100 Mbps	25 Mbps																													
8	1 Gbps	500 Mbps																													

Field	Description				Entry Type	Max Length	Example
Download/ Upload Speed Tier*	The following chart should be used by recipients of Alaska Plan ONLY				Integer	1	3
	Speed Tier ID	Download Speed	Upload Speed	Middle Mile			
	1	1 Mbps	256 Kbps	Satellite			
	2	4 Mbps	1 Mbps	Microwave			
	3	6 Mbps	1 Mbps	Microwave			
	4	10 Mbps	1 Mbps	Microwave			
	5	10 Mbps	1 Mbps	Fiber			
	6	25 Mbps	3 Mbps	Microwave/Fiber			
	7	25 Mbps	3 Mbps	Fiber			
	8	50 Mbps	5 Mbps	Fiber			
9	100 Mbps	5 Mbps	Fiber				

Field	Description	Entry Type	Max Length	Example
Address*	<p>Number and street address of this location. If possible, use the standardized Postal Service format. However, this information will be neither standardized nor validated by the HUBB.</p> <p>If a location does not have a traditional street address, enter a description of where the served premises is located (e.g., an intersection, a road, etc.).</p>	Text	100	715 Wisconsin Street
City*	City associated with this location.	Text	50	Cawker City
State*	2-letter postal abbreviation of the state associated with this location.	Text	2	KS
ZIP Code*	5-digit ZIP code associated with this location. ZIP codes that begin with a 0 must include that leading digit (e.g., “06804” cannot be reported as “6804”). This field must be stored as text so that leading zeroes are not dropped.	Text	5	67430
# of Units*	<p>The number of units associated with this location.</p> <p>If the address or building contains only one housing unit or business location, enter 1.</p> <p>If the location is a building with multiple units, such as an apartment or office building containing qualifying locations, enter the number units at that location. Each unit should be a separate housing unit or business location and will be counted as an individual location for buildout requirement purposes.</p> <p>You must enter an integer greater than or equal to 1 in this field.</p>	Integer	N/A	1

Field	Description	Entry Type	Max Length	Example
Carrier Location ID	The Carrier Location ID field is available for carriers to add their internal ID associated with a location. If you do not have an ID available, this field can be left blank.	Text	50	12345

Error Codes

After you upload your data, the HUBB tool will identify any errors and/or warnings in your data. Here's a guide to the system's short-hand codes including which system can check for each error/warning. Note: locations with only warnings can be submitted and saved in the HUBB.

SAC		Validation Type
SAC_REQUIRED	The Study Area Code field is missing data. This is a required field.	Error
INVALID_SAC	The Study Area Code must be a valid, 6-digit identifier assigned by USAC.	Error
INVALID_SAC_FUND	The Study Area Code listed must be participating in CAF II, ACAM, or CAF-BLS. You can only upload locations for these three funds into the application at this time.	Error
INVALID_SAC_FORMAT	The Study Area Code should be in number format without any non-numeric characters.	Error
USER_NOT_AUTHORIZED_FOR_SAC	Users must have the appropriate permissions/entitlements to file data on behalf of each Study Area Code entered. To correct permission issues, contact your Company Officer to add the "Form 481/HUBB" entitlement for the 498 ID of the location's SAC.	Error

Latitude		Validation Type
INVALID_LAT_DEGREE_RANGE	The latitude range must be between -90 and 90, inclusive.	Error
INVALID_LAT_FORMAT	The latitude must be in number format without any non-numeric characters.	Error
LAT_DECIMAL_EQL_5_DIGITS	The latitude only has 5 digits when it should have a minimum of 6 digits to the right of the decimal.	Warning
LAT_DECIMAL_MIN_6_DIGITS	The latitude should have a minimum of 6 digits to the right of the decimal.	Error
LAT_DECIMAL_MAX_13_DIGITS	The latitude should have a maximum of 13 digits to the right of the decimal.	Error
LAT_REQUIRED	The latitude field is missing data. This is a required field.	Error

Longitude		Validation Type
INVALID_LON_DEGREE_RANGE	The longitude range must be between - 180 and 180, inclusive.	Error
INVALID_LON_FORMAT	The longitude must be in number format without any non-numeric characters.	Error
LON_DECIMAL_EQ_L_5_DIGITS	The longitude field has 5 digits when it should have a minimum of 6 digits to the right of the decimal.	Warning
LON_DECIMAL_MIN_6_DIGITS	The longitude field should have a minimum of 6 digits to the right of the decimal.	Error
LON_DECIMAL_MAX_13_DIGITS	The longitude field should have a maximum of 13 digits to the right of the decimal.	Error
LON_REQUIRED	The longitude is missing data. This is a required field.	Error

HUBB		Validation Type
INVALID_CARRIER_LOCATION_ID	There are more than 50 characters are entered in the Carrier Location ID field.	Error

Latitude and Longitude		Validation Type
LOC_UNFUNDED_CB_CAFII	The latitude or longitude field(s) is not within your CAF II eligible service area. Click here to download eligible census blocks by SAC from the FCC's website. Note: eligible areas used for validations in the HUBB may have changed for some carriers.	Error
LOC_UNFUNDED_CB_ACAM	The latitude or longitude field(s) is not within your ACAM eligible service area. Click here to download eligible census blocks by SAC from the FCC's website. Note: eligible areas used for validations in the HUBB may have changed for some carriers.	Error
LAT_LON_NON_US	The latitude or longitude field(s) is not within the United States or territories. These field(s) must be within the U.S. or territory.	Error
INVALID_LOC_SAB_CAFBLS	The latitude or longitude field(s) is not within your CAF- BLS Study Area boundary associated with the SAC code.	Error
DUPLICATE_LOCATION_IN_FILE	The location is a duplicate of location(s) in the current upload file for this SAC.	Error

Latitude and Longitude (continued)		Validation Type
DUPLICATE_LOCATION_SAVED	The location is a duplicate of a previously uploaded and saved location for this SAC.	Error
DUPLICATE_LOCATION_NOT_SAVED	The location is a duplicate of a previously uploaded, but unsaved location for this SAC. The “original” location may have been uploaded by a colleague or consultant.	Error
DUPLICATE_LOCATION_CAFI	The CAF II location is a duplicate of a previously submitted CAF I, round 2 location for this SAC. CAF I, round 2 locations are submitted by carriers through the Form 481.	Error

Date of Deployment		Validation Type
INVALID_DATE_ACAM	The date of deployment cannot be prior to 01/01/2000 for ACAM fund participants.	Error
INVALID_DATE_CAFII	The date of deployment cannot be prior to 01/01/2000 for CAF II fund participants.	Error
INVALID_DATE_CAFBLS	The date of deployment cannot be prior to 05/25/2016 for CAF-BLS fund participants.	Error
INVALID_DATE_FORMAT	The date of deployment field is in an incorrect format. The correct format is: (M)M/(D)D/YYYY.	Error
DATE_REQUIRED	The date of deployment is missing data. This is a required field.	Error
INVALID_DATE_FUTURE	The date of deployment cannot occur in the future.	Error
LATE_LOCATION_CAFII	This location was submitted and certified after the filing deadline for the Funding Year report in which it should have been submitted. For example, CAF II recipients must file all locations deployed in 2017 by March 1, 2018.	Warning
LATE_LOCATION_ACAM	This location was submitted and certified after the filing deadline for the Funding Year report in which it should have been submitted. For example, CAF-ACAM recipients must file all locations deployed in 2017 by March 1, 2018. Pre-2017 locations must be filed by March 1, 2019.	Warning

Speed Tier ID		Validation Type
INVALID_SPEED_TIER_ID	The speed tier ID must be a valid number that corresponds with an Upload/Download Speed Tier.	Error
SPEED_TIER_ID_REQUIRED	The speed tier ID is missing data. This is a required field.	Error
INVALID_SPEED_TIER_ID_FORMAT	The speed tier ID should be in number format without any non-numeric characters.	Error
INVALID_SPEED_TIER_ID_FOR_FUND	The speed tier ID cannot be selected for the SAC's fund. For example, "4 Mbps download, 1 Mbps upload" is less than the minimum permissible speed for deployment or reporting of CAF II locations under FCC rules.	Error
SPEED_TIER_ID_SAT_BACKHAUL	Speed Tier 1 can only be selected if the study area has no access to terrestrial backhaul. Please see CFR 54.313 (g) to confirm applicability for this location.	Error

Address		Validation Type
INVALID_ADDRESS_LENGTH	An address cannot exceed 100 characters.	Error
ADDRESS_REQUIRED	The address field is missing data. This is a required field.	Error
INVALID_CITY_LENGTH	The city field cannot exceed 50 characters.	Error
CITY_REQUIRED	The city field is missing data. This is a required field.	Error
INVALID_STATE	The state field must be a valid 2-digit USPS state code.	Error
STATE_REQUIRED	The state field is missing data. This is a required field.	Error
INVALID_ZIP_CODE	The ZIP code must be 5 digits. If the ZIP code begins with a 0, this leading 0 must be included in the ZIP code field.	Error
ZIP_CODE_REQUIRED	The ZIP code field is missing data. This is a required field.	Error
INVALID_NUMBER_OF_UNITS_RANGE	The number of units must be an integer greater than or equal to 1.	Error
INVALID_NUMBER_OF_UNITS_FORMAT	The number of units should be in number format without any non-numeric characters.	Error
NUMBER_OF_UNITS_REQUIRED	The number of units field is missing data. This is a required field.	Error

Miscellaneous		Validation Type
SYSTEM_ERROR	A system error occurred while processing this location and it was not validated. Please upload this location again.	Error