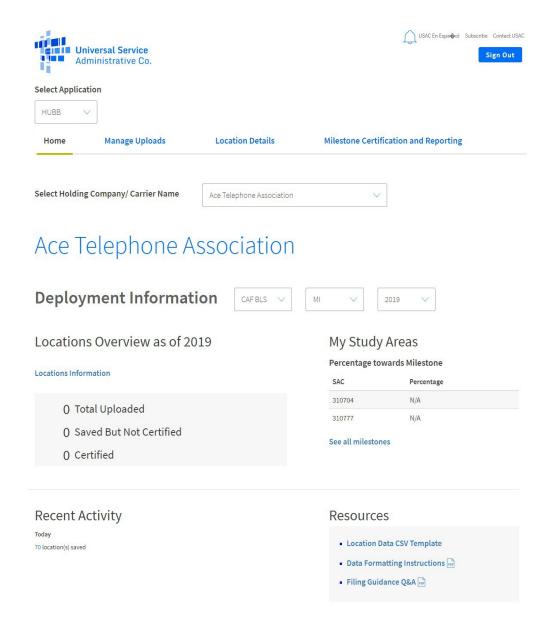


High Cost Universal Broadband (HUBB)
User Guide

Carriers participating in modernized Connect America Fund (CAF) programs must file broadband deployment data with USAC's HUBB (High Cost Universal Broadband) portal showing where they are building out mass-market, high-speed Internet service using CAF support. This information includes latitude and longitude coordinates for every location where service is available. This user guide provides a step-by-step overview of the HUBB filing process.

When carriers log into the HUBB via the USAC E-File system, this is the first screen they see.



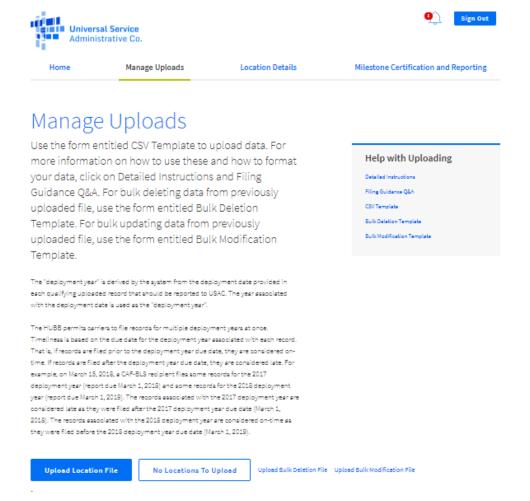
Users associated with multiple carriers should use the Holding Company/Carrier Name drop-down menu to view information for individual carriers.

Deployment information can be sorted by fund, state and deployment year.

The screen displays the number of locations uploaded, the number of locations that have been saved but not certified and the number of locations that have been certified.

This screen also shows progress toward deployment milestones, recent activity and HUBB resources.

Carriers upload CSV (comma separated values) files containing geolocated deployment data on the "Manage Uploads" page using the CSV template provided by USAC. This template can be found on the <u>HUBB resources page</u> or the HUBB Home page.



After a file is uploaded, the HUBB validates the data submitted.



Once the validation process is complete, users can review the data uploaded and any associated errors or warnings by clicking on the "Review Data" button, which brings up the "File Upload Details" screen.



File Upload Details

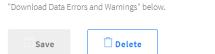
Summary

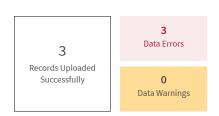
These are the validation results for HUBB New (used deleted) Locations for User Guide.csv. To fix errors or warnings, you can either delete all the locations and upload a new file, or edit each data entry individually using the table below.

Locations with one or more errors cannot be saved into the system.

Locations with one or more warnings can be saved into the system.

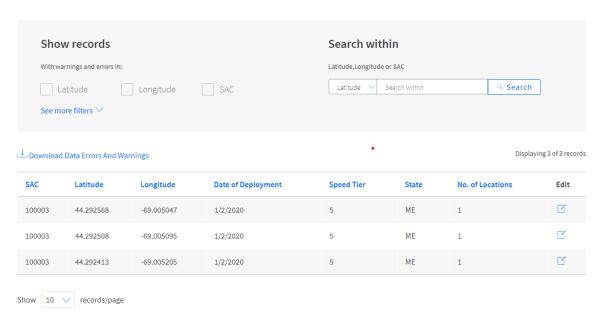
Note: The system does not display all errors for locations in the table below. To view the errors/warning codes, select the "Edit" icon in the table or the link





The "File Upload Details" screen also displays a graph of errors and warnings:

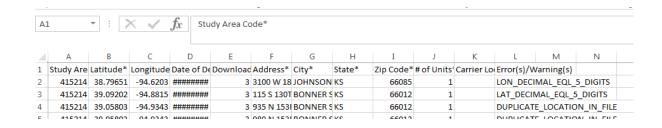
Records With Issues



See "Data Formatting Instructions" for details on error and warning codes.

The HUBB will not accept any data with errors.

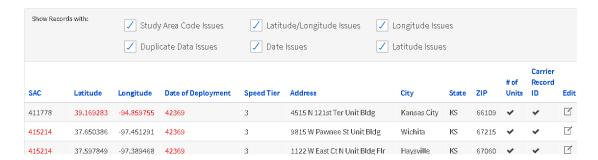
Users can click on "Download Data Errors and Warnings" to open an Excel file containing locations with errors or warnings. The Excel file looks like this:



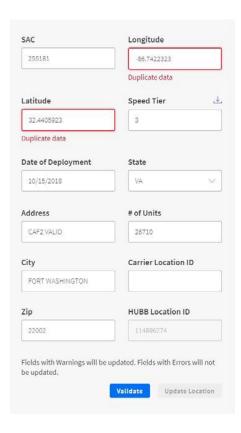
Users can find this same information by scrolling to the bottom of the "File Upload Details" screen, which shows details for each error or warning and provides the option to edit individual locations. Users can filter by issue and edit individual records by clicking the icon in the "Edit" column to the far right.

Records With Issues

- Any record with 1 or more errors cannot be saved into the system. The data for record must be corrected using the 'Edit' icon below or re-uploaded.
- Any record with 1 or more warnings can be saved into the system, but you may wish to double check the records with warnings, correct them using the 'Edit' icon below or re-upload prior to saving.
- Tip: use the filters below to isolate records with specific categories of errors/warnings.



When a user clicks on the Edit icon, this screen appears:



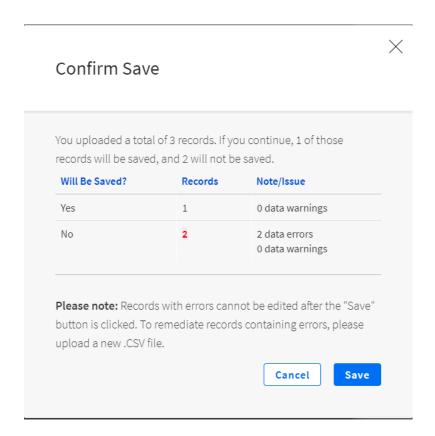
Users should make any necessary edits and click "Validate." The system then revalidates the location to determine if there are any remaining errors or warnings. If there are no errors, the "Update Location" button will become available.

On the "File Upload Details" screen, users can save locations with no errors, or delete locations to be re-uploaded after errors are fixed, by clicking in the "Data Options" box.



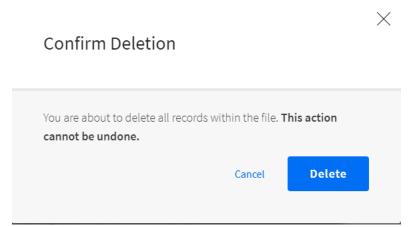
Records With Issues

Selecting "Save" opens a window to confirm that locations are to be saved.



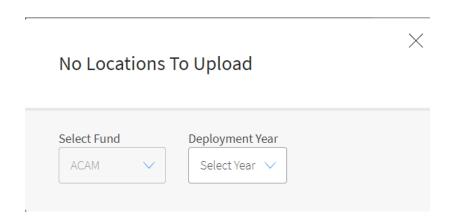
Please note that the locations will not appear on the Location Details screen for certification unless they are saved on this screen.

Selecting "Delete" opens a window to confirm that locations are to be deleted.

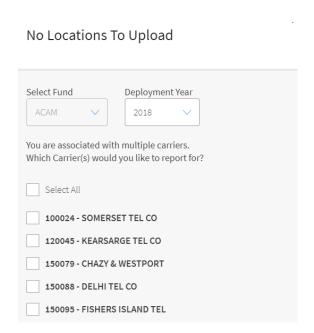


Carriers that did not deploy any new locations in the prior year must certify "No Locations To Upload." Note that only certifying officers can select this certification.

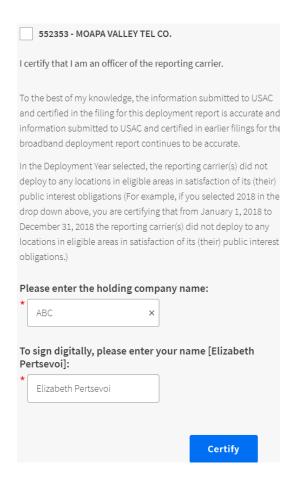
Clicking on the "No Locations To Upload" button on the "Manage Uploads" screen brings up the certification window. The officer is then prompted to select a fund and deployment year.



A list of carriers participating in the selected fund will appear when these two fields have been clicked.



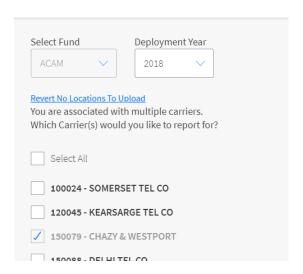
The officer should select the carriers with no new locations to upload and then certify at the bottom of the window.



A carrier that certifies "No Locations to Upload" in error can reverse the certification up to two times.

Clicking on "No Locations to Upload" brings up the screen listing the associated carriers. An officer can reverse a certification by clicking on "Revert No Locations to Upload."

No Locations To Upload



In the next window, the officer must indicate the carrier and the reason for reversing the certification.

Deployment Year 2018 Back You are indicating to USAC that you would like to overwrite previously certified No Locations to upload for this deployment Year. 150079 - CHAZY & WESTPORT I certify that I am an officer of the reporting carrier. CHAZY & WESTPORT To the best of my knowledge, the information submitted to USAC and certified in the filling for this deployment report is accurate and information submitted to USAC and certified in earlier fillings continues to be accurate. Please enter your reason for requesting an overwrite: * Please enter the holding company name: * To sign digitally, please enter your name [Elizabeth Pertsevoi]: *

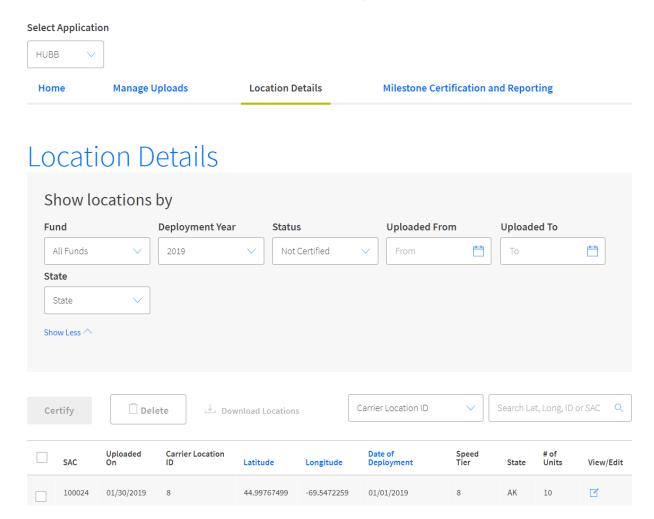
The "Location Details" page displays all saved locations.

Locations may be filtered by Fund, Deployment Year, Status (Certified, Not Certified, Bulk Modified and Bulk Deletion), Date Uploaded and State

Locations may be searched by SAC, Latitude, Longitude or Carrier Location ID using the drop-down menu and search field to the right of the "Download Locations" link.

Users may also download a report of locations that have been saved.

Users may view and edit individual location records that have been uploaded but not yet certified by clicking on the icon in the far right in the View/Edit column. Users can also delete locations that have not yet been certified.



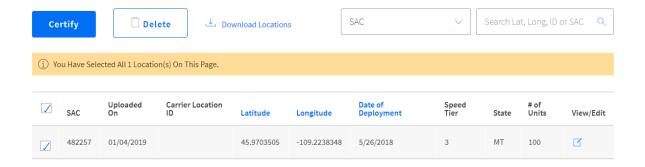
After the data is certified, the HUBB does allow revisions to speed tiers (to reflect network upgrades), month and day of deployment, addresses, and the last two digits of the latitude and/or longitude coordinates. If a carrier needs to revise any other portion of a certified location record before the filing deadline, the certifying officer must delete the entire record, and the carrier must then reupload a new record incorporating any changes.

Once the data is ready for certification, the certifying officer can select individual locations to certify using the checkboxes in the far left column, or can select all locations on the current page using the checkbox in the header.

The system does allow for bulk certification. Clicking on the box next to "Fund" in the header brings up a small link that asks if the carrier wants to select all records for certification at once (rather than just the ones that appear on the current page).

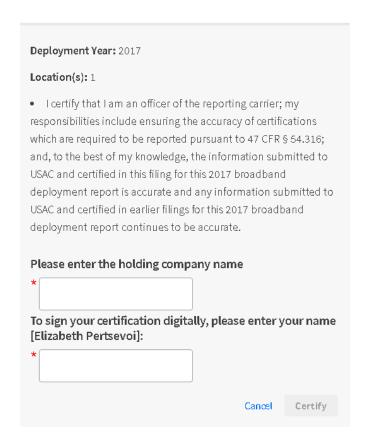
Once locations have been selected, the Certify and Delete buttons become available.

Note that the Certify button is only available to certifying officers.

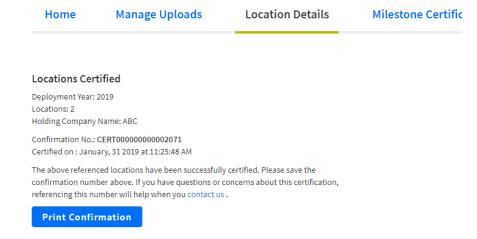


Clicking "Certify" brings up a pop-up window for certification. The name entered in the signature box must match the name in the brackets. The "Certify" button will become available once the certifying officer enters the holding company and name in the appropriate boxes.

Locations To Be Certified



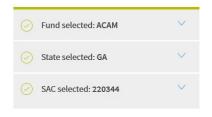
Following certification, a confirmation screen appears.



The "Milestone Certification and Reporting" page allows users to track deployment and reporting obligations, including a carrier's total build-out requirement, the number of locations submitted to the HUBB and progress toward meeting build-out milestones.



Milestone Certification and Reporting



Fields may automatically populate based on your uploaded file. You may edit your fields at any time.

In the table below, click a deployment year to view your uploaded locations by speed tier.

Disclaimer: This report provides feedback as data is added or removed from the HUBB. The information contained within this report is intended for informational purposes only to assist in compliance efforts and does not constitute a final determination of your compliance with the required performance obligations.

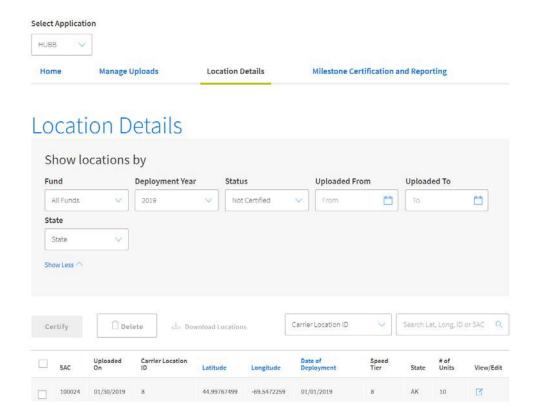
| Deployment Year | Locations Ready For Certification | Certified Locations | % of Certified Locations | Milestone Obligation % | Milestone on Target? | Certified On | Milestone Certification Status | View History |
|--------------------|--------------------------------------|------------------------|-----------------------------|---------------------------|-------------------------|-----------------|-----------------------------------|-----------------|
| 2016 | 0 | 0 | - | | - | - | | |
| 2017 | 0 | 0 | 2 | | 21 | 100 | | |
| 2018 | 0 | 0 | - | | - | - | | |
| 2019 | 0 | 0 | 2 | | 21 | 10 | | |
| 2020 | 0 | 0 | - | 40% | - | - | | |

Updating Previously Certified Records

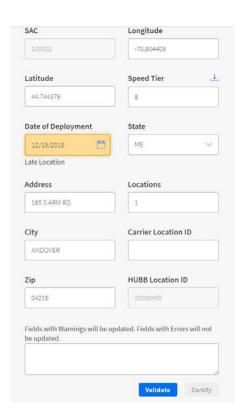
Officers can make revisions to location records in closed deployment years on a per-record basis or in bulk.

Updating a Single Location

To make a revision to a single record, the officer must login to the HUBB and locate the record using the drop-down menus and search fields on the "Location Details" screen.



Click the icon in the "View/Edit" column of the record that needs to be updated. A window will appear where the updates can be made.

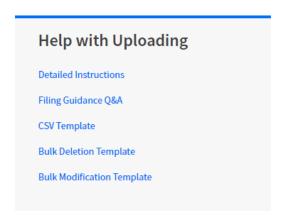


Officers should make the necessary updates and provide details of what has been updated in the text field provided.

Click the "Validate" button. When the validation is successful, the "Certify" button will become available. Officers must certify the record at this point or the changes made will be lost.

Bulk Modifications

Carriers must use the "Bulk Modification Template", which can be found on the Manage Uploads screen.



Complete the template to reflect the modifications that are being made to the records. Please note that fields marked with an asterisk (*) are required. Carriers can download records from the "Location Details" screen if they are missing any of the required fields.

Click on "Upload Bulk Modifications File" on the Manage Uploads screen to upload the completed bulk modifications file.



The bulk modifications file will appear in the list of Recently Uploaded Files.

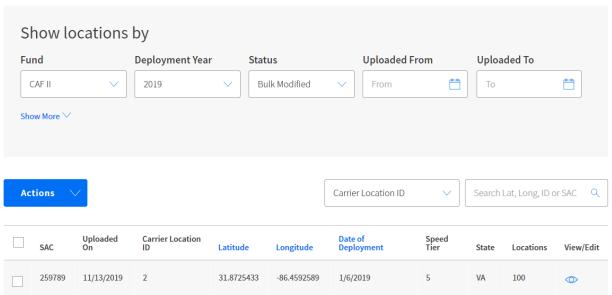
Recently Uploaded Files

| File Name | File Type | Uploaded | Progress | Records Uploaded | Data Errors & Warnings | Data Details |
|---|----------------------|---------------------------|----------|---------------------|---------------------------|-----------------------------------|
| HUBB Modification For User Guide.csv | Bulk Modification | Jan 4, 2021 1:24:59 PM | Complete | 4 | 3 0 | Error Log Review & Certify Data |

If there are any errors or warnings in the file, click "Error Log" to view the details.

Click on "Review & Certify Data" in the Data Details column, or go to the Location Details screen, to certify.

Location Details



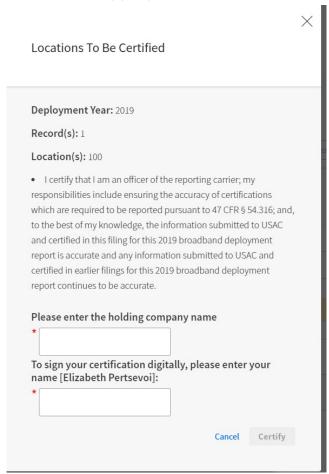
Use the "Bulk Modified" option in the Status field to display the locations that have been modified.

Individual records can be modified using the icon in the View/Edit column.

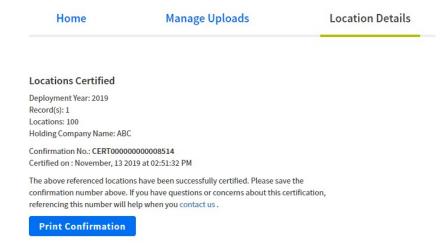
Select the locations to be certified using the check boxes next to each record or the check box in the header to select all. Select "Certify" from the Actions drop-downmenu.



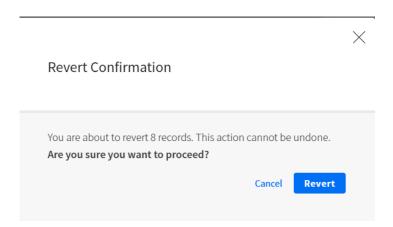
Clicking "Certify" brings up a pop-up window for certification. The name entered in the signature box must match the name in the brackets. The "Certify" button will become available once the certifying officer enters the holding company and name in the appropriate boxes.



Following certification, a confirmation screen appears.

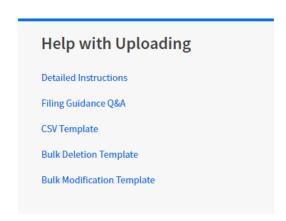


Carriers have the option to revert the modified records prior to certifying. If this option is selected, a window will ask for confirmation.



Bulk Deletion

Carriers must use the "Bulk Deletion Template", which can be found on the Manage Uploads screen.



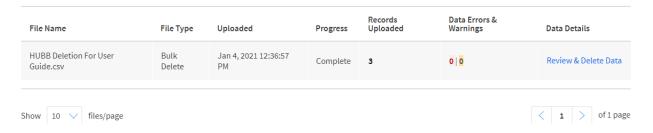
Complete the template to include the records that should be deleted. Each record must include a Reason Code. The "Reason Explanation" is a field that can be used for providing further details. The explanation is required when the "Other" reason code is used. See the Detailed Instructions for a list of Reason Codes.

Click on "Upload Bulk Deletion File" on the Manage Uploads screen to upload the completed bulk deletion file.

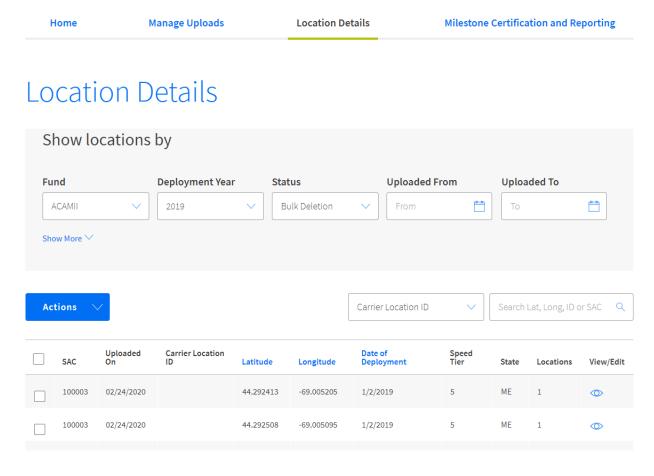


The bulk deletion file will appear in the list of Recently Uploaded Files.

Recently Uploaded Files



Click on "Review & Delete Data" in the Data Details column, or go to the Location Details screen, to certify. Please note that the locations will not be deleted from the HUBB until the officer has certified.



Use the "Bulk Deleted" option in the Status field to display the locations that were included in the bulk deletion template.

Select the locations to be certified using the check boxes next to each record or the check box in the header to select all. Select "Delete" from the Actions drop-downmenu.



The system will provide a warning that the deletions cannot be undone. Click Delete to complete the location deletions.

