Performance Measures Module User Guide

Covers Subscriber Upload, Performance Data Upload, and Compliance Report



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The FCC estimates that the response to this collection of information will take approximately 98 hours annually. This estimate includes time to gather and submit data for active subscribers, install any necessary software or testing equipment, conduct testing, and gather and submit results. For questions or comments on this estimate, or on how to improve the collection and reduce the burden it causes users, contact the Federal Communications Commission, Office of Managing Director, AMD-PERM, Washington, DC 20554, Paperwork Reduction Act Project (3060-1265). The FCC will also accept PRA comments via email at PRA@fcc.gov.

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General Information and System Requirements

Requirement	Description			
Internet Browsers and Versions Supported	 Safari version 10 and above Edge version 14 and above Chrome version 51 and above Firefox version 46 and above 			
User Access	Carrier GCs and SPOs are granted access to this system through the USAC One Portal/E-File system. Additional user access is granted by the 498 Officer of the company.			
Concurrent Accounts	Each organization is permitted an unlimited number of users. However, after six months of no usage, unused user accounts are deactivated.			
Session Timeout	Sessions will timeout after 30 minutes of inactivity. A warning message will appear five minutes prior to the expiration of your session.			



Portal Home Page

The initial landing point for the system is the **Upload Subscribers** page. The portal homepage has navigation links to three sections of the USAC Performance Measures Module (PMM): **Upload Subscribers, Subscriber Detail,** and **Randomizer**. Users can switch between these three sections by clicking on any of the links in the navigation header.

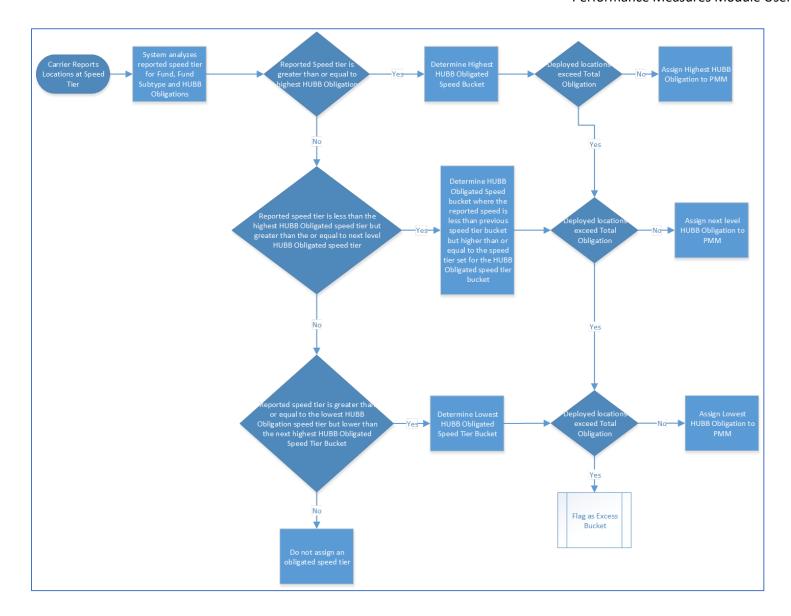
Downloading and Re-Uploading Data

The **Upload Subscribers** page allows users to select both Cycle and Fund to generate HUBB data and upload subscriber files. Only carriers that have entered certified broadband location data into the High Cost Universal Broadband (HUBB) portal against speed tier obligations can generate and download a valid template file. The "Speed Tier(s)" will be based on the Program Fund"s Final "Obligated Speed Tier" authorizations for each Study Area Code (SAC).

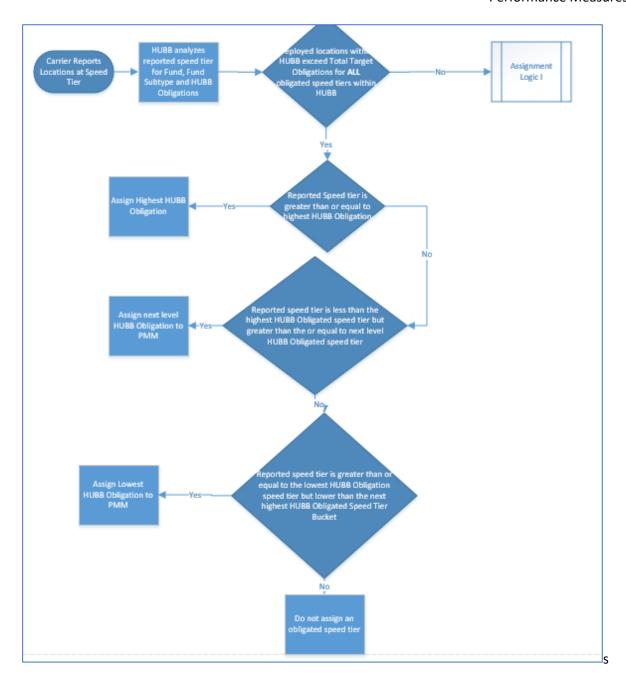
Fund	Speed Tier(s)
CAF II	10/1 Mbps
ACAM	4/1 Mbps, 10/1 Mbps, 25/3 Mbps
Alaska	Based on Authorizations (Varies)
RBE	Based on Authorizations (10/1 Mbps or 25/5 Mbps)
ACAM II	4/1 Mbps, 25/3 Mbps
CAF II	Based on Authorizations (10/1 Mbps, 25/3 Mbps, 100/20 Mbps,
AUCTION	1000/500 Mbps)
CAF BLS	25/3 Mbps

The assigned PMM obligated speed tier may differ from the reported speed tier uploaded into HUBB. The PMM assigned obligated speed tier utilizes cascading logic for multiple speed tiers within a SAC based on the final obligated speed tier authorizations, at the time of certification within the HUBB.











Speed Tier Tables

Speed Tier Table for All Funds Except Alaska

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	50 Mbps	5 Mbps
7	100 Mbps	20 Mbps
8	100 Mbps	25 Mbps
9	1 Gbps	500 Mbps

Speed Tier Table for Alaska

HUBB	ble for Alaska		PMM		
Alaska			Alaska Speed Tier		
Speed Tier	download	nload upload		download	upload
1	1 Mbps	256 Kbps	1	1 Mbps	256 Kbps
2	4 Mbps	1 Mbps	2	4 Mbps	1 Mbps
3	6 Mbps	1 Mbps	3	6 Mbps	1 Mbps
4	10 Mbps	1 Mbps	4	10 Mbps	1 Mbps
5	10 Mbps	1 Mbps	4	10 Mbps	1 Mbps
6	25 Mbps	3 Mbps	5	25 Mbps	3 Mbps
7	25 Mbps	3 Mbps	5	25 Mbps	3 Mbps
8	50 Mbps	5 Mbps	6	50 Mbps	5 Mbps
9	100 Mbps	5 Mbps	7	100 Mbps	5 Mbps
10	1 Gbps	500 Mbps	9	1 Gbps	500 Mbps
11	4 Mbps	1 Mbps	2	4 Mbps	1 Mbps
12	4 Mbps	1 Mbps	2	4 Mbps	1 Mbps
13	4 Mbps	1 Mbps	2	4 Mbps	1 Mbps
14	6 Mbps	1 Mbps	3	6 Mbps	1 Mbps
15	6 Mbps	1 Mbps	3	6 Mbps	1 Mbps
16	6 Mbps	1 Mbps	3	6 Mbps	1 Mbps
17	10 Mbps	1 Mbps	4	10 Mbps	1 Mbps
18	10 Mbps	1 Mbps	4	10 Mbps	1 Mbps
19	25 Mbps	3 Mbps	5	25 Mbps	3 Mbps
20	25 Mbps	3 Mbps	5	25 Mbps	3 Mbps
21	1 Gbps	100 Mbps	8	1 Gbps	100 Mbps
22	2 Mbps	1 Mbps	10	2 Mbps	1 Mbps
23	25 Mbps	5 Mbps	11	25 Mbps	5 Mbps
24	25 Mbps	5 Mbps	11	25 Mbps	5 Mbps
25	100 Mbps	20 Mbps	12	100 Mbps	20 Mbps

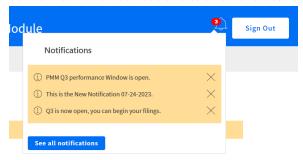


System Notifications

The **Notifications** feature allows users to effectively handle essential communications sent by the PMM Administrator. Notifications are informative messages sent by the PMM administrator directly to users.



To view current Notifications click on the bell icon.



Click on the "X" button to remove notifications from the view. To view all notifications, click on "See all notifications," which directs users to the **Notifications** page.



Notifications The notification below include system, program, and other news updates. If you do not see any, there are no notifications available. Message PMM Q3 performance Window is open. This is the New Notification 07-24-2023. Q3 is now open, you can begin your fillings. Show 10 records/page Mark as Read Mark as Unread

On the **Notifications** page, users can view all notifications sent by the system administrator. Use the "Mark as Read" or "Mark as Unread" buttons to categorize messages.

Assigning Subscriber Identifying Numbers (SIN)

The HUBB-generated file will have all HUBB data, meeting obligated speed tier requirements, with an additional column, "Subscriber ID." Add Subscriber IDs (separated by a semicolon, if there is more than one subscriber for the listed HUBB Location ID) for all subscribers associated with each location. This information must be included prior to re-uploading this file into the system. The HUBB Location ID and Subscriber ID are the only required fields for uploading subscriber data into the PMM system. The remaining fields are provided as a reference.

HUBB does not contain personally identifiable information (PII). When assigning SINs, carriers **should not use their subscriber**"s **PII**, including for example:

- 1. Name
- 2. Phone number
- 3. Social Security Number



- 4. Tribal ID Number
- 5. Carrier customer ID
- 6. Driver"s license number
- 7. Medicaid/Medicare/SNAP numbers or other similar numbers
- 8. Geolocation coordinates (Latitude/longitude)

Carriers will retain the underlying data matching the SINs. This data will not be shared with USAC or the FCC except as may be ordered in specific circumstances (i.e., audits).

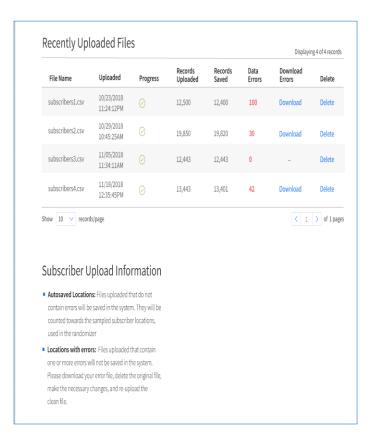
Steps to Download and Re-Upload Data

- 1. Select Cycle, Fund, and then click the "Generate HUBB data" button. All certified HUBB data will be included in one file. Once a file download is complete, users may retrieve the file from wherever the file was saved/downloaded.
- 2. Fill out the "Subscriber ID" column in the downloaded .csv file. If there is not a subscriber at a HUBB location, you should delete that row from your data file. If the "Subscriber ID" field is left blank, users will receive a warning in the data log file for that HUBB location.
- 3. Click on the "Upload Subscriber File" button.

Files Uploaded

Also on the **Upload Subscribers** page is the "Recently Uploaded Files" table. This table shows all the files that have been uploaded for validation. Within this table, users can:

- 1. **Review** the progress and summary of data after the uploaded file is validated.
- 2. **Download** data errors generated during the validation of the file after upload. A list of Error Codes is provided in the Data Error Codes section of this manual.
- 3. **Delete** the uploaded file from the PMM system. Please note: Deleting a file will remove all data associated with that file from the PMM system.





All locations without errors will be automatically saved in the PMM system. Locations with errors needs to be downloaded, corrected, and reuploaded in the system through the "Upload Subscriber File" button.

Reviewing Subscriber Detail

Locations without errors will be automatically saved and shown in a table on the **Subscriber Detail** page.

On this page, users can filter table data by cycle, fund, and SAC. The Filter by Cycle feature will default to "All Cycles" and allow users to view Subscriber ID-related data for all Cycles.

The Filter by Fund feature will default to "All Funds" and allow users to view Subscriber ID related data for all funds. The Filter by SAC feature will default to "All SACs" and allow users to view Subscriber ID-related data for all SACs.

- 1. **Download** filtered data using the "Filtered Data" feature.
- 2. **Click** "# of Subscriber IDs" to ensure the number of Subscriber IDs listed matches the Subscriber IDs uploaded. A modal listing Subscriber IDs will pop up for review.
- 3. **Submit** the reviewed locations that are ready to submit to the PMM randomizer tool. Only certifying officers will see the **Submit to Randomizer** button.



Submitting Subscribers to the Randomizer

All Subscriber IDs for valid HUBB Location IDs will be randomized by:

- 1. Cycle
- 2. Fund
- 3. SAC
- 4. State
- 5. Speed Tier

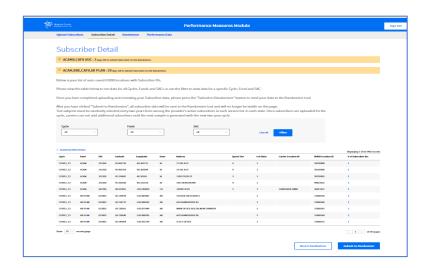
To receive the randomized list for performance testing, users must submit these locations to the Randomizer by clicking "Submit to Randomizer." Upon submission, subscribers associated with these HUBB Location IDs will be locked in the HUBB application. These locations will not be available for editing until after the performance testing on these subscribers is complete. If you have subscribers in the same SAC that reside across a state boundary, a sample for each state will be generated. Only a certifying officer (SPO Role) can engage the "Submit to Randomizer" button. Do not submit subscribers for randomization until all subscribers have been uploaded into the system.

Reverting Subscribers to the Randomizer (Revert Randomizer)

To revert a randomized list for performance testing, the locations must have been previously submitted to the Randomizer. The Revert Randomizer will not revert samples that have already been created.

Once the "Generate" button has been used to create the sample for a Cycle, Fund, SAC, State, and Speed Tier, it cannot be reversed.

Only a certifying officer (SPO) can engage the "Revert Randomizer" button. Once selected, the subscriber details page will populate with reverted subscribers for review or update.





Randomizer

Review Expected Samples

Two tabs are visible on the Randomizer module:

- 1. Review Expected Samples
- 2. Generate Samples

The **Review Expected Samples** tab allows users to review the expected sample(s) based on current broadband portal SAC and Speed Tier obligations. The Expected Sample(s) refers to all sample(s) that carriers are obligated to generate and upload performance data for the corresponding PMM cycle.



Review PMM Expected Sample(s)

The following filter dropdowns are available to view the PMM Expected Sample List table:

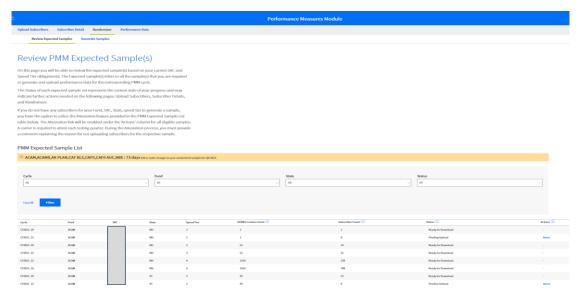
- 1. Cycle
- 2. Fund
- 3. State
- 4. Status

The Status dropdown has two options:

- 1. Generated
- 2. Not Generated

Selecting "Generated" will filter the Expected Sample(s) and display only the samples that have been submitted to randomizer or generated in the "Generate Samples" page.

Selecting "Not Generated" will filter the Expected Sample(s) and display only the samples that have not been generated.





The **PMM Expected Sample List** table shows the following columns:

Column	Description
Cycle	The testing cycle associated with the Expected Sample
Fund	The program associated with eh Expected Sample
SAC	The study area associated with eh Expected Sample
State	The state associated with eh Expected Sample
Speed Tier	The speed tier associated with eh Expected Sample
HUBB Locations Count	The sum number of units for uploaded and certified locations in the HUBB for the given Expected Sample (cycle-fund-SAC-state-speed tier)
Subscriber Count	The number of PMM subscribers uploaded towards the given Expected Sample
Status	The current progress or state of the Expected Sample
Actions	Ability to perform subscriber attestation for a given Expected Sample

The Status column in the **Review PMM Expected Sample List** table indicates the current progress of the sample. Use the table below to review the status of the sample and its meaning:

Expected Sample Status	Description
Pending Upload	The Expected Sample is awaiting subscribers to be
Feliding optoad	uploaded.
Pending Randomizer Submission	The Expected Sample has subscribers uploaded and is
rending Kandonnizer Submission	awaiting submission to the Randomizer.
	The Expected Sample"s subscribers have been submitted
Pending Generation	to Randomizer and its pending Sample Generation on the
	"Generate Samples" page.
	The Expected Sample has been generated in the
Ready to Download	"Generate Samples" page and its ready for performance
	testing.

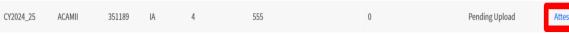


No Subscriber Attestation

If there are no subscribers in a fund, SAC, state, or speed tier to generate a sample, users can select the Attestation feature provided in the PMM Expected Sample List table below.

The Attestation link is available under the "Actions" column for all eligible samples. Carriers must have zero active PMM subscribers to be eligible.

A carrier can attest each testing quarter if it is unable to upload and test subscribers for the given quarterly period.



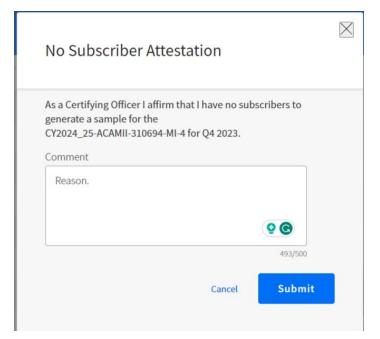


During the Attestation process, users must provide a comment explaining the reason for not uploading subscribers for the respective sample.

Steps to submit a No Subscriber Attestation:

- 1. Navigate to the **Review Expected Samples** page.
- 2. Locate the sample to perform No Subscriber Attestation.
- 3. Click on the "Attest" link located to the right under the "Actions" column.
- 4. Enter a comment providing an explanation for No Subscriber Attestation.
- 5. Click "Submit."
- 6. View Confirmation.

Note: No Subscriber Attestation is only available to carriers with zero PMM Subscribers for one or many Expected Sample(s). Only a certifying officer user can perform an Attestation.

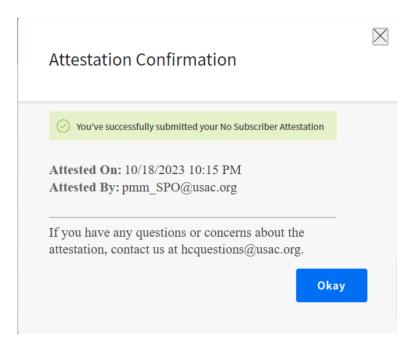




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Attestation functionality is available one time per testing quarter. Once Attestation has been completed for a sample, the system will not restrict any subsequent actions towards the sample you have attested to, such as: Subscriber Upload, Randomizer Submission, and Sample Generation.

The system will record the Attestation for the respective testing quarter. If a sample continues to have zero PMM subscribers in the following quarter, the "Attest" link will be reenabled.





Generate Samples

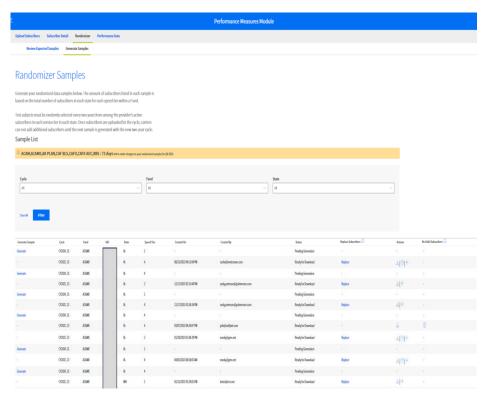
The **Generate Samples** tab allows user to generate randomized samples by cycle, fund, SAC, state, and speed tier. Only SACs of the states that are assigned to each carrier will be visible. Each sample will have the required number of subscribers according to the number of subscribers that were sent to the Randomizer on the **Subscriber Details** page.

In this table, users can:

- 1. Generate a sample for a particular cycle, fund, SAC, state and speed tier.
- 2. Download a generated sample for a particular cycle, fund, SAC, state and speed tier.
- 3. Replace one or more subscribers from a sample.
- 4. Supplement one or more subscribers to a sample.
- 5. View the history of each sample, including any changes or updates made to a sample. For example, if a carrier replaces a subscriber from a sample, the history modal will show the details of the replacement action.
- 6. Click the icon for "No Valid Subscribers" when there are no more subscribers to supplement or replace within a cycle, fund, SAC, state, and speed tier.

Steps to Generate Sample:

- 1. Select Cycle, Fund, and State to view all SACs from that State.
- 2. Click the "Generate" button located in the table to generate the sample for each row.
- 3. Download the generated sample from the "Actions" column by clicking on the download icon located in each row.

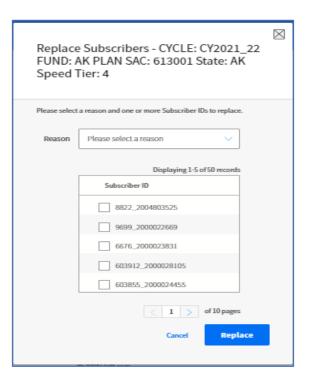




Steps to Request Replacement:

Click the "Replace" button in the Replace Subscribers column. **Do not select the "+" icon unless adding to the overall count of the sample**. For example, if the sample size is 25 and the supplement process is initiated ("+" icon), then add 25 subscribers, your overall sample count will be 50.

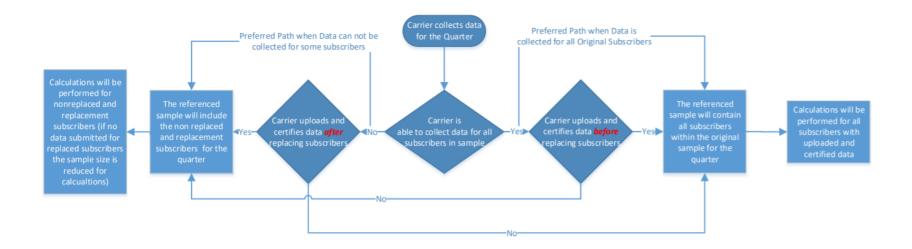
- 1. Select the reason for the replacement request from the dropdown menu.
 - a. Subscriber refuses to allow installation of testing equipment at customer premises.
 - b. Subscriber dropped service (no longer active); includes customers who have been discontinued due to lack of payment.
 - c. Subscriber demands removal of testing equipment at customer premises; includes customer's purposeful destruction of testing equipment.
 - d. Subscriber subscribes to a speed lower than buildout obligation.
 - e. Natural disaster.
 - f. Other (upon submission, the subscriber locations in the sample will be frozen until the request has been approved. Expect decision within five business days or sooner).
- 2. Select the Subscriber IDs that apply to the selected reason.
- 3. If the selected reason is "Other," provide an explanation in the displayed text box for the replacement request.
- 4. Navigate to view all the Subscriber IDs by clicking on the pagination control.
- 5. Click "Replace" to submit the replacement request and exit the modal.
- 6. Click "Cancel" to cancel the replacement request and exit the modal.





Timing to Request Replacement:

Click "Replace" in the Replace Subscribers column. If data is collected for all subscribers from the original randomized sample list within the quarter, it is highly recommended that carriers submit and certify performance data for the quarter prior to requesting a subscriber replacement for next quarter's data collection. However, if a carrier is unable to contact a subscriber for performance data collection, carriers should initiate subscriber replacement for the quarter prior to data submission and certification.





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Steps to Request Supplement:

- 1. Only begin this process if the sample size for the SAC and Speed Tier needs to be increased. For example, if the sample size is 10 and needs to increase to 20, utilize this procedure.
- 2. Enter the number of additional subscriber locations requested.
- 3. Check the checkbox to acknowledge the bolded statement.
- 4. Click "Request Additional Subscribers" to submit the Supplement Request and exit the screen.
- 5. Click "Cancel" to cancel the Supplement Request and exit the screen.

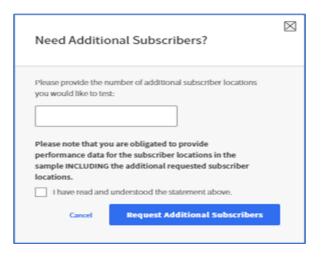
Users are responsible for testing any additional/supplemented subscribers added to a sample.

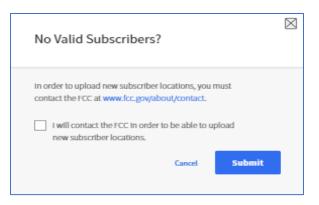
Steps to Submit No Valid Subscriber Request with Zero Subscribers to Test:

1. If you are attempting to remove a subscriber and have zero subscribers, please contact USAC for assistance at https://example.com/hcquestions@usac.org.

Steps to Submit No Valid Subscriber Request with One or More Subscribers to Test:

- 1. Click the icon for "No Valid Subscribers" when there are no more subscribers to supplement or replace within a SAC, state and speed tier.
- 2. A modal will appear instructing users to contact the FCC. Users are not required to contact the FCC directly. The process is automated once the checkbox is selected and submit action is taken.
- 3. Check the checkbox.
- 4. If you initiated the no valid subscriber in error, click "Cancel" to exit the screen.
- 5. Otherwise, click "Submit" button to submit the request for No Valid Subscribers and exit the screen.
- 6. Once the no-valid process is initiated, it must be reviewed and approved by USAC. Users will see a "Pending Review" status.
- 7. Once the request is approved by USAC, the status column will indicate "Pending Upload."







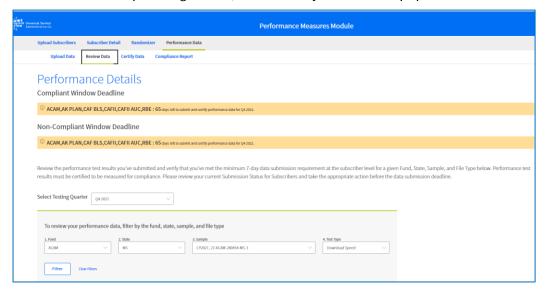
- 8. Follow the subscriber upload process and upload additional subscribers. Link process <u>Steps to Download and Re-upload Data</u>.
- 9. Upon completion of the subscriber replacement, the status column will update to "Ready."
- 10. The new random sample is available for download.

Performance Data/Upload Data

Performance Data is comprised of three pages needed to Upload, Review, and Certify your performance testing data. When users select the Performance Data Tab, you will start on the Upload Data page. Step 1 is to download the Speed Testing Template (SpeedTestingTemplate.csv) and the Latency Testing Template (LatencyTestingTemplate.csv). The field definitions for these files can be found in the Data Specifications section. If tests failed due to crosstalk (Test Status 2) or any other reason (Test Status 3), carriers must submit the following four fields at a minimum: HUBB LOCATION ID, SUBSCRIBER ID, START TEST, and TEST STATUS.

After populating the templates with performance testing data, files are ready to upload. Please note the maximum file size is 200 MB. Users may break files into multiple smaller files if the file size limit is exceeded. After uploading the file, the summary table will be populated.

In Step 2, upload individual speed and latency files. Based upon individual annual compliance results, some SACs may be in either Compliance or Non-Compliance. The Compliant and/or Non-Compliant windows provide a deadline countdown for data submission. Users must select the applicable Cycle, Fund, State, Sample, File Type (Speed Test, Low Latency or High Latency) and Start Date of the seven-day data submission period (Use MM/DD/YYYY format). The low latency option will appear for carriers with samples that should be measured against Low Latency (<=100 ms roundtrip). The high latency option will appear for carriers with samples that should be measured against High Latency (<=750 ms roundtrip). Users must select the **FIRST** day of the sevenday test period. Upload and Download speed tests must



be taken during the same seven-day period. If data is collected at multiple times during the quarter, data must be submitted for the seven-day period in which carriers want performance data assessed by PMM. The **FIRST** day of the seven-day test period must be selected.



Latency files do not have to begin testing the same day as speed tests but are still subject to the same seven consecutive day testing requirement. The Data Submission requirement for each type of test is summarized below:

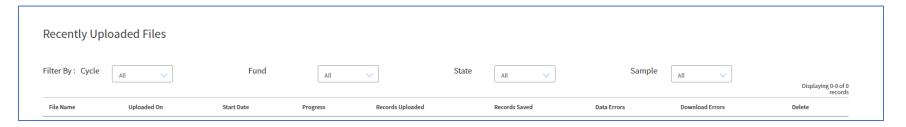
Test Type (* = required)	Minimum Data Submission Requirement
Download Speed	 One successful (Test Status = 1) test/hour between the hours of 6 p.m. and 11:59 p.m. local time (18:00-23:59 in 24-hour time format) Seven consecutive days 42 successfully completed tests (Test Status = 1) per Subscriber in each sample
Upload Speed	 One successful (Test Status = 1) test/hour between the hours of 6 p.m. and 11:59 p.m. local time (18:00-23:59 in 24-hour time format) Seven consecutive days 42 successfully completed tests (Test Status = 1) per Subscriber in each sample
Low Latency	 One test/minute between the hours of 6 p.m. and 11:59 p.m. local time (18:00-23:59 in 24-hour time format) Seven consecutive days 2,520 tests (Test Status = 1, 2, or 3) per Subscriber in each sample
High Latency	 One test/minute between the hours of 6 p.m. and 11:59 p.m. local time (18:00-23:59 in 24-hour time format) Seven consecutive days 2,520 tests (Test Status = 1, 2, or 3) per Subscriber in each sample

Note: The Data Submission Requirement shown above is for **one** subscriber in your sample. In other words, carriers need to submit at least 42 Upload Speed Tests, 42 Download Speed Tests, and 2,520 Latency Tests per subscriber in **each** sample to meet the minimum Data Submission Requirement.



After the file has completed uploading, it will appear in the "Recently Uploaded Files" table shown below the "Upload Performance Data" button.

The **Recently Uploaded Files** table displays the performance data templates uploaded into the system. Users can filter by state and sample created in the Randomizer section and for which a file was uploaded with upload speed, download speed, low latency or high latency test data. This table shows the records (rows of data) that have been uploaded and saved by the system. The table also displays any data errors found in the file(s). If there are data errors in any part of the file, users can download a data error log. In order to repair the file, users can either delete the previously uploaded file or upload a new file that contains the corrected data elements. A key to the error codes in the data errors log file can be found in the Data Errors section of this user guide.



Once all of the performance data is successfully uploaded, proceed to Step 3, Review Data.

Review Data

Review Data is the second step in the performance data submission process.

In this section, users can review the Performance Details and verify that they have met the minimum seven-day data submission requirement at the subscriber level for each state, samples and file type. Once data has been reviewed, proceed to the last step, certification.

Based upon annual compliance results, some SACs may be in either Compliance or Non-Compliance. The Compliant and/or Non-Compliant windows provide a deadline countdown for data submission and certification.

There is a filter for selecting the appropriate Testing Quarter for submitting data. Once the Testing Quarter has been identified, users may further filter based on fund, state, sample, and test type (download speed, low latency, high latency and upload speed). Once a filter is selected, press the "Filter" button to see the results displayed in the Data Submission Status Table at the bottom of the page.



The Data Submission Status table displays the subscribers in the particular sample selected.

The **Data Submission Status** table provides an overview of the performance tests submitted for individual samples. "# of Test(s) Submitted" displays the total count of valid performance tests of the selected Test Type for each subscriber in the sample. "# of Incomplete Test(s)" displays the total count of invalid performance tests of the selected Test Type for each subscriber in the sample. "Submission Status" indicates whether a carrier has met the minimum Data Submission requirement for the Test Type selected. The minimum data submission requirement is discussed in the previous section.

The "Download All Incomplete Test(s)" button lets users download an error log file that contains all the Incomplete Test(s) with an associated error message. The definition of errors can be found in the Incomplete Data Issue Codes section at the end of this guide.

After submitting the performance data, proceed to the last step, Certify and View Performance Results on the **Certify Data** page.

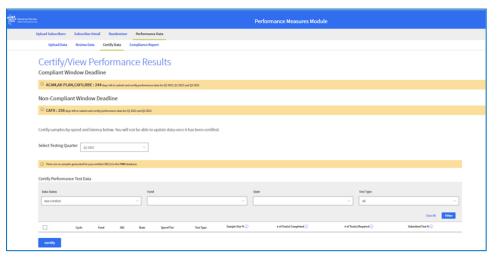
Certify Data

Certify/View Performance Results lets users manage the certification of performance testing data across Testing Quarters, Data Status, Fund, States, and Test Types. Begin by selecting the "Select Testing Quarter" filter for the Testing Quarter to be certified. The filter will only

show the quarter for which performance-testing data was submitted.

Users cannot update data once it is certified.

The **Certify Performance Test Data** table displays performance test data by Testing Quarter. Select the appropriate testing quarter using the "Select Testing Quarter" filter. Users should only certify data once the "Data Submission Progress" for Sample and Test Type shows as 100 percent. Users may still certify data that has not met the 100 percent Data Submission Progress benchmark. However, this data set will be considered "Incomplete" as it has not yet met the minimum testing requirement standards described on the **Upload Data** page. In addition, samples with incomplete data will not be included in compliance gap calculations. Utilize the "Compliance and Non-Compliance window deadline" reminders to avoid missing test data submission and certification of test data submission.





The **Certify Performance Test Data** table contains four filters: Data Status, Fund, State, and Test Type. Data Status lets users view data in samples that are either Certified, Not Certified, or Not Uploaded (data in the sample remains "Incomplete").

- The "Fund" field only shows the Fund(s) for which performance data has been successfully uploaded.
- The "State" field only shows the State(s) for which performance data has been successfully uploaded.
- Test Type, as described earlier, consists of Download Speed, Upload Speed, High Latency, and Low Latency. The fields in the table display information about individual samples (Fund, SAC, State, and Speed Tier).
- The last four columns in the table show the progress toward Data Submission for the sample.
 - o "Sample Size %" displays the percent of subscribers with data submitted in comparison to the original sample set value.
 - o "# of Test(s) Completed" displays the number of tests in the sample that have met the data submission requirement.

"# Of Test(s) Required" displays the number of performance tests needed to meet the data submission requirement and is calculated based on the number of subscribers in the sample. For example, a DL Speed Test with five subscribers in the sample will require 210 DL Speed Tests successfully completed, while a sample with 50 subscribers will require 2,100 DL Speed tests successfully completed (Test Status = 1).

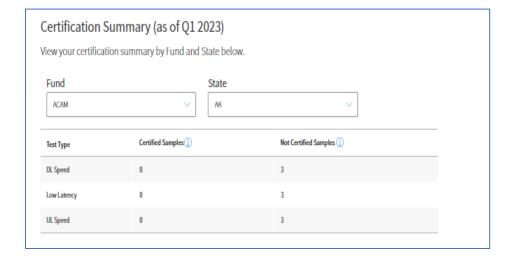
"Data Submission Progress" shows the percentage of completed tests that meet the data submission requirement for the sample. If the data has met or exceeded the Data Submission requirement, it can now be certified. Select one or more samples in the Certify Performance Test Data table and select the "Certify" button below the table.

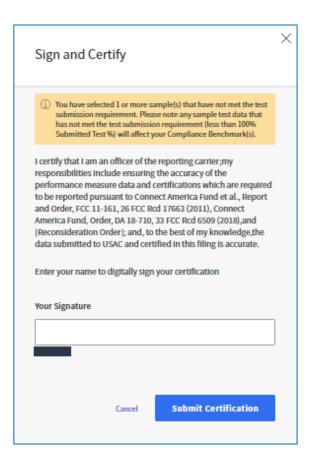
The sample size percent, # of Test(s) completed, # of Test(s) required, and Data Submission Progress do not display an adjusted calculation for subscriber replacement or pretesting waivers. The PMM readjusts the calculation based on subscriber replacement or pretesting waivers when deriving the compliance percentage score.



Once "Certify" is selected, a modal will appear titled **Sign and Certify.** If the Data Submission requirement has not been met for the sample, there will be a warning message highlighted in yellow. Complete certification for the sample(s) selected by typing the name as it is populated below the signature box. Upon completion of certification, a confirmation modal will appear that includes a confirmation number.

The **Certification Summary** table displays the number of Certified and Not Certified samples for each Test Type in the state selected. When there is no longer a count in the "Not Certified Sample" column, certification is complete for that Test Type.





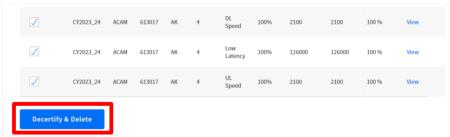


Decertify Data

Certify/View Performance Results now lets users manage the decertification of performance testing data across testing quarters, data status, fund, states and test types. Decertification is the process of reverting the current certification of performance testing data across testing quarters, data status, fund, states and test types.

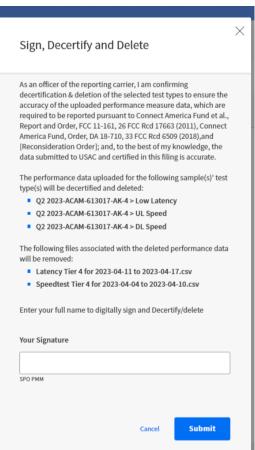
Steps for Decertification:

- 1. Choose the "Select Testing Quarter" filter for the Testing Quarter to be decertified. Users must have certified performance data present in the system before performing this action.
- 2. After selecting the specific quarter to decertify samples from, filter on "Certified" as the Data Status in the Certify Performance Test Data Table.
- 3. Select the specific sample sets and test types to decertify.
- 4. Click on the "Decertify and Delete" button.



- 5. After selecting sample(s)/Test types, click the "Decertify & Delete" button. A modal will appear titled "Sign, Decertify, and Delete."
- 6. Upon completion, the system will provide a confirmation number to confirm the decertification process was successful.

The Decertification process will delete any associated performance files that have been uploaded for the specific samples/test-types selected during the decertification process. Once clicking "Submit" on the "Sign, Decertify, and Delete" modal, the system takes a few moments to process the request. This is expected as the system must delete all associated data.





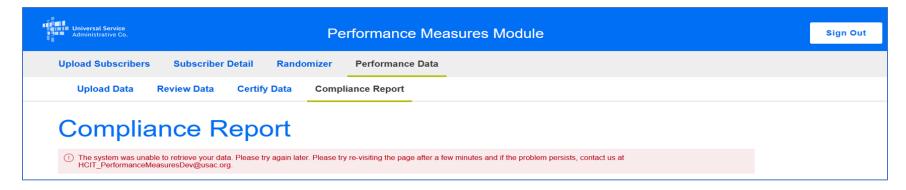
The Decertification process is similar to the Certification process in that the system will check that the window for the respective quarter is open before allowing users to proceed. All associated performance data will be deleted in the process. Users are expected to re-upload performance data for the respective quarter by visiting the **Upload Data** page within the "Performance" module.

The system will not allow partial selection of test types that have a common performance data file upload. For example, USAC speed testing template allows for speed and upload test type submission. For Decertification users must select both download and upload speed test types to decertify since they were originally uploaded using the same file. Latency can be independently decertified because it was uploaded in a separate file.

The Certification Summary table displays the number of Certified and Not Certified samples for each Test Type in the state selected. Users will notice the summary count values getting updated after decertification. Users will see the number of "Certified Samples" reduce while the number of "Not Certified Samples" increase.

Compliance Report

The compliance report is accessible under the "Performance Data" menu. The compliance report will display the following error message upon navigating to the page. The error message will no longer display after the PMM system completes compliance report calculations. Carriers will receive notification of the availability of the compliance report calculations once available.



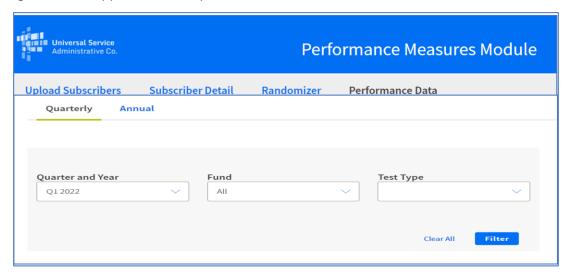
The compliance report will display a summary assessment of performance data results for each SAC.



Quarterly Compliance

When navigating to the **Compliance Report** page, select quarterly and the applicable quarter within the Quarter Filter. The "Quarter Filter" will be pre-populated with a list of all the quarters for which compliance was calculated. The Quarter and year values will be in descending order. When selecting the Test Type Filter, the following values will appear in the dropdown menu with the selected default value of "All":

- All
- DL Speed
- UL Speed
- High Latency
- Low Latency



If selected fields require correcting, choose the "Clear" button to clear the data. The Test Type Filter will default back to "All" selected for test type. Upon scrolling down on the **Compliance Report** page, the following page components should display in a table format:

i. Fund

ii. SAC

iii. State

iv. Speed Tier

v. Test Type

vi. Sample Size Met

vii. # of Tests Compliant

viii. # of Tests Non-Compliant

ix. # of Missed Tests

x. Compliance %

xi. Compliance Level

xii. History



Test Type

Filter

Al



If the sample and the test-type combination is not eligible for compliance calculation due to not certifying data submission, the value will be designated with a dash. Where the compliance calculation percent value is greater than 100, the respective compliance percentage column will be capped at 100 and populated with 100 percent. All Compliance percentage values are truncated to whole numbers. An exportable table formatted report is available for download by selecting the "Download Report" button on the top left of the table for data export. When selecting the history icon, a carrier can review any edits made by the PMM Administrator for compliance overrides.

Annual Compliance

When navigating to the **Compliance Report** page, select Annual. The Year Filter will be pre-populated with a list of all the years for which the compliance was calculated. The year values will be in descending order. When selecting the Test Type Filter, the following values will appear in the drop-down menu with the selected default value of "All":

Quarterly

2021

Annual

- All
- DL Speed
- UL Speed
- High Latency
- Low Latency

If selected fields require correcting, choose the "Clear" button to clear the data. The Test Type Filter will default back to "All" selected for test type.

Upon scrolling down on the "Compliance Report" page, the following page components should display in a table format:

- i. Fund
- ii. SAC
- iii. State
- iv. Speed Tier

- v. Test Type
- vi. Sample Size Met
- vii. # of Tests Compliant
- viii. # of Tests Non-Compliant

- ix. Compliance %
- x. Compliance Level
- xi. History

All



Fund	SAC	State	Speed Tier	Test Type	Sample Size Met	# of Tests Compliant	# of Tests Non-Compliant	# of Missed tests	Compliance %	Compliance Level	History

When selecting the history icon, a carrier can review any edits made by the PMM Administrator for compliance overrides.

If the sample and the test-type combination is not eligible for compliance calculation due to not certifying data submission, the value will be designated with a dash. Where the compliance calculation percent value is greater than 100, the respective compliance percent column will be capped at 100 and populated with 100 percent. All Compliance percentage values are truncated to whole numbers. An exportable table formatted report is available for download by selecting the Download Report button on the top left of the table for data export.

Compliance Report Calculations

View the <u>High Cost Performance Measures System Compliance Calculations</u> for more detailed information about the compliance report calculations.

The "# of Tests Compliant" column is populated with the total count of certified valid successful tests (status 1) that meet the compliance benchmark (i.e., test data certified with test status 1, which meets the following compliance calculation criteria based on the test-type value selected). Either low latency or high latency is assessed in the compliance calculations based upon fund and technology type.

Download Speed	Upload Speed	Low Latency	High Latency
Total count of certified valid successful Download Speed Tests with a Calculated Mbps >= 80 percent of the Obligated Speed Tier's Download speed	Total count of certified valid successful Upload Speed Tests with a Calculated Mbps >= 80 percent of the Obligated Speed Tier's Upload speed	Total count of certified valid successful Latency Tests with an RTT ≤ 100ms	Total count of certified valid successful Latency Tests with an RTT ≤ 750ms

The "# of Tests Non-Compliant" column is populated with the total count of certified valid successful tests (status 1) that do not meet the compliance benchmark (i.e., test data certified with test status 1, which do not meet the following compliance calculation criteria based on the test-type value selected.) Either low latency or high latency is assessed in the compliance calculations based upon Fund and technology type.



Download Speed	Upload Speed	Low Latency	High Latency
Total count of certified valid successful Download Speed Tests with a Calculated Mbps < 80 percent of the Obligated Speed Tier's Download speed	Total count of certified valid successful Upload Speed Tests with a Calculated Mbps < 80 percent of the Obligated Speed Tier's Upload speed	Total count of certified valid successful Latency Tests with an RTT >100ms	Total count of certified valid successful Latency Tests with an RTT > 750ms

The "# of Missed Tests" column is populated with difference between the total number of required tests submitted for each test type and the total count of certified valid tests (status 1, 2, and 3). Either low latency or high latency is assessed in the compliance calculations based upon fund and technology type.

Download Speed	Upload Speed	Latency
Total count of expected tests for each subscriber within the sample for each hour over a seven-day period between 6 p.m. and 12 a.m. taking into account cross-talk exception less the total count of certified valid Download Speed Tests	Total count of expected tests for each subscriber within the sample for each hour over a seven-day period between 6 p.m. and 12 a.m. taking into account cross-talk exception less the total count of certified valid Upload Speed Tests	Total count of expected tests for each subscriber within the sample for each minute over a seven-day period between 6 p.m. and 12 a.m. less the total count of certified valid Latency Tests

Compliance percent values are calculated by dividing the number of certified valid successful tests compliant by the total number of certified valid of tests (status 1) plus the total number of tests missed.

Compliance percent values are truncated to whole numbers. Where the compliance is not calculated, it will be reflected as incomplete and designated with a dash. Where the compliance calculation percent value is greater than 100, the respective compliance percent column will be capped at 100 and populated with 100 percent. Based on the compliance percent values, the compliance levels will be populated and display the following:



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Compliance Level	Compliance % (x)		
Fully Compliant	x ≥ 100%		
Level 1	85%≤ x < 100%		
Level 2	70% ≤ x < 85%		

Compliance Level	Compliance % (x)		
Level 3	55% ≤ x < 70%		
Level 4	0% < x < 55%		
Incomplete	null		



Data Specifications

Subscriber Upload

The table below provides the specification for the **Subscriber Upload** CSV file.

Field (* = required)	Description	Data Type	Max Length	Example
SAC	The six-digit Study Area Code (SAC) for the study area containing the location. This field is populated into the template but is not validated for PMM data submission. Edits to this field in the PMM data file upload will not be reflected in the HUBB.	Integer	6	579999
Latitude	Latitude of the location to which carrier has made service available and tested. It must have at least six decimal places. Coordinates must be in the WGS84 or NAD83 geographic coordinate system. This field is populated into the template but is not validated for PMM data submission. Edits to this field in the PMM data file upload will not be reflected in the HUBB.	Float	N/A	39.509220
Longitude	Longitude of the location to which you have made service available. It must have at least six decimal places. Coordinates must be in the WGS84 or NAD83 geographic coordinate system. This field is populated into the template but is not validated for PMM data submission. Edits to this field in the PMM data file upload will not be reflected in the HUBB.	Float	N/A	-98.433700



Field (* = required)	Description	Data Type	Max Length	Example
Address	Number and street address of this location. If possible, use the standardized <u>Postal Service format</u> . However, this information is not standardized nor validated by the HUBB.	Text	100	715 Wisconsin
	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.).			Street
	This field is populated into the template but is not validated for PMM data submission. Edits to this field in the PMM data file upload will not be reflected in the HUBB.			
State	Two-letter postal abbreviation of the state associated with this location. This field is populated into the template but is not validated for PMM data submission. Edits to this field in the PMM data file upload will not be reflected in the HUBB.	Text	2	KS
Speed Tier	View the <u>Speed Tier Table</u> document.	Integer	1	3
# of Units	The number of units associated with this location. If the address or building contains only one housing unit or business location, enter 1. 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.	Integer	N/A	1
	This field is populated into the template but is not validated for PMM data submission. Edits to this field in the PMM data file upload will not be reflected in the HUBB.			



Field (* = required)	Description	Data 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. This field is populated into the template but is not validated for PMM data submission. Edits to this field in the PMM data file upload will not be reflected in the HUBB.	Text	50	12345
HUBB Location ID*	The HUBB Location ID field will be entered in the subscriber data upload template. This ID must remain unchanged. This field is REQUIRED.	Text	50	A12345
Subscriber ID*	The Subscriber ID is the unique identifier assigned by the provider to designate active subscribers that are occupying locations previously reported in the HUBB. If there are multiple Subscriber IDs for a single HUBB location, carriers MUST use a semicolon ";" instead of a comma "," before the next Subscriber ID. This field is REQUIRED.		50	,A-80098678 or ;A-78694494



Speed Data Upload Template

The table below provides the specification for the **Speed Data Upload Template (Speed Testing Template)** CSV file.

Field (*:	= required)	Description	Data Type	Max Length	Example
HUBB Location ID*		The HUBB Location ID field will be entered in the Speed Testing or Latency testing template. This ID can be retrieved from the sample file generated in the Randomized Module. This ID must remain unchanged. This field is REQUIRED.	Text	N/A	A12345
Subscriber ID*		The Subscriber ID is the unique identifier assigned by the provider to designate active subscribers that are occupying locations previously reported in the HUBB. This ID can be retrieved from the sample file generated in the Randomized Module. This ID must remain unchanged. This field is REQUIRED.	Text	N/A	,A-80098678
Speed Type*		Speed Type = "1" for Download Speed (DL) or "2" for Upload Speed (UL)	Integer	1	"1" or "2"
IP Target*		IP Target = (host name or IP address) of the IP server that is designated for the test	String	100	"192.168.10.10" Or "MEX-IX McAllen"



Field	(* = required)	Description	Data Type	Max Length	Example
Start Test*		Start Test = ISO 8601 UTC format to include milliseconds and time zone offset.	String	200	"2020-03-05 01:03:01:123-
		Ex: yyyy-mm-dd hh:mm:ss:SSS±HH:MM			05:00"
		("+" for positive UTC timezone offset, "-" for negative UTC timezone offset)			
		This is the only accepted format for this field.			
End Test*		End Test = ISO 8601 UTC format to include milliseconds and time zone offset.	String	200	"2020-03-05 01:03:01:143-
		Ex: yyyy-mm-dd hh:mm:ss:SSS±HH:MM			05:00"
		("+" for positive UTC timezone offset, "-" for negative UTC timezone offset)			
		This is the only accepted format for this field.			
Bytes*		Bytes = total bytes received or sent across all connections or threads	Integer	50	"20000"
Test Status*		Test Status = Status of Test (1=success; 2= test not run due to cross talk traffic; 3= test not run due to other reason)	Integer	1	"1"



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Field	(* = required)	Description	Data Type	Max Length	Example
Comment (option	nal)	Text string, not required	String	500	"This location had faulty testing equipment that was replaced during the test period"



Latency Data Upload Template

The table below provides the specification for the **Speed Data Upload Template (Speed Testing Template)** CSV file.

Field (* = required)	Description	Data Type	Max Length	Example
HUBB Location ID*	The HUBB Location ID field will be entered in the subscriber data upload template. This ID can be retrieved from the sample file generated in the Randomized Module. This ID must remain unchanged.	Text	N/A	A12345
Subscriber ID*	The Subscriber ID is the unique identifier assigned by the provider to designate active subscribers that are occupying locations previously reported in the HUBB. This ID can be retrieved from the sample file generated in the Randomized Module. This ID must remain unchanged.	Text	N/A	,A-80098678
IP Target*	IP Target = (host name or Ip address) of the IP server that is designated for the test	String	100	"192.168.10.10" Or "MEX-IX McAllen"
Start Test*	Start Test = ISO 8601 UTC format to include milliseconds AND time zone offset.	String	200	"2020-03-05 01:03:01:123- 05:00"
	Ex: yyyy-mm-dd hh:mm:ss:SSS±HH:MM ("+" for positive UTC timezone offset, "-" for negative			
	UTC timezone offset)			
	This is the only accepted format for this field. Daylight Savings Time is supported.			



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Field (* = required)	Description	Data Type	Max Length	Example
Latency*	Roundtrip time (RTT) in milliseconds	Integer	20	"200"
Packets Sent*	Packets Sent = Number of packets successfully sent	Integer	100	"20"
Packets Received*	Packets Received = Number of packets successfully received	Integer	100	"18"
Test Status*	Test Status = Status of Test (1=success; 2= test not run due to cross talk traffic)	Integer	1	"1"
Comment (optional)	Text string, not required	String	500	"This location had faulty testing equipment that was replaced during the test period"



Data Error Codes

If submitted data fails validations, you may download the **Data Errors** CSV file from the "Recently Uploaded Files" table on the **Upload Subscriber List** page. The table below provides a list of all data error codes generated by the system.

Category	Code or Error Message	Description
File Error	File name contains one or many invalid characters. Please reference the USAC-provided Data Standards for file naming convention instructions.	 File names cannot have the following invalid characters: Left curly brace ("{") Backslash ("\") Non-printable ASCII characters (128–255 decimal characters) Caret ("^") Right curly brace ("}") Percent character ("%") Grave accent / back-tick ("`") Right square bracket ("]") Quotation marks "Greater Than" symbol (">") Left square bracket ("[") Tilde ("~") "Less Than" symbol ("<") "Pound" character ("#") Vertical bar / pipe (" ")
File Error	The uploaded file is not in CSV format. Please reference the USAC-provided template.	The uploaded file must be in CSV format.



Category	Code or Error Message	Description
File Error	The uploaded file has an incorrect header row. Please reference the USAC-provided template.	The uploaded file"s first row (the header row) must match the first row of the template you downloaded by clicking the Generate HUBB Data button.
File Error	The uploaded file has no records. Please add records and try again.	You must have a header row and at least one subscriber record.
Data Error	HUBBLOCATION_ID_REQUIRED	The HUBB Location ID field must be populated.
Data Error	HUBBHUBB_LOCATION_ID_INVALID_FORMAT	The HUBB Location ID field must be a whole number.
Data Error	HUBBHUBB_LOCATION_ID_INVALID_DUPLICATE	The HUBB Location ID field must be unique across the file.
Data Error	HUBBHUBB_LOCATION_ID_INVALID	The HUBB Location ID must match a certified HUBB Location ID from the HUBB.
Data Error	HUBBHUBB_LOCATION_ID_INVALID_SAC_ASSOCIATION	The HUBB Location ID's associated SAC in HUBB must match the PMM user's list of SACs from their entitlements.
Data Error	INVALID_HUBB_LOCATION_ID_EXTENDED_SUBMISSION_ WINDOW	The HUBB Location ID's Fund, SAC, State, and Speed Tiers must match the randomized sample's Fund, SAC, State, and Speed Tier in the "Pending Upload" status.
		The file's system upload date must also fall within the Subscriber Sample Extension Window for that same Fund, SAC, State, and Speed Tier.
Data Error	SUBSCRIBER_ID_REQUIRED	The Subscriber ID(s) field must be populated.



Category	Code or Error Message	Description
Data Error	SUBSCRIBER_ID_DELIMITER_INVALID	Each Subscriber ID(s) within a Subscriber.csv record must be separated using a semicolon (;) as a delimiter.
Data Error	SUBSCRIBER_ID_DUPLICATE_RECORD	The Subscriber ID must be unique within each row.
Data Error	SUBSCRIBER_ID_INVALID_FORMAT	The Subscriber ID(s) must not have any double quotes.
Data Error	SUBSCRIBER_ID_DUPLICATE	The Subscriber ID field and the corresponding HUBB Location ID's SAC combination must be unique within the file and must not be repeated for clean Subscriber records (Subscriber records with no errors).
Data Error	SUBSCRIBER_ID_INVALID_COUNT	The count of Subscriber ID(s) for a record in the Subscriber.csv must be less than or equal to the matching HUBB Certified location record's number of units.



Performance Data Upload Error Codes

File Error	The current version of this application supports the upload of the file up to 200 MB in size. To upload your data, please split-out your data into multiple files and re-upload them separately.	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The file size must be less than or equal to 200 MB.
File Error	There is no Randomized Sample for <qq yyyy="">. The system cannot process your request. Click Okay to proceed.</qq>	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The quarter value is derived from the start test-date value selected by the user during the file upload. Quarter 1: 01/01 - 03/31 Quarter 2: 04/01 - 06/30 Quarter 3: 07/01 - 09/30 Quarter 4: 10/01 - 12/31
File Error	You previously submitted test data for the selected sample: <sample> with a different Start Date<startdate>. If you would like to upload a test data file with a new start date, please delete the existing file from the PMM and submit a test data file with a new Start Date. Click Okay to proceed.</startdate></sample>	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The Start Date value must not match the existing start date for the sample and test type selected in the PMM database.
Data Error	DUPLICATE_RECORD	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv Each row record must have at least one unique value on a file level.



Data Error	DUPLICATE_TEST_DATA_SUBMITTED	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The same row record is in the PMM database.
Data Error	SUBSCRIBER_ID_REQUIRED	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The Subscriber ID field must be populated.
Data Error	SUBSCRIBER_ID_INVALID	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The Subscriber ID field must match the Subscriber ID from the list of subscribers within the sample for the quarter.
Data Error	HUBB_LOCATION_ID_REQUIRED	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The HUBB Location ID field must be populated.
Data Error	HUBB_LOCATION_ID_INVALID_FORMAT	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The HUBB Location ID value must be a whole number.
Data Error	HUBB_LOCATION_ID_INVALID_SUBSCRIBER _ID_ASSOCIATION	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The HUBB Location ID must match the associated Subscriber ID in the PMM database.
Data Error	IP_TARGET_REQUIRED	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The system will check if the IP Target field is populated.



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Data Error	IP_TARGET_LENGTH_INVALID	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The IP target field has a maximum of 100 characters.
Data Error	START_TEST_REQUIRED	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The Start Test Field must be populated.
Data Error	START_TEST_INVALID_FORMAT	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The Start Test Field format must be in yyyy-mm-dd hh:mm:ss: SSS±HH:MM (UTC offset).



Data Error START_DATE_INVALID_TIME_RANGE	START_DATE_INVALID_TIME_RANGE	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The YYYY, MM, DD, hh, mm, ss value of the Start Test Date must be within the following range:	
	Values	Range (Inclusive)	
		YYYY	2019 - Current Year (Server timestamp)
		ММ	01-12
	DD	01-31	
		hh	00-23
		mm	00-59
		SS	00-59
S	TART_TEST_INVALID_OFFSET	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv	
		The UTC of 14) inclusiv	ffset of the Start Test Date must be within (-12 to + ve.
ata Error START_TEST_INVALID	START_TEST_INVALID		: SpeedTestingTemplate.csv, cyTestingTemplate.csv
		The Start T timestamp	Fest timestamp must be before the server o.



Data Error	START_TEST_MISMATCH	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv
		The Start Test value must match the quarter defined by the Start Date selected in the front end while uploading the respective file.
Data Error	START_TIMESTAMP_INVALID	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The Start Test value must be within the 18:00:00:000 to 23:59:59:999.
Data Error	TEST_STATUS_REQUIRED	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The Test Status field must be populated.
Data Error	TEST_STATUS_INVALID_FORMAT	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The Test Status value must be a whole number.
Data Error	TEST_STATUS_INVALID	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The Test Status value must be either 1 or 2.
Data Error	COMMENT_LENGTH_INVALID	Applies to: SpeedTestingTemplate.csv, LowLatencyTestingTemplate.csv The Comments field must be 200 characters or less.
Data Error	SPEED_TYPE_REQUIRED	Applies to: SpeedTestingTemplate.csv The Speed Type field must be populated.



Data Error	SPEED_TYPE_INVALID_FORMAT	Applies to: SpeedTestingTemplate.csv The Speed Type value must be a whole number.
Data Error	SPEED_TYPE_INVALID	Applies to: SpeedTestingTemplate.csv The Speed Type value must be either 1 or 2.
Data Error	SPEED_TYPE_CERTIFIED_FOR_QUARTER	Applies to: SpeedTestingTemplate.csv The Speed Type and the sample must be certified for a given quarter.
Data Error	END_TEST_REQUIRED	Applies to: SpeedTestingTemplate.csv The End Test field must be populated.
Data Error	END_TEST_INVALID_FORMAT	Applies to: SpeedTestingTemplate.csv The End Test value must be in yyyy-mm-dd hh:mm:ss: SSS±HH:MM (UTC offset).



Data Error	START_DATE_INVALID_TIME_RANGE	Applies to: SpeedTestingTemplate.csv The YYYY, MM, DD, hh, mm, ss value of the End Test Date must be within the following range:	
		Value	Range (Inclusive)
		YYYY	2019 - Current Year (Server timestamp)
		MM	01-12
		DD	01-31
		hh	00-23
		mm	00-59
		SS	00-59
Data Error	END_TEST_INVALID_OFFSET	Applies to: SpeedTestingTemplate.csv The UTC offset of the End Test field must be within (-12 to + 14).	
Data Error	END_TEST_INVALID		est timestamp must be on or before the server p.



Data Error	END_TEST_MISMATCH	Applies to: SpeedTestingTemplate.csv
		The End Test value must match the quarter defined by the Start Date Selected in the front end while uploading the respective file.
Data Error	START_END_TEST_MISMATCH	Applies to: SpeedTestingTemplate.csv
		The End Test value must be greater than the Start Test value.
Data Error	END_TIMESTAMP_INVALID	Applies to: SpeedTestingTemplate.csv
		The End Test value must be within the 18:00:00:000 to 23:59:59:999.
Data Error	BYTES_REQUIRED	Applies to: SpeedTestingTemplate.csv
		The Bytes field must be populated.
Data Error	BYTES_INVALID_FORMAT	Applies to: SpeedTestingTemplate.csv
		The Bytes value must be a double data type.
Data Error	LATENCY_REQUIRED	Applies to: LowLatencyTestingTemplate.csv
		The Latency field must be populated.
Data Error	LATENCY_INVALID_FORMAT	Applies to: LowLatencyTestingTemplate.csv
		The Latency value must be an integer.
Data Error	PACKETS_SENT_REQUIRED	Applies to: LowLatencyTestingTemplate.csv
		The Packets Sent field must be populated.



Data Error	PACKETS_SENT_INVALID_FORMAT	Applies to: LowLatencyTestingTemplate.csv The Packets Sent value must be a double.
Data Error	PACKETS_RECEIVED_REQUIRED	Applies to: LowLatencyTestingTemplate.csv The Packets Received field must be populated.
Data Error	PACKETS_RECEIVED_INVALID_FORMAT	Applies to: LowLatencyTestingTemplate.csv The Packets Received value must be a double.
Data Error	PACKETS_RECEIVED_INVALID	Applies to: LowLatencyTestingTemplate.csv The Packets Received must be less than or equal to Packets Sent.

Incomplete Data Issue Codes

Category	Code or Error Message	Description
Issue Code	INCOMPLETE_DATA_SUBMITTED_DAYS	Applies to: Speed Testing and Latency Testing
		Applicable for all the subscribers if the test data submitted for the subscriber has not met the seven consecutive days of data submission with at least one valid test per hour within test specified hour (18:00-23:59) for speed testing and at least one valid test per minute within test specified hour (18:00-23:59) for latency testing.



Category	Code or Error Message	Description
Issue Code	INCOMPLETE_DATA_SUBMITTED_HOURS	Applies to: Speed Testing
		Applicable for all the subscribers if the test data submitted has seven consecutive days of data submitted with at least one valid test per hour, but at least one hour of the test-specified period (18:00-23:59) within seven-day period is missing a valid test; i.e., the test data submitted with test status one.
Issue Code	INCOMPLETE_DATA_SUBMITTED_MINUTES	Applies to: Latency Testing Applicable for all the subscribers if the test-data submitted has seven consecutive days of data submitted with at least one valid test per minute, but at least one minute of the test-specified period (18:00-23:59) within the seven-day period is missing a valid test; i.e., the test data submitted with test status one.

