Connect America Fund: Performance Measures Testing and New Sample Generation

December 5, 2023
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Today’s Speakers

• **John Putman**  
  Communications Specialist  |  High Cost

• **Ajay Ramesh**  
  Product Manager  |  High Cost IT
Connect America Fund: Performance Measures Testing and New Sample Generation

December 5, 2023
High Cost and the Connect America Fund (CAF)

The High Cost program ensures universal availability of essential telecommunications services in rural America

- **Legacy Voice Funds**
  - Subsidize voice service to provide universal access to basic phone lines
  - Calculate support based on carrier costs
  - Provide support to traditional rural telephone companies
  - Are subject to USAC audit process

- **Modernized Broadband Funds (Connect America Fund)**
  - Subsidize broadband to support advanced communications networks and high-speed Internet access
  - Use cost models and competitive bidding to give carriers fixed payments to deploy broadband with minimum speeds to a defined number of rural locations by interim and final milestone deadlines
  - Provide support to traditional rural phone companies, rural electric cooperatives, cable operators, wireless operators, wireless Internet service providers, satellite providers
  - Are subject to CAF compliance framework to ensure required deployment
Connect America Fund Compliance

USAC closely monitors carrier compliance with broadband deployment obligations to ensure that carriers are using CAF support to build out high-speed Internet access that meets minimum speed and latency standards to required location counts by relevant deployment milestone deadlines in rural areas eligible for funding.

Compliance process consists of several steps:

**HUBB Portal: Tracking Broadband Deployment**

**Verification Reviews: Confirming Broadband Deployment**

**Network Performance Testing: Measuring Speed and Latency**

**Final Audit Site Visits**

This compliance framework safeguards Connect America Fund accountability, transparency and integrity.
HUBB Portal: Tracking Broadband Deployment
• Carriers in modernized funds with defined fixed broadband build-out obligations must file deployment data annually with the HUBB

• **Annual HUBB filing deadline is March 1 for carriers to report broadband deployed with CAF support in the prior calendar year or certify “no locations to upload” for the year**

• HUBB collects: geographic coordinates (latitude/longitude) of locations where carriers are deploying broadband with CAF support, speeds available (speed tier) and deployment dates

• HUBB performs automated, real-time validation of data and only accepts locations that pass all checks:
  • Checks that lat/long of a reported location fall within area eligible for funding
  • Checks that the location is not a duplicate of one already submitted
  • Checks that date of deployment falls within fund timeline

• HUBB tracks carrier progress toward meeting interim and final deployment milestones.

• **Accurate geolocation data is key to filing successfully in the HUBB**
  • See USAC guide on geolocation best practices
  • HUBB dataset is foundation for CAF Map
Carriers in these funds (and ACS) have until March 1, 2024, to file data for locations deployed in 2023 or certify “no locations to upload”:

- Alternative Connect America Cost Model (ACAM)
- Revised ACAM
- ACAM II
- Connect America Fund Broadband Loop Support (CAF BLS)
  - HUBB will only accept CAF BLS locations deployed since May 25, 2016
- Connect America Fund (CAF) Phase II Auction (CAF II Auction)
- Rural Digital Opportunity Fund (RDOF)
  - RDOF carriers must submit any locations deployed since July 1, 2019
- Rural Broadband Experiments (RBE)
- Alaska Plan (other than carriers with individualized performance plans)
  - Alaska Plan carriers must also submit node and link data for middle mile fiber and microwave networks
- Bringing Puerto Rico Together (Uniendo a Puerto Rico) and Connect USVI Fund (PR/USVI) Stage 2 Fixed Support
HUBB Portal: Certifying Broadband Deployment

- Carriers have until **March 1, 2024**, to file and certify data for locations deployed in 2023
- Carriers that do not deploy locations in 2023 must certify “no locations to upload” by March 1, 2024
  - **New this year**: “No locations to upload” certification functionality only available between Jan. 1-March 1, 2024
  - USAC has reverted all “No locations to upload” certifications for carriers that have already completed this certification for 2023
    - These carriers must complete this certification again between Jan. 1-March 1, 2024.
- Carriers that do deploy in 2023 can file and certify locations throughout the year
- **New this year**: All carriers must complete a new annual certification to confirm that their filing activity for 2023 is complete, or that they have no locations to upload for the year, with an additional certification between Jan. 1-March 1, 2024
- Carriers with 2023 deployment milestones must also complete a separate milestone certification, including separate milestone certifications for separate deployment obligations by speed tier
  - Carriers may face verification reviews of their 2023 milestones in 2024 to confirm deployment to a random sample of reported locations
HUBB Portal: Tracking Broadband Deployment

For more information about filing in the HUBB, please visit the HUBB resources webpage:

https://www.usac.org/high-cost/annual-requirements/submit-data-in-the-hubb/

Resources include:

- HUBB FAQs
- USAC Guide to Geolocation Practices
- FCC Guidance on Location Reporting
- HUBB User Guide and Data Formatting Instructions
- Templates for data uploads, bulk deletions and bulk modifications
- HUBB webinar recording
- HUBB webinar presentation
Verification Reviews:
Confirming Broadband Deployment
Verification Reviews: Confirming Broadband Deployment

All carriers participating in CAF programs with defined broadband build-out obligations are subject to verification reviews to confirm reported deployment. Verification reviews fall into three main categories:

• Reviews tied to mandatory annual deployment milestones that begin following the annual March 1 HUBB filing deadline
  • Original/Revised ACAM, ACAM II, CAF II Auction and CAF BLS carriers may face reviews in 2024

• Reviews conducted at the request of carriers that complete deployment ahead of required milestones (meet optional milestones) and are seeking to reduce their Letters of Credit (LOC) values
  • RDOF and PR/USVI carriers can request review of an optional 20 percent deployment milestone

• Reviews conducted as part of the FCC Rural Broadband Accountability Plan (RBAP)
  • These reviews can occur before required deployment milestones even if a carrier does not request a review to reduce a LOC

(Carriers may also be subject to site visit audits following final deployment milestones)

Carriers found to have missed deployment milestones face increased reporting obligations and potential withholding/recovery of support
Verification Reviews: Confirming Broadband Deployment

The goal of the verification review process is to confirm that a carrier deployed broadband service meeting the FCC’s performance standards to a qualifying number of locations by the relevant deployment milestone deadline. USAC selects a statistically valid, random sample of locations certified in the HUBB by carriers chosen for review and seeks to verify that:

- The structure at the reported location is eligible for CAF support
- The reported service address accurately corresponds with the reported lat/long coordinates
- The upload and download speeds available are at or above the speeds the carrier must deliver
- The carrier deployed service at the required speeds in time to meet the deployment milestone
- The actual number of units or dwellings at the location accurately ties back to the reported number of units or dwellings for the location record
Carriers must submit documentation that serves as proof of deployment for each location record in the HUBB selected for verification review. Examples of acceptable documentation include:

- Subscriber bills

- Screen shots from public-facing service availability tool showing upload/download speeds available at a particular address

- Letters of certification certified by an outside engineer licensed by the state (including Professional Engineer number) where service was deployed

- Screen shots from an internal provisioning system showing the broadband speeds available at a particular service address (and associated geo-coordinates if available)

- DSLAM construction project completion sign-off sheets that releases all locations tied to this DSLAM to sales for marketing

- Engineering team emails showing that all locations tied to a particular DSLAM are released to sales for marketing
Verification Reviews: Confirming Broadband Deployment

For more information about the verification review process, please visit the verification resources webpage:

https://www.usac.org/high-cost/resources/fund-verification-reviews/

Resources include:
Verification webinar recording
Verification webinar presentation
Verification review schedule (by fund)
Examples of the types of documentation that carriers can supply to prove deployment
Network Performance Testing: Measuring Broadband Speed and Latency
Network Performance Testing: Measuring Speed and Latency

• Framework ensures that CAF-supported broadband service meets basic performance measures standards

• Carriers must conduct one week of speed and latency testing at a random sample of CAF-supported locations with active subscribers in each quarter of the year, and submit and certify all test results for all selected locations (unless subject to FCC waiver) for all four quarters in the PMM by the following July 1
  • Coming soon: FCC will require carriers to report test results within two weeks of the end of the quarter (timing of this new mandate is still TBD)
  • At least 80 percent of speed measurements must be at 80 percent of required speeds and 95 percent of low-latency measurements must fall at or below 100 milliseconds round-trip time
    • FCC considers failure to meet speed and latency standards as a failure to deploy and may withhold support
  • Before official testing begins, carriers must conduct a year of quarterly “pre-testing”
    • Carriers must submit and certify all test results for all selected locations (unless subject to FCC waiver) in the PMM within one week of the end of the quarter, but will not face withholding of support for failing to meet speed and latency standards
  • USAC provides quarterly compliance reports during pre-testing – and to carriers that file and certify test data within one week of the end of the quarter during official testing - to help carriers track their progress
Network Performance Testing: Performance Measures Module

• Lets carriers identify which locations deployed with CAF support and reported in the HUBB have active subscribers
• Generates a random sample of locations for speed and latency testing and provides the obligated speed tiers to be tested (based on the speed tiers reported for those locations in the HUBB compared with the speeds carriers are required to deliver)
  • For funds with multiple speed tiers, the obligated speed tier to be tested for some locations may not be the same as the speed tier reported for that location in the HUBB
  • Carriers must obtain a new sample after two years of pre-testing/testing
• Collects the speed and latency test results from carriers
• Calculates compliance with performance measures standards based on certified test results
  • Carriers can download compliance reports that provide details at the SAC level about the percent of upload and download speed tests and latency tests that met FCC network performance standards
  • See USAC website for a detailed explanation of how the PMM calculates compliance
Carriers in these funds (and ACS) have until Dec. 31, 2023, to complete one week of fourth quarter testing:

- Carriers in these funds began quarterly pre-testing in January of 2022 and quarterly official testing in January of 2023 (cycle year: CY2022_23), and are now in their first year of quarterly official testing:
  - Alternative Connect America Cost Model II (ACAM II)
  - Connect America Fund-Broadband Loop Support (CAF BLS)
  - Connect America Fund (CAF) Phase II Auction
  These carriers (and ACS) must obtain new random samples for ongoing quarterly testing next year (cycle year: CY2024_25)
    - New: CAF BLS carriers out of compliance for 2023 can request statistically valid sample

- Carriers in these funds began quarterly pre-testing in January of 2021 and quarterly official testing in January of 2022 (cycle year: CY2021_22), and are now in their second year of quarterly official testing (cycle year: CY2023_24):
  - Alternative Connect America Cost Model (ACAM) and Revised ACAM
  - Rural Broadband Experiments (RBE)
  - Alaska Plan
Network Performance Testing: Upcoming Obligations by Fund

• Bringing Puerto Rico Together (Uniendo a Puerto Rico) Fund and the Connect U.S. Virgin Islands (PR/USVI) Fund
  • Will begin quarterly pre-testing in January of 2024 and quarterly official testing in January of 2025 (cycle year: CY2024_25)
  • These carriers must obtain random samples for quarterly pre-testing that starts next year

• Rural Digital Opportunity Fund (RDOF)
  • Will begin quarterly pre-testing in January of 2025 and quarterly official testing in January of 2026

• Enhanced Alternative Connect America Cost Model (Enhanced ACAM)
  • Will begin quarterly pre-testing in January of 2026 and quarterly official testing in January of 2027
  • Carriers moving to Enhanced ACAM must complete a week of testing with their current funds (Original ACAM, Revised ACAM or CAF BLS) in the fourth quarter of 2023
    • USAC encourages these carriers to continue quarterly testing with their current funds in 2024 – particularly if they are at risk of being out of compliance with 2023 testing since passing quarterly results for 2024 can bring them back into compliance
Network Performance Testing: Tracking Compliance

- Carriers currently have until July 1, 2024, to submit and certify results from testing conducted in all four quarters of 2023, but USAC encourages carriers to file and certify quarterly.
- USAC provides quarterly compliance reports to carriers that file and certify test results within one week of the end of the quarter to help them track their progress and address any shortfalls.
  - First and second quarter compliance reports are currently available in the PMM for carriers that submitted and certified test data quarterly.
  
  - Carriers should check these compliance now to find out if their test results did not meet FCC standards or if they didn't submit all required test data.
    - Carriers that did not meet FCC speed and latency standards for 2023 testing can potentially avoid penalties by submitting passing quarterly results for 2024.
    - CAF BLS carriers out of compliance for 2023 can request a statistically valid sample.
  
  - Carriers still have time to submit missing data.
- USAC will not withhold support from carriers that file and certify data on a quarterly basis and fail to meet speed and latency metrics before evaluating certified data for the full year.
- USAC will only calculate final performance compliance – and withhold support from carriers that fail to meet speed and latency requirements – after carriers submit and certify test data for the entire year.
## Network Performance Testing: Tracking Compliance

<table>
<thead>
<tr>
<th>Fund</th>
<th>SAC</th>
<th>State</th>
<th>Speed Tier</th>
<th>Test Type</th>
<th>Sample Size Met</th>
<th># of Tests Certified</th>
<th>Compliance %</th>
<th>Compliance Level</th>
<th>Actions</th>
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<td>AK</td>
<td>3</td>
<td>UL Speed</td>
<td>Passed</td>
<td>2100</td>
<td>100 %</td>
<td>Fully Compliant</td>
<td>✓</td>
<td></td>
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<tr>
<td>CAFII</td>
<td>AK</td>
<td>3</td>
<td>DL Speed</td>
<td>Passed</td>
<td>2100</td>
<td>100 %</td>
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<td></td>
</tr>
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<td>3</td>
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<td>Passed</td>
<td>126000</td>
<td>100 %</td>
<td>Fully Compliant</td>
<td>✓</td>
<td></td>
</tr>
<tr>
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<td>UL Speed</td>
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<td>1680</td>
<td>100 %</td>
<td>Fully Compliant</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>ACAM</td>
<td>AK</td>
<td>3</td>
<td>UL Speed</td>
<td>Passed</td>
<td>2100</td>
<td>100 %</td>
<td>Fully Compliant</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>ACAM</td>
<td>AK</td>
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<td>UL Speed</td>
<td>Passed</td>
<td>2100</td>
<td>100 %</td>
<td>Fully Compliant</td>
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<td></td>
</tr>
<tr>
<td>ACAM</td>
<td>AK</td>
<td>2</td>
<td>UL Speed</td>
<td>Passed</td>
<td>210</td>
<td>100 %</td>
<td>Fully Compliant</td>
<td>✓</td>
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</tr>
<tr>
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<td>100 %</td>
<td>Fully Compliant</td>
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</tr>
<tr>
<td>ACAM</td>
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<td>4</td>
<td>UL Speed</td>
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<td>100 %</td>
<td>Fully Compliant</td>
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<tr>
<td>ACAM</td>
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<td>1680</td>
<td>100 %</td>
<td>Fully Compliant</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
To generate random samples for testing, carriers must complete the following steps:

- Download their certified HUBB locations into a comma separated value (CSV) file
- Determine which HUBB locations have active subscribers
- Add a carrier-generated, alpha-numeric subscriber ID to the CSV template to serve as a unique identifier for each HUBB location with an active subscriber
  - Carriers should not use any personally identifiable information (such as a customer phone number or social security number) in a subscriber ID
- Upload the CSV template to PMM
- Once all subscriber location data has been uploaded and certified, select “Submit to Randomizer” in PMM
- Generate a random sample of locations in PMM
- Download the sample with the locations and obligated speed tiers to be tested
Network Performance Testing: Obtaining Random Samples

• Carriers should be certain that their broadband deployment information in the HUBB is as up-to-date, accurate and complete as possible before obtaining random samples from the PMM
  • Carriers that do not have locations in HUBB yet must start testing within one quarter after they do

• Carriers cannot delete HUBB records, or edit or modify the number of units for HUBB records, for subscriber locations that have been randomly selected for speed and latency testing during the two years when those locations are part of the testing sample

• Carriers should only request a random sample one time and should not alter uploaded subscriber location data or request a new sample once a sample is generated for a SAC

• Sample sizes are determined by number of active subscribers submitted to the PMM - up to 50 locations

• For funds with multiple speed tiers, the obligated speed tier to be tested for some locations may not be the same as the speed tier reported for that location in the HUBB

• New sample may contain some of the same subscriber locations that are in existing sample
Network Performance Testing: Managing Random Samples

• Replacing subscribers
  • To replace a selected subscriber with the next randomly selected one, a carrier must provide a reason:
    • Subscriber Refused to Allow Installation of Testing Equipment
    • Subscriber Dropped Service (no longer active)
    • Subscriber Demands Removal of Testing Equipment
    • Subscriber Subscribes to Lower Speed Than Being Tested
    • Natural Disaster
    • Other – Requires Explanation and USAC / FCC Review

• Adding subscribers
  • Carriers may request additional randomly selected subscribers to test, but are responsible for submitting test data for any additional subscribers

• No Valid Subscribers
  • Carriers that cannot find five active subscribers to test are subject to verification that more subscribers are not available
Performance Measures Module: New Functionality

• **Review Expected Sample** page (located under the randomizer menu in the PMM)
  • Displays the samples that the system expects to generate based on a carrier’s current SAC entitlements, speed tier obligations in the HUBB and uploaded subscriber location data
  • System now tracks carrier progress in uploading test data for each expected sample

• **No Subscriber Attestation** (quarterly)
  • Allows a carrier to attest that it does not have any active subscriber locations to upload – and therefore cannot generate a sample - for a particular cycle/fund/SAC/state/speed tier combination
  • Requires carrier to provide an explanation for lack of active subscribers
Network Performance Testing: Measuring Speed and Latency

Carriers must:

- Test up to 50 locations for each speed tier they are required to deploy to in each state where they receive support
  - Sample sizes are determined by the number of active subscribers submitted to PMM
- Conduct testing at all selected locations (unless subject to FCC waiver)
- Meet separate testing requirements for each fund in which they participate
- Use the same subscriber locations for both speed and latency testing
- Provide subscribers at selected locations with necessary CPE (modem, router) at no extra cost
- Test from customer premises to a remote test server located at, or reached by passing through, FCC-designated IXP
  - FCC rules provide allowance for crosstalk caused by consumer activity
- Conduct all speed tests in same week and all latency tests in same week
  - Speed and latency tests may take place in different weeks
- Conduct testing between 6 p.m. and 12 a.m. local time
- Certify all test results for all locations using separate CSV files for speed and latency results
Network Performance Testing: PMM Process Flow

1. Get HUBB Data
2. Add Subscriber Data
3. Upload Subscriber Data
4. Submit to Randomizer
5. Generate Sample
6. Download Sample
7. Test Sample
8. Submit Test Data

- Download Certified HUBB Location Records
- Add Subscriber IDs to Template
- Upload Subscriber Template
- Submit Subscriber Data to Randomizer
- Generate Sample of Subscribers to Test
- Download Sample of Subscribers to Test
- Conduct Performance Testing of Sample
- Submit All Speed and Latency Data for Subscribers

Remember To Certify Your PMM Data
Network Performance Testing: Obtaining New Samples

- PMM is ready to accept subscriber location data from ACAM II, CAF BLS, CAF II Auction and PR/USVI carriers (and ACS) and generate random subscriber location samples for these carriers to begin or continue quarterly speed and latency testing in 2024. Carriers can now:
  - Upload all subscriber locations, submit to randomizer, and generate/download sample(s)
- Carriers should start this process ASAP to have enough time to prepare for testing in 2024!
- New samples should reflect new deployments, new subscribers and network upgrades (upgraded speed tiers)
  - Carriers should be sure that their broadband deployment information in the HUBB is as up-to-date, accurate and complete as possible before requesting a new sample
  - Obligated speed tiers for locations already in the HUBB are now locked, but carriers can edit lat/long coordinates and address information and add new deployments
    - While carriers have until March 1, 2024 to submit broadband locations built in 2023 to the HUBB, USAC encourages carriers to file 2023 deployments as soon as possible so those locations can potentially be included in random samples
    - USAC is using a special process to generate new random samples for CAF BLS carriers with fewer than 150 locations in the HUBB
Network Performance Testing: Timeline for Obtaining New Samples

October/November
- Add New or Upgrade Existing Locations in HUBB

November
- PMM Windows Opened for New Sample Generation
- Continue to Complete Testing for Q4 2023 with Existing Sample

December
- Contact Subscribers for Performance Testing in Q1
- Generate New Sample
- Replace Subscribers as Needed for New Sample

January
- Start Data Collection for New Sample
Performance Measures Module

Upload Subscriber List

1. Select the proper Cycle
2. Start the New Sample process by generating HUBB data
3. Download file with HUBB locations and enter Subscriber IDs
4. Upload template with Subscriber IDs
| A   | B       | C     | D     | E     | F     | G     | H     | I     | J     | K     | L     | M     |
|-----|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1   | Cycle   | Fund  | SAC   | Latitude | Longitude | Address | State | Speed | Tie # of Units | Carrier Loc | HUBB Loc | Subscriber ID(s) |
| 2   | CY2021_22 | AK PLAN | 613015 | 61.46269 | -149.356 | 1472 MAIN | AK    | 12    | 62070 | 555 | 65149866 |
| 3   | CY2021_22 | AK PLAN | 613015 | 61.45808 | -149.37 | 1472 MAIN | AK    | 12    | 62070 | 555 | 65149867 |
| 4   | CY2021_22 | AK PLAN | 613015 | 61.4537 | -149.378 | 1472 MAIN | AK    | 12    | 62070 | 555 | 65149868 |
| 5   | CY2021_22 | AK PLAN | 613015 | 61.46065 | -149.357 | 1472 MAIN | AK    | 12    | 62070 | 555 | 65149869 |
| 6   | CY2021_22 | AK PLAN | 613015 | 61.45813 | -149.352 | 1472 MAIN | AK    | 12    | 62070 | 555 | 65149870 |
| 7   | CY2021_22 | AK PLAN | 613015 | 61.45808 | -149.356 | 1472 MAIN | AK    | 12    | 62070 | 555 | 65149871 |
| 8   | CY2021_22 | AK PLAN | 613015 | 61.45395 | -149.351 | 1472 MAIN | AK    | 12    | 62070 | 555 | 65149872 |
| 9   | CY2021_22 | AK PLAN | 613015 | 61.41771 | -149.179 | 1472 MAIN | AK    | 12    | 62070 | 555 | 65149873 |
| 10  | CY2021_22 | AK PLAN | 613015 | 61.44517 | -149.368 | 1472 MAIN | AK    | 12    | 62070 | 555 | 65149874 |
| 11  | CY2021_22 | AK PLAN | 613015 | 61.44282 | -149.367 | 1472 MAIN | AK    | 12    | 62070 | 555 | 65149875 |
Performance Measures Module

Verify Subscribers

Subscriber Detail

AK PLAN: 12 days, left to Submit Subscribers to the Randomizer.

CARI/ACMII/CARI BS/CARI AOC: 73 days, left to Submit Subscribers to the Randomizer.

Below is your list of auto-saved HUBR locations with Subscriber IDs.

Please view the table below to see data for all Cycles, Funds and SACs or use the filter to view data for a specific Cycle, Fund and SAC.

Once you have completed uploading and reviewing your Subscriber data, please press the "Submit to Randomizer" button to send your data to the Randomizer tool.

After you have clicked "Submit to Randomizer", all subscriber data will be sent to the Randomizer tool and will no longer be visible on this page.

Test subjects must be randomly selected every two years from among the provider’s active subscribers in each service tier in each state. Once subscribers are uploaded for the cycle, carriers can no longer add additional subscribers until the next sample is generated with the next two-year cycle.

Cycle

Fund

SAC

Close All

Filter

- Download/Export Data

- Displaying 50 of 51 records

- Show 5 records/page

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Performance Measures Module: Review Expected Sample

New screen: Review Expected Samples

If no subscribers uploaded for a SAC / Speed Tier combination, Attest that No Subscribers are available.
Performance Measures Module: No Subscriber Attestation

Certify that you have No Subscribers for this SAC / Speed Tier

Confirmation message

View Attestation History

Attested History

<table>
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<tr>
<th>Quarter Year</th>
<th>Attested By</th>
<th>Date and Time</th>
<th>Comments</th>
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<tbody>
<tr>
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<td><a href="mailto:prem_spoc@uscac.org">prem_spoc@uscac.org</a></td>
<td>10/20/2023 12:01 PM</td>
<td>No subscribers are available for this speed tier.</td>
</tr>
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</table>
## Performance Measures Module

### Generate Samples Screen

**Randomizer Samples**

Generate your randomized data samples below. The amount of subscribers listed in each sample is based on the total number of subscribers in each state for each speed tier within a Fund.

Test subjects will be randomly selected every two years from among the provider's active subscribers in each speed tier in each state. Once subscribers are uploaded for the cycle, carriers can not add additional subscribers until the next sample is generated with the next two year cycle.

**Sample List**

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Fund</th>
<th>SAC</th>
<th>State</th>
<th>Speed Time</th>
<th>Created On</th>
<th>Created By</th>
<th>Status</th>
<th>Actions</th>
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<tbody>
<tr>
<td>CY2022.23</td>
<td>ACAM</td>
<td>IA</td>
<td>2</td>
<td>09/20/2022 09:54 AM</td>
<td><a href="mailto:raquel@meritcmm.com">raquel@meritcmm.com</a></td>
<td>Replace</td>
<td>Replace Subscribers</td>
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</tr>
<tr>
<td>CY2022.23</td>
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<td>09/20/2022 09:54 AM</td>
<td><a href="mailto:raquel@meritcmm.com">raquel@meritcmm.com</a></td>
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Performance Measures Module

Upload Performance Data Screen

Select options for data file

Select file and upload performance data
Performance Measures Module

Review Performance Data Screen

To review your performance data, filter by the fund, state, sample, and file type.

Data Submission Status: CY2023_24-ACAM13017-AK-2

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Download file with record errors
Performance Measures Module

Certify/View Performance Results

Certify Performance Data Screen

Select file and click Certify to complete filing process
Performance Measures Module

Compliance Report Screen

Compliance Results
Network Performance Testing: Measuring Speed and Latency

For more information about performance measures testing, please visit the performance measures resources webpage:

https://www.usac.org/high-cost/annual-requirements/performance-measures-testing/

Resources include:

- Performance Measures testing schedule (by fund)
- [FCC information](#) about the performance measures testing program
- [Charts](#) showing acceptable test paths and remote server locations
- List of [vendors](#) that are helping carriers with speed and latency testing
- Quick tips [guide](#) to the PMM
- An [explanation](#) of PMM compliance calculations
Questions?