# Connect America Fund: Performance Measures Testing and New Sample Generation

December 5, 2023

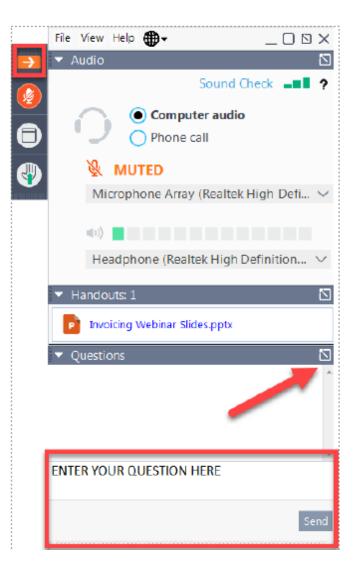


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# Today's Speakers

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# 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.

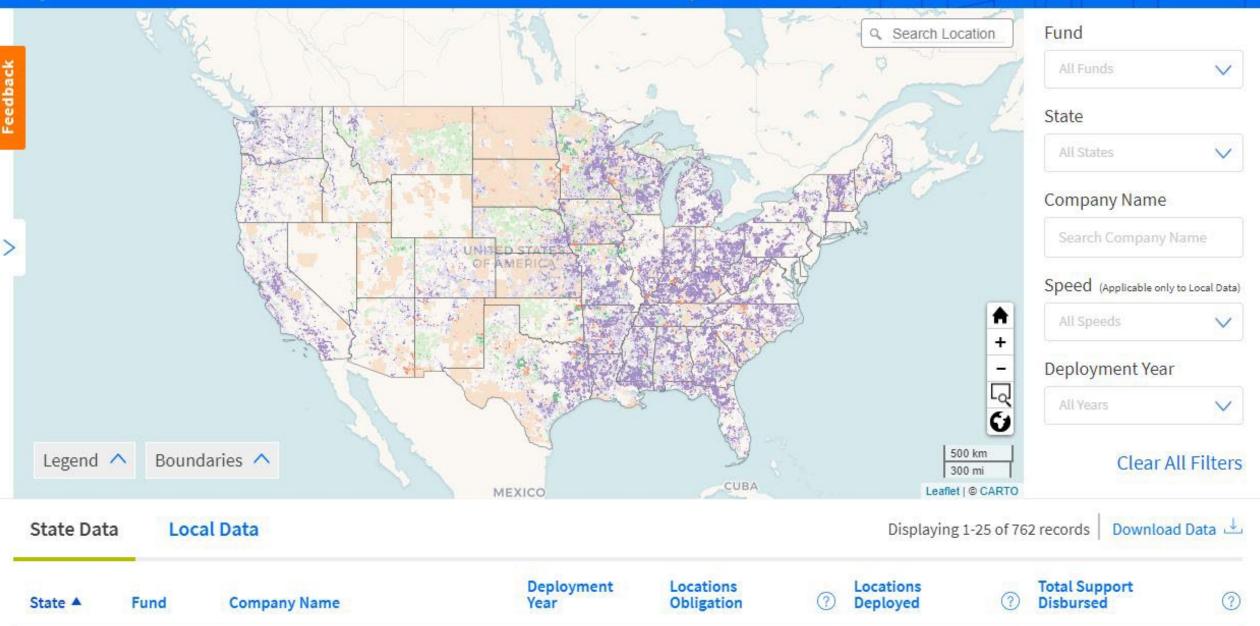
# HUBB Portal: Tracking Broadband Deployment



# 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

#### Universal Service Connect America Fund Broadband Map



# **HUBB Portal: Filing Obligations by Fund**

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
  - <u>New this year</u>: "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
- <u>New this year</u>: 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 <u>Guide</u> to Geolocation Practices FCC <u>Guidance</u> on Location Reporting <u>HUBB User Guide</u> and <u>Data Formatting Instructions</u> Templates for <u>data uploads</u>, <u>bulk deletions</u> and <u>bulk modifications</u> HUBB webinar <u>recording</u> HUBB webinar <u>presentation</u>



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

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

#### 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 <u>recording</u> Verification webinar <u>presentation</u> 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 <u>all test results for all</u> <u>selected locations (unless subject to FCC waiver)</u> 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 <u>all test results for all selected locations</u> (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 <u>certified</u> 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

# Network Performance Testing: Testing Obligations by Fund

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
  meet speed and latency requirements after carriers submit and certify test data for the entire year

### **Network Performance Testing: Tracking Compliance**

								Displaying 1-10 o	of 6618 record
Fund	SAC	State	Speed Tier	Test Type	Sample Size Met	# of Tests Certified	Compliance %	Compliance Level 🔺	Actions
CAFII		AK	3	UL Speed	Passed	2100	100 %	Fully Compliant	Ľ
CAFII		AK	3	DL Speed	Passed	2100	100 %	Fully Compliant	Ľ
CAFII		AK	3	Low Latency	Passed	126000	100 %	Fully Compliant	Ľ
ACAM		AK	2	UL Speed	Passed	1680	100 %	Fully Compliant	Ľ
ACAM		AK	3	UL Speed	Passed	2100	100 %	Fully Compliant	Ľ
ACAM		AK	4	UL Speed	Passed	2100	100 %	Fully Compliant	
ACAM		AK	2	UL Speed	Passed	210	100 %	Fully Compliant	Ľ
ACAM		AK	3	UL Speed	Passed	252	100 %	Fully Compliant	Ľ
ACAM		AK	4	UL Speed	Passed	210	100 %	Fully Compliant	Ľ
ACAM		AK	2	DL Speed	Passed	1680	100 %	Fully Compliant	Ľ

# **Network Performance Testing: Obtaining Random Samples**

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 <u>before</u> 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**

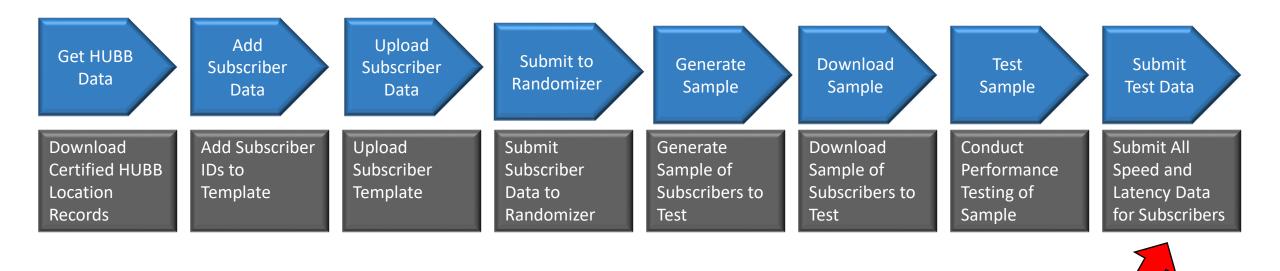
- **Review Expected Sample** page (located under the randomizer menu in the PMM)
  - Displays the samples that the system expects to generate based on a carrier's current SAC entitlements, speed tier obligations in the HUBB and uploaded subscriber location data
  - System now tracks carrier progress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



Remember

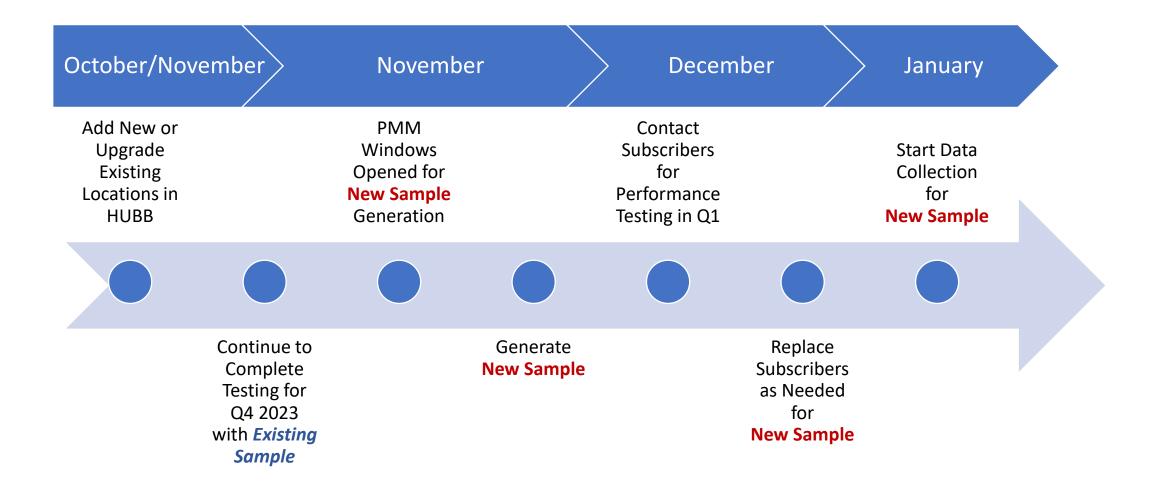
**To Certify Your** 

**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 upto-date, accurate and complete as possible <u>before</u> 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**



		P	erformance Measures	Module				
Upload Subscribers Subscriber D	Detail Randomizer Performance Data							
Upload Subsc	riber List							
(i) AK PLAN: 12 days left to Upload Se	ibscribers.							
© CAFII,ACAMII,CAF BLS,CAFI	AUC: 73 days left to Upload Subscribers.							
Is collected, including it's start year and end solution of the start year and end sol	year. This fife will have a column for you to add your Subscriber IDs.           Select Cycle           Select Fund			r Cycle ew Sample proce HUBB data	ess by			
Generate HUBB Data								
	oad Template_10-19-2023-10-04-28.csv	Download file with HU	JBB locations and	d enter Subscribe	er IDs			
Performance Subscriber Data Uple  Step 2: Upload the downloaded HUBB Data The Cycle and Fund in the file must match th For more information on data validation and  Upload Subscriber File	file with your Subscriber IDs by Cycle and Fund. te Cycle and Fund selected in Step 1. Formatting rules, click on Detailed instructions. Upload tem	Download file with Hu	JBB locations and	d enter Subscribe	er IDs			
Performance Subscriber Data Uple  Step 2: Upload the downloaded HUBB Data The Cycle and Fund In the file must match th For more information on data validation and	file with your Subscriber IDs by Cycle and Fund. te Cycle and Fund selected in Step 1. Formatting rules, click on Detailed instructions. Upload tem		JBB locations and	d enter Subscribe	er IDs Records Saved	Data Errors	Download Errors	Delete
Performance Subscriber Data Uplo  Step 2: Upload the downloaded HUBB Data The Cycle and Fund In the file must match th For more information on data validation and  Upload Subscriber File  Recently Uploaded	file with your Subscriber IDs by Cycle and Fund. te Cycle and Fund selected in Step 1. Iformatting rules, click on Detailed instructions. Upload tem Files	plate with Subscriber IDs				Data Errors 0	Download Errors	Delete
Performance Subscriber Data Uple Step 2: Upload the downloaded HUBB Data The Cycle and Fund in the file must match th For more information on data validation and Upload Subscriber File Recently Uploaded File Name	flle with your Subscriber IDs by Cycle and Fund. te Cycle and Fund selected in Step 1. I formatting rules, click on Detailed instructions. Upload tem Files te_ACAMIL_462203.csv	uplate with Subscriber IDs	Progress	Records Uploaded	Records Saved		Download Errors  - Download Errors	

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_	A	В	C	D	E	F	G	Н		J	К	L	М
1	Cycle	Fund	SAC	Latitude	Longitude	Address	State	Speed Tie	# of Units	Carrier Lo	HUBB Loca	Subscribe	r 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	АК	12	62070	555	65149872		
9	CY2021_22	AK PLAN	613015	61.41771	-149.179	1472 MAIN	АК	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					
Upload Subscribers	Subscriber D	etail Rand	omizer Performanc	e Data							
Subscri	ber Det	tail 「		Verify Subscr	bers						
(i) AK PLAN : 12	days left to Submit Su	bscribers to the Ran	domizer.								
© CAFII,ACAMI	I,CAF BLS,CAFII	AUC:73 days 1	eft to Submit Subscribers to the	e Randomizer.							
Below is your list	of auto-saved HI	UBB locations	with Subscriber IDs.								
Please view the ta	able below to see	e data for all C	ycles, Funds and SACs	s or use the filter to vie	w data for a sp	vecific Cycle, Fund and SAC.					
Once you have co	ompleted upload	ing and review	ving your Subscriber of	data, please press the	"Submit to Rar	ndomizer" button to send your data to the Randomizer tool.					
						I will no longer be visible on this page.					
Test subjects mus	st be randomly se	elected every	wo years from among		subscribers in	each service tier in each state. Once subscribers are uploaded for the					
Cycle All	~			Fund All	~	SAC	Clear	Filter			
🕹 Download Filtered Da	ta										Displaying 1-10 of 145 records
Cycle	Fund	SAC	Latitude	Longitude	State	Address	Speed Tier	# of Units	Carrier Location ID	HUBB Location ID	# of Subscriber IDs
CY2021_22	AK PLAN		58.739979	-156.983901	AK	SCHOOL RD ELDERS 5		1		21968530	1
CY2021_22	AK PLAN		58.729772	-156.998303	AK	AGS BUNKHOUSE 85		1		21968540	1
CY2021_22	AK PLAN		58.738565	-156.977944	AK	MAIN OFFICE RED SALMON CANNERY		3		21968542	3
CY2021_22	AK PLAN		58.729646	-156.998195	AK	AGS BUNKHOUSE 86		1		21968549	1
CY2021_22	AK PLAN		58.745064	-156.955229	AK	FLEET OFFICE		1		21968553	1
CY2021_22	AK PLAN		58.745829	-156.952013	AK	NEW BUNKHOUSE DSL SB		2		21968555	2
CY2021_22	AK PLAN		58.744847	-156.995330	AK	MAIN OFFICE AT L&M WEST OF LEADER CREEK FISHERIES		1		21968561	1
CY2021_22	AK PLAN		58.675430	-156.655733	AK	CURRIERS TRIPLEX UNIT #1 ACCROSS FROM LAKE & PEN S APT 2		1		21968563	1
CY2021_22	AK PLAN		58.696349	-156.686613	AK	DIAMOND LODGE HOUSE OFF OF SOCKEYE RD		1		21968567	1
CY2021_22	AK PLAN		58.742228	-156.989998	AK	LAST HOUSE ON SALMONBERRY RD NORTH OF CEDARVILLE		1		21968574	1

Show 10 V records/page

Revert Randomizer

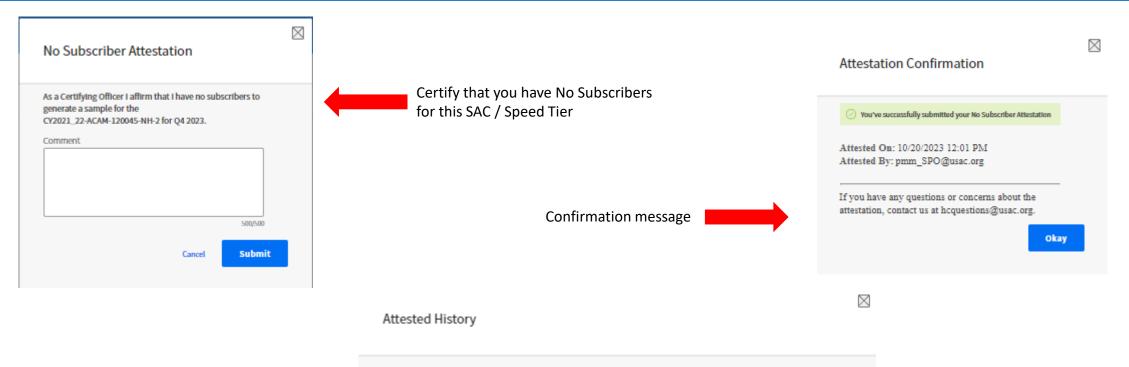
Submit to Randomizer

Of 15 pages
 Of 15

#### **Performance Measures Module: Review Expected Sample**

					Performance M	Aeasures Module		
pload Subscribers	Subscriber Detail R	Randomizer Perform	ance Data					
Review Expe	ected Samples Generate	e Samples						
Review I	PMM Expec	ted Samp	ole(s)	New	screen: Review Expected S	Samples		
n this page you w beed Tier obligati	will be able to review the e tion(s). The Expected samp pload performance data fo	expected sample(s) bas ple(s) refers to all the s	ed on your current S ample(s) that you are					
	expected sample set repr tions needed on the follow							
ou have the option able below. The At carrier is required comment explain	any subscribers for your F on to utilize the Attestation Attestation link will be enal d to attest each testing qu ning the reason for not up ed Sample List	n feature provided in th bled under the 'Action: uarter. During the Attest	e PMM Expected Sar s' column for all eligi ation process, you m	nple List ble samples. nust provide		Spe	o subscribers uploaded for a SAC / ed Tier combination, Attest that No scribers are available	
ACAM,ACAMII	I,AK PLAN,CAF BLS,CAFII	I,CAFII AUC,RBE : 73 d	<b>ays</b> left to make changes to	your randomized samples for Q4 2023.				
Cycle			Fund		State		Status All	
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lear All <b>Filt</b>		SAC		Speed Tier 2	HUBB Location Count ①	Subscriber Count ①	Status ① Ready for Download	Actions 🚯
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### **Performance Measures Module: No Subscriber Attestation**



Quarter Year	Attested By	Date and Time	Comments	*	
Q4 2023	pmm_SP0@usac.org	10/20/2023 12:01 PM	No subscribers are available for this speed tier.		View Attestation History
				*	
			Clo		

se De.							Performance Measures Module				
Upload Subscribers S	Subscriber Detail R	andomizer P	erformance D	ata							
Review Expected	Samples Generate	Samples									
					Generate	Samples Screen					
Randomiz	er Samp	les									
Generate your randomiz based on the total num											
Test subjects must be ra subscribers in each serv can not add additional s Sample List	vice tier in each state	Once subscribe	ers are uploa	ided for the cyc	cle, carriers						
-											
(i) ACAM,ACAMII,AK P	PLAN,CAF BLS,CAFII	,CAFII AUC,RBE	: 73 days lef	ft to make changes to	your randomized samples	for Q4 2023.					
Cycle					Fund All			All		·~·	
Clear All Filter							Poplac	o Subceribore	Download S	ubscriber File	
	Ger	ierate San	nple				Керіас	e Subscribers			
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Generate	Cycle CY2024,25 CY2022_23	Fund ACAMII ACAMII		IA IA	2	Created On - 06/23/2022 04:53:04 PM		Status Pending Generation Ready for Download	Replace Subscribers ① - Replace	Actions - غ ا ۱۰  +	No Valid Subscribers ① - -
	Cycle CY2024_25 CY2022_23 CY2022_25	Fund ACAMII ACAMII ACAMII		IA IA IA	2 4 4	- 08/23/2022 04:53:04 PM -	Created By - rachel@metcteam.com -	Status Pending Generation Ready for Download Pending Generation	- Replace	- ∓l⊚l+	No Valid Subscribers ①
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	Performance Measures Module	
Upload Subscribers Subscriber Detail F	Randomizer Performance Data	
Upload Data Review Data Cert	tify Data Compliance Report	
Upload Performan	uce Data Upload Performance Data Screen	
	ance test data for both speed tier and latency testing ples. To upload your performance test data, follow	
Step 1: Download Speed and Latency data templates for submitting your subscriber locations test results.		
SpeedTestingTemplate.csv LatencyTestingTemplate.csv		
Step 2:Upload performance test results by selecting the ap Cycle, Fund, State, Sample, File Type and Start date of you submission period. Performance test results should be col according to the template you downloaded and only corre the sample for which you are uploading performance data information on data validation and formatting rules, click of Detailed instructions. ⊇	ur 7-day quarterly data Ilected respond to a. For more	
Select Cycle	CY2022_23 V	
Select Fund	ACAMII	
Select State	Select options for data file	
Select Sample	Select a Sample V	
Select File Type	Select File Type $\checkmark$	
Select Start Date of 7 day data submission period	MM/DD/YYYY	
Upload Performance Data	Select file and upload performance data	

			Performance	e Measures Module		
Upload Subscribers Subscrib	er Detail Randomizer Performa	ince Data				
Upload Data Review	Data Certify Data Compliance	Report				
	esults you've submitted and verify th		nance Data Screen	given Fund, State, Sample, and File Type below. Perf	ormance test results must be certified to be measured for comp	liance. Please review your
Select Testing Quarter Q420	23	~				
1. Fund ACAM Filter Clear Fi	2. State	~	3. Sample CY2023_24-ACAM-613017-AK-2	Test records with Errors	4. Test Type Download Speed	
HUBB Location ID	Subscriber ID	# of Test(s) Submitted 🕕	# of Incomplete Test(s) 👔	Submission Status 🕕 🔺		
28665456	104431_9967662071	0	42	0		
28665390	104918_9997662315	0	42	0		
28666163	105072_9997662422	0	42	0		
49964812	105460_9997662707	0	42	0		
28665391	106083_9997663126	0	42	0		
28665446	106933_9997663678	0	42	0		
66409392	107298_9997663936	0	42	Φ		
58912144	107399_9997663993	0	42	Φ		
28662334	107620_9997675414	0	42	O		
28662273	107797_9997675488	0	42	O		
Show 10 V records/page				< 1 > of 4 pages		

	Performance Measures Module	
Upload Subscribers Subscriber Detail Randomizer Performance Data		
Upload Data Review Data Certify Data Compliance Report		
Certify/View Performance Results Compliant Window Deadline	n	
ACAMII: 91 days left to submit and certify performance data for Q4 2023.		
C ACAM, ACAMII, AK PLAN, CAF BLS, CAFII, CAFII AUC, RBE: 258 days left to submit and certify performance data for Q3 2023, Q4 2023, Q1 2023 and Q2 2023.		
Non-Compliant Window Deadline		
(i) ACAM, ACAMII, AK PLAN, CAF BLS, CAFII, CAFII AUC, RBE: 81 days left to submit and certify performance data for Q4 2023.		
ACAMII: 90 days left to submit and certify performance data for Q4 2023.		
Certify samples by speed and latency below. You will not be able to update data once it has been certified.		
Select Testing Quarter Q42023 V		
(j) There are no samples to certify for the filter values selected.		
Certify Performance Test Data		
Data Status Fund S	State	Test Type
Not Certified V ACAM V	AK 🗸	All
		Clear All Filter
Cycle Fund SAC State Speed Tier Test Type Sample Size % []	# of Test(s) Completed (j) # of Test(s) I	lequired (j) Submitted Test % (j)
Select file and click Certify to complete filing process		

						Performance Measure	s Module			
load Subscribers	Subscriber Detail	Randomizer	Performance Data							
Upload Data	Review Data	Certify Data	Compliance Report		Compliance Repo	ort Screen				
ly compliant samp	or annual complia oles. Whereas, perf s with High Laten	nce report using formance data fo	or incomplete performance	e data submissions and f	Based on your annual report, if y or Levels 1-4 is due quarterly un	your compliance level reflects "Full C util a sample is fully compliant. See c gy on USAC's website for more inform	ompliance levels and suppo			
rter and Year 3 2023			Fund All		Test Type	e Gea	ar All Filter	Cc	ompliance Resu	lts
) One or more of your sar								6 - 5 - N	↓	Displaying 1-10 of 819 records
Nownload Report	State	Speed Tier	Test Type	Sample Size Met	# of Tests Compliant	# of Tests Non-Compliant	# of Missed tests	Compliance %	Compliance Level	Displaying 1-10 of 819 records History
ownload Report nd SAC	State		UL Speed	Passed	1207	# of Tests Non-Compliant	# of Missed tests 0	100 %	Fully Compliant	
Ind SAC	State AK AK	Speed Tier 2 4	UL Speed UL Speed	Paszed Paszed	1207	1	0	100 % 100 %	Fully Compliant Fully Compliant	
nd SAC AM AM	State AK AK AK	Speed Tier 2	UL Speed UL Speed UL Speed	Passed Passed Passed	1207 1898 1915	1 1 1 1	0	100 % 100 % 100 %	Fully Compliant Fully Compliant Fully Compliant	History -
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Ind SAC	State AK AK AK AK	Speed Tier 2 4 3 4	UL Speed UL Speed UL Speed DL Speed	Passed Passed Passed Passed	1207 1898 1915 1851	1 1 1 48	0 0 0	100 % 100 % 100 %	Fully Compliant Fully Compliant Fully Compliant	History -
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nd SAC AM AM AM AM AM AM AM AM	State AK AK AK AK AK AK	Speed Tier 2 4 3 4 4 2 4 2 3 3	UL Speed UL Speed UL Speed DL Speed DL Speed DL Speed	Passed Passed Passed Passed Passed Passed	1207 1898 1915 1851 1187 1868	1 1 1 48 30 27	0 0 0 0 0 0	100 % 100 % 100 % 100 % 100 %	Fully Compliant	History
Download Report	State AK AK AK AK AK AK AK	Speed Tier 2 4 3 4 4 2 3 4 2 3 2 2 2	UL Speed UL Speed UL Speed DL Speed DL Speed DL Speed Low Latency	Passed Passed Passed Passed Passed Passed Passed Passed	1207 1898 1915 1851 1851 1187 1868 40065	1 1 1 48 30 27 626	0 0 0 0 0 0 0	100 % 100 % 100 % 100 % 100 % 100 %	Fully Compliant       Fully Compliant	History

### **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) <u>FCC information</u> about the performance measures testing program <u>Charts</u> showing acceptable test paths and remote server locations List of <u>vendors</u> that are helping carriers with speed and latency testing Quick tips <u>guide</u> to the PMM

An <u>explanation</u> of PMM compliance calculations

