USAC and the Connect America Fund

Coming in 2021:
Deployment Milestones and Verification Reviews for ACAM Carriers

December 3, 2020
Housekeeping

• Use the “Audio” section of your control panel to select an audio source
• Turn on your computer’s speaker, or
• Use the call-in instructions (including audio PIN)

Audience Q&A

• Submit your questions using the “Questions” box in your webinar control panel
• We will answer questions at the end of the presentation
Welcome

Today’s Speaker:

John Putman
Communications Specialist
Stakeholder Engagement and Outreach
Connect America Fund Goals

- Preserve and advance universal availability of voice service
- Drive universal availability of modern networks capable of providing voice and broadband service to homes, businesses and community anchor institutions
- Drive universal availability of modern networks capable of providing advanced mobile voice and broadband service
- Ensure that rates for broadband and voice services are reasonably comparable in all regions of the nation
- Contain administrative costs and minimize the universal service contribution for consumers and businesses through efficient, effective program management
USAC closely monitors carrier compliance with broadband deployment obligations to safeguard the accountability, transparency and integrity of the Connect America Fund.

Compliance process consists of three steps:

- **HUBB Portal: Tracking Broadband Deployment**
- **Verification Reviews: Confirming Broadband Deployment**
- **Performance Testing: Measuring Network Speed and Latency**
High Cost Universal Broadband (HUBB) Portal

A system that collects the geographic coordinates (latitude and longitude) of locations where carriers are deploying broadband using CAF support

- Tool for collecting location-specific service availability data from carriers across all Connect America Fund (modernized) programs – millions of individual records
- Performs automated, real-time validation of data submissions
  - Checks that latitude and longitude of a reported location fall within area eligible for funding
  - Checks that the location is not a duplicate of one already submitted
- Tracks carrier progress toward meeting deployment obligations, including interim milestones
- Annual HUBB filing deadline is in March for carriers to report broadband deployed with CAF support in the prior calendar year or certify “no locations to upload”
A system that collects the geographic coordinates (latitude and longitude) of locations where carriers are deploying broadband using CAF support

• Serves as a starting point for verification reviews to confirm deployment to a statistically valid, random sample of locations reported by carriers
• All carriers participating in CAF programs with deployment obligations are subject to verification reviews tied to mandatory deployment milestones
• Goal is to verify that a carrier deployed broadband service meeting the FCC’s minimum performance standards to a qualifying number of locations by the relevant milestone
• Carriers that miss deployment milestones face increased reporting obligations and potential loss of support
• Provides the foundation for the CAF Map, a public map that shows the impact of CAF funding on broadband expansion across rural America
Performance Measures Testing

Performance measures compliance framework requires carriers receiving CAF support to conduct network speed and latency testing and report the results to USAC

- Carriers must conduct one week of speed and latency testing at a USAC-selected random sample of CAF-supported locations with active subscribers in each calendar quarter
  - Test results due to USAC by July of following year
  - FCC will consider failure to meet basic speed and latency requirements as a failure to deploy and may withhold support
- Before official testing, carriers are subject to quarterly “pre-testing”
  - During pre-testing, carriers must test speed and latency at a random sample of subscriber locations and submit results to USAC on a quarterly basis
  - Carriers will not face withholding of support for failing to meet speed and latency standards during pre-testing
- Windows to start testing vary by fund, beginning with CAF II Model carriers
Verification Reviews:
Confirming Broadband Deployment
HUBB Filing Obligations by Fund

Carriers in these funds have until March 1, 2021 to file data for all locations deployed in 2020:

- **Connect America Fund (CAF) Phase II Model:** Carriers must meet their total build-out obligations by end of 2020 in each state where they receive support (100 percent milestone)

- **Alternative Connect America Cost Model (A-CAM) and Revised ACAM:** Carriers face first milestone for deploying 10/1 Mbps broadband service, and must be at least 40 percent of the way toward meeting their final 10/1 Mbps build-out obligations by the end of 2020 (40 percent 10/1 Mbps milestone)

- **ACAM II and Connect America Fund-Broadband Loop Support (CAF-BLS):** All CAF-BLS carriers must file in the HUBB

- **Rural Broadband Experiments (RBE):** Carriers face rolling deployment milestones

- **Alaska Plan** (other than carriers with individualized performance plans that only require them to maintain service at existing levels)

- **CAF Phase II Auction**
HUBB Filing Obligations

- Carriers with 2020 deployment milestones – including CAF II Model, Original ACAM and Revised ACAM carriers - must also complete milestone certifications as part of the annual HUBB filing and will face verification reviews tied to those milestones
  - Carriers subject to defined build-out milestones must notify the FCC and USAC, and relevant state, U.S. Territory or Tribal governments if applicable, within 10 business days after the applicable deadline if they have failed to meet a build-out milestone
  - Carriers that miss milestones face increased reporting obligations and potential loss of support
  - ACAM milestone tracking functionality is being updated - certification is temporarily turned off

- ACAM II carriers have until March 1, 2021 to report pre-2019 broadband deployment and CAF-BLS carriers have until March 1, 2021 to report pre-2019 broadband deployment at speeds of at least 25 Mbps downstream/3 Mbps upstream (25/3 Mbps) completed since May 25, 2016

- Carriers that did not deploy any locations in 2020 must still log into the HUBB and certify "no locations to upload" by March 1, 2021
Verifying Broadband Buildout

• Verification review goal is to confirm that a carrier deployed broadband service meeting FCC’s minimum performance standards to a qualifying number of locations by the relevant deployment milestones.

• Carriers must supply documentation that can serve as evidence of deployment for every location selected for review. Must include evidence that:
  • The service address or location ties back to the latitude and longitude coordinates for that record in the HUBB (i.e. location).
  • The upload and download speeds available at that location are at or above the speeds that the carrier is required to deliver (i.e. broadband speed).
  • The carrier deployed broadband at the required speeds in time to meet the relevant deployment milestone date (i.e. date of service availability).
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
# SAMPLE SUBSCRIBER BILL

## ACCOUNT SUMMARY

<table>
<thead>
<tr>
<th>BILLING DATE: 12/22/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW CHARGES DUE DATE: 1/09/19</td>
</tr>
<tr>
<td>PREVIOUS BALANCE: $84.83</td>
</tr>
<tr>
<td>TOTAL AMOUNT DUE: $84.83</td>
</tr>
</tbody>
</table>

## PAYMENT STUB

| TOTAL AMOUNT DUE: $84.83 |
| NEW CHARGES DUE DATE: 1/09/19 |

## OTHER SERVICE CHARGES AND CREDITS

<table>
<thead>
<tr>
<th>SERVICE CHARGE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrier Cost Recovery Surcharge</td>
<td>$3.99</td>
</tr>
<tr>
<td>TOTAL OTHER SERVICE CHARGES AND CREDITS</td>
<td>$3.99</td>
</tr>
</tbody>
</table>

## TOTAL MONTHLY SERVICE CHARGES

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Phone Unlimited</td>
<td>$30.99</td>
</tr>
<tr>
<td>Broadband Service 10/1</td>
<td>$29.99</td>
</tr>
<tr>
<td>TOTAL MONTHLY SERVICE CHARGES</td>
<td>$60.98</td>
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## TAXES AND OTHER CHARGES

<table>
<thead>
<tr>
<th>CHARGE</th>
<th>AMOUNT</th>
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<tbody>
<tr>
<td>Federal Taxes and Charges*</td>
<td>$13.06</td>
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<tr>
<td>State Taxes and Other Charges*</td>
<td>$6.80</td>
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<tr>
<td>TOTAL TAXES AND OTHER CHARGES</td>
<td>$19.86</td>
</tr>
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</table>

## TOTAL

<table>
<thead>
<tr>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>$84.83</td>
</tr>
</tbody>
</table>

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*INCLUSIVE OF ALL CHARGES
SAMPLE QUALIFICATION TOOL RESULTS

KEY: INCLUDE: CUSTOMER ADDRESS, BROADBAND SERVICE, UPLOAD/DOWNLOAD SPEEDS

Results for:
Customer Street Address, Customer City, State, Zip Code

Not your address? Change it.

INTERNET

Internet
Download and watch videos and music
Access social network sites
Surf the information superhighway

FEATURE:
Speeds of up to 10 mbps download, 1 mbps upload

Screen shot from public-facing service availability tool showing upload/download speeds available at this address.
SAMPLE ENGINEER CERTIFICATION

KEY INCLUDE: DATES OF AVAILABILITY, PLACE, SPEED

XYZ ENGINEERING

April 18, 2018

Re: Engineering Certification of Gigabit Technology and Coverage

Dear USAC Representative,

XYZ Engineering Company has reviewed the maps, designs and equipment specifications for the ABC Phone Company fiber network build-out in the [223 exchange of Anytown, USA].

I certify that they meet or exceed the CAF II performance requirements and have the capability of providing gigabit speeds for any CAF II eligible locations within these exchanges. All locations within Anytown, USA are covered by 123 exchange and the 100% fiber network capable of delivering up to 1 gigabit service. The fiber in this location was live and in effect by December 31, 2017.

If you have any questions or need additional information, please let us know.

Best regards,

Signature

Firstname Lastname
Title
XYZ Engineering Company
123.456.7891
name@email.com
License #450789
State Licensed: VA
SAMPLE PROVISIONING SYSTEM SCREENSHOT

KEY
INCLUDE: CUSTOMER ADDRESS, LAT/LONG, UPSTREAM/DOWNSTREAM SPEEDS

QUALIFY ADDRESS FOR BROADBAND SERVICE

ADR: CUSTOMER STREET ADDRESS
CUSTOMER CITY, STATE, ZIP CODE

LAT/LONG: 38.8977° N 77.0365° W

CLASS OF SERVICE: TELEPHONE:

UPSTREAM BANDWIDTH: 1M DOWNSTREAM BANDWIDTH: 10M

TECHNOLOGY: COMBO MINIMUM TECHNOLOGY: DSL

SERVING TERMINAL: X-123/4

DSLAM: NYYNYXE1 ACPT: X-123/4

GENERIC CARD TYPE: COMBO

RELIABLE DSL AID:

ENTER NEXT TASK CODE:

Screen shot from internal provisioning system showing service address and broadband speeds available at this location.
## SAMPLE ACCEPTANCE TEST

**Key**: Include: Completion Date, DSLAM Name or CLLI Code, Signature, Sign-off Date

### ACCEPTANCE TEST

**Facility**: Any City, USA  
**Location**: Anytown, USA  
**WBS No.**: 000-0000  
**Engineer**: XYZ  
**Spec. Issue date**:  
**Install start date**:  
**Install completion date**: 4/14/2016

<table>
<thead>
<tr>
<th>ITEM</th>
<th>INSPECTION CHECKLIST</th>
<th>Task to be done by:</th>
<th>Code</th>
<th>Completed by (name(s)):</th>
<th>ACCEPTED by COM Initials</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Review spec &amp; drawing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4/15/2016</td>
</tr>
<tr>
<td>1</td>
<td>Inventory Material</td>
<td></td>
<td></td>
<td>First Name, Last Name</td>
<td>FN LN</td>
<td>4/15/2016</td>
</tr>
<tr>
<td>2</td>
<td>Provision &amp; turn up system</td>
<td></td>
<td></td>
<td>First Name, Last Name</td>
<td>FN LN</td>
<td>4/15/2016</td>
</tr>
<tr>
<td>3</td>
<td>Complete redlines, leave copies with CIs &amp; copy in job folder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Notify engineer when equipment is accepted &amp; ready for traffic</td>
<td></td>
<td></td>
<td>First Name, Last Name</td>
<td>FN LN</td>
<td>4/15/2016</td>
</tr>
<tr>
<td>5</td>
<td>DSLAM name or CLLI code: NYNYX1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CO Installer verification**  
CO installation tasks are complete and ready for inspection by COM.  
**Signature of CO Installer**: Signature  
**Date**: 4/15/2016

**COM Maintenance Acceptance**  
If partial acceptance, what exceptions remain?  
**Partial Acceptance**  
**Final Acceptance**  
**Remarks**:  
Final acceptance by CO Foreman  
**Signature of CO Foreman or designee**: Date: 4/15/2016

DSLAM construction project completion sign-off sheet and release of all locations tied to this DSLAM to sales for marketing.

AVAILABLE FOR PUBLIC USE
To: Richard Roe, Sales

DSLAM
NYN1 NYNYXE
is built and ready for release.

John Doe
Specialist, Network Engineer
Company Communications
123-456-7890
website.url

Email from engineering team showing that all locations tied to this DSLAM are released for sale.
Verifying Broadband Buildout

- Verification reviews of multi-unit locations – i.e. locations with more than one living unit, such as apartment buildings or duplexes – will also confirm that the number of units at the location selected for review ties back to the number of units reported for that location in the HUBB.
- Carriers will be required to submit documentation to prove the existence of each individual unit at that location.
- Carriers that cannot provide acceptable documentation proving the number of units at a multi-unit location reported in the HUBB may see a reduction in the number of units counting toward deployment obligations.
- Carriers should not group separate single-unit locations together – using the same latitude/longitude coordinates, but labeled as multiple units at one location – when reporting deployment in the HUBB.
Verifying Broadband Buildout

Examples of acceptable documentation for multi-unit locations include:

- Subscriber bills for each individual unit at the location
- Screen shots from a public-facing service availability tool showing upload/download speeds available for each individual unit at the location
- Screen shots from an internal provisioning system showing upload/download speeds available for each individual unit at the location
- Screen shots of a mapping software street view or satellite view of the location that provide evidence of the number of units at that location, such images showing two separate front entrances or two separate driveways
- Screen shots from an apartment complex website, property tax website or real estate website (such as Realtor.com, Xome, Trulia, Redfin, etc.) showing the number of units at the location
- Geotagged photos or video clips (taken using a mobile phone or camera with geotagging turned on) that provide evidence of the number of units at the location, such as images of separate electric meters or separate mailboxes, along with a screenshot of the file properties page for each picture or video that displays the associated latitude/longitude coordinates
### ACCOUNT SUMMARY

<table>
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<tbody>
<tr>
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<tr>
<td>New Charges Due Date</td>
<td>1/09/19</td>
</tr>
<tr>
<td>Previous Balance</td>
<td>$4.83</td>
</tr>
<tr>
<td>Payments Received Thru 12/08/18</td>
<td>-$4.83</td>
</tr>
<tr>
<td>Balance Forward</td>
<td>$0.00</td>
</tr>
<tr>
<td>New Charges</td>
<td>$4.83</td>
</tr>
<tr>
<td>TOTAL AMOUNT DUE</td>
<td>$4.83</td>
</tr>
</tbody>
</table>

### PAYMENT STUB

Total Amount Due: $4.83

### CUSTOMER STREET ADDRESS

MAIL TO:
ABC PHONE COMPANY
PHONE COMPANY STREET ADDRESS
PHONE COMPANY CITY, STATE, ZIP CODE

### MONTHLY SERVICE CHARGES FROM 12/22/18 TO 1/22/19

<table>
<thead>
<tr>
<th>Description</th>
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### OTHER SERVICE CHARGES AND CREDITS

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<tbody>
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<td>State Taxes and Other Charges*</td>
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<td></td>
<td></td>
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</table>

### TOTAL

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>$64.83</td>
</tr>
</tbody>
</table>
SAMPLE QUALIFICATION TOOL RESULTS FOR MULTIPLE UNITS

KEY
- INCLUDE: CUSTOMER ADDRESS, BROADBAND SERVICE, UPLOAD/DOWNLOAD SPEEDS
- INCLUDE: CUSTOMER ADDRESS, CUSTOMER UNIT NUMBER/UNIT NAME

Results for:
- Customer Street Address
- Customer Unit Number/Unit Name
- Customer City, State, Zip Code
  Not your address? Change it.

INTERNET
- Internet
  Download and watch videos and music
  Access social network sites
  Surf the information superhighway

FEATURE:
- Speeds of up to 10 mbps download, 1 mbps upload

Screen shot from public-facing service availability tool showing upload/download speeds available at this address.
Sample Provisioning System Screenshot for Multiple Units

**Key**
- Include: Customer Address, Lat/Long, Upstream/Downstream Speeds
- Include: Customer Unit Number/Unit Name

---

**Qualify Address for Broadband Service**

<table>
<thead>
<tr>
<th>ADR:</th>
<th>Customer Street Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>CUN:</td>
<td>Customer Unit Number/Unit Name</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>CCST</td>
<td>Customer City, State, Zip Code</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Lat/Long:** 38.8977° N 77.0365° W

**Class of Service:**
- **Telephone:**  

**Upstream Bandwidth:** 1M  
**Downstream Bandwidth:** 10M

**Technology:** Combo  
**Minimum Technology:** DSL

**Serving Terminal:** X-123/4

**DSLAM:** NYNYX3E1  
**ACPT:** X-123/4

**Generic Card Type:** Combo  
**Reliable DSL Aid:**

**Enter Next Task Code:**

---

Screen shot from internal provisioning system showing service address and broadband speeds available at this location.

Available for public use.
Street Level Photo
Photo shows two units at this location—two entrances and two mail boxes.

High Altitude Photo
Photo shows two units at this location—two separate walkways that lead to two separate entrances.
Verifying Broadband Buildout

Step one: Announcement and Data Collection

- Following milestone deadline, USAC selects carriers for verification review
- For each carrier chosen, USAC selects a statistically valid, random sample of locations certified in the HUBB for review
- USAC sends announcement letters to selected carriers identifying sampled locations and requesting documentation to prove deployment
- Carriers unable to edit or modify HUBB records for locations selected for review
Step two: Document Review and Testing

- USAC encourages carriers to send documentation as it becomes available, rather than waiting to provide everything at once
- Documentation will be unique to each carrier and may vary by region of the country
- Carriers may need to submit more than just one piece of evidence to prove location, speed and date of service availability for a particular HUBB record
- USAC reminds all carriers to retain all records and analysis needed to demonstrate that universal service support is being used in accordance with High Cost Program rules (see 47 CFR Section 54.320(b))
Verifying Broadband Buildout

Step three: Conclusion

- When the verification process is complete, USAC holds exit conferences with carriers selected for review to provide details of findings
- USAC sends closure letters summarizing findings and carriers have opportunity to respond
- Carriers found to have missed milestones face increased reporting obligations and potential loss of support
Verification Resources

For more information about the verification process, please visit the Verification Resource Page on the High Cost Website
Other CAF Resources

HUBB Resources Page

HUBB FAQs

Guide to Geolocation Best Practices

Performance Measures Resources Page

Multifactor Authentication Troubleshooting Steps
(for E-File access)
Questions?