

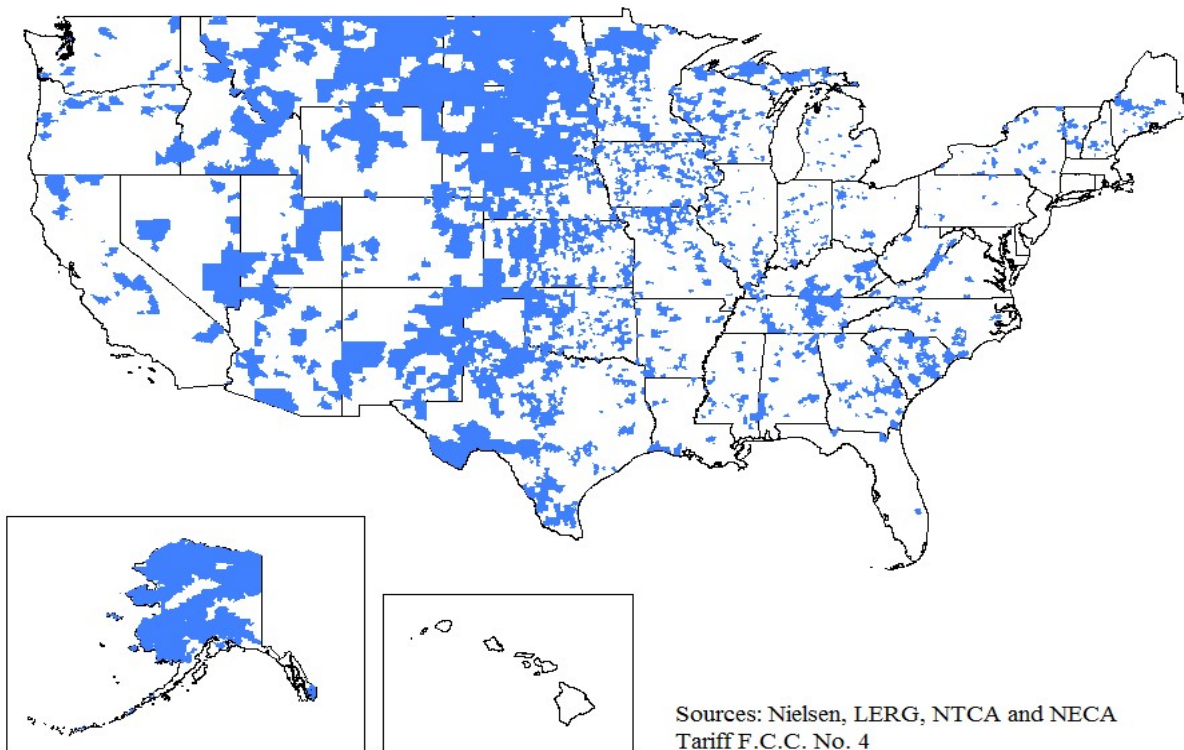


Efforts at Improving Broadband Access and Adoption in Rural America

**Partners for Rural America Conference
September 2017**

Why Care About Rural Broadband?

NTCA-The Rural Broadband Association



Sources: Nielsen, LERG, NTCA and NECA
Tariff F.C.C. No. 4

Why Care About Rural Broadband? (cont.)

- Payback Accrues to Benefit of All of America – Not Just Rural!
- Impacts of Investment/Operations (Hudson Inst. 2016)
 - Rural BB companies = \$24.1B contribution to state economies in 2016
 - \$17.2B of that = direct benefit from rural telecom operations
 - \$6.9B = follow-on impact of operations
 - \$15.9B accrued to benefit of urban areas
 - 70K jobs – 54% in urban areas

Why Care About Rural Broadband? (cont.)

- **Impacts of Rural Broadband More Generally**
 - Pending new study –
 - Rural consumers responsible for over 10B Internet-driven transactions each year
 - Value exceeding an estimated \$1T
- **NTCA Smart Rural Community Program**
 - Celebrating applied use of rural broadband
 - 44 communities in 14 states recognized so far
 - Economic development, education, health care, government services, and public safety functions, among others
 - Award winner shared characteristics:
 - Commercial, governmental, non-profit partnerships
 - Recruitment/retention of employers (businesses and education esp.)

So, What Do We Do as a Country (or Region or State) to Promote Rural Broadband?

- **Start from Rural Challenges**
 - Distance
 - Density
 - Topography
- **Translate to Practical Challenges**
 - Access to Capital
 - Ongoing Operations
- **Interested Stakeholders**
 - Private sector operators/service providers – commercial and cooperative
 - Lenders/Financing
 - Municipal/Local
 - State
 - Federal

Programs and “Solutions” Toolkits

- **Private Sector**
 - Fundamental problem of business case – “market failure”
- **Local and State**
 - Franchising/ROW Terms
 - Partnerships/Loans/Grants/Entry
- **Federal**
 - Access to Capital – RUS (and Others?)
 - Ongoing Operations – Universal Service Programs
 - ROW Terms/Regulation

Drilling Down – Universal Service as the Business Case for Rural Broadband

- **What is the Connect America Fund?**

- High-Cost USF – 47 U.S.C. § 254
- 2011 “Transformation Order”

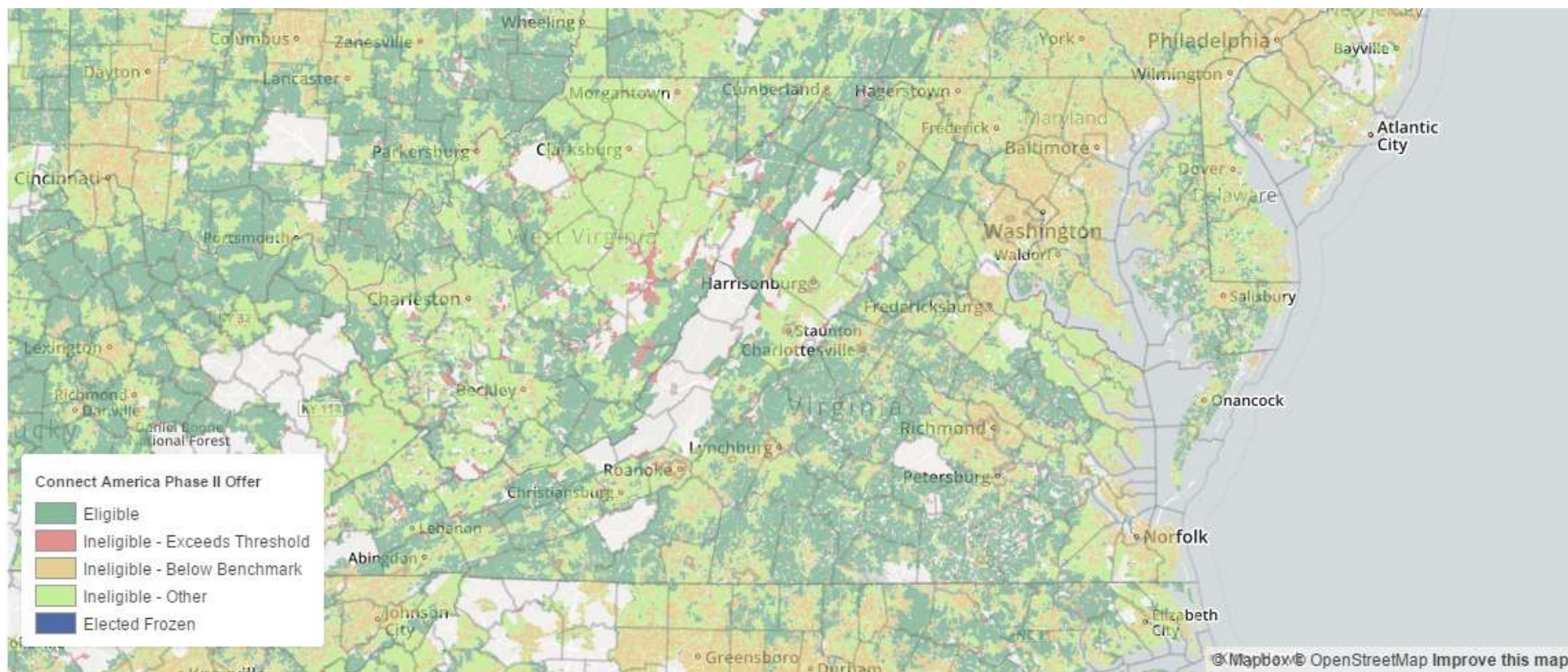
- **Different Flavors of CAF**

- CAF Phase I
- CAF Phase I, Round 2
- CAF Phase II – Model & RoFR
- **CAF Phase II Auction**

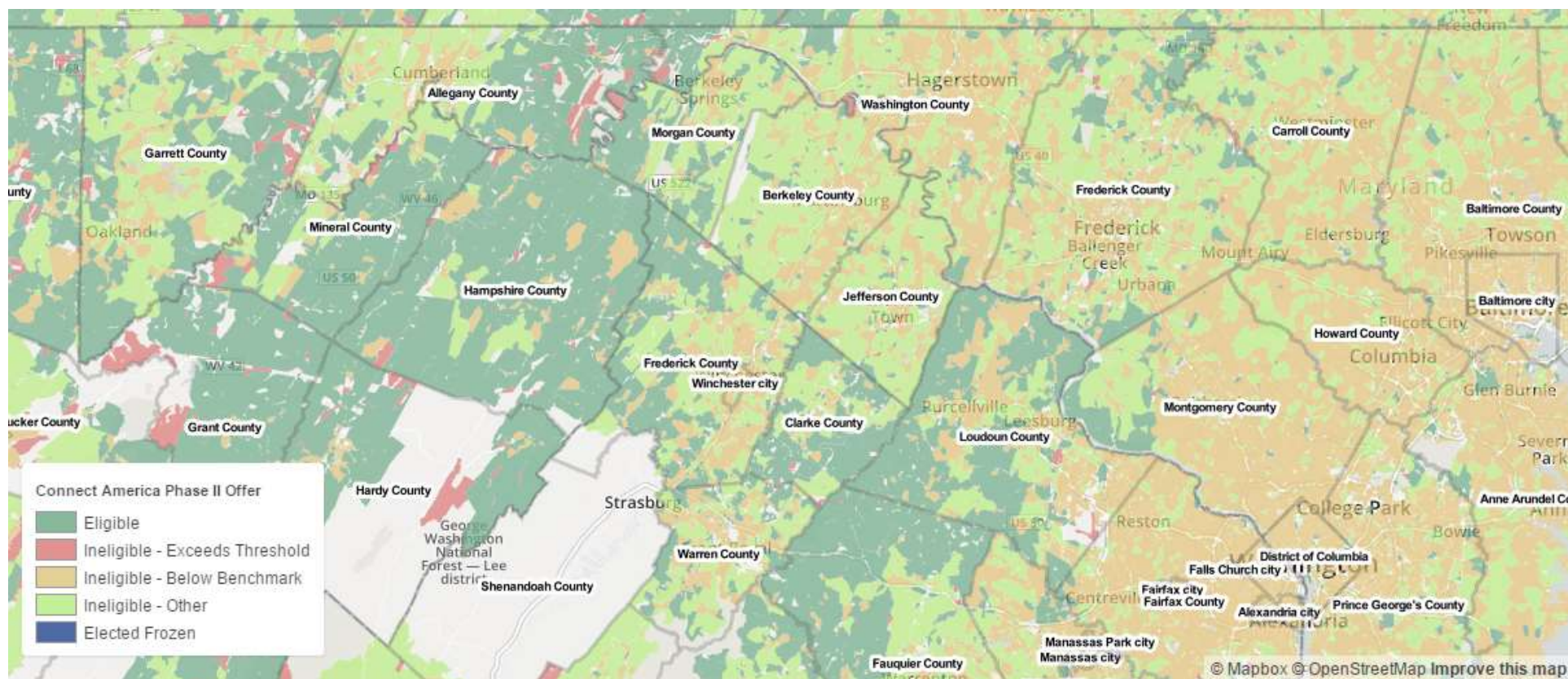
- **Other CAF/USF**

- CAF-ICC
- CAF-BLS & HCLS
- ACAM
- Mobility Fund Phases I & II
- Remote Areas Fund

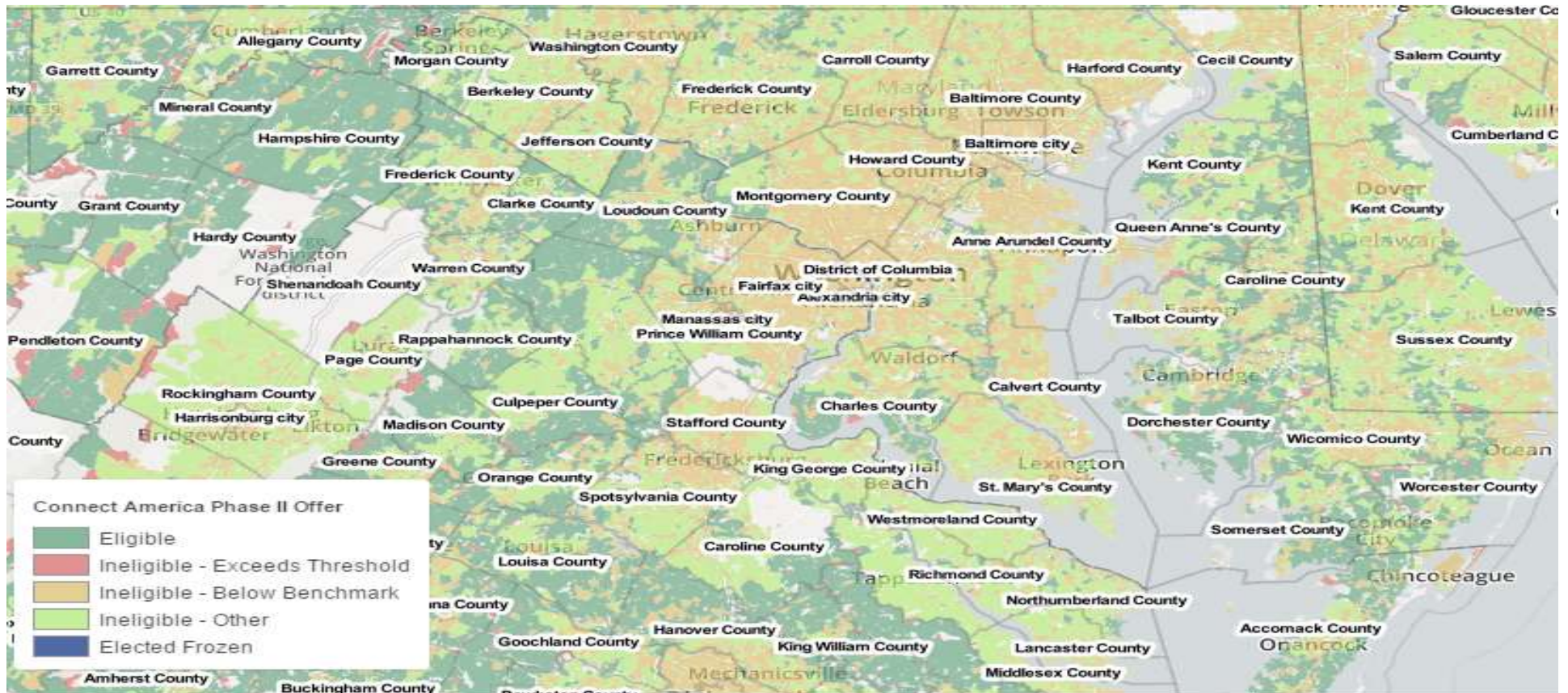
Where is CAF Phase II?



Where is CAF Phase II?



Where is CAF Phase II?



What is CAF Phase II?

- **High-Cost USF for Qualifying Areas**
 - Locations in Eligible Census Blocks (by Level of Current Service, Cost, & Competition)
 - RoFR Model Offer Rejected by Price Cap Carrier
 - Minimum Geographic Size of Actual Bids Remains Open (CBG?)
- **Terms & Conditions of Support**
 - Term of Support is 10 Years
 - Deployment Measured over 6 Years, with Milestones for Years 3-6 (95% Compliance at State Level)
 - Bidders Must be Eligible Telecommunications Carriers by Time of Award

What is CAF Phase II?

- **Application/Compliance Process**

- *Short-Form* – Demonstrate Eligibility for Weights; Certification of Prior Service (voice/BB/electric – sort of); Audited Financials (sort of)
- *Long-Form* – Further Certifications/Evidence of Financial & Technical Capabilities; Letters of Credit; ETC Designation
- Further Guidance Forthcoming on Weighting Eligibility Demonstrations
- Ongoing Compliance Reports will Include “HUBB” Geocoding & CapEx Tracking

What is CAF Phase II?

- Competitive Bidding Structure - Weights

Performance Tier	Speed	Usage Allowance	Weight
Minimum	$\geq 10/1$ Mbps	≥ 150 GB	65
Baseline	$\geq 25/3$ Mbps	≥ 150 GB or U.S. median, whichever is higher	45
Above Baseline	$\geq 100/20$ Mbps	2 TB	15
Gigabit	≥ 1 Gbps/500 Mbps	2 TB	0

Latency	Requirement	Weight
Low Latency	≤ 100 ms	0
High Latency	≤ 750 ms & MOS of ≥ 4	25

What is CAF Phase II?

- **Competitive Bidding Structure – National Auction**
 - Bids Scored Relative to Reserve Price, Taking Weights into Account
 - Exact Reserve Price not yet set, But at Most Will be CAM Model Level
 - Will Also be a Per-Location Cap on Support – TBD
 - Bids Compared to Other Bids Nationally
 - Special Process Tied to NY Broadband Grant Program
 - Pennsylvania “Me Too” Petition

When is CAF Phase II?

- **Unclear – Maybe Early 2018?**
 - Reconsideration Petitions Pending – PA and Hughes Satellite
 - Auction Procedures Being Finalized – More Notice & Comment
 - Debates Already Arising Over Structure & Relationship to Weighting
 - Overhang/Promise of Infrastructure Debate?

Who is CAF Phase II?

- **Open to Any Providers**
 - ETC Designation
 - Sectors Competing on Weights Already
 - Proven Track Records vs Start-Ups?
 - Lessons from “Rural Broadband Experiments” and “Smart Rural Communities”?
- **Parting/Partnering Thoughts?**
 - www.Partnersinbroadband.com