# The National Broadband Plan

## *Challenges and Opportunities for the RLEC Industry*

## June 30, 2010

# Agenda

- **Introduction and Overview of the NBP**

- **Association Panel**



- **Conclusion**

Glenn Brown    Rural

Alliance

Bob Gnapp      NECA
Tom Wacker     NTCA
Randy Tyree    OPASTCO
Eric Keber     WTA
Dave Duncan    ITA

# Overview of the NBP

# The National Broadband Plan

- Directed by Congress in the ARRA (Stimulus Bill)
  - Perception that USA is "15th worldwide" in Broadband
  - Expand availability, affordability and adoption
- NBP establishes national goals
  - 100 Mbps to 100M Homes by 2020
  - 500 MHz of new spectrum for mobile Broadband
  - Convert existing USF to support Broadband
- The NBP, as Currently Written, Will Harm Rural America
  - "Digital Divide" – 100 Mbps Urban vs. 4 Mbps Rural
  - Eliminates Incentives for rural infrastructure investment
  - Up to 90% reduction in current USF funding to RLECs
- Need broad coalition to advocate for Plan improvements

# Current RLEC Realities

- RLECs role:
  - Serve rural areas that Bell found unprofitable
  - Serve as Carriers of Last Resort (COLR) for high-cost areas
  - Broadband service to millions of rural consumers
  - Back-haul and middle-mile functions for wireless and others
- RLECs rely on USF and ICC to recover over half of their network costs (many > 70%)
  - Current USF and ICC mechanisms not sustainable
- The political landscape has changed
- NBP proposes comprehensive USF and ICC reform
  - But in a manner that would cripple COLR abilities
  - NBP fundamentally redefines Universal Service

# Definition of Universal Service

Section 254(b) – Universal Service Principles

1.  Quality services at just, reasonable and affordable rates
2.  Access to advanced services in all regions of the Nation
3.  Consumers in rural, insular, and high-cost areas should have access to services reasonably comparable to those services provided in urban areas, at reasonably comparable rates
4.  All providers of telecommunications services should pay equitable and nondiscriminatory contributions to support USF
5.  There should be specific, predictable and sufficient federal and state mechanisms to preserve and advance universal service

– A legacy of the "Farm Team"

# Access MOU Trends
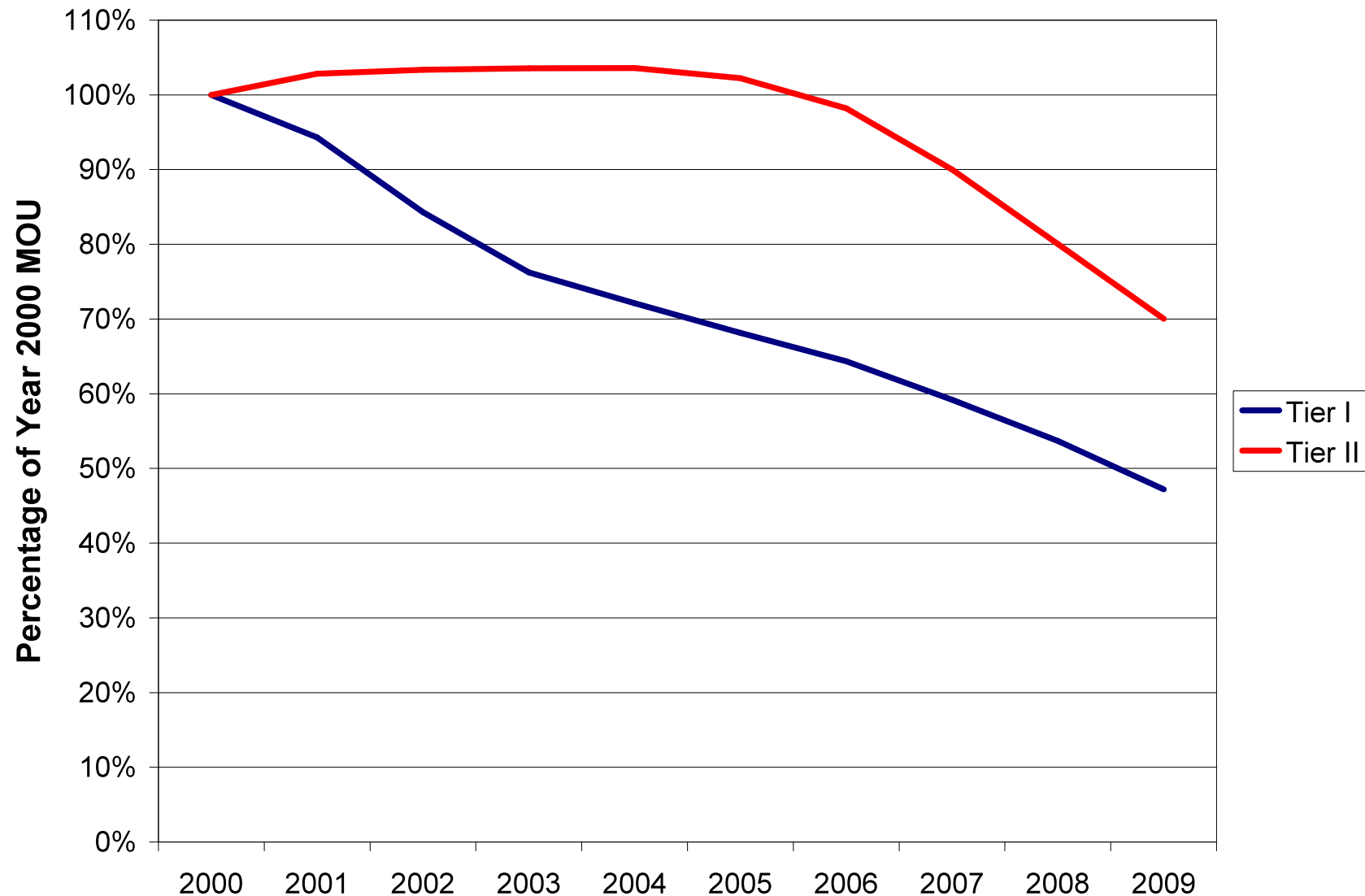
# USF Collection Mechanism
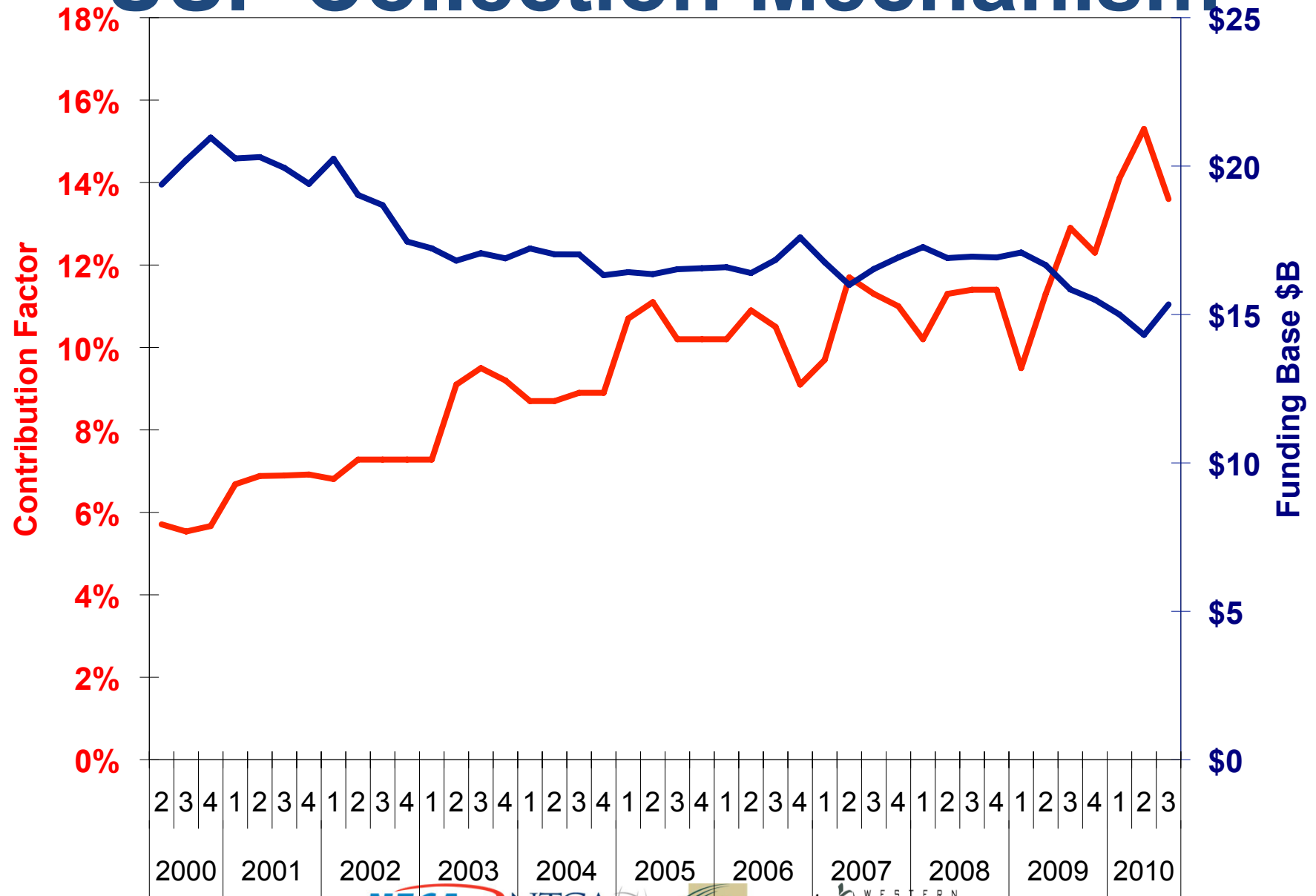
# The Landscape is Different

- New FCC Priorities
  - New Democratic FCC Chairman, different agenda, urban focus
  - The Silicon Valley agenda (i.e., Network Neutrality, Google Voice, et. al. )
  - Focus on Spectrum and Mobile Broadband
  - Broadband is King

- New Legislative Realities
  - The "Farm Team" is long-gone
  - Questions on the size, need and efficacy of the USF
  - Many other pressing priorities
  - Partisan gridlock

# What is in the NBP?

- By 2020, 100 Mbps broadband to 100M homes

- 500 MHz of new spectrum for mobile broadband

- Current USF evolves to a broadband fund
  - Connect America Fund (CAF)
  - Mobility Fund (MF)
  - Shift $15.5B from current USF over 10 years

- Eliminate per-minute ICC over time
  - Congress to give FCC authority to regulate intrastate access
  - Offset revenue loss through SLC increases and local rate rebalancing

- Three "Stages" of implementation
  - Stage 1 (2010-2011) – Design new mechanisms and processes
  - Stage 2 (2012-2016) – Begin implementation
  - Stage 3 (2017-2020) – Eliminate legacy High-Cost programs

# Connect America Fund

- CAF supports build-out to "unserved" areas
  - USF and ICC supported service to high-cost areas
- Rate-of-Return (RoR) Regulation Eliminated
  - Support based on proxy model (4/1 Mbps) for "most efficient technology"
  - Revenues include regulated <u>and</u> unregulated revenues
- Maximize number of households served quickly
- One Broadband Provider of Last Resort per area
  - Reverse auctions
- <span style="color:red">Total funding (CAF + MF) no higher than 2010 levels</span>
- No provisions (yet) for supporting existing rural Broadband infrastructure (i.e. USF and ICC replacement)

# What Does This Mean?

- End of "Universal Service" per Sect. 254(b)
  - No "comparability" (4 Mbps vs. 100 Mbps)
  - No "predictability" (particularly for existing networks)
- Significant shifts of funding to RBOCs and Wireless
  - RBOCs have largest number of "unserved" areas
  - "Broadband Assessment Model" (BAM) found wireless "most efficient technology" for 90% of unserved households
  - 4G wireless can meet 4/1 Mbps standard
- Rural areas locked-in for 20 years
  - 4/1 Mbps is the upper bound of 4G capabilities

# What Does This Mean?

- RLECs face grave uncertainty for the future
  - RoR regulation effectively ended by ICLS freeze and CAF
  - Current mechanisms gone by 2020
  - Reduced incentives for new investment
  - How much funding can RLEC broadband providers expect?
    - If they are BPOLR?
    - If someone else is BPOLR?
- The USF Collection Mechanism could literally implode
  - Significant pain for multiple segments (RLEC, S&L, Low-Income, Rural Health Care)
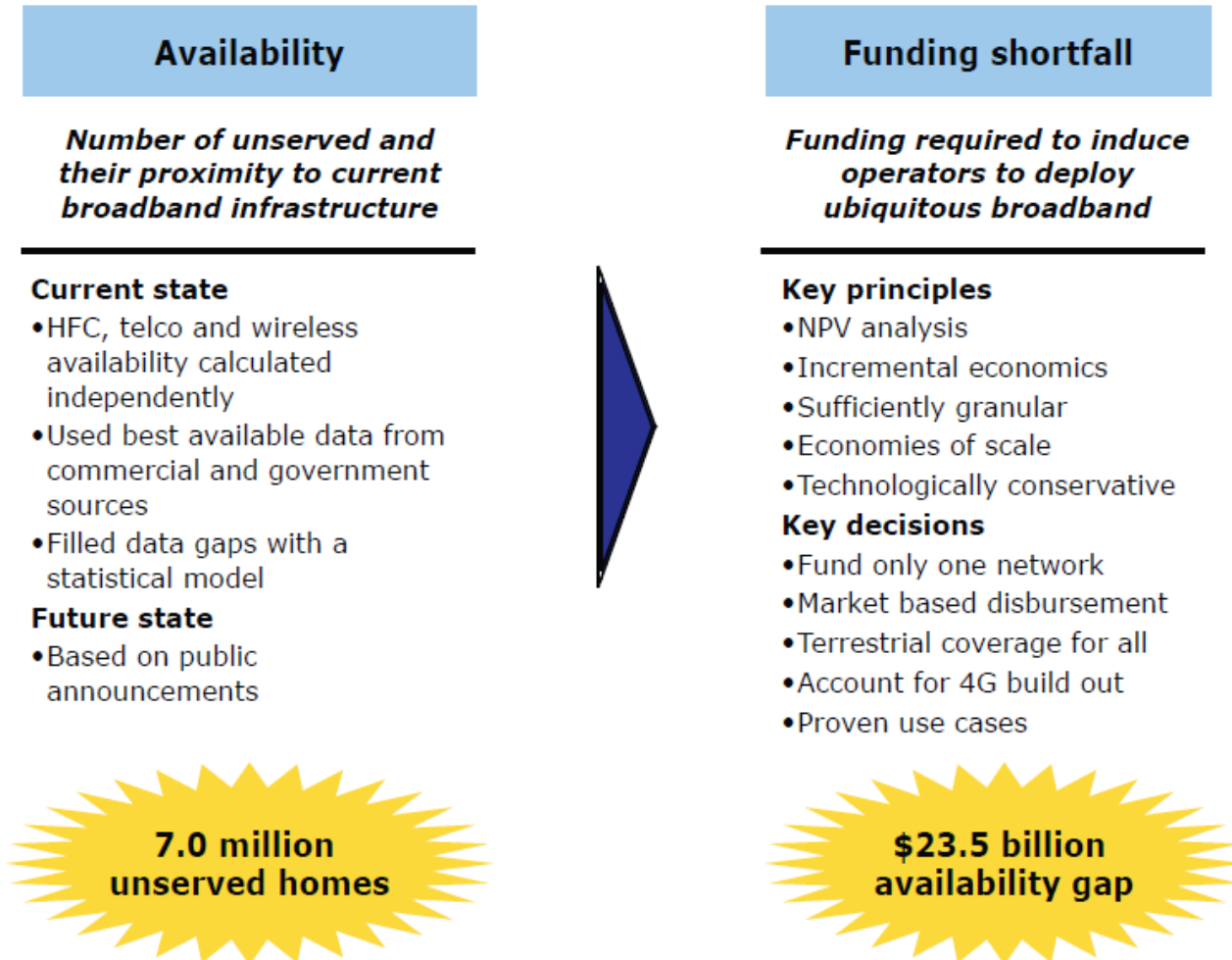- We have <u>a lot</u> of work to do to get this all fixed!

# FCC's 2010 "Action Agenda"

| | Q2 2010 (CY) | Q3 2010 (CY) | Q4 2010 (CY) |
|---|---|---|---|
| **Promote World-Leading Mobile Broadband Infrastructure and Innovation** | Mobile Roaming Order and FNPRM (**WTB**) | AWS Bands Analysis (**WTB**, OET) | AWS Potential Order (**WTB**, OET) |
| | D Block Order/NPRM (**WTB**, PSHSB) [Also in Public Safety] | | Secondary Markets Internal Review (**WTB**) |
| | Launch Strategic Spectrum Plan and Triennial Assessment (**WTB, OET**, OSP) | Spectrum Sharing/Wireless Backhaul NPRM/NOI (**WTB**, OET) | Spectrum Dashboard 2.0 (**WTB**, OET, PSHSB, MB, IB) |
| | | Oppor. Use of Spectrum NPRM (**OET**, WTB, IB, MB, PSHSB) | Recommendation re: Contiguous Unlicensed Spectrum Proceeding (**OET**, WTB) |
| | 2.3 GHz WCS/SDARS Order (**OET**, WTB, IB) | TV White Spaces Opinion & Order (**OET**, MB, WTB) | |
| | | MSS NPRM (**OET**, IB, WTB) | Experimental Licensing NPRM (**OET**) |
| | | Broadcast TV Spectrum Innovation NPRM (**OET**, MB, WTB) | |
| **Accelerate Universal Broadband Access and Adoption** | USF Reform NPRM and NOI (**WCB**, WTB) | | Mobility Fund NPRM (**WTB**, WCB) |
| | Lifeline/Low-Income Joint Board Referral Order (**WCB**, WTB) | Hearing Aid Compat. Second Report & Order/FNPRM (**WTB**, OET, CGB) | Spectrum on Tribal Lands NPRM (**WTB**, CGB) |
| | E-Rate FY2011 NPRM (**WCB**) | | E-Rate FY2011 Order (**WCB**) |
| | USF Merger Commitments Order (**WCB**, WTB) | Rural Health Care Reform NPRM (**WCB**) | USF Transformation NPRM (**WCB**, WTB) |
| | Lifeline Pilot Roundtable (**WCB**, WTB) | Lifeline Flexibility NPRM (**WCB**, WTB) | Intercarrier Compensation NPRM (**WCB**, WTB) |
| | FCC/FDA Workshop and PN on Converged Devices (**OET**) | Establish Accessibility and Innovation Forum (**CGB**, WCB, WTB) | USF Contributions NPRM (**WCB,** WTB) |
| | Launch FCC Office of Native American Affairs (**CGB**) | Real-Time Text NOI (**CGB**, WCB, WTB, OET) | Real-Time Text NPRM (**CGB**, WCB, WTB, OET) |
| | FCC-Native Nations Broadband Task Force (**CGB**) | | Internet Video and Device Accessibility NOI (**CGB**, WCB, WTB, MB) |
| **Foster Competition and Maximize Consumer Benefits Across the Broadband Ecosystem** | Mobile Wireless Competition Report (**WTB**, OSP) | Interconnection Clarification Order (**WCB**) | |
| | Pole Attachments Order and FNPRM (**WCB**) | Rights-of-Way Task Force (**CGB**, WCB) | Small Business Broadband & Wholesale Comp. NOI (**WCB**) |
| | Small Business Broadband & Wholesale Comp. PN (**WCB**) | | |
| | Special Access Workshop (**WCB**, WTB, OSP) | | Special Access NPRM (**WCB**, WTB, OSP) |
| | CableCARD NPRM (**MB**, OET) | | |
| | Smart Video Devices NOI (**MB**, OET) | | Smart Video Devices NPRM (**MB**, OET) |
| | Launch Tech. Adv. Grp. on Speed & Perf. (**CGB**, OET, WCB) | | Transparency & Disclosure NPRM (**CGB**, WCB, WTB, OET) |
| | Launch Speed and Performance Measurement Program (**CGB**, WTB, WCB, OET) | | Broadband Data NPRM (**WCB**, WTB, OSP) |
| **Advance Robust and Secure Public Safety Communications Networks** | | Public Safety Roaming & Priority Access NPRM (**WTB**, PSHSB) | NG 911 NOI (**PSHSB**, OET, WCB, WTB) |
| | | D Block Order/NPRM (**WTB**, PSHSB) [Also in Mobile] | Back-Up Power NOI (**PSHSB**, OET, WTB) |
| | | 700 MHz Waiver Petitions (**PSHSB**, WTB, OET) | Serv. Outage & Homeland Security NPRM (**PSHSB**, OET, WCB, WTB, IB) |
| | ERIC Public Safety Interoperability Order (**PSHSB**) | 700 MHz Public Safety Order/FNPRM (**PSHSB**, WTB, OET) | |
| | Cybersecurity Certification NOI (**PSHSB**, WTB, OET, WCB) | Location Accuracy FNPRM (**PSHSB**, OET, WTB) | |
| | Survivability NOI (**PSHSB**, OET, WTB, WCB) | | |
| | Serv. Outage & Homeland Security Workshop (**PSHSB**, OET, WCB, WTB, IB) | | |

**Legend:**
- Wireless Telecommunications Bureau (WTB)
- Wireline Competition Bureau (WCB)
- Office of Engineering and Technology (OET)
- Media Bureau (MB)
- Consumer & Governmental Affairs Bureau (CGB)
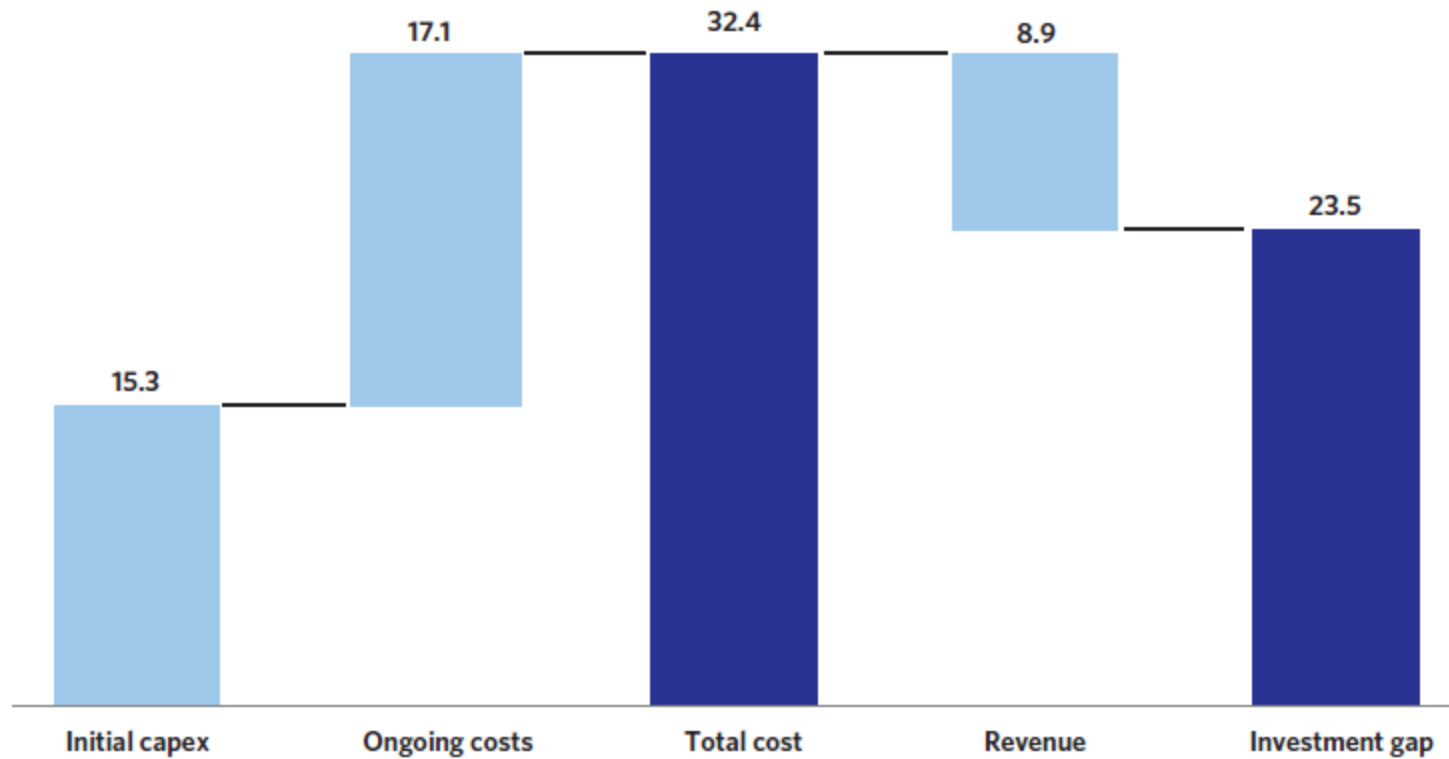- Public Safety & Homeland Security Bureau (PSHSB)

NECA  NTCA National Telecommunications Cooperative Association The Voice of Rural Telecommunications www.ntca.org  OPASTCO  WESTERN TELECOMMUNICATIONS ALLIANCE

# The Broadband Availability Gap
## (OBI Technical Paper No. 1)

### Availability

**Number of unserved and their proximity to current broadband infrastructure**

**Current state**
- HFC, telco and wireless availability calculated independently
- Used best available data from commercial and government sources
- Filled data gaps with a statistical model

**Future state**
- Based on public announcements

**7.0 million unserved homes**

### Funding shortfall

**Funding required to induce operators to deploy ubiquitous broadband**

**Key principles**
- NPV analysis
- Incremental economics
- Sufficiently granular
- Economies of scale
- Technologically conservative

**Key decisions**
- Fund only one network
- Market based disbursement
- Terrestrial coverage for all
- Account for 4G build out
- Proven use cases

**$23.5 billion availability gap**

Source: OBI Technical Paper No. 1 page 2

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# Broadband "Investment Gap"



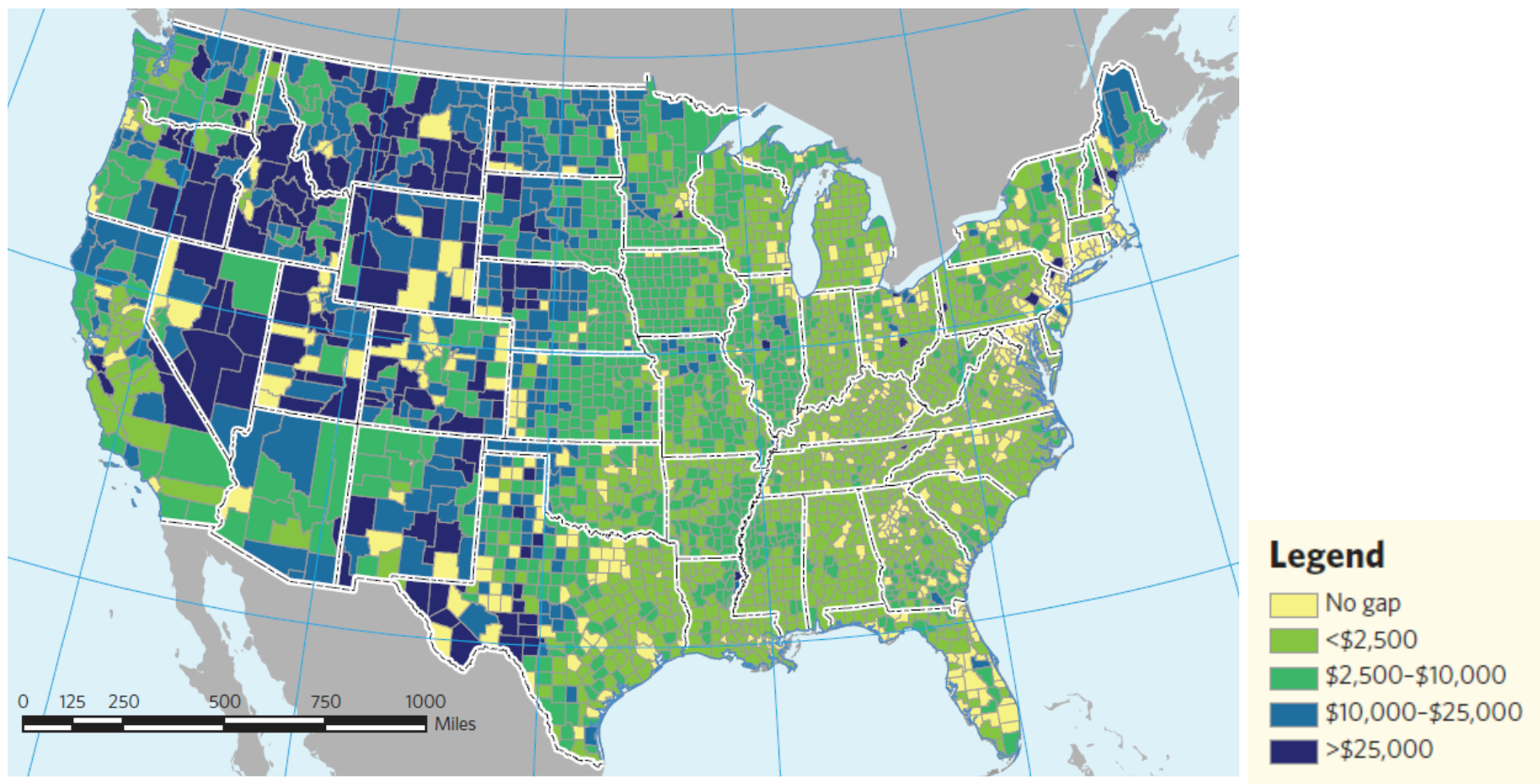| | | | | |
|---|---|---|---|---|
| 15.3 | 17.1 | 32.4 | 8.9 | 23.5 |
| Initial capex | Ongoing costs | Total cost | Revenue | Investment gap |

(in billions of USD, present value)

Source: OBI Technical Paper No. 1 page 5

16

# Investment Gap Per Household



**Legend**
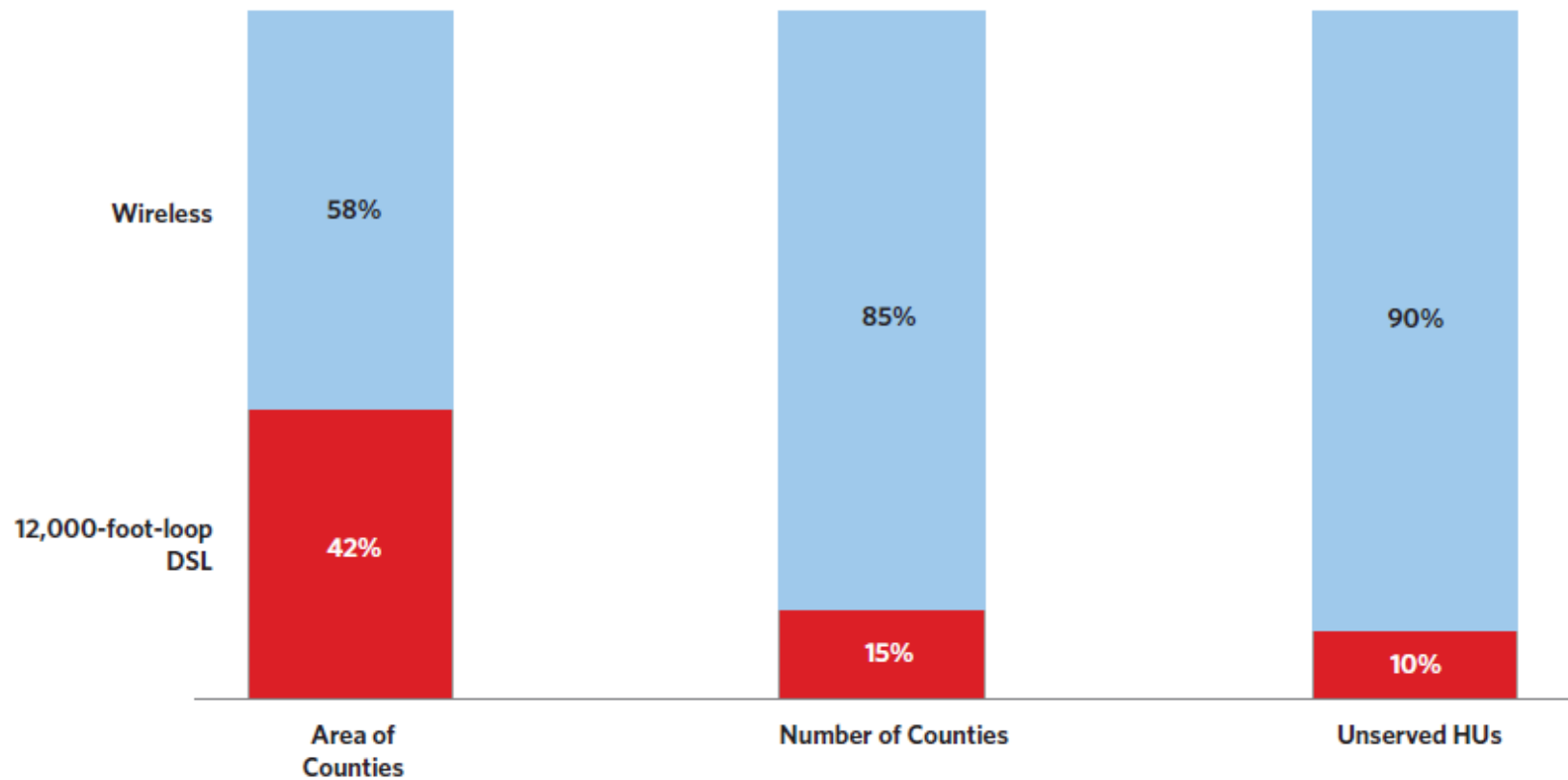- No gap
- <$2,500
- $2,500–$10,000
- $10,000–$25,000
- >$25,000

Source: OBI Technical Paper No. 1 page 8

NECA

NTCA
NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION
*The Voice of Rural Telecommunications*
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17

# Investment Gap "Lowest-Cost Technology"



**Legend**

**12k DSL has lower gap**
- No gap
- <$2,500
- $2,500–$10,000
- $10,000–$25,000
- >$25,000
- Fully served

**4G has lower gap**
- No gap
- <$2,500
- $2,500–$10,000
- $10,000–$25,000
- >$25,000

0  125  250  500  750  1000
Miles

Source: OBI Technical Paper No. 1 page 12

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18
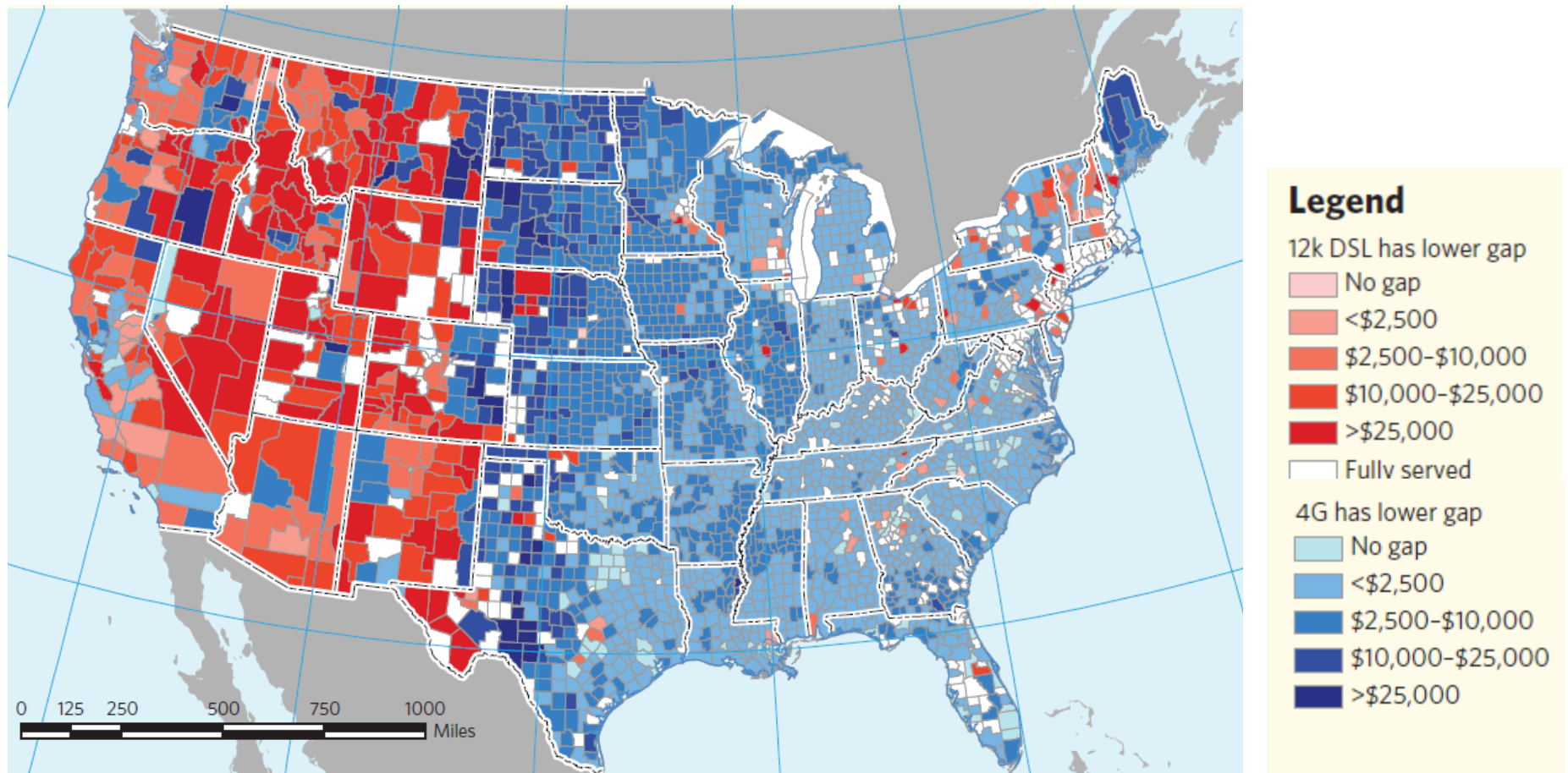
# "Lowest Cost" Technology



Source: OBI Technical Paper No. 1 page 13

# Reasons For Cost Differences

- Definition of "Current State" coverage
  - Wireless (4G) and Cable footprint developed from commercial "coverage maps"
  - No current national data base for Wireline DSL
    - DSL coverage estimated based on Alabama data (partial MN and PA data)
    - Regression analysis based on relationship of DSL to demographic factors

- Wireless designed as "Fixed Wireless Access" (FWA)
  - High-powered CPE and external high-gain antenna
  - Tower coverage radius defined by fixed terrain relationships
  - Definitely not "Mobile Broadband"

- Rural consumers forever locked with 4/1 Mbps broadband
  - Limited speed and throughput of FWA architecture
  - No migration path for rural customers to higher broadband speeds

- Failure to realize the long-term benefits of fiber

# Association Panel

NECA            Bob Gnapp
NTCA            Tom Wacker
OPASTCO         Randy Tyree
WTA             Eric Keber
NCSTAE          Dave Duncan (Iowa Tel. Assn.)

# Rural Group

- Objectives
  - Draw attention to harmful provisions of the NBP
  - Work with the FCC to identify constructive alternatives
    - Simply saying "no" is not an option
  - Conduct unified "Hill" advocacy efforts – speak with "*one rural voice*"
  - Involve members companies and other stakeholders and assist them with their advocacy efforts
- Current work teams
  - Comment Drafting
  - Broadband Assessment Model (BAM) Rebuttal
  - Advocacy and Outreach
  - Legislative
- Creating partnerships to support Rural Group objectives
  - Consultants
  - Engineers
  - Academics
  - State Associations

# Work Team Membership

- Comment Drafting Team
  - Rick Askoff      NECA
  - Jill Canfield      NTCA
  - Gerry Duffy      WTA
  - Dan Mitchell      NTCA
  - Stuart Polikoff      OPASTCO

- Advocacy and Outreach Team
  - Glenn Brown      Rural Alliance
  - Joe Douglas      NECA
  - Dave Duncan      ITA
  - Geoff Feiss      NCSTAE and MTA
  - Wendy Mann      NTCA
  - Derrick Owens      WTA
  - Randy Tyree      OPASTCO
  - Tom Wacker      NTCA

- Model Rebuttal Team
  - Glenn Brown      Rural Alliance
  - Pat Chirico      NECA
  - Wendy Fast      NTCA
  - Victor Glass      NECA

- Legislative Team
  - Adam Healy      NTCA
  - Eric Keber      WTA
  - Tammie Logan      NTCA
  - Leif Overson      NTCA
  - Derrick Owens      WTA
  - Randy Tyree      OPASTCO
  - Tom Wacker      NTCA

# Advocacy and Outreach

- Mission -

  To reach out to other stakeholders who are negatively impacted by the National Broadband Plan, educate them on what the Plan means to them and their constituents, and encourage them to become actively involved in advocating to the FCC, Congress and other key policymakers for necessary Plan reforms

- Key Strategies

  – Identify key rural stakeholders at the state and national level

  – Convince them to get involved to help redirect the NBP

  – Involve the state associations as key players in this dialogue

  – Educate, empower and involve RLEC employees in this critical advocacy effort

# Advocacy Tools

- Messaging Tools :
  - Potential Stakeholder Lists
  - Talking Point Outlines
  - PowerPoint Presentations
    - General Audiences
    - Telco-Focused Audiences
  - Draft Letters
  - Draft Comments
  - Draft Op-Ed Pieces
  - An On-Line Library of Letters, Comments, Articles, etc.
  - An On-Line Forum for Information Exchange

# Advocacy Tools

- Resource web links
  - www.ntca.org/nbpresourcecenter/
  - www.opastco.org/site/advocacy/nbp/
  - www.w-t-a.org

- If you need information, ideas, or help contact one of us:

| | | | |
|---|---|---|---|
| NECA | Bob Gnapp | rgnapp@neca.org | 800-892-3322 |
| NTCA | Tom Wacker | twacker@ntca.org | 703-351-2039 |
| OPASTCO | Randy Tyree | rxt@opastco.org | 202-659-5990 |
| NCSTAE | Geoff Feiss | gfeiss@telecomassn.org | 406-442-4316 |
| Rural Alliance | Glenn Brown | gbrown@mcleanbrown.com | 928-284-3315 |
| WTA | Derrick Owens | derrick@w-t-a.org | 202-548-0202 |

- If we don't have what you need we'll find someone who does!

# Potential Advocacy Partners

- Congressional Delegation
- State Commissions
- NARUC
- State Legislature
- Governor's Office
- Government Organizations (ALEC, NCSL, NGA, NAC, etc.)
- Rural Economic Development Organizations
- RLEC Suppliers
- RLEC Lenders
- Agricultural Groups
- Mining, Timber, etc. Groups
- Rural Health Care Groups
- Schools, Libraries

- Chambers of Commerce
- Local Newspapers
- Local Government Officials
- Local Business Groups
- Civic Organizations (Rotary, Kiwanis, etc.)
- Library Associations
- Educations Organizations
- Consumer Groups
- Etc., Etc., Etc.

# What We Need From You

- Reach out to business and government leaders and discuss what the NBP will mean to rural America

- Ask rural stakeholders to write to the FCC and Congress
  - Rural areas must have access to broadband services comparable to those available in urban areas
  - Amend NBP to support continued investment in rural broadband

- Generate as much input as possible by August 5
  - NECA, NTCA, OPASTCO and WTA will be filing joint comments in the FCC's NOI/NPRM on July 12
  - Reply comments are due August 12
  - We need to show broad support to amend the NBP in our replies

- **STAY ON MESSAGE!!**
  - Consistency of message will be critical to our success

# What You Can Do

1. Get <u>personally</u> involved in improving the NBP!!
   – Learn about the issues (familiarize yourself with the advocacy tools)
   – Develop a game plan
2. Educate employees and directors on what is at stake
   – For them personally, as well as for their community's long-term vitality
   – Provide them with talking points, draft letters, etc. (personalized, if possible, for your community and local economy)
3. Reach out locally
   – Local newspapers, local officials (legislators, mayors, county executives, etc.), civic and business organizations, schools, libraries, etc.
   – Don't forget your local vendors and suppliers
   – Encourage organizations to communicate with their national offices (if appropriate)
   – Your goal is to generate editorials, op-ed pieces, letters to the FCC and Congress, and other support for rural broadband availability

# What You Can Do

4. Reach out statewide
   - Partner with other RLECs in your state (state association or ad hoc)
   - Meet with your State Commission
     - Do so prior to NARUC meetings that begin July 18
   - Meet with your Governor's office and legislative leaders
   - Meet with statewide economic development, business, education, health care and other groups with an interest in broadband availability

5. Reach out to Washington, DC
   - Let your Congressional delegation knows where you stand
     - Share local input that you are able to generate
   - Let the FCC Commissioners know that the NBP must be amended to address rural broadband needs
     - But leave Bureau contacts to the national associations

# What You Can Do

6. Send copies to the DC Advocacy Team
   – We need as much as possible by August 5 for  FCC's NOI/NPRM
      • But keep working, this is just the first battle (albeit an important one) in what will likely be a long war for rural America
   – Send copies of letters, articles, and whatever else you are able to generate in support of NPB reforms to:
      • The national RLEC association you primarily work through (i.e., NTCA, OPASTCO or WTA); and
      • NBP@rural-alliance.org
         – So that we can have a single data base containing all rural stakeholder letters, filings, articles, etc.

# Questions & Answers

# Conclusion

- **We appreciate your interest and participation**

- **Encourage your employees, directors, vendors, elected officials and other stakeholders to get educated and get involved**

- **Together we can be powerful agents for needed changes in the NBP**