



United States
Department of
Agriculture

Rural Development



Presented by Keith B. Adams

National Association of Regulatory Utility Commissioners (NARUC)

RUS Telecommunications Program Update

Washington DC

Rural Development Background

Rural Development divided into three agencies with unique programs and objectives:

- **Rural Utilities Service (RUS)**
- Rural Housing Service (RHS)
- Rural Business-Cooperative Service (RBS)

Across the three agencies, Rural Development administers over 40 programs.

- RUS Electric and **Telecommunications** programs are administered out of the National Office
- All RHS and RBS programs are administered out of the State Office

Telecommunications Programs History

From electricity to broadband...

- | | |
|------------------------|--|
| 1930s | <ul style="list-style-type: none">• Rural Electrification Administration (REA) began providing financing to promote rural electrification |
| 1949 | <ul style="list-style-type: none">• REA received authority to finance telephone service in rural communities |
| 1995 | <ul style="list-style-type: none">• Evolving from the REA, the Rural Utilities Service (RUS) required that all financed telecommunications networks have the capacity to deliver broadband |
| 2009 to present | <ul style="list-style-type: none">• RUS has invested over \$6.8 billion in loans and grants to build out broadband infrastructure in rural areas |

Telecommunications Loan Programs

Infrastructure Program

- \$690 million available in FY 2016
- Loans finance new and improved telecommunications infrastructure in rural communities of 5,000 or less

Farm Bill Broadband Program

- \$20 million available in FY 2016
- Loans finance the costs of constructing a broadband network serving rural communities of 20,000 or less (not located in urbanized area contiguous/adjacent to a community over 50,000)
 - Eligible service areas contain at least 15% unserved areas with no part of the service area overlapping with 3 or more incumbent service providers or a current RUS borrower or grantee (there are certain exceptions)

Telecommunications Loan Programs Update

Infrastructure Program

- FY 2015 -- **17** loans approved: **\$245 million**
- FY 2016 -- **1** loan approved: **\$30 million**
- FY 2016 -- **15** loans in process: **\$185 million**
- Applications are accepted year round

Farm Bill Broadband Program

- New regulation and NOSA were published July 30, 2015
- FY 2015 Application Window closed September 30, 2015
 - 15 loans in process: \$118 million
- FY 2016 Application Window will open soon.
Stay tuned for the FY 2016 NOSA!

Telecommunications Loan Programs -- Did You Know?

Standard Loan Terms include:

- 2 Year Principal Deferral
- Interest Rate at the Cost-Of-Money
- Loan Maturity - Life of the Facilities Financed Plus 3 Years

Modified Loan Terms for Serving a Substantially Underserved Trust Area (SUTA) include:

- At the discretion of the Administrator, RUS can modify certain loan terms or application requirements, which may include:
 - Interest rates as low as 2%, extended amortization period, and/or priority over projects that do not serve trust areas

Staff can assist and review loan applications before submission.

Telecommunications Farm Bill Loan Program -- Did You Know?

Unserved is defined as areas lacking access to Broadband Service of 4 meg down/ 1 meg up.

Applicant Priority is given to applications demonstrating the greatest proportion of unserved households.

Special Terms and Conditions may apply to applications where over 50% of the households are unserved, which may include:

- up to 4 year principal deferral
- 25% extension to the amortization period of the loan up to 35 years

Telecommunications Grant Programs

Community Connect Program

- **\$10.3 million** available in FY 2016
- Grants cover the costs to construct broadband networks in rural communities of 20,000 or less (not located in urbanized area contiguous/adjacent to a community over 50,000)
 - Service Area must be entirely unserved
 - Broadband Service is defined as 3 Mbps (download plus upload)
 - 15% Matching Requirement

Distance Learning and Telemedicine Program

- **\$19 million** available in FY 2016
- Grants fund equipment needed to provide Distance Learning and Telemedicine services
 - 15% Matching Requirement

Telecommunications Grant Programs Update

Community Connect Program

- FY 2015 – **68** applications submitted: **\$106 million**
- FY 2015 – **5** applications approved: **\$11 million**
- Anticipated FY 2016 funding window to open in the spring

Distance Learning and Telemedicine Program

- FY 2015 -- **191** applications submitted: **\$38 million**
- FY 2015 – **75** applications approved: **\$23 million**
- FY 2016 Application Window opened January 12, 2016 and **will close March 14, 2016**
- Applications are being reviewed as they are submitted

Telecommunications Grant Programs – Did You Know?

Special Consideration provided under both grant programs to projects serving tribal communities.

- 15 additional points in FY 2014 and 2015

DLT Program Special Consideration provided for tribes, Strikeforce, and Promise Zones.

- 15 additional points in FY 2016

Telecommunications Programs – Tribal Investments

Since 2009, RUS has invested over \$157 million in projects serving Tribal Lands, Tribal Organizations, American Indians, and Alaska Natives:

Telecom Infrastructure	\$91.3 million
Farm Bill Broadband	\$9.9 million
Community Connect	\$13.6 million
Distance Learning and Telemedicine	\$42.6 million

Across Rural Development, over \$400 million has been invested in projects serving tribal communities.

Telecommunications Programs – Tribal Highlights

- **\$279,106 Distance Learning and Telemedicine** grant to Eastern Aleutians Tribes, Inc. to purchase video conferencing equipment and CPR mannequins capable of recording and quantifying performance to improve training in local communities (AK)
- **\$10.5 Million Broadband Initiatives Program** loan/grant combination to the San Carlos Apache Tribe to provide Fiber-to-the-Premises to five new communities, a hospital, and several clinics (AZ)
- **\$5.4 Million Infrastructure** loan to Mescalero Apache Telecom, Inc. to upgrade its telecommunications system and provide fiber optic Internet to half of its service territory (NM)
 - First RUS Telecommunications Program loan provided with SUTA consideration

Rural Utilities Service Telecommunications Key Contacts

Assistant Administrator

Keith Adams

keith.adams@wdc.usda.gov / 202.720.9556

Deputy Assistant Administrators

Sami Zarour

sami.zarour@wdc.usda.gov / 202.720.9556

Peter Aimable, Office of Portfolio Management & Risk Assessment

peter.aimable@wdc.usda.gov / 202.720.1025

Shawn Arner, Office of Loan (& Grant) Origination & Approval

shawn.arners@wdc.usda.gov / 202.720.0800

Ken Kuchno, Office of Policy & Outreach

kenneth.kuchno@wdc.usda.gov / 202.720.0667



United States
Department of
Agriculture

Rural Development



Thank you for your support!

Keith Adams
Assistant Administrator
RUS Telecom Program
keith.adams@wdc.usda.gov
202.720.9556
www.rd.usda.gov

USDA Rural Development is committed to the future of rural communities.

Goals of the National 911 Program



1. Enable & promote coordination among public and private 911 stakeholders at local, State and Federal/national levels
 2. Collect & create resources for state/local 911 Authorities
 3. Administer a grant program for the benefit of 911 Public Safety Answering Points (PSAPs)
-
- Provide a Federal “home” for 911
 - Promote and support 911 services

Job #1: Coordination & Collaboration

Federal:

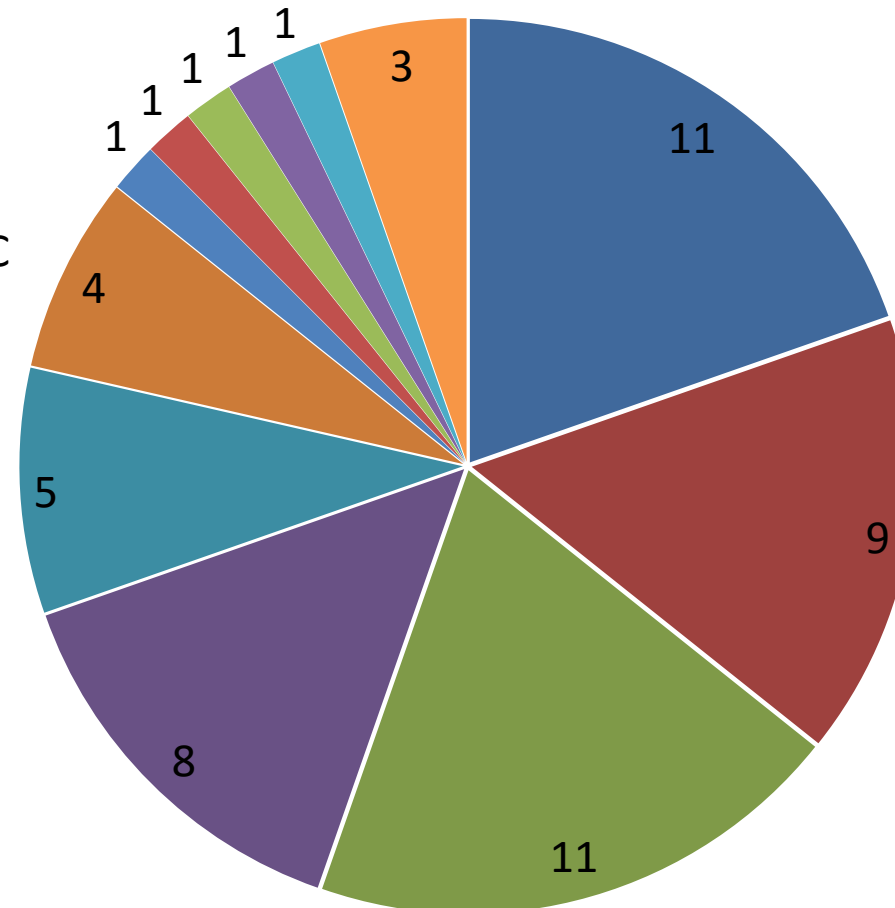


- » Emergency Communication Preparedness Center
 - Steering Committee
 - Grants Focus Group
 - 911 Focus Group
- » FCC – Public Safety and Homeland Security Bureau
 - Communications Security, Reliability and Interoperability Council
 - Task Force on Optimal PSAP Architecture
- » DHS – Office of Emergency Communications
 - Liaison
- » Department of Defense – Public Safety Communications Working Group
- » Coast Guard
- » FirstNet

Where State 911 Agencies are Located



- Homeland Security/Public Safety
- Emergency Management
- Emergency Communication
- Admin/Management/Finance/PUC
- 911 Board/Office
- IT
- Association of Counties
- Resource Center
- Commerce Commission
- Coordinating Council
- State Police
- NA



Job #2: Resources

- National Profile Database
- NG911 Standards ID & Review
- Assessment of a Statewide 911 System
- 911 Legislative Tracking Database
- “911 Connects” Newsletter
- NG911 Video
- “State of 911” Webinar series

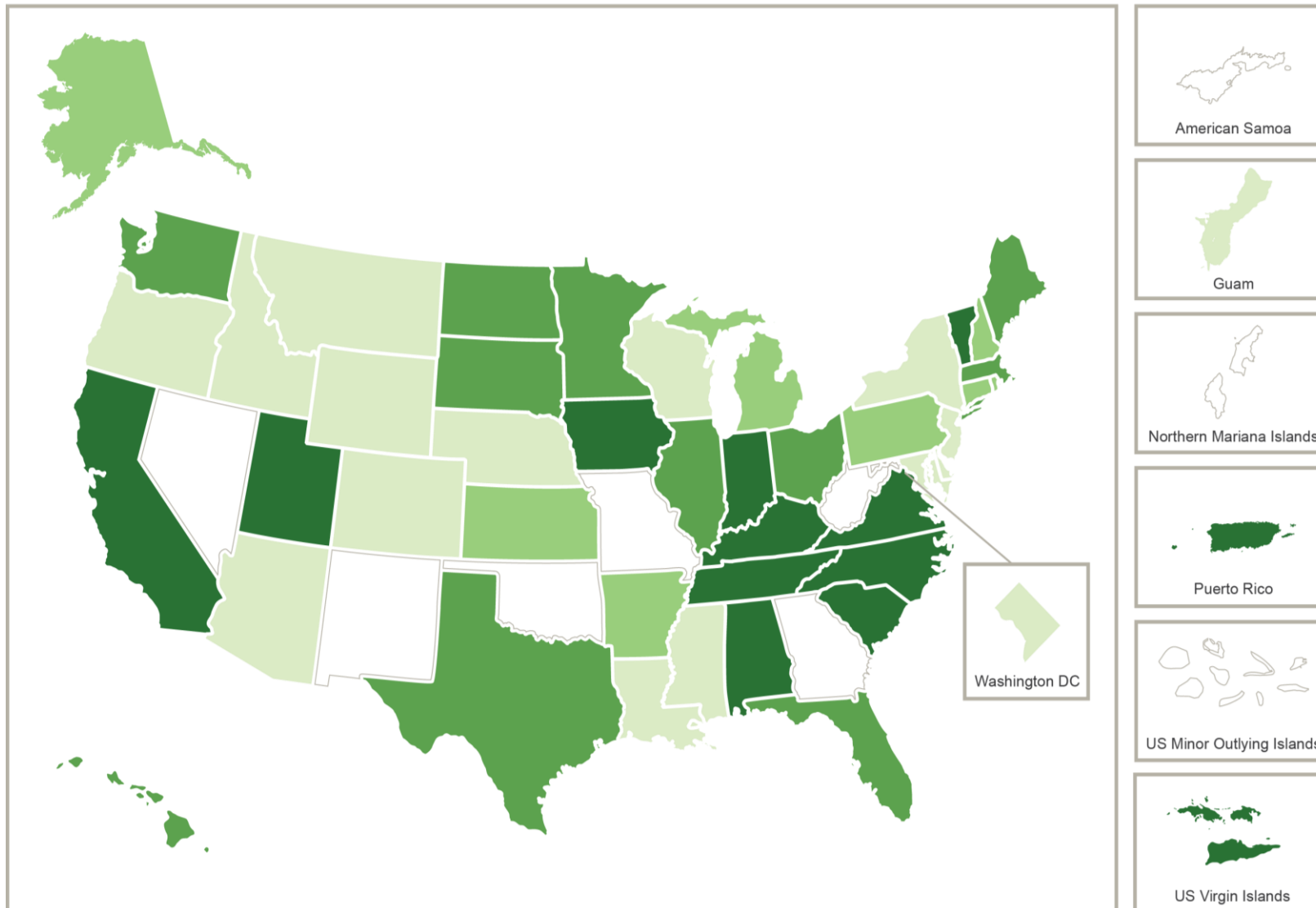
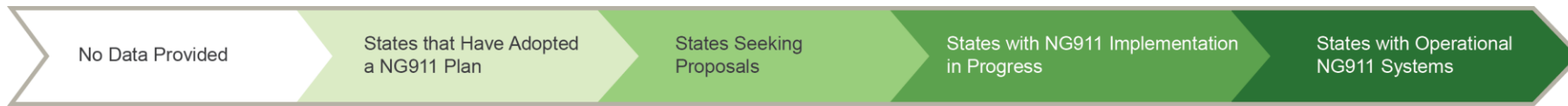
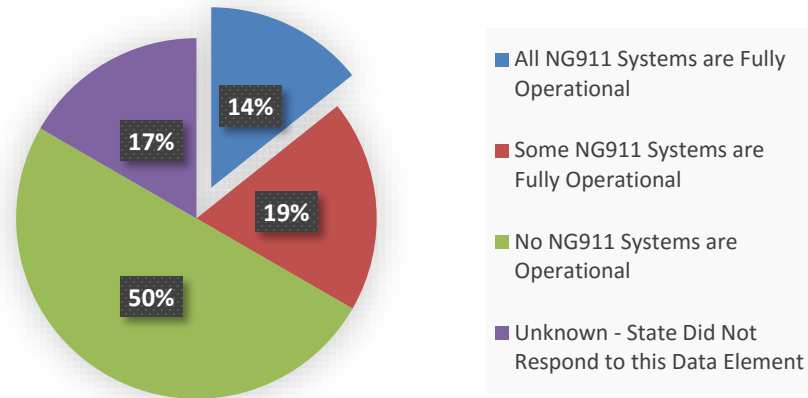


Figure 3. NG911 Systems by Reporting States



(“fully operational” defined as systems using NG911 infrastructure to process voice calls, including ANI & ALI)

Table 2. Implementing Next Generation 911

Data Element	2011 Data by Reporting States	2013 Data by Reporting States	2014 Data by Reporting States
Statewide NG911 Plan Adopted	9 of 27	15 of 39	19 of 42
Statewide NG911 Concept of Operations Developed	3 of 27	12 of 39	16 of 42
Statewide Request for Proposal Released	Not Reported	13 of 36	18 of 42
State Contract Has Been Awarded	Not Reported	13 of 29	16 of 42
Statewide Installation and Testing	Not Reported	9 of 30	11 of 42

Job #2: Resources

Examples and options for legislative language to facilitate the deployment of Next Generation (NG) 9-1-1

Guidelines for STATE NG9-1-1 Legislative Language

NG911 A LEADER'S GUIDE TO NEXT GENERATION 911 FOR LAW ENFORCEMENT

Model State 911 Plan

911.gov

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The "State of 911" Webinar Series

Home / 911 Issues / The "State of 911" Webinar Series

2015 Webinars | 2014 Webinars | 2013 Webinars | 2012 Webinars

Click here to sign up to receive updates on the State of 911 Webinar Series.

December 2015

FCC Activities & Statewide Management Information Systems Updates
Hear about FCC 911 and public safety task force activity updates and discussion of statewide Management Information Systems (MIS) in Utah.

Speakers Include:

- **Federal Update:**
Tim May, Policy and Licensing Division, FCC Public Safety and Homeland Security Bureau
- **Stakeholder Update:**

5 Ways That NG911 Can Improve Your Agency

Saving lives

Gaining efficiencies

Adapting to the future

Next Generation 911

NCSL NATIONAL CONFERENCE OF STATE LEGISLATURES

9-1-1 Legislation Tracking Database

Welcome to the National Conference of State Legislatures 9-1-1 Legislation Database. You can search for 2012 introduced legislation by topic, keyword, year, status or primary sponsor. The database is updated bi-weekly. 9-1-1 topics include:

- 9-1-1 Administration, Plans, Boards & Commissions
- 9-1-1 Fee, Service Fee or Surcharge
- 9-1-1 Funding and Appropriations
- 9-1-1 Privacy and Confidentiality
- Sponsored 9-1-1
- Next Generation (Advanced 9-1-1)
- Unrelated 9-1-1
- 9-1-1 Other Miscellaneous

The National Conference of State Legislatures works in cooperation with the National Highway Traffic Safety Administration to bring you up-to-date, real-time information about 9-1-1 bills that have been introduced in the 50 states and the District of Columbia.

9-1-1 Legislation Tracking Database

- 2012 9-1-1 Enacted Legislation
- Traffic Safety Legislation Tracking Database
- Telecommunications and Information Technology Overview Page

NHTSA

Denver Office
Tel: 303-344-7789 | Fax: 303-344-7800 | 1700 East First Place | Denver, CO 80202

Washington Office
Tel: 202-424-4480 | Fax: 202-721-0880 | 444 North Capitol Street, N.W., Suite 515 | Washington, DC 20001

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Safer cars. Safer Drivers. Safer roads.

Job #2: Resources – Standards ID & Review

Types of Standards:

- Product
- Interface
- Data
- Test
- Performance
- Operations

The National 911 Program
Next Generation 911
(NG911)
Standards Identification
and Review

A compilation of existing and planned standards for NG911 systems



Washington, DC
January 2014

Job #2: Resources

NG911 Cost Study

...to serve as a resource for Congress as it considers creating a coordinated, long-term funding mechanism for NG911.

7 parts:

1. How costs would be broken out geographically & allocated among PSAPs, broadband service providers, and third-party providers of NG911 services
2. Assessment of the current state of NG911 readiness among PSAPs
3. How PSAP access to broadband may affect costs
4. Technical analysis & cost study of delivery platforms, e.g., wireline, wireless and satellite
5. Assessment of architectural characteristics, feasibility and limitations of NG911 service delivery
6. Analysis of the needs of persons with disabilities
7. Standards and protocols for incorporating VoIP & "Real-Time Text" standards.

Period of performance: October 2016 thru September 2018

Job #3: 911 Grant Program: \$115 Million

- “(A) Migration to an IP-enabled emergency network, and adoption and operation of Next Generation 911 services and applications;
- “(B) Implementation of IP-enabled emergency services and applications enabled by Next Generation 911 services, including the establishment of IP backbone networks and the application layer software infrastructure needed to interconnect the multitude of emergency response organizations; and
- “(C) Training public safety personnel

(For info as it is available: <http://www.911.gov/911grants.html>)

Job #3: 911 Grant Program

911.gov

Need to call 911?

About the Program911 IssuesProgram InitiativesNational 911 CoordinationResource Center

911 Grant Programs

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The advances in telecommunications technology are changing the every portion of the emergency communications ecosystem. The 911 Grant Program provides grant funding to support local and state 911 Public Safety Answering Points (PSAPs) in upgrading their 911 systems.

In September 2009, the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) and the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA) awarded more than \$40 million in grants for the implementation and operation of Phase II enhanced 911 services and for the migration to an Internet-Protocol (IP) enabled emergency network. Grantees used funds to upgrade their 911 systems to comply with Phase II wireless E911 requirements, implemented Next Generation 911 (NG911) technologies, and make significant improvements in technology and emergency communication. Go to the [E911 Grant Program](#) page to learn more and read the full report online [here](#).

In November 2014, the FCC conducted the AWS-3 spectrum auction which generated approximately \$44.8 billion in revenue. Of that total, \$115 million has been set aside for the 911 Grant Program. See below to gain a general understanding of the activities that will be completed as part of the 911 Grant Program.

Stage 1: FCC conducts AWS-3 spectrum auction
Stage 2: Auction proceeds transferred to Public Safety Trust Fund
Stage 3: Public Safety Trust Fund transfers funds to 911 Grant Program
Stage 4: NHTSA & NTIA draft joint grant regulations
Stage 5: Public provides comments on draft regulations
Stage 6: Final regulations are published and grant applications accepted
Stage 7: Grants are awarded

Click [here](#) to sign up to receive updates on the NHTSA/NTIA 911 Grant Program.

Search

911 Program Initiatives

Working for an Updated 911 System

People expect the 911 system to work quickly and reliably, everywhere and with any device. The National 911 Program's role is to help the 911 community provide optimal 911 services across the nation.

Read More

Resources for 911 Systems

**Shared Tools & Documents**
In the 911 Resource Center

Receive National 911 Program Updates

State 911 Resources

 Document Resource Center

 Model Legislation Guidelines

 Profile Database

Laurie Flaherty
Coordinator
National 911 Program
(202) 366-2705
laurie.flaherty@dot.gov



The Origin of Carrier of Last Resort Obligations

Prof. Barbara A. Cherry
The Media School, Indiana University
Presented at
NARUC Winter Meeting 2016



Origins under State Law

Provider of Last Resort Obligations Originate under State Public Utility Law

- During the 19th century, provider of last resort obligations originated under the States' common law of public utilities.
- An entity acquired the legal status of a public utility when a state or local government:
 - Granted the entity a franchise, which need NOT be exclusive;
 - To provide some essential service and facilities of public concern;
 - Through the exercise of some government right, privilege or power (e.g. eminent domain).
- Upon acceptance of the franchise, the utility bore provider of last resort obligations, whether:
 - Implied by the common law; or
 - Explicitly stated in the franchise agreement.

The Core Obligations of a Provider of Last Resort

- There are two core components to the obligations borne by the provider of last resort:
 - An affirmative obligation to extend facilities throughout the franchise area; and
 - A legal barrier to exit from providing facilities and services.
- These core components were retained when, starting from the late 19th century and continuing throughout the 20th century, states codified public utility laws through legislation.

“Carrier” of Last Resort

- Over time, entities in various industries acquired public utility status through grant of government franchises.
- But some public utilities were also common carriers under a separate, and much older, body of common law.
 - E.g. Railroads, telegraphy or telephony companies.
 - But not water, gas, and electricity companies.
- Thus, when the public utility was also a common carrier, the provider of last resort became known as the “carrier” of last resort.

Origins of Integrating Federal & State Regulation

Coordinating Interstate and Intrastate Regulation

- Thus, telecommunications carriers have historically borne dual legal statuses:
 - As common carriers; and
 - As public utilities.
- But each of these statuses arose for different reasons under separate bodies of common law.
- With the rise of interstate commerce, Congressional legislation created a federal/state, dual jurisdictional framework to coordinate common carriage and public utility regulation.

Origins of the Federal Statutory Framework

- The Federal statutory framework for common carriers originated with the the Interstate Commerce Act of 1887, based on agency oversight by the ICC.
 - Initially applicable to railroad common carriers; and
 - Later applied to telegraphy and telephony common carriers by the Mann Elkins Act of 1910.
- The Federal Communications Act of 1934 later transferred jurisdiction over telegraphy and telephony common carriers to a new agency, the FCC.

Regulation Under The Telecommunications Act of 1996

- Under this federal statutory framework, the States' imposition of carrier of last resort obligations has coexisted with the FCC's regulatory jurisdiction over telecommunications common carriers in interstate commerce.
- The Telecommunications Act of 1996 (TA96) modified the legal framework for coordinating federal/state regulation.
- Most relevant here are the provisions of TA96 that relate to ensuring universal service -- sections 254 and 214.

Under TA96: States Retain Authority for COLR

- In orders implementing sections 254 and 214, the FCC has explicitly stated that States retain their authority with regard to COLR obligations.
- “[W]e do not seek to modify the existing authority of states to establish and monitor carrier of last resort obligations” (par. 15). *USF/ICC Reform Order*, 26 FCC Rcd 17663 (2011).
- “[O]ur decision to grant forbearance in these limited circumstances does not disturb existing carrier of last resort obligations and does not preclude states that do not have carrier of last resort obligations from imposing such obligations” (par. 64). *FCC CAF Phase II Order*, 29 FCC Rcd 15644 (2014).

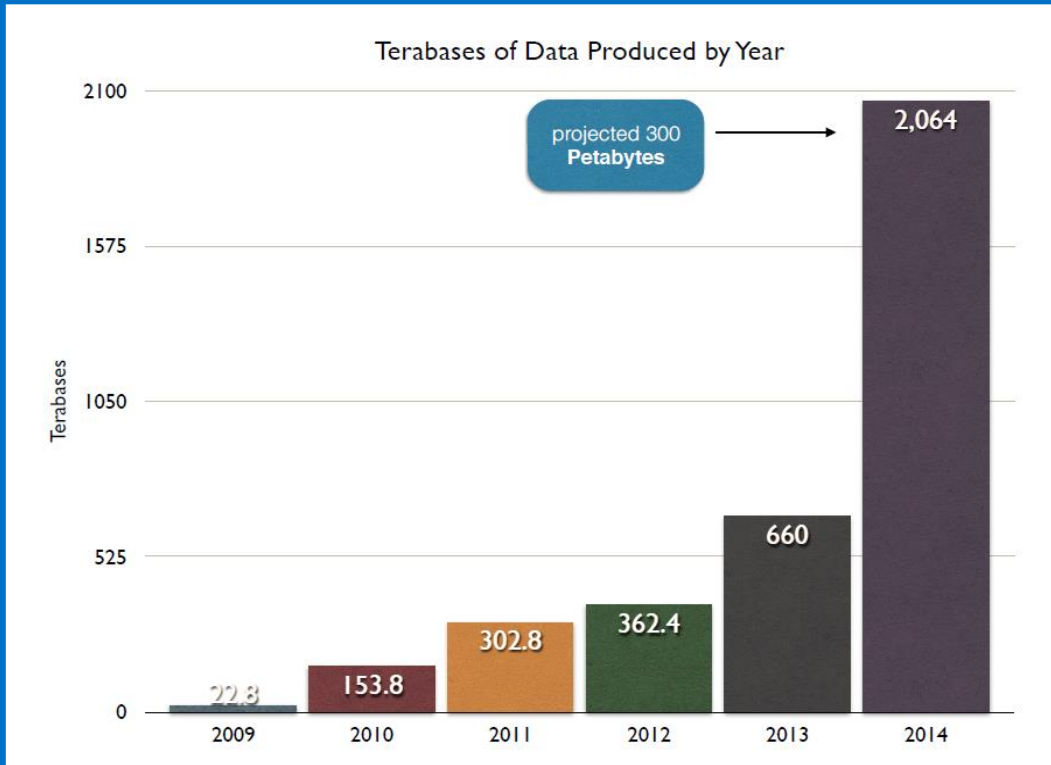
Under TA96: Some Related Federal Requirements

- Yet, the States' COLR requirements are *supplemented* by federal statutory requirements on common carriers.
- These requirements include common carriers' general **duty to serve**, originating under the common law:
 - To serve upon reasonable request, without unreasonable discrimination, at just and reasonable rates, and with adequate care.
- They also include **ETC's obligations** under section 214, one of which is a legal exit barrier.
 - For an ETC to discontinue service; or
 - For an ETC to relinquish its status as an ETC.

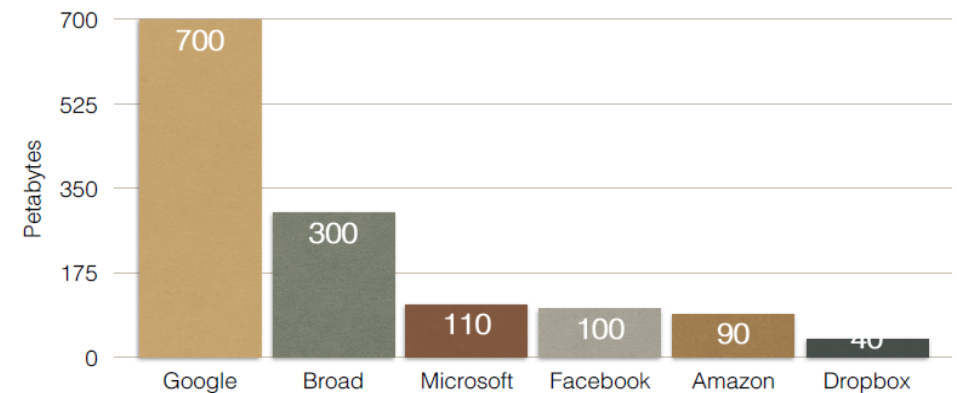
...And the Future?

- This is the current state of the law from which further policy is evolving:
 - For broadband services
 - For technology transitions
 -

Data @ Broad Institute ... alone.



We produce as much data as the big cloud providers



The Broad Institute will produce more data than Microsoft, Facebook and Amazon combined by 2015