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	• Rural Electrification Administration (REA) began providing financing to promote rural electrification
1949	• REA received authority to finance telephone service in rural communities
1995	• Evolving from the REA, the Rural Utilities Service (RUS) required that all financed telecommunications networks have the capacity to deliver broadband
2009 to present	• RUS has invested **over $6.8 billion** in loans and grants to build out broadband infrastructure in rural areas

Telecommunications Loan Programs

Infrastructure Program	**Farm Bill Broadband Program**
• $690 million available in FY 2016	• $20 million available in FY 2016
• Loans finance new and improved telecommunications infrastructure in rural communities of 5,000 or less	• 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	Farm Bill Broadband Program
• FY 2015 -- **17** loans approved: **$245 million**	• New regulation and NOSA were published July 30, 2015
• FY 2016 -- **1** loan approved: **$30 million**	• FY 2015 Application Window closed September 30, 2015
	• 15 loans in process: $118 million
• FY 2016 -- **15** loans in process: **$185 million**	• FY 2016 Application Window will open soon. **Stay tuned for the FY 2016 NOSA!**
• Applications are accepted year round	

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	Distance Learning and Telemedicine Program
• **$10.3 million** available in FY 2016	• **$19 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)	• Grants fund equipment needed to provide Distance Learning and Telemedicine services
	• 15% Matching Requirement
• Service Area must be entirely unserved	
• Broadband Service is defined as 3 Mbps (download plus upload)	
• 15% Matching Requirement	

Telecommunications Grant Programs Update

Community Connect Program	**Distance Learning and Telemedicine Program**
• FY 2015 – **68** applications submitted**: $106 million**	• FY 2015 -- **191** applications submitted: **$38 million**
• FY 2015 – **5** applications approved: **$11 million**	• FY 2015 – **75** applications approved: **$23 million**
• Anticipated FY 2016 funding window to open in the spring	• 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

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Thank you for your support!

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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

Safer cars. Safer Drivers. Safer roads.

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

Legend:
- 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

Pie chart values: 11, 9, 11, 8, 5, 4, 1, 1, 1, 1, 1, 3

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

States that Have Adopted a NG911 Plan · States Seeking Proposals · States with NG911 Implementation in Progress · States with Operational NG911 Systems · No Data Provided

Washington DC

American Samoa · Guam · Northern Mariana Islands · Puerto Rico · US Minor Outlying Islands · US Virgin Islands

Combined NHTSA // NENA Data - Data Collected in 2014

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Figure 3. NG911 Systems by Reporting States

- 14% — All NG911 Systems are Fully Operational
- 19% — Some NG911 Systems are Fully Operational
- 50% — No NG911 Systems are Operational
- 17% — Unknown - State Did Not Respond to this Data Element

("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**

NHTSA data – collected in 2015

Job #2: Resources

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

911.gov

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

NHTSA
www.nhtsa.gov

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)

NHTSA
www.nhtsa.gov

Job #3: 911 Grant Program

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The Origin of Carrier of Last Resort Obligations

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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 <u>dual</u> 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).
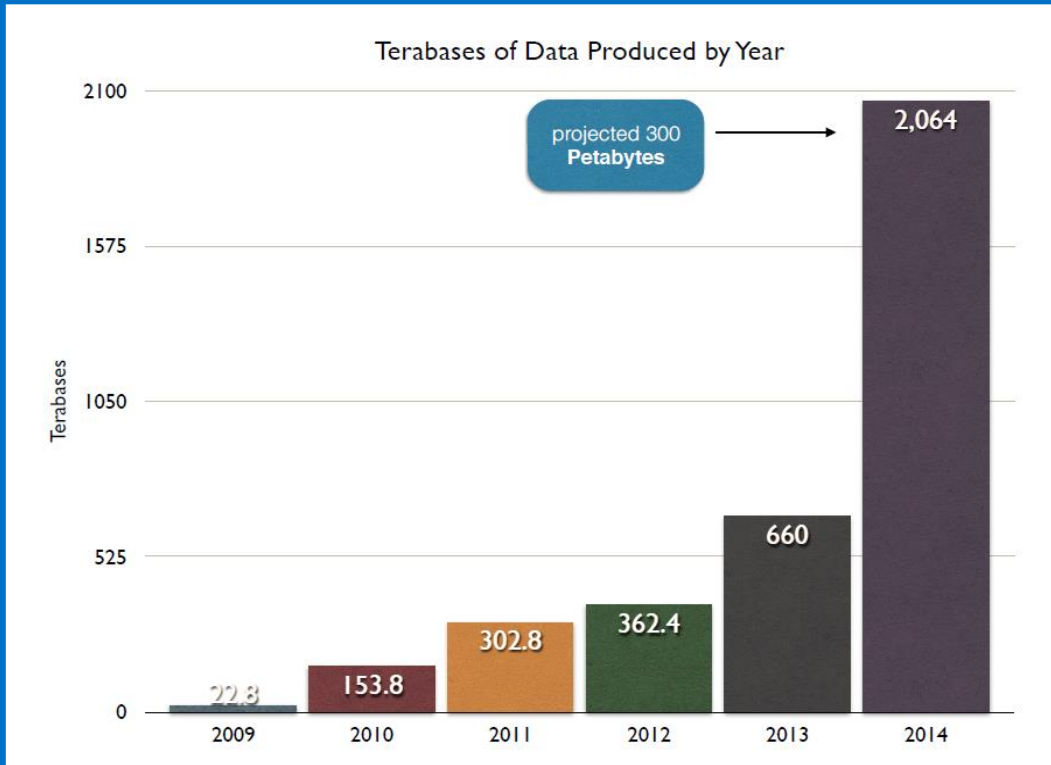
Under TA96:
Some Related Federal Requirements

- 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 discrim-ination, 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

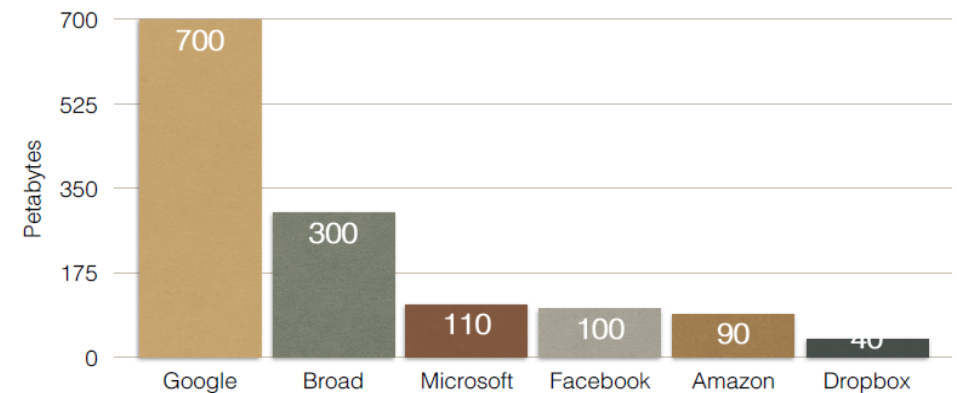 - For an ETC to relinquish its status as an ETC.

…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.

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

Health & Life Sciences at Intel
Where information and care meet

(intel) Look Inside.™