The NMPRC and Rural Broadband Deployment in New Mexico

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What is Rural Broadband?

- The Federal Communications Commission (FCC) defines Broadband as 25 mbps upload, 3 mbps download speeds as adequate threshold for wireline broadband deployment measure per household. 2019 FCC Broadband Deployment Report.

- For mobile broadband, the FCC considers 5/1 mbps upload/download speed as a minimum, and 10/3 mbps as the median upload/download speed. 2019 FCC Broadband Deployment Report.

- The Definition of a rural areas may vary depending on what the definition is used for.

- The Census Bureau identifies two types of urban areas:

  Urbanized Areas (UAs) of 50,000 or more people;

  Urban Clusters (UCs) of at least 2,500 and less than 50,000 people.

  "Rural" encompasses all population, housing, and territory not included within an urban area. The FCC's Broadband Deployment Report uses Form 477 data, which is compiled on a census block basis.

- New Mexico Rural Universal Service Fund rule defines a rural area as (**NMAC 17.11.10.7.X) "Rural area"** means:

    (1)   any unincorporated area; or

    (2)   any city, town or incorporated area with a population of 15,000 or less as reflected in the United States census for 2010.

FCC 2019 Broadband Deployment Report

- FCC BB Deployment Report issued to satisfy federal Section 706 requirements to advance broadband deployment in U.S.

- Reports wireless and wireline broadband deployment data nationwide, by state, county, and tribal, rural and urban areas as of December, 2017. New Mexico specific data contained in the report.

- Report can be downloaded at https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2019-broadband-deployment-report.

- Data in the report relies on Form 477 data collected by the FCC twice yearly from broadband providers reporting broadband service type and speed.

- Dissent from two FCC Commissioners based on concern over accuracy of FCC Form 477 data used as the basis for the statistics in the 2019 Broadband Deployment Report.

- Example of issues: 1) if one location in a census block is served by a broadband provider, all of the locations in the census block are reported as served in that census block; 2) a location in a census block is considered served if a provider makes service "available", but may not actually serve.

FCC Form 477 Data

- FCC collects data twice per year in the Form 477 from all wireline and wireless broadband service providers.
- Data collected on the census block level.
- Information also collected from providers on wireless, wireline, and Voice-over-Internet Protocol (VoIP) voice subscriptions.
- Information collected from providers on type of broadband service provided, and speed and latency characteristics per subscription.
- FCC Form 477 data used by the FCC for a variety of purposes, including broadband reporting, mapping, and disbursement of federal universal service funding.

Form 477 Data and other Federal Mapping Efforts

- FCC uses Form 477 data to populate the FCC's broadband map. Map was not updated for a number of years, leading to outdated information on that map, compounding accuracy issues: https://www.fcc.gov/news-events/blog/2018/12/07/decommissioning-national-broadband-map-and-its-apis.

- The FCC keeps more accurate map data showing where certain forms of Federal Universal Service Fund (FUSF) Connect America Fund (CAF) Funding has been awarded, including CAF Phase I, CAF Phase II, Mobility Phase I, Tribal Mobility Phase I awarded areas. https://www.fcc.gov/reports-research/maps/. There are problems with the FCC's latest attempt to map Mobility Phase II areas in preparation for the Mobility Phase II auction, and a FCC investigation was launched into carrier reporting for that map: https://www.theverge.com/2018/12/7/18130925/fcc-investigation-coverage-maps/

- Form 477 data also used to determine where Federal Universal Service Funding (FUSF) is to be awarded, and where a competitor may challenge a claim that a carrier is providing service in a particular area.

- Carrier coverage was often over-reported on the FCC broadband map. The FCC updated the broadband map in February of this year: https://broadbandmap.fcc.gov/#/. However, it is recognized that more works needs to be done to further define customer locations.

- FCC opened proceeding to explore methods by which it may improve broadband service location reporting and replace carrier Form 477 reporting in WC Docket 19-195 and Docket WC 11-10.

Federal Universal Service Fund Role in Deployment of Broadband

- In 2011, the FCC repurposed the FUSF from subsidizing Public Switched Telephone Based (PSTN) based networks to subsidizing carrier deployment of broadband networks (FCC Docket 11-161).

- Created the Connect America Fund (CAF) for wireline CAF Fund, and wireless Mobility Fund.

- CAF Phase I, CAF Phase II, Mobility Phase I, Tribal Mobility Phase I awards for underserved and unserved areas have already been awarded. See FCC maps.

- Those Incumbent Local Exchange Carriers (ILECs) and Competitive LECs (CLECs) that previously received PSTN-based support have seen their support changed to other forms for support based on the build-out and maintenance of broadband networks. That transformation is ongoing.

- FCC broadband funding is tied to carrier deployment to a minimum number of locations with specific speed and latency requirements, and potential network testing requirements to verify carrier deployment as required by the FCC.

Recent FCC Efforts to Update Broadband Mapping and Deployment

- On August 2, 2019, the FCC put out for comment in Docket FCC 19-77 a proposal to create a Rural Digital Opportunity Fund, which would provide $20.4 billion in funding to unserved areas over the next ten years. See also FCC dockets WC19-195 and WC 11-10.

- FCC Proposal is to use reverse auction mechanism to deploy 25/3 mbps to rural very high cost areas.

- Supplements FCC efforts to deploy broadband to rural areas through the already implemented CAF FUSF program.

- On August 6, 2019, the FCC issued an order in WC Dockets 19-195 and 11-10, to propose the creation of a Digital Opportunity Data Collection to eventually replace carrier Form 477 data reporting. It will require the use of carrier geospatial data and "crowdsourcing" to help correct for any erroneous carrier location reporting.

- That order also made some adjustments to modernize Form 477 data reporting, including relaxation of carrier confidentiality and reporting of voice deployment on a more granular census tract level.

Role of the NMPRC and Federal USF Funding to Eligible Telecommunications Carriers (ETCs)

- The NMPRC's primary jurisdiction is over intrastate telecommunications services; the FCC has primary jurisdiction over broadband services because it has been designated as interstate in nature whether defined as a telecommunications or information service (see Net Neutrality).

- In order for a carrier to receive FUSF support, they must first be designated as an ETC.

- The FCC has delegated by statute the responsibility of designating and recertifying ETCs to the state regulatory commissions.

- The NMPRC has been designating and recertifying ETCs under federal standards for many, many years.

- The NMPRC has designated ILECs, Competitive LECs (CLECs), wireline and wireless providers, and providers qualifying for federal high cost support and Lifeline-only wireless providers as ETCs.

- So far, these certifications have included "legacy" FUSF support, CAF Phase I and II funding, Mobility and Tribal Mobility Funding, and stand-along Lifeline funding.

- The NMPRC recertifies all high-cost ETCs per federal standards once per year to certify to the FCC that those providers are using FUSF support as intended for universal service purposes so they can continue to receive high-cost USF funds. The current NMPRC annual FUSF recertification docket is Case No. 19-00092-UT.

- Given these delegated responsibilities from the FCC, the NMPRC has an interest in tracking federal USF funding and the activities of ETCs in New Mexico.

Examples of Available Sources of Funding for Broadband Deployment in New Mexico

- Federal FUSF Programs, including:

  1)High cost support programs.

  II) FCC FUSF Lifeline Program, including Tribal Lifeline service.

  III) FCC FUSF E-Rate Program to fund schools and libraries.

  IV) FCC FUSF Rural Health Care Program.

- New Mexico Rural Universal Service Fund (NMRUSF) Broadband Program.

- US Department of Agriculture (USDA) Rural Utility Service (RUS) Broadband loans and grants. Example, USDA Re-Connect Program Loans and Grants.

- Housing and Urban Development (HUD) Grants.

- A comprehensive list of funding sources can be found at National Telecommunications and Information Administration (NTIA) website: https://broadbandusa.ntia.doc.gov/new-fund-search.

- Information also available at New Mexico Department of Information Technology: https://www.doit.state.nm.us/broadband/index.shtml.

- Prior to awarding grants or loans to a carrier, most organizations who supply the loans or grants want know if the area is unserved or underserved, and whether the applicant has accepted funding from any other source in order to qualify for those funds to provide service in the area. This is another reason why it is important to have accurate information on where and why type of broadband is being deployed in the state.

New Mexico Rural Universal Service Fund Broadband Program

- Created through the passage of SB 308 in 2017. Required $5 million per year to be allocated to a Rural Broadband Program funded through the NMRUSF. Also requires that at least 60% of NMRUSF access reduction support and need based support given to ETCs be spent on broadband.

- Carriers are required to be certified as an ETC to access NMRUSF funds.

- NMRUSF Rule NMAC 17.11.10 New Mexico Rural Universal Service Fund governs use and administration of the NMRUSF: http://164.64.110.134/parts/title17/17.011.0010.html.

- Criteria for NMRUSF Broadband Program administration found in NMAC 17.11.10.31. Broadband Program.

- Targeted to unserved and underserved rural areas.

Current Demands on the NMRUSF

- Commission changed to a per-connection surcharge late 2018; $1.17 per connection for wireline, wireless, and VoIP connections. Stabilized revenue stream. Case No. 18-00202-UT.

- Case No. 18-00252-UT changed surcharge starting January 1, 2019 to $1.24 per month to fund projected yearly demand on the fund of $29,211,663.36. Broken down by category is:

- Access reduction support - $18,843,564

- Need-based support - $1,400,000 (expires Dec. 2020)

- LITAP - $480,000

- Broadband Program - $5,000,000

- Broadband Deficit Recovery - $1,462,957

- True-ups (60 months) - $1,819,802

- Admin Fees - $130,340

- Legal Fees - $50,000

NMRUSF Broadband Program Cont'd

- 2018 first year of implementation for project deployment beginning in 2019.

- Broadband applications due between May 1 and June 1 every year.

- Three month review period by Staff, report made to the Commission by September 1. Commission selects projects for award by October 1. One month protest period. Commission issues any modifications to its October 1 order by December 1.

- In 2018 there were a total of 26 proposed projects from four applicants – CenturyLink, Windstream, Smith Bagley, and Eastern New Mexico Telephone Cooperative. The projected cost of the 26 proposed projects was $8,192,963.1.

NMRUSF Broadband Program

- Since the commission provides a 75% match to 25% of carrier funding toward project costs, the total amount of monies requested from the Broadband Program was $6,070,834. The applicants combined offered to contribute matching funds in a total amount of $2,122,630.

- In 2018, NMPRC awarded $5,000,000 in support to the four ETCs for 24 individual broadband projects. Each of the applicants receive funding for some or all of their requested projects.

- Projects are to be completed over a three year time span. The Commission issues 1/3rd of the award up front, 1/3rd at mid-point of project, and 1/3rd at completion.

- Reporting requirements on project deployment at mid-point and completion of project. Commission is receiving some of those reports now for projects started earlier this year.

NMRUSF Broadband Program

- Four ETCs have applied for NMSRUF Broaband Program funds this year – CenturyLink, Windstream, Smith Bagley, and Plateau Communications (subsidiary of ENMR Telephone Coop).

- Total matching funds of $4,802,436.41 requested for 36 proposed broadband projects with a total value of $6,403,248.55.

- Review process at the Commission this year will be the same as last year.

- NMRUSF audit and review process under active discussion at the NMPRC.

- Staff relies primarily on the NMDoIT broadband Map to analyze proposed broadband projects because overall it is more accurate than the federal broaband map, and Staff has access to NMDoIT resources if there are questions.

NMRUSF Broaband Program and Broadband Mapping

- Examples of New Mexico state broadband map accuracy: 1) realistic wireless propagation footprints based on wireless tower sites and spectrum used, 2)DSL footprints based on 18,000 foot radius from central office locations, and 3) Integration of FCC mapping of CAF Phase II areas.

- It may take a while for the FCC to work out the mapping accuracy issues.

- Having good state mapping resources means the state does not have to rely on the FCC to determine what broadband services are being deployed where in New Mexico.

- Good mapping resources allows for broadband gap analysis so the state can troubleshoot how to assist with getting broadband out to areas of need.

- The broadband market is becoming more competitive and dynamic. However, this does not guarantee deployment and more rural areas usually require some form of subsidy to ensure there is a business case for carrier deployment.

- Current broadband deployment does not guarantee ongoing deployment. Providers sometimes find there is no ongoing business case to continue to deploy broadband service. Providers go out of business, or are taken over by rivals who have a different business model or "vision", putting current customers in jeopardy. Ongoing monitoring of state-specific broadband deployment is important.

Questions?

- Thank you