## Broadband Development Strategies for NM

NM Legislative Interim Science, Technology & Telecommunications
Committee

July 26, 2018

# Opportunities for Enhancing Broadband Development in NM

NM Legislative Interim Science, Technology & Telecommunications
Committee

July 25, 2016

## Sacred Wind's activities in last 2 years Navajo service territory

- Expanded Broadband coverage to Navajo homes – 85-90%
- Doubled Now quintupling broadband speeds
- Upgraded/replaced all MW antenna
- Upgraded all Digital Cabinets
- "shortened" copper loops
- Added 70 miles fiber



## Activities in last 2 years

## **Expanded to 4 Other Rural Areas**

- All underserved areas
- All fiber to fixed wireless
- Now serving 100Mbps to home
- Fiber to 24 schools
  - 1 Gbps to each school
- Fixed wireless to 1 school
  - 100-200 Mbps to the school

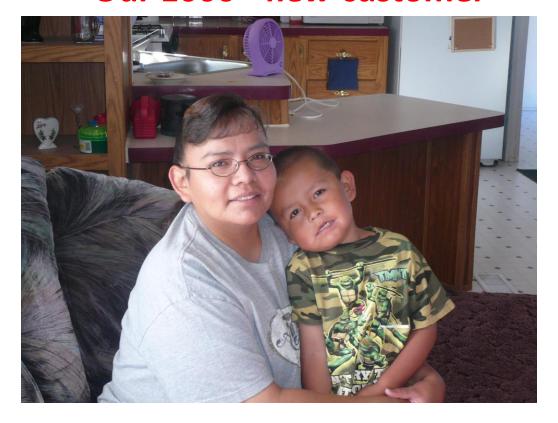


## Sacred Wind – the value of local focus

#### New formula for success

- Local company with local focus
  - No competing markets elsewhere for RoR
- Technology agnostic & daring
- USDA low interest loans
- The buck stops in Yatahey

#### Our 1000<sup>th</sup> new customer



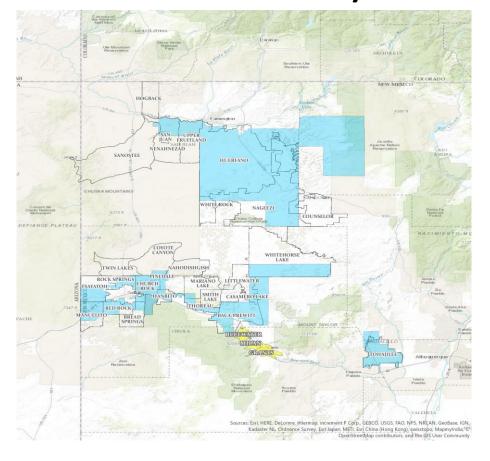
## But, not without challenges ....

#### **Geographic/demographic challenges**

- 3,200 square miles
- 2 households per sq mile
- 49% poverty rate
- High youth & elderly population

- 120 miles between 2 exchanges
- Windshield time excessive

#### **SWC** service territory



## Or aggravations .....

#### Right of way – a weekly work item

- Tribal Trust land
- BIA allotments
- BLM land
- USFS
- State land
- Private land
- County

#### Diné ba Na'anish?



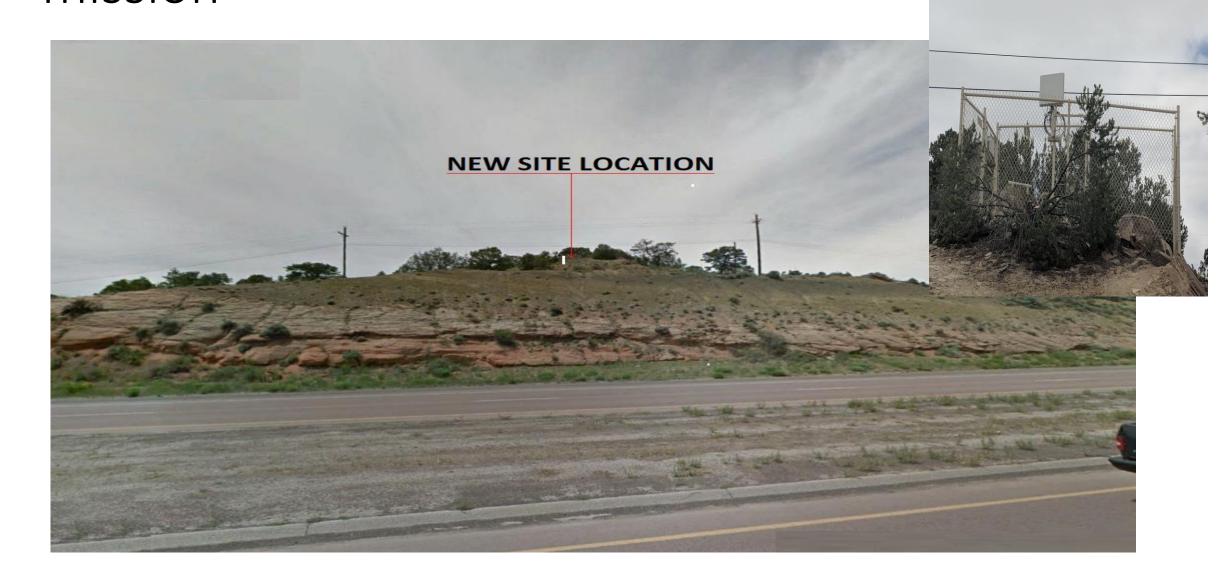
## Or unnecessary costs ....

- 2-3 year BIA ROW reviews
- A/Es required for pole attachments
- \$250,000 fee to negotiate
- Detour "around Mt. Taylor"
- 1 year for Albq permit

## Impediments 9 Us

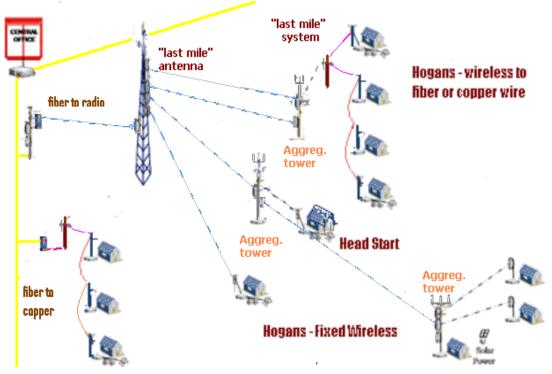


Even allies are off-mission if there's no mission



Mix of Technologies is Key in Rural NM

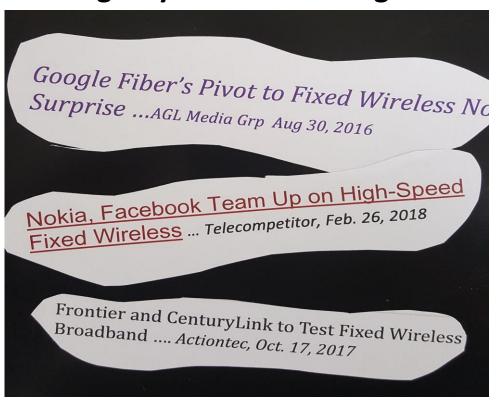
#### **Fiber to Copper & Fixed Wireless**





## Fixed Wireless has a huge role for NM's future

## The Big Guys are now taking notice



#### **Sacred Wind installing since 2008**



## Other Broadband Trailblazers in New Mexico

#### **Success Stories**

What about the 25%

- Mescalero Apache Telecom
- ENMR/Plateau
- AbqGig in Barelas
- Other local rural telcos

 Do we have a plan for the unserved & underserved?

## **CAF Phase II Auction**

## for Broadband in High Cost Rural Areas



## Broadband Development Is Up to Us in NM

- Must have a STATEWIDE PLAN of attack
  - Remove impediments & create incentives
  - Governor & Legislature must be involved
  - Municipalities and Tribes must have a stake in the Plan
  - Companies must venture into a mix of technologies
- Comprehensive rural coverage will take time
- Broadband development will not automatically increase economies in rural areas. It is a tool, not an outcome.

## State Broadband Objective?

## Broadband to every home by 202\_\_!

- Define Broadband
  - 10 Mbps down load
  - 25 Mbps download
- Support programs for high cost Rural
  - Target help to smallest areas

#### How much will this cost?

- A lot
  - Capitalize on diverse technologies
  - Wireless in more rural areas fixed and mobile
  - It will cost a lot more to do nothing

## Solutions?

#### **Collaboration needed**

- Carriers must push the technology envelope
- PRC fund needs to grow
- Legislative commitment
- City & Tribal engagement
- State Transportation Dept. commitment

#### **Legislative commitment**

- Tax incentives for rural investment
- Tax incentives or seed money for technology trials
- Earmark support to PRC or other BROADBAND fund
- Enable & incentivize PPP between providers and Cities & Tribes
  - Assist Cities & Tribes to develop their own broadband plan
- "Liberalize" rights of way for fiber cable