

Connectivity Strategy



# Peace River Regional District



# What we did...

- Market Research to Determine a Comprehensive List of Service Providers, Service Areas, Pricing and Service Levels
- Survey of Fiber, Wireless and Mobility Networks
- Determine Accessibility to Networks
- Stakeholder Engagements with Local Service Providers and Businesses to Build a Needs Analysis
- Data Compilation and Mapping
- Current and Future Technology Analysis and Comparison to Needs Analysis
- Level 1 Design of Proposed Network Including Fiber/Wireless Options
- Modelling Network Build out with Lifecycle Cost Analysis Including Fiber/Wireless/Mobility Blended Network Designs
- Funding/Partnership Options

# What we found...

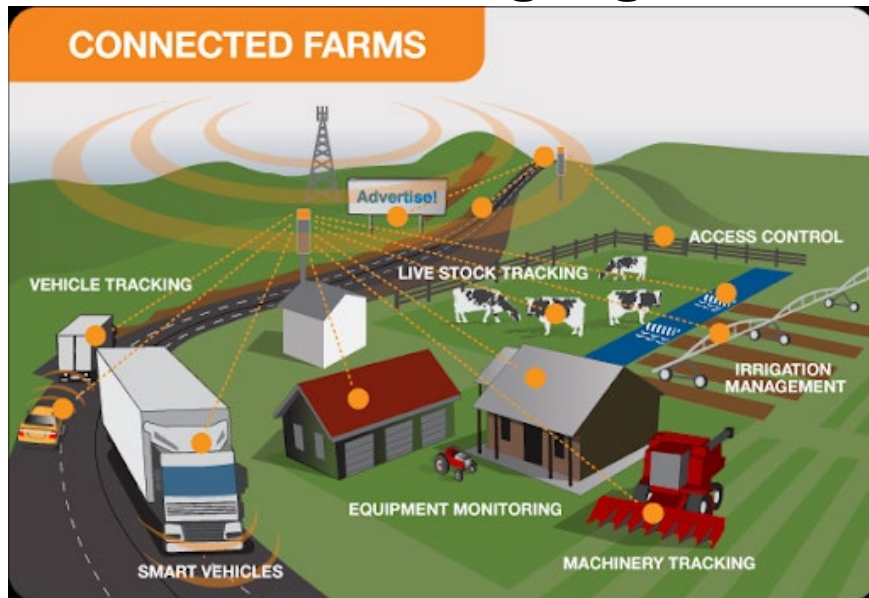
- Reached out to 521 businesses across the 4 districts
  - Electoral B - 88% Dissatisfied with current Internet offerings
  - \*Electoral C- 50% Dissatisfied with current Internet offerings
  - Electoral D - 80% Dissatisfied with current Internet offerings
  - Electoral E - 88% Dissatisfied with current Internet offerings
- Response from 115 residents to an online survey hosted by PRRD
  - 48% of respondents satisfied with current Internet offerings
- Approximately 50% of PRRD residents do not have access to the Universal Broadband Objective of 50 Mbps Down and 10 Mbps according to CRTC mapping.

# Network Accessibility and Partnership Opportunities...

- **Shaw**
  - District has some fiber transport infrastructure available in parts of the district with limited partnership opportunities.
- **TELUS**
  - District has some fiber transport infrastructure available in parts of the district with limited partnership opportunities.
- **Northwestel**
  - Fiber infrastructure is located within one region of the district. Path to partnership opportunities requires ongoing development.
- **ROHL**
  - Transport fiber infrastructure is available in parts of the district. Partnership opportunities available.
- **PRIS**
  - Does not have fiber infrastructure. Partnership opportunities available for wireless service solutions

# What is missing...

## Precision Farming/Agritech



## Rural Crime Prevention/Public Safety

- Property crime rates are 42% higher in rural areas versus urban areas.
- Security systems and HD Cameras require lots of bandwidth to be effective.
- Access to 911 is not universal in PRRD.

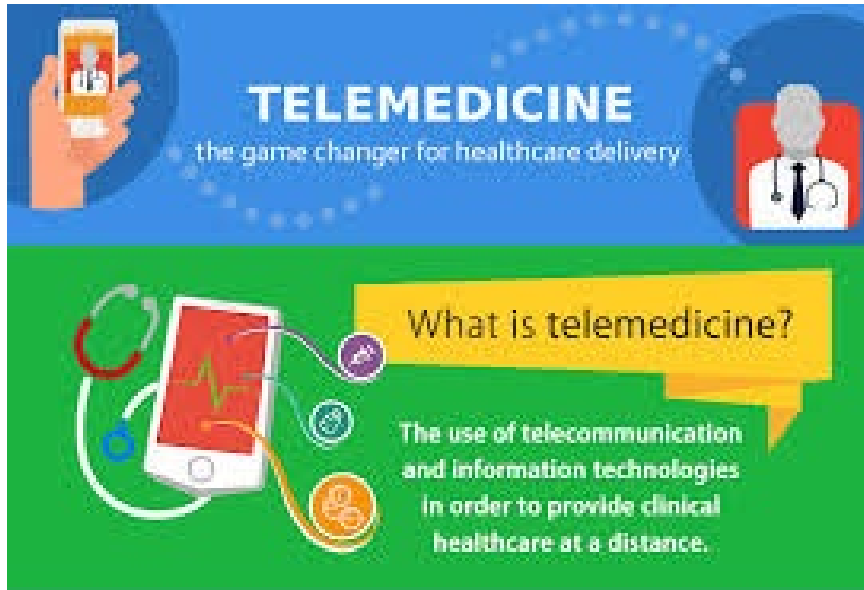
## Aging in Place

- Medication management
- Video Chat
- Blood pressure/Blood sugar management
- Home Entertainment (Netflix, Spotify)
- Smart Home/Smart Speaker (Google Home, Amazon Alexa)
- Home Security

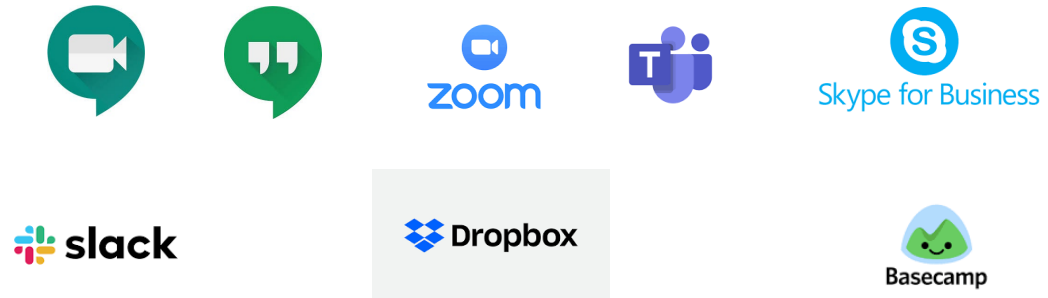


# What is missing...Covid-19 Update

## Telehealth



## Distance Learning/Work From Home



Access to video-based health, school and work from home apps for non-essential workers in offices and all k-12 and college/university students is critical during the pandemic. H

# What is coming...

- 5G
- Smart City
- Autonomous Vehicles

Fiber infrastructure is a requirement for 5G to be deployed anywhere. 5G is the basis that all of these “future” technologies is going to be built around.

Having community owned fiber infrastructure that is commercially available to carriers ensures that PRRD will get 5G before rural communities that don't have fiber.





# Proposal & Next Steps

## Three-Layer Broadband Market Model

Retail Service Providers

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Attract new or leverage existing Service Providers to operate on the fiber infrastructure

Active Network

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Single Wholesale ISP Operator – creates economies of scale and diversity

Community Owned Fiber Network

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Fiber Construction



# Proposal & Next Steps

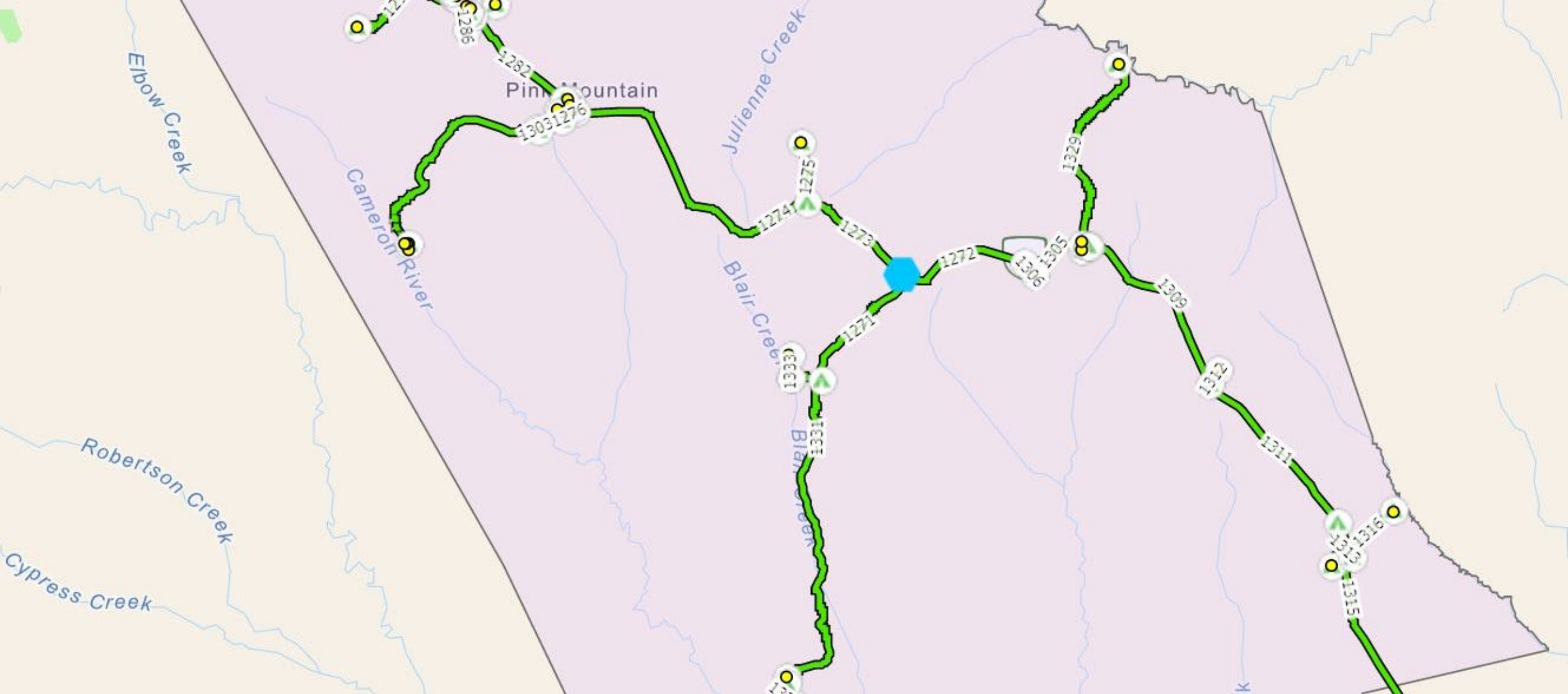
Readying CRTC and Connecting BC grant applications.

Shovel-Ready projects available for Provincial and Federal Stimulus Funding.

## Pilot Project Recommendation #1

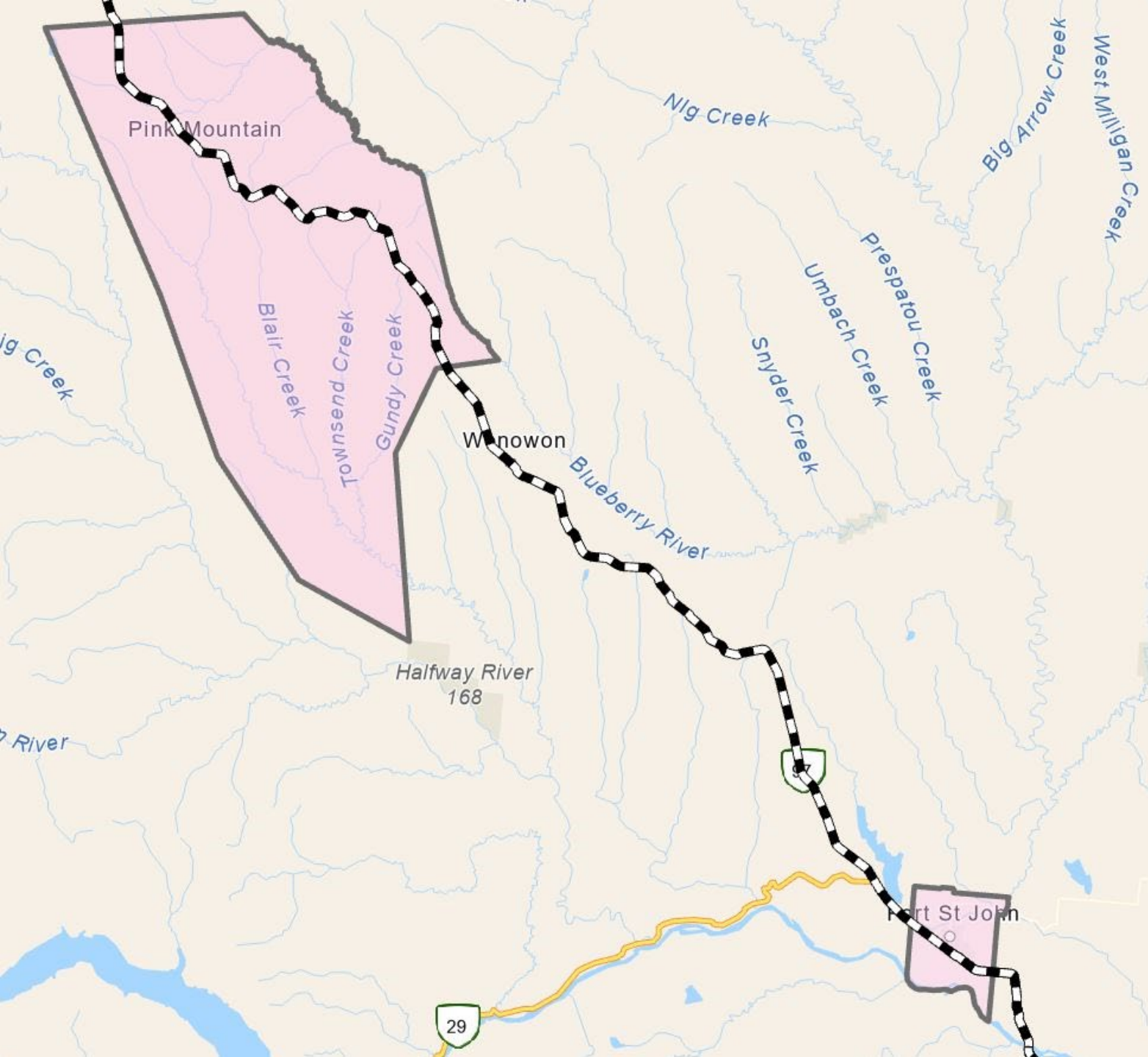
Highway 97 Fiber from Fort St. John to PRRD boundary.

- Wireless local access solutions in Pink Mountain and Wonowon (100+ Mbps solution)
- Possible anchor customers
  - Fiber to the work camps
  - Oil and Gas producers at Pink Mountain



## Pink Mountain FTTH





Hwy 97 from  
Fort St. John  
to Pink  
Mountain

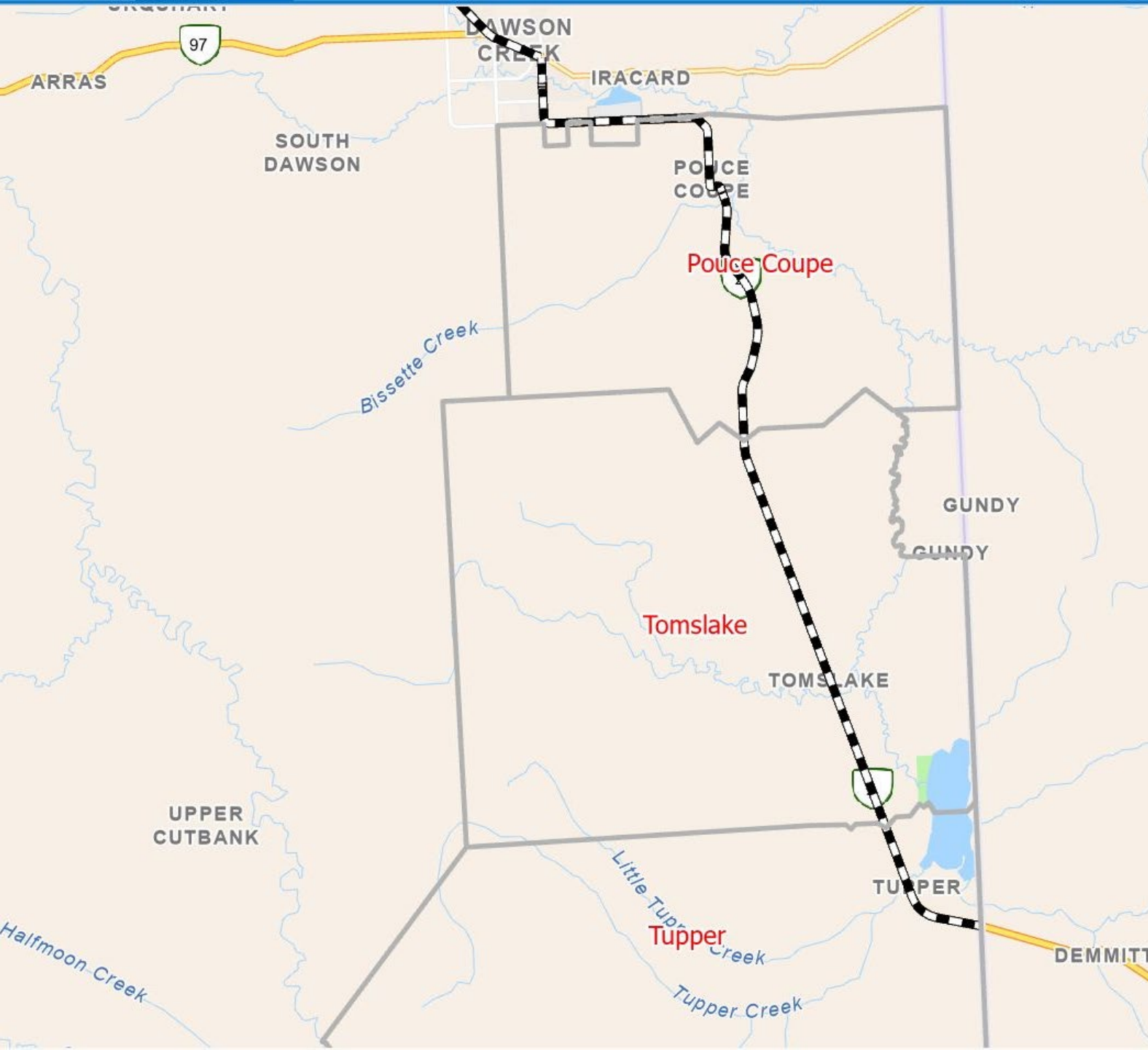
# Proposal and Next Steps

## Trial Recommendation #2

### Tomslake/Tupper

- Wireless solution to provide at least 100 Mbps Download and 100 Mbps Upload speeds.





Tomslake/Tupper

# THANK YOU!

