"Internet for All Benzie County" (IFA-BC)
Cherry Capital Connection, LLC (CCC)

Great progress Benzie County has made:

Just a few years Benzie County began to identify unserved and underserved areas of Benzie County. Today there are currently multiple significant fiber construction efforts being conducted by Spectrum, Acentek, Point Broadband, ACD, Mercury Broadband, and CCC.

RDOF Continues no change.

PPP Continues with no changes.

ARPA Internet for all – Benzie County
  a. Metro Act applications processed (Crystal Lake, Inland, City of Frankfort)
  b. Received BCRC permit for a small section in Crystal Lake Township.
  c. Working on permits, City of Frankfort, BCRC and MDOT.
  d. Inland and Crystal Lake approved land leases for Fiber Distribution Centers.
  e. Crystal Lake Township has distributed ARPA funds to expand our **IFA-BC** efforts.
  f. Bilateral agreements have been received from the Village of Frankfort, Crystal Lake Township and Inland Township.
  g. Once MDOT permit received Construction will start.
  h. FDC will be constructed on site at Crystal Lake Township and Inland Township.
      a. Electrical is on order.
      b. Propane is on order.
      c. Meet point orders with PFN have been signed and processed.
  i. Additional material staging of material in Benzie County will proceed.
  j. **Open access discussions and responses**
      i. Eclipse Communications, 186Networks, Mercury Broadband, PFN
          i. All communications with Eclipse have been paused.
          ii. PFN will sign IRU agreement with CCC November

ROBIN

CCC signed an agreement with MIHI.
  Spectrum and Acentek challenged the CCC ROBIN application.
  Will pass 5,100 households.
  Unserved and underserved has been defined as 1,400 households.
  $2.2 million less funding based on challenges.
There will be a ROBIN 2
Community outreach has begun.
  Two public meetings were executed.

BEADS
  Stakeholders meeting was held.
  Comment period open for 30 days.
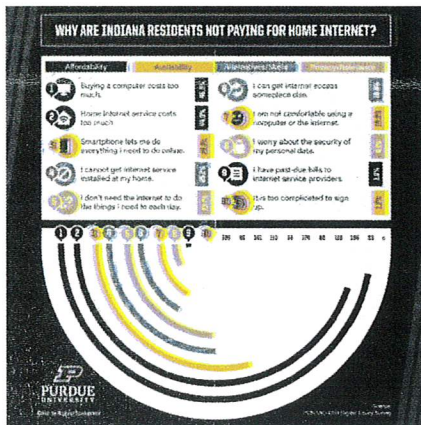
Other projects outside the funding scope of IFA-BC
  a. 911 Tower to be constructed in Frankfort. County approved allocation of $351K towards this effort.

>   i. An agreement has been provided and accepted by the county including detailed preliminary cut sheets for the construction of the infrastructure.
> b. Will be attending Merit meeting in Lansing.
> c. Will be attending 123Net Beads meeting in Lansing.
> d. Participate in multiple round tables with the MIHI office.

Evaluating other funding opportunities

Effort is focused on addressing barriers to adoption. The Link provided is a good article published by Purdue University.

https://pcrd.purdue.edu/why-are-indiana-residents-not-paying-for-home-internet/?mc_cid=91d45a9d2e&mc_eid=921b2da1f8

1. Buying a computer cost too much.
2. Home internet cost too much.
3. Smartphone meets my internet needs.
4. Can not get internet service at my home.
5. Don't need internet.
6. I can get internet access somewhere else.
7. I am not comfortable using the computer.
8. Worries about security.
9. Owe money to another provider.
10. Too complicated to sign up.

2023 the USDA initiated a program referred to as Community Connect
https://www.usda.gov/reconnect/program-overview

Kind Regards - Tim Maylone - CEO and Managing Member, Cherry Capital Connection, LLC

Open Access Opportunities and challenges

Scope of fiber in Benzie County: Based on current projects and once all existing areas are constructed 95% of all service locations (households) should be connected to fiber. **ROBIN effect on margins:** The ROBIN award was based on points. To achieve points and to bring additional funding to the Benzie County infrastructure CCC agreed to the following conditions:

> a. 100 Meg service to be offered at $64.00 per month (this would be for all households).
> b. 100 Meg service to be offered at $30.00 per month (this would be for all households eligible to ACP).
>> 1. The $30.00 would be paid by the FCC ACP program and the household would pay $0.00. This requires the provider to be ACP eligible to participate.

Preparation for Open Access (enhancement to network design in support of OA)
1. Upgrading multiple WWW facing routers to include redundant Broadband Gateway Network servers (BGN)
2. Incorporate multiple "S" and "C" tag VLANs in support of segregating services and locations to manage multiple providers.
3. Incorporate VLANS encapsulated inside VLANs in support of Layer 2 Point to Multi-Point (PtMp) capabilities.
4. Establish an authentication method based on equipment addressing to facilitate multiple provider routing.
5. Establish multiple Fiber Distribution Centers near consumers that includes offloading traffic flow to minimize lag associated with multiple provider routing.
6. Establish consumer demarcation gateway (DG) that will enable TR069 and TR147 transparent speed testing to FCC sites. Each Open Access location would be verified for throughput capabilities independent of provider subscription limits.
7. Integrate Optical Network Terminals into DG to reduce footprint at service location utilizing multiple provider integration.

Open access
1. CCC can offer IRU terms for dark fiber strands per route mile with terms less than cost of construction.
2. CCC can offer PtP terms starting at 2Gig that can be increased to 4Gig, 6Gig, 8Gig, 10Gig, 25Gig, 40Gig, 100Gig.
   a. Pricing is dependent on multiple factors that can be defined once we know the A to Z endpoints.
3. CCC can offer PtMP under leased terms layer 2.
   a. Pricing is dependent on multiple factors that can be defined once we know the A to Z locations.
4. Based on pricing options set by ROBIN for the fiber and the high rate of houses to be connected the general outlook for Fixed Point Wireless (FPW) may limited in Benzie County.
   a. There are multiple FPW companies in Benzie County that would be effected.
5. Based on the State directed subscription rates the margins are narrowed in the 100Meg Direct Internet Access (DIA) to households.
   a. Example 100meg under ROBIN and through the end of 2027 will be priced at $64 or $30.
   b. After applying port charges, the margins to households are narrow.
6. There are margins that would support open access in a small business / large business consumer end point market that is willing to pay greater than mass market rates.
7. Other areas that would provide open access opportunities could be (there may be other areas):
   a. DEI, Managed Services, VoIP, Security, Asset monitoring, PtP or PtMP geographically separated networking, Cyber security, Telehealth, and LAN support
8. Initial port charges would allow CCC to recover capital investment over time and profit.
9. increase adoption rate.

Example:
1. Our containers (router) support 3rd party add on (much like your cell phone). PLUME can provide a $7.99 service to consumers that could be promoted by the CCC web site and ordered direct. This would be linked to any container that supports "open sync".
2. National providers budget a $10 to $16 return after port fees are applied on residential (Mass Market). Because ACP under ACP is a Net Zero the $30 dollar level does suggest that ACP customer would not be served by providers requiring to pay a port charge.