Shovel Readiness
Keys To Optimizing Your Funding & Accelerating Your Build

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Government Funding Programs Typically Favor

- Gigabit capable networks
- Detailed spending plan for network build-out
- Solid operations plans
  - Operating the network
  - Delivering service
- Affordable service
Shovel Ready Projects

- Projects that have a fair amount of preliminary work completed and are seeking or waiting for funding.

- Typically, if a portion of funding was awarded, work could start.

- They have 3 main elements for consideration:
  - Assessment
  - Capability
  - Detail Proposal
Assessment: Key Questions

Community
- What are you looking to solve?
- Revenue opportunities?
- Community Support?

Dependencies
- Permits process?
- Funding?
- Dependent on others?

Architecture
- Aerial or Buried?
- Architecture?
- Existing assets?
- Estimated cost?
Assessment

- What will the investment solve for the community?
  - Social
  - Educational
  - Government services
  - Economic growth

- Understanding dependencies:
  - Pole attachments
  - Rail Crossings
  - Water crossings
  - Easements

- High level costs estimate
Typical Deployment Architectures

- **Home Run**
- **Centralized Split**
- **Distributed Split**
- **Distributed Tap**

NOTE: Assessments based on Corning models, field trials.  

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Capability: Key Questions

Operations
- Who will operate the network?
- Service to offer and from where?
- Customer experience?

Materials
- Material Vendor?
- Materials required?
- Material lead times?
- Material forecast?

Labor
- Engineer/designer?
- Line & Splicing?
- Home techs?
- Maintenance techs?
Operations

- Operating models, various options
- Network Operations
- OSS/BSS systems and supporting processes to support customers
- Operations resource model

Picture: Courtesy Tri County Electric Cooperative
Product & Workforce Considerations

- Labor makes up over 50% of the cost

- Product Checklist:
  1. Cost for tooling and training
  2. Speed to market
  3. Skilled resource availability
  4. Labor costs
  5. Reliability and time to repair
  6. Flexibility to add capacity
  7. Where is it going to be installed
Hiring a Contractor

- Obtain references
- Clear requirements i.e. change orders
- Review safety programs
- Unit rates vs hourly
- Consolidate work items
- Warranty for work
- EF&I models
- Clearly set dates tied to payment
Aerial Material Costs/Foot

- Strand & Lash
  - $$$ - $$$$$
  - $ - $$$

- Traditional ADSS
  - $$$$ - $$$$$$

- Self-Support
  - $$$$ - $$$$$$

- Drop
  - $ - $$
Capabilities

- Materials and Labor availability
- Funding requirements and models
- Services and marketing
- Performance management and governance
Detail Proposal: Key Questions

**Financial**
- Scope defined?
- Detail costs?
- Spend plan?
- Budget management?
- Revenue model?

**Operations**
- Network operator?
- Customer service?

**Project Plan**
- Milestones?
- Scorecard?
- Resource plan?
- Materials?
Detail Proposal

- Clearly defined scope
- Spend plan (detailed costs)
- Operations plan
- High level design completed
- Program management governance
- Resource and material plan
- Build schedule including customer connection
Quality
“You get what you inspect”

- Ensure design and build partners have a solid quality control program
- Ensure you have an internal quality assurance program
- Develop a process to identify issues and implement learnings
- Cable traces
- Issue resolution
Internet down in Tumbler Ridge, B.C., after beaver chews through fiber cable

CBC News · Posted: Apr 25, 2021 11:17 AM PT | Last Updated: April 25
Is the project “Shovel Ready”?

- **Assess the Project →**
  Benefits & Dependencies

- **Evaluate Capabilities →**
  Labor & Materials Availability

- **Create Detail Proposal →**
  Executable & Manageable Plan
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