



Vermont Community Broadband Status Update

Presented to the Joint Information Technology Oversight Committee

Christine Hallquist

Vermont Community Broadband Board

Executive Director

Christine.Hallquist@vermont.gov

802-636-7853

September 3, 2021

VCBB Status

- Board appointed
 - Laura Sibia
 - Dan Nelson
 - Holly Groschner
 - Brian Otley
 - Patty Richards (Chair)
- Currently a staff of two (Executive Director and Rural Broadband Technical Assistant)
- Four meetings (Meeting weekly for now)
- Offices in place (112 State Street)
- Website established - <https://publicservice.vermont.gov/vcbb>
 - Meeting notices and minutes are available on website

What we have done so far

- Met with the CUD Boards
 - CUDs are in different stages of development
 - We do not want to miss next year's construction season (timeline in a few slides)
- Met with most of Vermont's telecom providers
 - VCBB goal is to enhance partnerships and maximize the optimization and utilization of existing infrastructure, knowledge, human resources and capital \$\$
 - Telecom providers want to move as quickly as possible
- Established a number of policy recommendations
 - In the process of finalizing those recommendations
- In the process of hiring staff
 - Administrative Assistant
 - General Counsel
 - Grant Administrator
 - Budgeted \$150K for GIS support
- Developed proposed network design standards
- Distributed H315 funds to enable CUDs to hire much needed staff and finalize partnership agreements
- Joined coalition of five states – Iowa, Oregon, South Carolina, Louisiana, Vermont

Key Performance Indicators

(proposed)

At the Board and Administration level, some possible KPI's could include:

- Percent of underserved addresses connected
- Total cost per address passed
- Cost per mile
- Cost per Mbps combined (upload and download) access
- Take-rate
- Low-income access

Early Board and Administration KPI's could also include:

- Addresses covered by High Level Design
- Addresses covered by detail design
- On-time connection rate

There will be a separate set of measures to confirm end connections. These will likely be derived from existing Federal Communication Commission success measures. For example;

- Initial connection speed
- Initial connection latency
- Speed and latency over time (with minimum performance requirements defined)

Next Steps

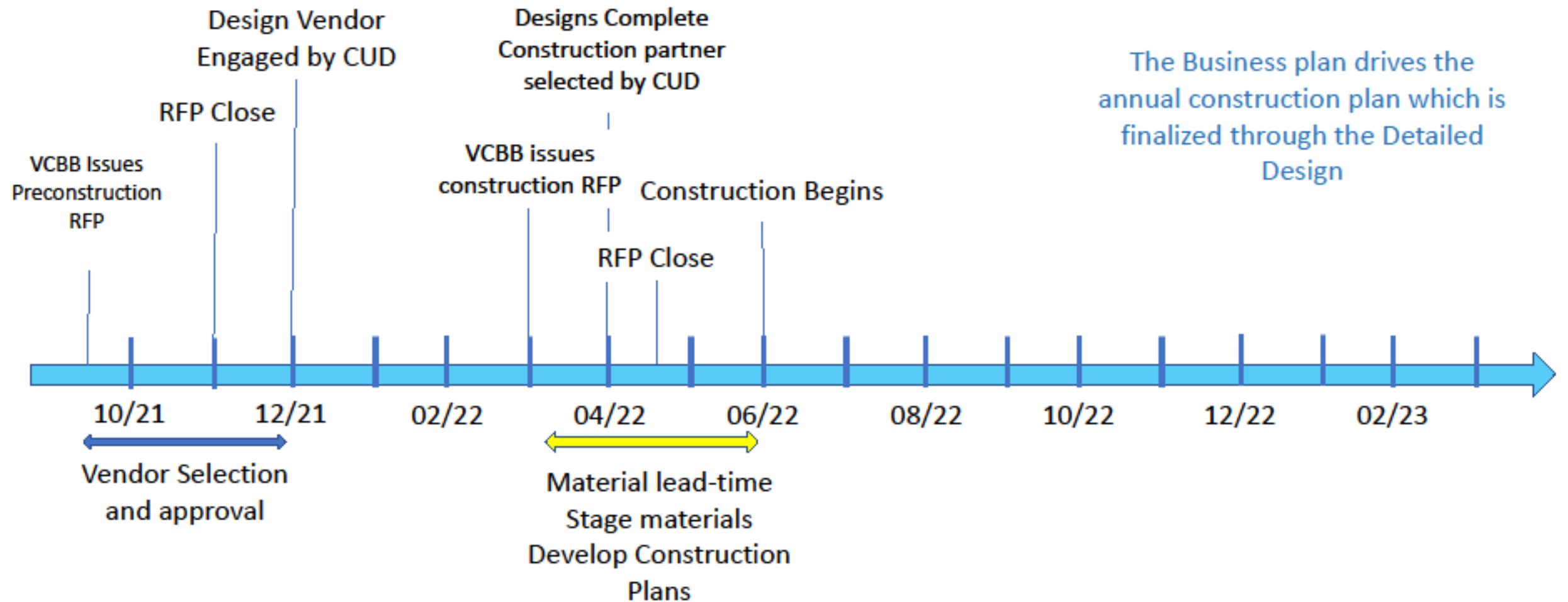
- Finalize Network Design Standards
 - First workshop (telecom providers and CUDs) is September 15
- Get CUD's started on Detailed Design (High Level Designs are complete)
 - **High Level Design (HLD)** is a global overview of the network, A GIS -based route design, typically using existing poles, with a basic description of the material requirements and costs. It is done from the desk using automated software that calculates the material based on distance-based algorithms. The goal of the HLD is to develop a proposed route and a cost estimate with a 70% confidence level.
 - **Detailed Design (DD)** addresses specific locations for poles and equipment, network usage and capacity, spares requirements, estimated loss factors, road and railroad crossing plans, power requirements, etc.. DD uses significant field verification of assumptions. DD triggers make-ready applications, construction schedules, and verification test plans. A DD will produce a cost estimate with an 80%+ confidence level. Full confidence comes after the make-ready survey is completed.

Next Steps (con't)

- Get Detailed Designs started ASAP
- Finalize CUD partnership agreements
- Finalize CUD/town/telecom provider relationships
- Staff the CUDs
- Finalize the VCBB budget
- Update and verify baseline data
- Establish Key Performance Indicators and reporting methodologies
- Additional CUD workshops
 - Grant Management
 - Organizational Development
- Create the infrastructure to provide human resource needs
 - Kentucky Model – 57% of labor resources come from in-state

Time-line

CUD fiber design and Construction



Most important things to focus on

- Material Lead times
- Human resource availability
- Maximizing the use of existing infrastructure
- Accelerating the growth and potential of the CUDs

Questions?? Concerns??