

Robinson, Beth

From: Robinson, Beth
Sent: Tuesday, July 26, 2011 1:15 PM
To: Anne Galloway; Marshall, Karen
Cc: Allen, Susan; Johnson, Harriet; Robinson, Beth
Subject: RE: public records request from VTDigger.org
Attachments: CONNECT VT FINAL REPORT.PDF; Strategic Plan CONNECT VT v1.docx

Anne-

I have attached the project telecommunications and SmartGrid plan developed by Matt Dunne, Steve Terry and Karen Marshall. I've also attached the subsequent version prepared by Karen Marshall alone reflecting the evolution of that plan. The latter document isn't squarely within the scope of your request, but reflects the next generation of the plan. I figured you might want it.

The other two documents are agreements among the three private entities. Neither we nor the Department of Public Service has copies of the operational agreement or the project agreement among these entities at this point. (My understanding is that there is an open docket at the PSB through which the utilities can seek cost recovery associated with the smart grid. Presumably, when CVPS seeks cost recovery approval from the Board then it may have to share the contract with the Board. Likewise, DPS may get the contract in the future. It may be subject to exemptions at that time. (Since we don't have it, we can't say one way or the other.)

I hope this is helpful.

Thanks,
Beth

From: Anne Galloway [<mailto:gallowayanne@rocketmail.com>]
Sent: Monday, July 25, 2011 12:57 PM
To: Marshall, Karen
Cc: Allen, Susan; Robinson, Beth
Subject: public records request from VTDigger.org

Hi Karen,

I am requesting, under the access to state public records law (Title 1, chapter 5, 317), three documents that were referred to in a recent press conference about the SmartGrid collaboration:

1. the operational agreement between VTel, Green Mountain Power and Central Vermont Public Service
2. the project agreement between VTel, Green Mountain Power and Central Vermont Public Service
3. the project telecommunications and SmartGrid plan developed by Matt Dunne, Steve Terry and Karen Marshall.

Thanks very much for your kind attention in this matter.

Anne Galloway
Editor, VTDigger.org
802-595-9159

CONNECT VT: Action Plan

Transition Team Task Force

Members: Steve Terry, Karen Marshall, Matt Dunne, Susan Bartlett, Jeb Spaulding

FINAL REPORT

January 20, 2011

A task group was convened in mid November to ascertain the status of currently in progress and planned initiatives by the private, public and institutional (such as the utilities) sectors to complete universal availability of broadband connectivity and mobile service throughout the state by year end 2013.

The goal was to develop a coordinated telecommunications plan that engages all stakeholders in delivery of the state's telecommunications objectives, with the enhanced goal of making Vermont the leading state in the nation for deployment and utilization of a wireless canopy and fiber infrastructure.

The telecommunication infrastructure and services will support the State's economic viability with enhanced technological competitiveness, and greater efficiency and effectiveness in the delivery of services including education, healthcare and energy.

The task force initiative took the following framework into consideration:

- Infrastructure and its ownership, to include fiber, cable, towers, utility poles, and all other assets that create the coordinated backbone for services delivery.
- Capital in the private sector; large institutions and users; Federal, awarded and any additional that may be available ; State resources
- Regulation and permitting scenarios that support, encourage or aid in the competitive monetization of the infrastructure assets, and conversely dissuades monopolization of same.
- Predicted use and adoption by consumers, government and businesses
- Existence of a shared, collaborative or at minimum coordinated business model for telecommunications infrastructure and services.
- Authority and accountability within the system.

During the period, seventeen stakeholder organizations participated in meetings to inform the task force on its initial recommendations. This report presents:

- Technical priorities
- Vision, strategic objective and goals
- An initial action plan for leadership, regulatory support, providers, the VTA, state agencies, our Congressional delegation, adoption, and an overview of capital currently deployed through federal and state sources.

Technical priorities

Based on our work with stakeholders, we identified the following technical priorities:

- Complete a Wireless Canopy across Vermont by 2013
- Build Middle Mile fiber deep into communities
- Last Mile solutions to 2013 include
 - maximizing existing DSL, cable and copper by shortening distance and applying compression technologies, and supporting providers to meet current build out commitments
 - NTIA, RUS and state funded initiatives to build service in underserved and unserved areas
 - Build fiber in greenfields where projected use indicates positive financial return
- Last Mile solutions: FTTN into the future
 - Replace aging modalities with fiber to the premise or coax

VISION

When CONNECT VT is successful, we will have invested wisely and carefully to provide universal availability of broadband connectivity at 10 mbps or greater and mobile service throughout the state by year end 2013.

Vermonters, our institutions and economic engines will be connected to one another and across the globe.

Our telecommunications and technological infrastructure will support our goals to be:

- the vanguard of innovative, cost effective administration and delivery of health care
- the model of forward looking, life long education for every Vermonter
- the most energy efficient state in the nation
- the state where business and agricultural sectors locate, expand, and thrive in a global marketplace for goods and services

It is not only the speed of connectivity; it is the quality of our telecommunications services that will be a differentiating factor for Vermont on a global landscape.

STRATEGIC OBJECTIVE

Connect VT has a unique and time sensitive opportunity to leverage the evolution and capital resources of the utility and telecommunications sectors to build Vermont's broadband and mobile infrastructure. Our strategic objective is to achieve the "marriage" of Smart Grid deployment, deep fiber roots at the community level and a wireless canopy covering the state by 2013.

GOALS

1. Recognizing that 95% of the asset deployment will be completed by private sector companies and the utilities, it is imperative that we engage all stakeholders to coordinate, collaborate and stay connected with our common vision and objectives.
2. Maintain a competitive marketplace for services that fosters continued private sector investment in infrastructure and deploys leading edge technology.
3. Understand the role and contribution of each stakeholder and hold them accountable for completion by 2013.
4. Balance the openness and ownership of the pipe, so that Vermonters are assured market competitive rates, access to content and comparable service in all regions.
5. Overcome the inherent challenges of low population density and topography in underserved areas. We will utilize public resources to fill gaps in the infrastructure and build assets that can shift the private sector business case from "thin" to achievable.

6. Make public policy decisions that create predictable and efficient processes for asset deployment.
7. Meet federal timelines that exist for NTIA, RUS and DOE grants of funding. Seek, collaborate on and deploy any additional federal funds that may arise to support our goals.
8. Continuously identify and remove barriers to success through 2013.

Speed, coordination and collaboration are of the essence. In order to CONNECT VT all stakeholders- telecommunications providers, utilities, departments of government, regulatory agencies, and municipalities- will work together united around a commonly shared vision and plan.

Regulatory

Possible regulatory actions in 2011

1. Extend Act 248A, make permanent option recognizing that telecommunications infrastructure evolution will continue through time, or at very least through targeted CONNECT VT project plan end date of 2013.
2. Extend language on Restrictive Covenants in 27 VSA 544 to include telecommunications installations, with the rationale that communications infrastructure may be commercial in nature but deliver public benefit
3. Apply same consolidated appeals process, 10 VSA 8501, 8504, 8506, which was passed for renewables to 248A applications.
4. Improve Act 248A process in Department of Public Service and Public Service Board.
5. Create and negotiate a pole make ready model that is predictable and known to providers and owners.
6. Consider, develop and enact Alternative Regulation scenarios for various private sector providers based on knowledge of the master plan, and desirable outcomes that can be achieved with their capital investment and participation.
7. Assure capacity within DPS in the position of Director of Telecommunications, and related staff.
8. Department of Public Service should conduct Telecommunications Survey Report or updated key metrics in 2011, 2012, 2103

Providers

1. Build on the work of the task force and develop 1:1 relationships with all private sector providers with the goals of understanding their infrastructure build out plans between now and 2013.
2. Facilitate speed and soundness of financial agreements between and among providers for pole attachment, carriage, backhaul, and colocation.

State Government Entities/ VTA will pursue the following strategic initiatives:

1. Wireless tower development
2. State Wireless Site Management and Marketing
 - a. Completion of state agency inventory and development of master license agreement for state owned buildings and sites that can be leased for installation of wireless.
 - b. Creation of licensing entity within VTA that negotiates and retains revenue for all telecommunication installation leases on state owned properties.
3. Wireless Canopy Network, "in fill with small scale wireless base stations". At up to 80 sites in highly undesirable and hard to reach areas, VTA will directly buy and install small base station equipment, thereby provisioning carriers to provide cellular and mobile broadband service.
4. Deep Fiber into underserved communities: "in fill strategy, state owned fiber". VTA will develop and own regional fiber networks, connecting to and extending existing and planned networks already in place by private providers
5. FFTP: Fiber to the Premise demonstration projects

Direct investment where there is no existing FFTP or committed carrier (cable or fiber) using public funds to spur on the acceleration of fiber deployment.

Scaled to a model of demonstration projects, create bonded funding for up to three \$10 million projects to begin in 2011. These would take place where there is no cable service and fiber is not contemplated. The purpose of these demonstration projects is to determine the actual cost and viability of FFTP.

6. Review the July 2010 Vermont Telecommunications plan for accuracy, incorporate 2013 goal date and CONNECT VT, adoption by PSB.
7. Leverage research and manufacturer relationships to create demonstration projects where possible and inform our technological choices.

State Agencies and Anchor Institutions

Critical thinking and planning to recast service delivery by state agencies, that is in synch with the build out of telecommunications infrastructure- in the education, health care and government services sectors. This thinking should achieve the reverse engineering of delivery, focus on how new capabilities and how capacity can achieve better outcomes,

1. Convene agencies with vision of telecommunications infrastructure and mandate IT planning and delivery of services that synchs with roll out of CONNECT VT.
2. Engage Department of Information and Innovation in agency level planning for specific CONNECT VT initiatives that will rely on data/ records conversion.

Congressional Delegation

Share the CONNECT VT vision and plan, uniting Senators Leahy and Sanders, Congressman Welch's staffs on alliances with DOE, NTIA and RUS to support Smart Grid completion and accountability for federally funded projects.

Financial/ Capital

Funded projects: Federal and State resources, see addendum 1

- a. \$410 million in identified, combined capital resources to be spent prior to end of 2013 in the utility and telecommunications sectors.
 - b. Utility investment for reliability and Smartgrid represent \$189 M to be deployed through 2013. The reliability portion (\$53M) is a project funded through ISO NE, with 80% of cost to be born by ratepayers in NE, outside of VT. Smartgrid is a combination of ARRA (\$68M) and utility match of \$68M.
 - c. Various entities (NTIA, RUS, State capital bill) have awarded \$179,850M in grants, loans to private providers to build out fiber or wireless for targeted service areas.
 - d. \$40 million state bonding yet to be deployed.
2. Consider Vermont Universal Service Fund as a resource for bond repayment revenues.

Adoption and Communication

This area bears further discovery and investigation to build on in-progress initiatives and development of a statewide plan for adoption. Plan should integrate availability of services with a focus on how to use internet resources to improve outcomes.

Role of the Chief of Connect VT

- Acts on behalf of the Administration to lead, manage and coordinate all activities both inside and outside state government in order to meet the objectives of universal access to broadband and cellular services, and the development of modern telecommunications networks to serve the state.
- Responsible for building relationships, to convene and hold the stakeholders accountable to deliver the solution, on time and task with the Governor's mandate.
- Advise and informs Governor, Administration, Legislature on a regular basis on CONNECT VT progress, barriers/ solutions and stakeholder relationships,
- Regularly convenes key leaders in state government to assess and inform on progress, troubleshoot barriers and develop solutions (policy, legislative, process, regulatory) to achieve project goals.
- Create and maintain master asset map for the state, with inventory of all fiber, cable, wireless assets and coverage.

Stakeholders

Telecommunications companies

Cable companies

Wireless providers

Electrical Utilities

Legal Counsel to above

Regulatory and State Agencies

Legislature

Congressional Delegation

Municipalities, Planning Commissions

Economic Development entities and business advocacy groups

Higher Education Institutions

Departments of state government

Community anchor institutions (e.g. K-12, libraries, health centers)

CONNECT VT

Action Plan 2011 - 2013
March 30, 2011

Karen L. Marshall, Chief ConnectVT

CONNECT VT 2013

VISION FOR VERMONT

When CONNECT VT is successful, we will have invested wisely and carefully to provide universal availability of broadband connectivity and mobile service throughout the state by year end 2013. Universal broadband availability is defined as service at speeds not less than 768 kbps down/200 kbps up to 100% of Vermont homes and businesses. We also have aspirational goals of achieving a minimum 5 mbps (4 mbps down/1 mbps up) by this time. Our community anchor institutions and economic engines will be connected to one another and across the globe at speeds of at least 100 mbps.

Our telecommunications and technological infrastructure will support our goals to be:

- The vanguard of innovative, cost effective administration and delivery of health care
- The model of forward looking, lifelong education for every Vermonter
- The most energy efficient state in the nation
- The state where business and agricultural sectors locate, expand, and thrive in a global marketplace for goods and services

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OUTCOMES

Vermont can and should pursue a path to achieve the following seven outcomes by year end 2013:

- Universal availability of mass-market broadband
- Universal availability of mobile service along roadways and near universal availability statewide
- Universal first responder communications
- Fiber broadband connectivity to all anchor institutions and large businesses
- Widespread adoption and use of broadband at home and work
- Speeds and pricing for residential broadband on par with national urban areas
- All customer locations support smart electric meters

DEFINITIONS

Unserved target community: a census block where at least 10% of the premises do not have broadband at speeds of 768/200 kbps or greater available

Underserved target community: a census block where at least 50% of the premises do not have broadband at speeds of 5 mbps or greater available

Community anchor institution: a school, library, government building, transportation center or health center that does not have broadband at 100mbps or greater available

Cellular target corridor: a major or secondary roadway where cellular service is not available or is interrupted

CONNECTVT ACTION STRATEGIES

1. Build infrastructure that will complete connections to premises in unserved target communities, where broadband at speed of 768 kbps down/200 kbps up is not available.
2. Expand networks that support, and connections to, premises in underserved target communities, where broadband service is less than the aspirational standard of 5 mbps (4 down/1up).
3. Build infrastructure that will complete mobile coverage in the 55 cellular target corridors as the first priority in universal availability of mobile service. Identify and prioritize remaining corridors and areas where demand on service is exceeding capacity of networks. It is critical to recognize that the majority of wireless build out will be driven by mobile wireless carrier plans for expansion and upgrade of services.

PROJECTS: the following three categories of projects will contribute to achieving action strategies listed above.

- a. ARRA Funded projects
 - i. Sovernet and VTEL fiber, to CAI by end 2013; estimated project start Q2 2011 (NTIA)
 - ii. VTEL WOW, by end 2013; estimated project start Q3 2011 (RUS)
 - iii. Waitsfield Champlain Valley Telecom, fiber to premises, in progress (RUS)
 - iv. Smart Grid Deployment (DOE), with VELCO ISO funded reliability fiber ring
- b. Private Sector Activity (current in progress, identified and to be identified)
 - i. Fairpoint 51 exchanges: completion by June 30, 2011
 - ii. Fairpoint ALT REG investment, estimated \$7M to build 100% coverage to additional exchanges with completion prior to end 2013
 - iii. EC Fiber , Central VT completion phase 1 by end 2011
 - iv. CLEC, Cable, community based and other operator upgrades, to be identified
 - v. WISP expansions and speed upgrades, to be identified
 - vi. Wireless carriers, coverage extension and transition to 4G, to be identified
- c. State of Vermont investment through Vermont Telecommunications Authority
 - i. SOV capital and bonding resources will be used to complete connections by improving the economics of a network such that a retail carrier will provide service to a last mile premises.
 - ii. SOV capital and bonding resources will be used to build or cause to be built infrastructure that supports the wireless network.
 - iii. These projects will be funded by a requested \$13M 2 year capital appropriation FY 2012 and 2013 that will be invested directly or through grants to entities in
 - a. Fiber
 - b. Tower and supporting fiber connections
 - c. Equipment that supports wireless services

4. Complete Smart Grid communications infrastructure where we leverage the electric utility fiber, wireless and telecommunications fiber infrastructure to complete networks, lower cost of backhaul and increase geographic availability of broadband. This strategy maximizes resource sharing between electrical utility, public safety and broadband infrastructure providers on a single set of physical resources where possible.
5. Aggregate institutional demand and organize connections to institutions.
6. Continue expeditious permitting policies to improve affordability and availability of broadband and wireless deployment.
7. Redesign key functions of state government that will be supported by enhanced networks with a focus on applications that will transform service delivery.
8. Accelerate adoption by consumers through funding of digital literacy programs.
9. Engage and incorporate planning for economic development.

SUPPORTING INITIATIVES: MAPPING AND MEASURES

MAPPING

Utilize existing VCGI broadband maps and create additional capacities in our mapping to demonstrate:

1. Utilize the current broadband mapping initiative map for all wireless and wired providers to reflect 768/200 kbps standard and 5 (4 down/1 up) mbps standard; updated every 6 months through 2013 by VCGI.
2. Create a "CONNECTVT 2013" dynamic project map that reflects planned build outs and progress to completion in aggregate form for wireless and wired projects from all available sources (ARRA and non ARRA funded, distribution utilities and transmission utilities as they are available and contribute to the overall telecommunications network); updated every 6 months beginning July 1, 2011
 - Funding for VCGI needed; recommend that this be included in VTA 2012 allocation
3. Place an overlay of the identified 99 unserved communities, and identified 55 unserved or underserved mobile corridors on Project Map to reflect progress to goals.

CONSUMER DEMAND DATABASE

Develop a database and communication strategy for unserved and underserved consumers that is accessible on line at www.broadbandvt.org

- Enter unserved or underserved address
- Begin communication regarding service availability
- Projected date for availability of service and potential provider information
- Communication to household on completion and availability of service/ provider
- Accessed through www.broadbandvt.org
- This project is in development with VCGI, Department of Public Service, CONNECT VT, VTA with work product to be completed by May 1, 2011

PROJECT MANAGEMENT PLAN

Create a master project management plan that uses individual provider data on project plans to create a master view for completion of state goals. The project management plan will capture the following significant phases with timeline:

- Project scope/ route
- Design and engineering
- Permitting and Licensing
- Procurement
- Construction schedule
- Service availability target date by communities/ entities/ CAI's each project will serve

Steps:

1. Access project management planning capacity within SOV
2. NDA to support information reporting
3. Gather project plan data from all funded, known projects with first submission due June 1, 2011 and every 90 days thereafter
4. As new projects come on line, incorporate into project plan model

COMMUNICATION

- www.broadbandvt.org: currently soft launched and available to the public
- Launch and media roll out: kick off date 4 30 2011, with mapping updates at 6 month intervals
- Central source for consumer information
- Integrate the following additional sections and information:
 - CONNECT VT 2013 map
 - 99 Communities update , 55 Corridors update
 - Message from the Governor and CONNECT VT

INDICATORS: to be finalized

Unserved target communities

communities, premises, population

Underserved target communities

communities, premises, population

Total subscribers, in aggregate, by county or community as an indicator of adoption

CAI's connected at 100 mbps or >

Mobile Service 55 target corridors