The State of Broadband Service in Wyoming December 15, 2021 Wyoming Telehealth Network Monthly Webinar

What areas are being targeted first for expansion and how are you involved? Are we working with WyDOT to partner when roads are being redone so we don't have to dig the streets up twice?

TCT: TCT is located in northern Wyoming and primarily serve in Park County, Big Horn County, portions of Washington County and Hot Springs County. And just a little bit of background when it comes to areas that are served. As a CLEC (competitive local exchange carrier) and incumbent carrier, we have boundaries where we had obligation from years ago, TCT originally as a co-op had, you know, areas that were fenced in, if you will, with geography.

Over the years that I have been here at TCT, we have recognized needs, even back in the days of dial up, where people have a lack of service. As things have accelerated over the years, we began recognizing areas adjoined to our original territory that had needs and we began offering as many services as we could to those areas.

Mapping was mentioned earlier and how important it is for identifying areas of need. I can tell you as a carrier, we are painfully aware of what those needs are because we manage the networks, we know where the weak points are, and often times, the very edges of the network are the most costly to build to. They make it very difficult, from a business perspective, to serve the very edges of the network and maintain that price point that the customer can afford.

So as we budget these projects, we try to maintain the core of the network, and then push the edges out as the speeds have gone from 3 by 1, 10 by 1 to 25 by 3, all of the new programs are asking for 100 by 100, 100 megabit by 100 megabit which requires technology changes.

Those technology changes are expensive. So, again, we budget dollars for the expansion, first to get the core and then you move out to the edges. We have been able to be a part of the Connect Wyoming program that the governor used the CARES funds for. We did seven different projects throughout our area. Several hundred customers were able to receive upgraded services, and it's been a very good thing for us as a company to be able to provide better services.

We also work closely with not only WyDOT but all of the entities, municipalities. It's very difficult at times because our timelines are different. As projects are being done for sewer or water or other things, it doesn't necessarily fit our build, but we do try to place facility if at all possible so we don't have to go back and tear things up and create a burden for the people that we actually serve.

Silver Star Communications: From Silver Star's perspective, all of these questions in this presentation are really great questions and they open up a lot of opportunity for Wyoming providers to meet the needs of Wyoming citizens. I agree that broadband has become somewhat of an essential service versus an optional service for the reasons that Andrea mentioned earlier, and particularly in rural areas.

From Silver Star's perspective, we set our capital project objectives typically on a five-year trajectory. First and foremost, we set priorities to fortify and strengthen our network to serve our existing customers, but we are always seeking opportunities for expansion beyond our traditional service area to get connectivity out to those communities and areas who are underserved and unserved.

When it comes to working with WyDOT and other local road authorities, we value keeping a solid working relationship with those representatives for facilities placement. All of this is really a collaborative effort, and the real goal is to minimize negative impact on communities and keeping in mind that smart construction benefits everyone by increasing efficiencies and reducing the environmental and traffic community impacts.

Which Wyoming cities and towns do not currently have broadband? Do you have a plan to address this with a timeline? What communities do you think should be a priority and why?

TCT: As has been mentioned before, we each have different unique areas and for TCT, we previously went into areas that had not been served, or served very well. And, yes, I don't know -- there are no areas that have nothing, somehow less than others even within our territory, and we are mindful about what we can do there.

I think as TCT, we are not looking to get too crazy outside of the areas, we have the Big Horn Mountains to the east of us through Yellowstone Park. There are definitely boundaries that if you jump over, it changes the scope of what we are able to maintain in terms of a very good network and not lose ground where we are in our communities today. Making the business case of where we go and how we go about that is difficult.

Some of the new grant opportunities will make a big difference to the overall broadband penetration in the state and the most need, I guess, is kind of being evaluated by every carrier in their certain area, and the great thing is we have the Business Council that are evaluating the needs based on the mapping, based on the feedback of residents in the state.

The way we look at that, we identify the greatest need areas in our own communities where we need to invest dollars to get out to, we can make those presentations to the state and the governor's office, the state broadband manager will have the ability to weigh in and help us determine where the needs are this first round and where, if there are additional rounds afterward, they will go.

We are confident that they will be able to help identify those greatest needs and then allow us to participate where it makes sense for us as a carrier.

Silver Star Communications: It's a really big question and it's something that I think we have all struggled with for a long time - understanding where these pockets in these areas are. We all might have our ideas of what those are, but hopefully the broadband map will shed some light on the additional work that needs to be done and where.

From a timeline, it's tricky. Silver Star worked hard to keep its service areas set with good quality service, and I know for some folks out there who are not as lucky to live and work in some of our carriers' areas, that can be a struggle. We are certainly doing all that we can to expand that out. Certainly, it will be exciting to see what happens with the upcoming grant funds and how those are put to use.

I really struggle with this question about communities and which should be a priority because every area has really their own unique aspects and concerns and needs. And I will be selfish and say, well, of course, my area (laughter), but I think I will say that those areas that do not have adequate service from the get-go should be looked at first to see what we can do to get service out to those folks.

Even without clinic or facility capability to deliver telehealth, are there other locations in the community that can serve as originating sites for telehealth delivery (i.e. libraries, public health nursing offices, fire house, etc.?) Is this something your company can support? If so, how?

TCT: TCT comes about our history as a co-open, so we try to maintain an intimate relationship with our customers when it comes to understanding what their needs are. Sometimes we can physically make a change that will help. Other times we have to look at a compromise to get the need and we have worked with individual customers who have a pacemaker, for example and they have a need to dial in and have that read or adjusted, and we try to be creative to the best of our ability on the individual level.

We do provide complementary services to the volunteer fire departments throughout our area, which there are several, because that becomes a gathering place. We want to make sure some of the small towns that don't have a library, necessarily, but have a firehouse or a public gathering place, and we often donate those services so that there is a place that they can go to.

We work closely with the unified network the State of Wyoming has, so any state agency that has a need for Internet services and data services, we work with them to fulfill those needs. And surely try to take ownership of those communities because that's who we are. We are a part of those communities, we are involved in the volunteer services out and about and we do our best. Sometimes that co-op mentality, I might get chastised by my board giving too much away, but it truly is what we are. We try to pay the bills, and yet we hate to turn away any customer that has a need.

So we do our best. It is difficult. We don't always have the answer. There is no easy button that says we can get optimal service to every customer, but we do try to make good decisions that will benefit all of them.

Silver Star Communications: I think that there are community services that can be used for these types of services. I would pipe up and say conditional on HIPAA guidelines because I know there are certain things that have to be just so for privacy and such.

Even saying that, the hybrid solution, I guess I would call it certainly will require collaboration between healthcare providers and broadband providers. We are more than willing to support the need where it is feasible within our abilities. What we have found is that communicating with the customer or whomever is looking for the service, planning out what their need is and how we can help meet that, and then following up with all parties to make sure that the services that they were seeking or are looking to receive are being delivered. I mean, I guess in the end, we would really need to see what the proposal is, and kind of work from there, and I'm sorry that's a little bit of a non-answer, but as the local provider, we do have facilities available and are more than happy to look at these different options and what we can do to help out with that.

What is are your policy plans to move ahead with broadband access during the upcoming session?

TCT: Over the years since the state broadband manager position was established, we have always worked closely as a company to understand the bigger picture of Wyoming and tried to participate in a meaningful way with them. We give our feedback on the direction that that they are taking and we take direction from them on what things they are hearing and seeing.

We are also a member of YTA, so as a group, we have a small part of the state and each of those carriers that are member companies to YTA have areas of responsibility within the state, and as a group, we do try to make sure that we are not leaving anybody out and making sure that we are trying to address the needs.

The thrive and drive areas that the governor's task force has come about was mentioned earlier. If you look through those, the one thing that came to my mind when I looked at each of those goals was that half of them, I believe, are broadband centric. When you are trying to attract new families into the state with new skills and things, if they don't have broadband, you are not going to get those in your communities.

So there is a multifaceted approach to that. If we don't fund broadband and we don't make it available, we are not going to achieve all of the goals that the governor and the task force have been able to. So we are in support of moving the broadband development deeper and deeper into the State of Wyoming to provide more services for the residents here, and with that we were able to participate in the previous Connect Wyoming grant.

I had an email this morning from someone that received service from that. We were working on a different project and he said the Internet at the house is great. Living in the middle of nowhere is pretty nice with good Internet. That was something that I got today from him. Because he had terrible service before and through the work of the governor and the broadband Committee, we were able to receive funds to serve areas that had very poor service and their life is different now that they have the ability to do what they need to do, whether it's telemedicine, working from home, having kids at home from school, whatever.

You don't have to schedule a time slot on your home Internet. Everybody can do what they need to do.

Silver Star Communications: There is going to be a lot going on this session, and I'm going to take this from the Wyoming Telecommunications Association perspective, and say we are going to advocate for equitable and judicious use of the funding that becomes available under these couple of federal acts. I mean, it's really hard to say what every provider has on their plate to consider, but we do believe that developing strong relationships with legislators and policy makers to help educate on the progress we have made as carriers over even just the past few years. Understanding better the work that needs to be done really is an important part to ensuring that all of the state has reliable high quality broadband or access to reliable high quality broadband.

What upcoming capacity building plans do you have in the foreseeable future?

TCT: We spend a lot of money annually as part of our long-term growth and whether COVID is here or not, those projects that we continually work on, as I mentioned earlier, the need to upgrade from copper to fiber as indeed the requirement for bandwidth change, that's very capital intensive in making that transition.

So that's just part of our ongoing. When you add all of the things that took place through COVID and the grant opportunities, our plate was pretty full, almost overflowing with what we were trying to do in a short time, but we participated in, we saw great progress. You have your day to day work and then you have opportunities of grants that can sometimes accelerate what your long-term goals are.

We were fortunate we had completed a core upgrade just prior to all of this COVID stuff, and so as the command changed and moved to the homes and things, we really didn't see a lot of adverse effects, but we were prepared which we were very fortunate to have that behind us. We immediately were able to raise bandwidth to our medical facilities and were able to make sure that they weren't starving for Internet and we voluntarily did that to help them.

From the internet perspective, Wyoming is an island without connections outside of the state. So we are just finishing a link from our Wyoming network up into Billings, Montana to give us additional capacity and redundancy to the carriers that now leave the state.

For us, that's been a big part of improving the network and providing a better product for the state because you guys don't necessarily just want to talk to yourselves, you want to talk to people throughout the world.

Silver Star Communications: This is another tough question. I have to be careful not to give away all of our detailed plans or I may get in trouble, but Silver Star maintains a healthy capital investment plan. It has and will continue to invest significant funds in improving broadband capacity, and as we have been talking about these funding opportunities, as they are made available, we review against our strategic priorities and act accordingly where there are areas that we can fit into our plans. We are participating in the WBC, Wyoming Business Council sponsored grant application through NTIA, and last year we

constructed nearly \$60 million in CARES grant funds worth of broadband facilities that expanded and extended broadband service out to folks who really needed it.

So we know it's possible, and we know it takes a lot of planning and drive, and we are going to continue working on getting that reliable quality service out to areas of need.

Knowing the state is prioritizing broadband access by deploying federal money in the near future, how do you plan to maximize this funding? How will this funding help working families in the state?

TCT: With the latest Connect Wyoming opportunities that the state has put together the framework for, one of the things that they require of us is to submit our service areas so we are not just depending on people in the state to do the speed tests. We actually are giving them a map of all of the areas that we serve and the speeds that we are able to qualify based on different tiers of the 25 by 3. Anything less than 100 by 20 or the gigabit or higher speeds that do exist also.

So we are providing that data to the state. We are actively working to engineer in the areas that we know need the service. We have a mechanism in place within our equipment that we are able to monitor the devices that are out there as far as routers, making sure that they are getting what they are expecting, and then some of the federal grants and opportunities through the federal, we have to prove that out.

We have to demonstrate that the packages that are purchased are meeting that, and so we want to make sure, again, we are part of the community, we use the network just like our customers do and we want it to be the very best in making sure that the funds are used for a good purpose. When we are done we want to walk away and if the phone doesn't ever ring again from the customer, we know we did our job because they are not having issues and needing to call us and how do I make this work.

So if we can eliminate our phone calls, we know we are successful as a provider.

Silver Star Communications: So I'm going to say that the opportunities under this Connect Wyoming grant funding and future potential fundings are, gosh, almost priceless. This is such an exciting time to be in the industry and be a part of this intense drive to improve people's everyday lives.

Broadband has become such an integral part of how we work, how we learn, how we relax, and for me how I shop. Of course, I could go on, but because of the high cost just to deliver the quality of services needed to support these everyday activities and this funding has the potential to spur local economies, empower individuals to work with, play where they want to.

From our perspective, we are working hard on our planning to maximize the funding where it's available to us. I would guess many of the WTA are doing the same, and I would say in five years from now, Wyoming from a broadband point of view is going to look a lot different than how it does today, what we are talking about today.

We are the smallest population size in the U.S., but it's still a large state in size. So just taking that into consideration, all of the work that needs to be done to place facilities, you know, the funding assist is really invaluable.