

An Interview with Jeff Reiman

Perspectives from the COVID-19 Pandemic: Leadership and Learning in Nevada

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Each interviewee had the opportunity to review their transcript. All measures have been taken to preserve the style and language of the interviewee. This interview features Jeff Reiman, President of The Broadband Group, and was conducted on 12/12/22 by Kelliann Beavers and Elia Del Carmen Solano-Patricio. This interview covers topics including reflections on leadership, organizational challenges, and opportunities for collaboration.

Interview with Jeff Reiman

Date: 12-12-2022

SPEAKERS: Kelliann Beavers, Elia Del Carmen Solano-Patricio, Jeff Reiman

Elia Del Carmen Solano-Patricio [00:03]

Okay. So, we're here with Jeff Reiman. Am I saying it right?

Jeff Reiman [00:05]

Jeff Reiman. That's correct.

Elia Del Carmen Solano-Patricio [00:07]

Okay. Thanks, Jeff. If we could just obtain your permission, again, to record this interview for our record.

Jeff Reiman [00:13]

Yes. Permission granted.

Elia Del Carmen Solano-Patricio [00:18]

Okay. So, I'll get started with a pretty basic question. Can you describe your role throughout the pandemic, and the role of your business, as a broadband group, as a whole? You sent us a couple of articles, so I'm really curious to follow up on those.

Jeff Reiman [00:35]

Let me make sure I understand the question. What my role is and the role of the company during the pandemic?

Elia Del Carmen Solano-Patricio [00:36]

Yes.

Jeff Reiman [00:39]

Our role as a company was consistent with what it was pre-pandemic. I guess I want to make sure I understand.

Elia Del Carmen Solano-Patricio [00:50]

That's perfectly valid, yes.

Jeff Reiman [00:56]

So, our firm works with cities and communities on deploying connectivity infrastructure. Connectivity infrastructure is defined by broadband infrastructure, and that could be fiber optic wires, as well as cell towers, allowing for 5G connectivity, and Wi-Fi connectivity. What's interesting is that certainly, the introduction of COVID into our society helped make clearer than ever before the importance of connectivity. Those cities, those communities that have taken a proactive approach in working to deploy high-performance broadband infrastructure were much

better positioned than those who did not take an active role in working to deploy improved broadband connectivity to their residents, to their businesses, to their community institutions, and to their government offices.

Since the pandemic began, many regions, localities, and communities are working to understand how they can attract investment or make their own investments, to avoid the types of challenges that were suddenly introduced. During the pandemic, if there was one thing that held our entire economy together, it was access to high-performance connectivity. Of course, that was only for those who were fortunate enough to have access to it. And who were those people? They were people who typically lived in higher socioeconomic areas of cities, regions, and communities. Where it made economic sense for the incumbent service providers, the CenturyLinks, the ATTs, the Comcasts, to make investments.

And if city leadership didn't see it as their responsibility, to make sure that there was equal access to connectivity, then those who were in those regions suffered materially. Students were asked to learn and stay current on their education by going online. Well, many of those students didn't even have a computer, let alone broadband connectivity; introducing what is now being commonly referred to as the "homework gap." Which is not only unfair, it was cruel. To say, "You, student, can't come into the classroom. And you are expected to keep up with your education," whether you're a first-grader, second-grader, third-grader, or you are in high school or in college – who had access to connectivity and could stay current. Those who didn't have access to broadband connectivity were left on their own. The same with trying to stay employed. The same with trying to get access to healthcare. For those that had access to connectivity, it was disruptive, but it wasn't crippling. For those that didn't, it was crippling. And what the Broadband Group has always worked to promote was the importance of connectivity.

Since the pandemic came in, that is now universally recognized. So in many ways, our practice has picked up in terms of the amount of interest that we're receiving from communities around the country saying "what we have now isn't good enough. We now recognize that, and we need to figure out how we can move forward to avoid this ever happening again." If there is one way to look at how fortunate we were when COVID occurred; imagine if it happened 10 years prior.

Elia Del Carmen Solano-Patricio [04:31]

Mm-hmm.

Jeff Reiman [04:32]

Connectivity was even that much more lacking.

Elia Del Carmen Solano-Patricio [04:34]

Right.

Jeff Reiman [04:36]

So, I would say that's what we do. That's what we've always done for the last 27 years, promoting the importance of connectivity. Working to deploy it where it doesn't yet exist. When the pandemic occurred, the interest in our practice picked up materially, and now the interest continues to be there.

Elia Del Carmen Solano-Patricio [05:01]

You know, Jeff? I'm an urban studies major. And we study measures of urban resilience, which traditionally have been water access, infrastructure, and things like that. I don't even know if a lot of models have them yet. But broadband access didn't use to be a measure of urban resilience. And it sounds like you're really explaining how that is the case right now.

But I'll use that to move on to the next question. And if you could kind of walk me through what – if you're thinking about the pandemic as a timeline, how the Broadband Group participated in the local community, right? So, we're looking at COVID in Nevada. If I were a city leader, for example, what would my interaction with The Broadband Group have been like?

Jeff Reiman [05:52]

We actually didn't have much interaction here locally. When I first moved to Nevada, that was in 2009. We received a federal grant by way of the U.S. Department of Commerce. It was called the Broadband Technology Opportunity Program. We received 19.7 million dollars by way of the Broadband Stimulus Program. We built networks connecting Vegas and Reno for the first time with an interstate fiber connection. That has really been our only work here locally.

But I'll share with you how we work with other cities across the country: Long Beach, California, Huntsville, Alabama, Springfield, Missouri, and rural parts of North Carolina. Essentially, a locality contacts the Broadband Group and says, 'our connectivity is not where it needs to be, but we have no idea of how to move forward.'

Elia Del Carmen Solano-Patricio [06:41]

Mm-hmm.

Jeff Reiman [06:44]

The cities ask: “Do we work with Cox? Do we work with AT&T? Do we work with Century Link? They're not really returning our calls”, We emphasize that they are of course not bad people at these companies. They just have a lot of areas of focus, and they're getting calls from across the country. It's hard to get on their radar.

Elia Del Carmen Solano-Patricio [06:59]

Mm-hmm.

Jeff Reiman [07:00]

Cities ask: “Do I align with a brand-new service provider, who I've never heard of before, who says they're going to solve all of our problems? I have no idea who these people are. How do I know if they're qualified to do what it is they say they're going to do, or if they're just hoping to build a business, and they may, and likely will be bankrupt in six months? What investments do I make on my own, so that we can take control of our connectivity future, but avoid making investments that are going to be challenged and proved to be unsustainable? How do we move forward? We're staring into the abyss of what our options are, and we just need help understanding what the potential paths forward are.”

We work with those cities and help them understand what is their current level of infrastructure. Where are the gaps? And then what are the opportunities to fill in those gaps by way of going to an incumbent provider by way of Cox – and I don't mean to pick on Cox because you know, everybody complains about their ISP – their internet service provider – but quite frankly, Cox is one of the better ones in the country, in terms of the investments they do and have made here locally in Las Vegas but there are still gaps.

So if the city can go to Cox and say, "Look. I'm not just asking for additional investment. I'm demonstrating to you; we have done our work. We see a gap in connectivity here. There is business to be had because there's a need here. Here are the revenues that you can secure if you built out that infrastructure."

Elia Del Carmen Solano-Patricio [08:30]

Mm-hmm.

Jeff Reiman [08:31]

Will that not be a more compelling approach to a service provider? That you took a proactive plan to make their investment more compelling, as opposed to "Hey, we need help, but we really don't know in which way we're asking for you to help us."

Elia Del Carmen Solano-Patricio [08:46]

So, you present to them – and I'm just trying to imagine what this looks like – a map of broadband infrastructure and potentially, feasibility reports or impact reports.

Jeff Reiman [08:59]

That would be a fair way, to sum up, the things that we do.

Elia Del Carmen Solano-Patricio [09:02]

Kelliann?

Kelliann Beavers [09:05]

I know you said you haven't been working necessarily with local communities. I was just going to make the observation that in my interview with the City Manager of North Las Vegas, a lot of what he shared with me about the early challenges at the height of the pandemic was about the lack of access throughout a significant portion of North Las Vegas as far as the students not having access to internet especially. And that they had had Cox come and do some kind of study shortly before the height of the pandemic, to sort of look at where the gaps were and understand that.

And I'm just wondering, is that happening off the watch of an entity like you? I think it's so fascinating that – my background in urban planning, broadly. So, the fact that you exist as a mediator between the entities like Cox, and a public entity like a city or a county is really interesting to me, and I find it interesting that there's not already a connection there. Is that just the city comes to you, or how does that part usually work?

Jeff Reiman [10:16]

You find there's not already a connection where – oh, with us, and like the city of North Las Vegas.

Kelliann Beavers [10:19]

Yeah. I would think, oh, this is a no-brainer – that you guys would be supporting them, and they would be reaching out to you. But I have no idea, really, how those kinds of dialogues work. And I know you said you had some public funding.

Jeff Reiman [10:31]

We're just a very small company of about 30 employees. We don't advertise. We don't market. Quite frankly, we've grown by referral base and by word of mouth. I've talked with the City of Las Vegas years ago when there was still questioning like "Well, what do you mean? We kind of already have the internet. Why is this really so important?" And it's because the inequities of where there is high-performance kind of – and where there's not, wasn't as acutely obvious then. Is this really what's needed? So people can surf the internet in a little bit more enjoyable fashion? And what's made clear now is that it's obviously not the case. It is now recognized as a critical function of the way people live, and quite frankly, the way the government provides its services to its residents and businesses. So that's why the conversations wouldn't have been prior. Why it hasn't happened since is simply because they probably don't even know that we exist here in Las Vegas, and that's just a function of our size and the resources we have available.

Our current projects, which we have been engaged in long before the pandemic began, are now asking for more and more work." We're hiring and we're staffing up more, but that's just to address our current client base. It's challenging for us to bring on enough resources that would then also be able to serve the needs of new engagements like the City of Las Vegas, even if it is local. We're a professional services company, meaning we're only as good as the people that we have advising our client projects. And there are just not that many qualified folks out there who actually know what they're doing, to where I want to bring them on and would trust them to be able to provide the right level of guidance. It's difficult to scale in that regard.

When we talk about the reactionary nature of all of the city planners who didn't have a plan in place, you know, it's good that they're thinking about it. There's a gentleman named Blair Levin now of the Brookings Institute. These are the articles I shared with you that he wrote. What he is famous of saying for city planners, again, back when it wasn't as obvious, when we were trying to pitch the importance of connectivity is, "do you have the level of broadband infrastructure in place today that you're going to need 10 years from now? And if that answer is no, the time to start planning is now. Because that's how long it takes to get to where you think you're going to need to be." And I'll tell you, that timeline is the amount of time that it takes, actually, to work through. All the planning of where the infrastructure exists today; what are the investment options; what investments should we make; what partnership opportunities are out there?

So it's good that everybody's working to plan now, but it's not a quick fix, unfortunately, in terms of having foundational infrastructure that's going to sustain, for the next 20-30-40 years. There have been "band-aid" fixes of putting up Wi-Fi antennas in parking lots so people can actually have a place to do their homework from their car, after hours, when their parents are able to drive

them to that area. But obviously, that's an embarrassment, and that's not the right fix. That's a band-aid. And to have a foundational long-term plan in place takes almost 10 years of true planning.

Elia Del Carmen Solano-Patricio [14:02]

Okay. One of the questions that we have on our list here is what lessons we can learn for future crises, and I think you just answered that for us. If you can picture the crisis 10 years from now, Jeff.

But I wanted to come back to the groups that are most vulnerable because you mentioned the word inequities. And that in a pitch to city leadership, it would be the most pressing, right? Can you hear me okay?

Jeff Reiman [14:28]

Yeah. Absolutely.

Elia Del Carmen Solano-Patricio [14:29]

Okay. For those groups where the inequities exist, can you tell me a little bit about how you would describe them to city leadership? Would you say – we're in Nevada for instance, right? I mean immediately thinking about a rural-urban divide. Could you elaborate on that?

Jeff Reiman [14:46]

Sure. Now, you're saying something that seems obvious, which is that rural broadband is where it's lacking. And what is actually the case is that the digital divide, which it is often referred to as – is arguably much more prevalent in urban markets, even as it is in rural markets. Especially if you look at the number of people that are disconnected.

Elia Del Carmen Solano-Patricio [15:08]

Wow, okay.

Jeff Reiman [15:12]

And there's often this focus on rural broadband, which is important, and it needs to be addressed. But to make the mistake of saying, well, it's rural broadband and that's that problem, and that's where we should focus because the urban markets, those markets are well-served. The only people who want you to think that way are the incumbent service providers who don't want competitive investments in those urban markets, even though they have not made the level of investments that are required to meet the connectivity needs of those underserved markets, they still protect their market share there and say, "Hey, don't worry about that. What about that rural market over there? That's where you should be paying attention to."

Elia Del Carmen Solano-Patricio [15:44]

Yeah.

Jeff Reiman [15:45]

And that's why you hear so much conversation and attention going to rural broadband is because the lobbyists and the folks with the dough, who want to protect those urban markets, that's where

they're driving the attention. And it's not to say it's not important out there, but it's equally as important in the urban underserved markets.

Elia Del Carmen Solano-Patricio [16:08]

So they really send the competition away. What is a map of Southern Nevada look like in terms of equities? Where are the inequities in Southern Nevada?

Jeff Reiman [16:19]

Accurate broadband mapping is now a major focus of the FCC. And that is something that they are working to improve because there is no well-defined map of where broadband exists and where it doesn't exist¹. And when we have 45 billion dollars now being allocated to the states to address the gaps in broadband connectivity, naturally it makes sense to know where those gaps exist. Unfortunately, a federal-level type of approach towards accurate mapping at the granular, local level is going to be filled with air. So that's a major gap in U.S. broadband planning.

Elia Del Carmen Solano-Patricio [17:10]

Mm-hmm.

Jeff Reiman [17:11]

It's working to be fixed now but accurate mapping still does not exist. But, as you might suspect, where there is the economics of customers who have the dough to purchase expensive broadband, that's naturally where the private companies have placed their capital. And it's not that they're bad people. They have limited resources, so they do so in a way that makes the best investment as a private enterprise.

Elia Del Carmen Solano-Patricio [17:43]

Mm-hmm.

Jeff Reiman [17:44]

That is why localities need to be aware of the options in place to fill in the gaps. So if the incumbent service providers don't want to invest in those areas where it's needed but doesn't make economic sense for them, a city can say, "No sweat. Don't worry about it. We will find the opportunity to make those investments on our own."

Elia Del Carmen Solano-Patricio [18:02]

Right. The city will cover it.

Jeff Reiman [18:06]

The city *should* cover it.

Elia Del Carmen Solano-Patricio [18:07]

Mm-hmm.

¹ Jeff Reiman informed us the following year that "an updated FCC map was released in June 2023. While it is much improved, its accuracy continues to be debated."

Jeff Reiman [18:08]

It is a critical utility. So that, again, is the foundation for the way residents are educated, the way they get access to healthcare, the way that they get access to job opportunities, the way they're able to search for job opportunities, and the way they're able to apply for unemployment. All of the special services that many people rely on require access to connectivity, and the folks that need it most are often the ones who typically don't have access to the level of connectivity that is needed.

Elia Del Carmen Solano-Patricio [18:34]

Wow. The ones who need it most are the ones who have the least access to it. You're so right. And given the health crisis – I'm picturing people at a welfare office, lining up to get services, wearing masks, when they could have been applying for the service online, had they had broadband access, right?

Jeff Reiman [18:54]

That's exactly right.

Elia Del Carmen Solano-Patricio [18:57]

So I would like to ask – you mentioned a grant that had nothing to do with the pandemic. It was earlier when you moved to Nevada, right?

Jeff Reiman [19:04]

Yeah.

Elia Del Carmen Solano-Patricio [19:06]

Were there any COVID-related funds or stimulus packages that you noticed impacted people the most, from your perspective, as a business leader? That could be CARES, ARPA money. And you're talking about students a lot, so-

Jeff Reiman [19:24]

Localities are using ARPA money that's been approved to extend broadband connectivity into unserved and underserved markets. So localities have allocated ARPA money towards broadband infrastructure – whether it's, again, deploying Wi-Fi in parks and in public areas where folks can gather. Some are working to extend fiberoptic infrastructure into areas, to libraries, so folks can go there and have better connectivity at these public facilities, often referred to as community anchor institutions. Those are important investments that were made available by way of ARPA. But again, they are often not the permanent solutions that are needed to ensure equitable access to high-performance connectivity.

Kelliann Beavers [20:13]

Jeff. Are there other businesses that do similar work to you? I'm naïve to that. I don't really know. It sounds really unique the way in which your business works. Are there other companies that work in a similar way to you?

Because it sounds to me like, when you articulate some of these broad needs – "We need more

companies like you" or your company to be able to grow in such a way and have the expertise that it needs to marry all of these disparate needs. But I don't really understand whether that already exists and just isn't developed or what.

Jeff Reiman [20:51]

The Broadband Group was founded in 1997 when very few people understood or appreciated what the term "broadband" even meant. It was founded by my father and my mother, who handle the business side of things, recognizing the important role of connectivity will play in how communities live, how they socialize, have access to healthcare. For years, The Broadband Group never had competition. We were really alone in terms of that consulting side, which tells you either one of two things: one, we were trying to create an industry that nobody else cares about, and there's a reason for that... just nobody cares. Or two, my father was a true visionary who realized this is something that people need to be caring about, and no one cares about it, yet. And of course, it was the latter.

Over the years, especially as of late, a cottage industry has emerged because there's so much interest and there are so many state and federal monies available going towards this area of planning that there are new firms coming and trying to be that advisory service. Some are better than others, obviously.

The larger firms are now trying to get into it as well: the Boston consulting groups, the McKinseys, and others trying to shift that direction now, seeing that there's a market out there. But those advisory firms that really have perspective in understanding what works and what doesn't work, are very limited.

Kelliann Beavers [22:28]

Yeah. Because it seems to me like there would be a really nuanced element of public education necessary in addition to the advisory services that, I don't know, could not be done well without a certain amount of background and experience.

Jeff Reiman [22:43]

Yeah, you're exactly right.

Elia Del Carmen Solano-Patricio [22:45]

I have a question about that, actually. You mentioned that you were hiring people. A friend of mine works for you, Brian Garcia. He gave us the tip. A really great guy. How do we get you more Brian Garcias? What can the university – what can Brookings Mountain West do for the Broadband Group in order to create a collaboration and address some of those?

Jeff Reiman [23:08]

So I reached out to UNLV, and over the years I even reached out to UNLV. Because I wanted to make our firm known to the graduates of the university, both the undergraduate as well as those out of the Lee School of Business. I wanted those students to know that there are opportunities here locally, outside of the major gaming and healthcare industries that historically have defined our economy. And I thought that would be a benefit, both to the Broadband Group – so, smart, talented students want to come work for us. But also, I think important for UNLV, for students to

recognize there are opportunities here in Southern Nevada. That's why I recently presented there at the Lee Business School. I talked about the three pillars; one is giving some insight into the broadband industry. The second, talking about doing business here in Las Vegas to inspire the students to look at career opportunities here locally, and not think that they have to go to LA, San Diego, or somewhere in Utah to get a job outside of the obvious legacy industries here. And three, to give some lessons in entrepreneurship.

It's interesting. Only a few years ago the broadband industry was not exciting for many students. I'd say I did broadband planning and students would have a disinterested response was .which is a similar reason as to why there were so many localities caught flat-footed? Was there even a need for that? Was does that mean? Doesn't Cox already do everything, Century Link, AT&T, and Verizon? And you're telling me they don't know what they're doing? I think those companies know what they're doing. What role do you really play?

Now, I use the analogy, when I go to a cocktail party – when I first came to Las Vegas 14 years ago and told folks I worked with The Broadband Group, everyone was kind of getting bored really fast, and – would look for the next person to talk to. Now, folks are leaning in: "Oh, well, gee whiz. What's up with Google Fiber? Why aren't they coming to Las Vegas?" and "What's with all this 5G? I've heard that was going to change the world. And I've got 5G on my phone, but nothing's really changed yet. What does that mean?"

There is just so much interest right now in this industry. So, in terms of, you know, we'd love to be more known too. The students at UNLV – we would love to find a home for them here at The Broadband Group when they graduate. We've got more work than we can shake a stick at right now, and I think we do really interesting work. We do meaningful work. We are a healthy business in that regard, but more so than anything else, we're an education firm. We are there to educate leaders, whether in the land development industry, or leaders at electric utilities, who we work with a lot now, who extend connectivity infrastructure, or if you're a city leader. Again, we educate on what the opportunities are to extend broadband to where it's needed most. It used to be, again, convincing them that it's important. And we used to talk about economic development and how it's going to drive new businesses and keep new businesses, and hey, there's this thing called "telehealth." And "Oh, gee. That seems kind of weird talking about a physician online. Distance education – is that just for the random people who homeschool? Who really does homeschooling? Why would anybody care about that?"

Elia Del Carmen Solano-Patricio [26:30]

Mm-hmm.

Jeff Reiman [26:31]

Now the need is clear. So it's just a matter of, we know we need it. How the heck do we get there? It's a lot of fun what we do. It's important.

Elia Del Carmen Solano-Patricio [27:23]

Wow.

Jeff Reiman [27:24]

And we love calling Las Vegas home. We're very proud to be here in Las Vegas. It's been great for us as a company. And we're just very optimistic about being here. And as much talent as we could bring on from UNLV, we would certainly welcome that.

Elia Del Carmen Solano-Patricio [27:41]

I was just about to ask you, what was one collaboration you are most proud of? And I think you just told me, yes, your participation in the FCC decision-making process.

Jeff Reiman [27:53]

Exactly – I'm sorry. Ask the question again.

Elia Del Carmen Solano-Patricio [27:56]

Well, I'll ask you a question. Was there a collaboration that happened since COVID you're most proud of?

Jeff Reiman [28:06]

I'm trying to think of – since COVID – it's not what I just said. That's not what I'm most proud of.

Elia Del Carmen Solano-Patricio [28:13]

Oh, it wasn't? Oh, okay.

Jeff Reiman [28:14]

(cannot discern – Carmen and Jeff are talking at the same time)

Elia Del Carmen Solano-Patricio [28:14]

I think that's pretty impressive.

Jeff Reiman [28:16]

No. What I'm most proud of are the network deployments that we are achieving in Huntsville, Alabama. They deployed a fiber network, Google Fiber, as the service provider. City-wide network. And the first area of the city that was built out was the most – lowest socioeconomic status area of the city. That was the first one that we built out to. Springfield, Missouri had very little access to broadband. They had AT&T copper infrastructure. A very poor level of connectivity. The cable provider there was underinvesting in that community because there was no competition. There was no reason for them to do so. It was a cash cow for them.

Elia Del Carmen Solano-Patricio [28:59]

Mm-hmm.

Jeff Reiman [29:01]

They had a base level of infrastructure in place, and the subscribers had no other options.

Elia Del Carmen Solano-Patricio [29:05]

Right.

Jeff Reiman [29:07]

We worked with the utility to invest in city-wide fiber optic infrastructure; bringing in a new service provider, allowing for every resident to have access to the levels of connectivity that they were going to need to be able to maintain access to healthcare, education, social services – let's not overlook just the ability to interact with their friends and family when they're isolated, and the importance of mental health that brings.

Elia Del Carmen Solano-Patricio [29:35]

Right.

Jeff Reiman [29:36]

All the residents of those cities in which we worked had access because of the infrastructure investments that we were able to structure in those regions. Absent that, there would have been thousands. Thousands of homes would have been in a much more challenging position, and that's what we're most proud of.

Elia Del Carmen Solano-Patricio [29:58]

Wow, that was – I can picture the lives of all those people, and that was beautiful.

I asked you what Brookings Mountain West could do, and it made me think of a fact sheet that we just put out, actually. That's a big part of what we do, is to take large datasets, synthesize them, and put them out into the world for businesses or city leaders to take a look at. This one is called, *Cutting Edge Technology in the Mountain West*, where one of the factors that we measured was internet speed and broadband access, along with other things like the share of startups versus tech and green employment, versus residents with EV access – we know is an issue with electric vehicles.

So, I'd like to send you that fact sheet, Jeff, and just kind of get the ball rolling to establish a relationship or connection from here out. So that we could kind of gauge what other types of fact sheets we should put out, right? Because if we want to inform city leaders in the Valley – North Las Vegas, Henderson, North Las Vegas – where the gaps are, we could do that. They need to do that, of course. They need to make the investment. But in order to compel them, "Here's a map. Here are some numbers."

Jeff Reiman [31:09]

Yeah.

Elia Del Carmen Solano-Patricio [31:11]

So, I would just like to send that over to you, and then take any suggestions for what you think we should be publishing.

Jeff Reiman [31:15]

I would welcome that. We have great respect for the Brookings Institute. First of all, congratulations on your alignment with that organization. I mean, world leaders – that research Brookings puts together. It's amazingly impressive, and impressive that you are aligned there with them.

Kelliann Beavers [31:37]

I think we also may have some senior research associates outside of this project that we're doing, that's focused on the pandemic, who, at least in the last year, have been doing more specific work related to the work that you do. Not The Broadband Group specifically, but broadband as a whole. And so, to the extent that there's relevance there, I may just send an introductory email to make some connections for them, and for you, in case there's a meaningful opportunity in the future.

Jeff Reiman [32:08]

Fascinating.

Elia Del Carmen Solano-Patricio [32:10]

Yeah.

Jeff Reiman [32:11]

For city leadership to understand how they can achieve asymmetric value creation, especially with the incumbent service providers. Again, they're not – everyone blames – "Oh, the Cox's are the worst people ever. AT&T, the worst people ever," and obviously, they're not. They just have limited resources, and they are going to place those resources in the areas which they know are going to be most effective. Maybe not anything from a financial perspective, but even from an achieving levels of connectivity perspective. When looking at asymmetric value creation, is obviously, what can a locality do that's relatively small, that brings outside rewards to those service providers they're trying to align with? And in exchange, those service providers do something that's relatively minor to them that brings outside returns to those localities.

How can that be achieved? And the more educated and the more informed city leadership can be, the better they're going to be at gaining the attention of those service providers, or of a track team, investments by qualified providers who will be able to help them create the level of connectivity that needs to be in place for the residents and businesses.

Elia Del Carmen Solano-Patricio [33:26]

That's not what I thought of immediately when you said: "asymmetric." So I'm glad that you explained it because it's happening here in Nevada, right? Switch went moved to Northern Nevada and not here. So it is an issue that-

Jeff Reiman [33:38]

Say that again? What about Northern Nevada?

Elia Del Carmen Solano-Patricio [33:42]

Who was the company that took their-

Jeff Reiman [33:45]

Switch.

Elia Del Carmen Solano-Patricio [33:46]

Who was it?

Jeff Reiman [33:47]

Switch.

Elia Del Carmen Solano-Patricio [33:48]

Yes. They moved – they went there instead of here.

Jeff Reiman [33:50]

Yeah. And maybe it's not Switch because Switch has a large facility here, and they have a large facility in Northern Nevada as well.

Elia Del Carmen Solano-Patricio [33:52]

Okay. Tesla, thank you.

Jeff Reiman [33:59]

Oh, Tesla. Yeah. Exactly.

Elia Del Carmen Solano-Patricio [34:02]

Yes. And that has to do with one of the measures that we put in the fact sheet. For example, residences with EV access. If more residences had EV access here, they might see a bigger opportunity for investment.

So I think we'll move on to just our last couple of questions, Jeff, if that's okay.

Jeff Reiman [34:19]

Yeah.

Elia Del Carmen Solano-Patricio [34:22]

We ask you, what can we learn from the COVID crisis that could be lessons for future crises? And if there's anything that you wish governments, at any level, had done differently or could do differently moving forward? You touched on those things a little bit, but if you want to just give us any final thoughts that you want to share with us.

Jeff Reiman [34:48]

(hesitates) What are my final thoughts? The (hesitates again) hmm. I'm trying to not be repetitive in terms of what I have said already. Because I've talked about what it has taught us, and the importance of having connectivity. But I think the importance of connectivity helps with resiliency, but it is not a replacement for just being together. And if we have the infrastructure in place to allow us to get through, or, hopefully, avoid the next major disruption, whatever that is, the sooner we're able to get through it, the sooner we're able to be together. The importance of connectivity has never been clearer because what is connectivity-enabled? It enables all of us to communicate.

The fact of the matter is, communication most effectively happens when we're all able to sit together. So the ability for this infrastructure to, again, I would hope, gets us through, or helps us avoid the next major macro disruption, so that we can get together, sit in a room together, just think about things together, and problem-solve together. That is what's going to allow us to

continue to evolve and progress. And again, hopefully, access to connectivity gets us there sooner because it's not a full replacement for it.

Elia Del Carmen Solano-Patricio [36:19]

Wow. I was surprised to hear you say that. I'm pleasantly surprised, and that's very cool. Jeff, thank you for participating. We really appreciate it. If there are any opportunities for you to do what you're doing with Leap Business, also with Greenspan – we're in the Greenspan College of Urban Affairs. So, a lot of our urban studies students would also be interested in what you do. Or, for example, The College of Engineering. I know that they have some computer science folks over there that are working really hard on issues like this as well. Please let us know, and we'd be happy to make those connections.

Jeff Reiman [36:53]

Yeah. And likewise, if there is any opportunity for us to contribute like we did previously at the Lee School of Business, I'd be happy to, if schedules permit, obviously. But that's great you have the relationship with Brian. We sure do feel fortunate that he has joined us here. Just such a pleasure to be around. So, stay in touch with Brian as well. He'll keep you updated on what we're working on. And if there are areas in which we can contribute to the work and research that you do, I sure would welcome it.

Elia Del Carmen Solano-Patricio [37:24]

Okay, great. Thank you. I'm going to send you that link to that fact sheet via email as well, so you don't lose it in the chat here. And then we can keep that as a thread for any future suggestions.

Jeff Reiman [37:32]

All right. Hang on a second. I have a gentleman here who wants to say hi.

Elia Del Carmen Solano-Patricio [37:37]

(waves) Hi.

Male Speaker: [37:40]

Hello.

Elia Del Carmen Solano-Patricio [37:39]

How are you?

Jeff Reiman [37:42]

I want to introduce – so I want you to know, we are founded by – my parents, my mother, and father, founded the company in 1997. My mother's – (mother walks into the room).

Elia Del Carmen Solano-Patricio [37:47]

This is the visionary herself? Hello.

Mrs. Reiman [37:52]

I'm part of it. I've kept the lights on for many, many years.

Kelliann Beavers [37:56]

It's critical – it's an important part.

Jeff Reiman [37:57]

Yeah.

Mrs. Reiman [37:58]

Yes. I'm hoping for a good conversation though. It's, you know, very important.

Jeff Reiman [38:05]

No, and it's so cooled that they're aligned with the Brookings.

Mrs. Reiman [38:08]

Absolutely. Fantastic.

Elia Del Carmen Solano-Patricio [38:12]

You look so proud right now, Momma Bear. You really do. (laughter) Hi, it's good to see you. Kelliann, I think we could stop recording now.

Kelliann Beavers [38:19]

Oh, yeah. (laughter)

End of audio: 38:24