

Transcript of the Ninety-Seven Podcast *Episode 2 Part 2 — The Tech Multiplier Effect*

[0:00] *[Rep. Khanna begins speaking]*

Rep. Khanna: I mean, I don't think it's possible to have a fair shot in the 21st-century economy without the internet, and we've seen in COVID the dramatized impact of people having to drive to parking lots to do their homework [or] having to drive to another town to get internet access. That shouldn't happen in America. Majority Whip Clyburn has a bill--\$80 billion--it would hook up the entire country to affordable high-speed internet. 25% of rural America still doesn't have access to [the] internet. \$80 billion is something we can afford, I mean, we spent \$3 trillion of COVID response. Certainly, we can find 1/30th of that money to give everyone access to high-speed internet.

[0:40] *[Background music fades in]*

Zack: Welcome to the Ninety-Seven. I'm Zack Mannheimer, and this is Part 2 of The Tech Multiplier Effect. This part is focused on the rural digital divide and ways to solve it. That \$80 billion bill that Congressman Khanna just mentioned was passed a few days ago and became \$100 billion as part of the Moving Forward Act in the US House. The MFA as it has come to be known, or as I'm calling it, is a \$1.5 trillion infrastructure bill meant to fix our roads and bridges, create clean energy, and bring high-speed internet to quote: "unserved and underserved rural suburban and urban communities." The full version of the bill isn't likely to pass the Senate, but the broadband-related amendments still have a chance of becoming law.

[1:22] *[Background music fades in]*

"While the party-line vote on the full bill is a fact of our current politics, no one should make the mistake of thinking that broadband provisions are partisan," said Matt Wood; who is the President of Policy and General Counsel at Free Press Action, a media advocacy group who monitors these activities. He continued quote: "people in cities and rural areas alike need better broadband at better prices no matter their party or politics."

While that may be true, politics have a sneaky way of working themselves into just about everything, and especially things that cost \$100 billion.

Rep. Khanna: Well, this would go to the communities, to the electrical co-ops and it would prioritize them, and so it's not just giving the funding to the private companies it's actually saying we're going to give it to wherever it can make it work, and in most of those cases, it's going to be communities themselves which are the most efficient, so I think that that's the big innovation of the bill.

Zack: Our economy didn't function without broadband before COVID, and it especially cannot function now. Both sides of the aisle agree on this point.

Rep. Khanna: We're pushing for it. I'm hoping it could be bipartisan. I mean, in a time of coronavirus where we've seen the importance of digital equity, why not make this part of one of the next stimulus.

Zack: That was Congressman Ro Khanna. Coming up is Larry Irving. You may remember him from his cameo turn in the first part of the episode. Larry is one of the original internet guys; one of the nerds back in the late 80s and early 90s trying to help the world understand not only the value the internet would bring, but also creating policy around this new world as part of the Clinton administration. Larry is also credited as having coined the term 'digital divide' which came out of the first empirical study proving that such a thing exists in 1993, and he was the first African American inducted into the Internet Hall of Fame—which is a thing—in 2019.

Larry: One of the things that troubles me a little bit, and I'm a huge fan of both representative Khanna, and particularly Representative Clyburn and I admire their leadership, I mean, the thoughtfulness on these issues. I believe that decision should be data-driven, and then we should make informed decisions. So, a little bit of context—I did the

transition for the Clinton administration when there was no internet, and then helped kind of develop the internet policy for the Clinton administration. I did the transition for the Obama presidency and helped rethink some of the proposals to address connectivity in the \$8 billion 'BTOP' program—Broadband Telecommunications Opportunities Program—that was part of the stimulus package that Mr. Obama came out with. In both instances, the projects I worked on I really focused on making sure we had adequate data before we spent money. So, I support them fully, but I really wanna put mapping and data analysis and understanding what the grid looks like—the grid meaning what the country looks like—before we spend too many of those dollars.

Zack: Novel idea Larry has of understanding the data before we drop 100 'B-bills' on a problem that we may not fully understand. We have to map the problem first. Rural America is not 100% devoid of broadband. In fact, there are hotspots throughout the country where local telecoms have taken it upon themselves to just lay the fiber to every home and business, like in Stanton, IA, with a population of 689. We need to know where the fiber has to go, how much it's going to cost to get there, what department will fund it, who's going to look after it, and who ultimately will profit from it.

Rep. Khanna: Go through the Commerce [Department]. I mean, you could do it through a combination. I mean, we've said through the Commerce Department, but it could be through a combination of the Commerce Department and the National Science Foundation and the Department of Education. It could be a separate agency; I'm open to negotiation. Then obviously the president of the United States would make that determination ultimately, but the key is to have the investment and to make the effort.

Zack: In the height of the Cold War we invested 2% of our GDP for science and innovation, but we're not even at 1% today. The MFA gets us close to 1%. So, is that enough or is that just what we can hope for?

Rep. Khanna: Well, ideally, we would be at 2% now. Some of the gap in funding is coming from the private sector, but the private sector is funding largely software. They're not funding the things that are intensive in manufacturing, they're not funding some of the most groundbreaking innovation that's capital intensive, and that means that it's not leading to jobs. So, we want to be investing in the types of science and technology that's also going to lead to jobs, and we

don't want it all in DC or Silicon Valley or Boston, we want it spread out.

Zack: Economic development's underlying thesis has been if there are jobs in a community, people will go there to get the jobs. That has been true for the better part of America's existence, but is a job enough to make someone move there today? It's true, we need to spread the tech jobs out. Every community should enjoy them, but in order to get the jobs, you've got to have a community worth living and investing in.

Larry: I think there are three different barriers, and I'll give them to you in order. One: a lot of people in the early days—and I had people say this to me—that the internet was just the new Citizens Band Radio. You know, the geeks like it, the nerds like it, but do real people really need it? Not so much. That kind of evolved into, you know, this is great, everybody should have access to it, but we're capitalist society and let the marketplace drive this. I mean, we don't want the government to interfere in [the] efficient allocation of capital resources, and if the government gets out in front of the tel-cos or the [inaudible] or the cellular companies or the broadband providers, we're going to deter investment. Rather [we should] encourage investment, so let's not screw up this wonderful thing that's happening that the private sector is bringing us, which is a little bit not right because there wouldn't have been an internet that early without government investment in the invention of the internet.

Zack: This is important. [The] government did play a role in creating the internet, but they did so in a way that allowed the private sector to take the lead once the feds gave them that initial push on the swing. This is similar to how electricity came about. Private innovation led to a need for public capital, which went back to private companies competing to the point where electricity is needed everywhere, and the feds came back in to secure it. Identical to where we are today with broadband. This is not a perfect system and still leaves the door open for abuse, but electricity, the Federal Aviation, Food and Drug [Administration], Federal Reserve, Federal Communications, and many other administrations all have similar backstories, but yet we're still stuck in a partisan gridlock.

Larry: But the thing was, let's not have the government screw up [the] efficient allocation of capital by big companies. We don't want to get out in front of them. Let them do their thing. The most important reason, the biggest reason, is ideology. It's just become partisan

fighters. You have Republicans on one side, Democrats on the other side and you've never been able to kind of merge them. In the 90s, when I was working on President Clinton's staff--or in his administration--a better way of putting it, one of the things we were able to do is we were able to get some funding for urban applications and connectivity by working with Republican senators who came from rural America and said look, you need more rural connectivity, we need more assistance in urban connectivity, let's kind of figure out how to work together. For about 10 years, the digital divide--I mean, I'm the guy who kind of came with the term--but the digital divide, for about 10 years wasn't a word uttered by many Republicans. It just wasn't something they were interested in doing. In recent years, as the problems in rural America become more evident, there has been more and more focus on the rural divide, and it is appropriate because a higher percentage of people in rural America aren't connected. There are something like 5 million households in rural America that don't have basic connectivity at the level they need to really have broadband, but there are 15 to 20 million urban households that don't have access to broadband because they can't afford it.

Zack:

The urban and rural digital divides are opposites of the same problem. The urban divide is due to the 20 million people not being able to afford the monthly service cost. The rural divide of 5 million is due in most part to the broadband companies not being able to afford to lay the fiber and to profit from it, or at least that's the justification. And again, we're back in 1936 right up that dirt road with two houses, but today it seems that the digital divide in any geography won't get solved until we solve our partisan divide.

Larry:

Going back to my original point, in both instances it's a question of resources and affordability. In one case—the 5 million rural households—it's going to take an investment from every American to get those folks connected in the same way that we had a rural telephone service and in the same way that we spend billions of dollars to get electricity out to rural America, and no one should begrudge spending that money. It is a great investment by the American people to connect all of us with this electricity, telephone, or broadband, but there's been an entirely different kind of analysis when this comes to urban Americans and whether not we should help folks of low income who live in urban America get access to the Internet. To me it's the same issue, it's just positive in a different way, and if we can get past the partisan divide, if we get Republicans—and I'm a liberal Democrat who believes it is important people in

Montana in Texas and Nebraska and Oklahoma be connected to the internet—and I'm willing to pay my fair share as a taxpayer to connect them.

Zack: Speaking of politicians who are cutting through the political divide...

Rep Khanna: And I didn't know what to expect and then Hal Rogers invited me to come down to Paintsville, Kentucky and he called that area Silicon Holler, and he said—he's almost 80 years old and Republican, a very decent person—and he said Trump carried that district by 80% or something, and he said that we need to use these big pipes to connect my district to the rest of the world so that people can stay in Paintsville, but have opportunities. Once they went there to this deep red area and saw that there was an appetite for this, there was an openness this, as long as it wasn't seen as the Silicon Valley guy coming in, but more as someone listening and partnering, I thought OK I maybe there's something to this. This is not coming from a coastal community, but it is actually in something that people in these communities want and that's when I said that we should really run with this.

Larry: The solutions to problems in small communities are generally found closest to the problem, and one of the things that we should be encouraging—and whatever we do with federal funding should absolutely try to encourage—is let's try to find the smartest people in communities to help us figure out solutions. And there are solutions that we can find in Iowa that will map to Montana and solutions we map in Montana might help in Alaska, but if we can create some best practices and create some models that others can replicate, we can do this more efficiently with less cost and let's learn from each other and spend the money smartly, as opposed to thinking one is a one-size-fits-all, or, two: that companies who for 20 years haven't and couldn't be bothered to serve these communities all of a sudden have some epiphany and decide they're going to go to the small communities they haven't and probably not going to and they may not be the most cost-effective way to get this job done.

Zack: Bottom line? It's all local. The federal government is searching for solutions just like our chamber directors are, and the feds can come in with some financials and maybe some best practices, but it's up to us on the ground to implement these concepts. Ultimately that is the heavy lifting, not the price tag.

Rep Khanna:

Well, I think there are two different things. I think for the mid-size cities we need to make massive investments in research universities [and] near those research universities in the cutting-edge technology in their local area. So, in Youngstown it could be advanced manufacturing and robotics; it could be timber manufacturing in Washington, it could be ag-tech in places in Iowa, it could be tire manufacturing in Akron, OH, and we look at that innovation and that's going to create many jobs. It's going to create infrastructure jobs in those areas and it's going to help the rural communities that are located near that city. We know this. I mean we know that rural Virginia was the most excited about trying to get Amazon to Northern Virginia because they would have [the] benefits from being within an hour of a major tech company or major tech hub, but that's not sufficient. We can't just say to the rural communities, "OK, be near a Des Moines," but we need to do something specifically for rural and in that way, it's impractical to say that you're going to have an innovation hub in a rural town, nor would a rural town want that. They don't want to transform into some busy hub, but what you can do there is have applied technology, and that's where I would work with the community colleges and the land grant institutions and the ag extensions and make sure that they're offering credentials in those local rural communities for people to do the jobs either for a nearby innovation hub or anywhere in the country. So, if you fund those credentialing programs at community colleges and land grants and then you fund more of the intensive technology in the mid-size cities, then you start to have a road map for how we get America to have technology and new economic opportunities in every part of the nation.

Zack:

That road map includes planning. It's not enough just to be near an urban metro. Your community has to have a plan but being near an urban metro definitely helps.

Jim:

You know, you ask about other cities, well, my focus is like a laser on the Northern Virginia/Eastern Maryland region. There are a couple things there, one: so many federal operations have now sprung up in that region over the last thirty, forty, fifty years that it's become a national security problem and what I'm talking about there is that it's now become a target-rich environment. You could have one terrorist event create [a] substantial disruption to the operation of our entire federal government because of that density. God forbid somebody were to explode a dirty bomb in Manassas or Fairfax county. The wind currents would spread that not only throughout the DC region, [but] it would [also] go all the way up in

the Baltimore and Philadelphia [regions]. That's unacceptable, and I can tell you from talking with folks in Homeland Security and the Defense Department, they're really worried about this the problem. Of course, you know, the politics, the funding, I mean so much has to go into fixing it that it's been a really challenging problem. The other factor is that it's just become ridiculous to try to operate anything in that region and it's been sucking the air out of our fiscal budget for decades and now it's just unsustainable.

Zack: Not only is it too expensive to live in DC, it's too expensive to run a business even when that business is a nonprofit entity called the federal government. So, the feds were in the same position that Twitter and Facebook are in, they have to find other places for their employees to live.

Jim: You may recall reading a couple years ago about the USDA Secretary Perdue came in and said, "Hey, we're going to relocate 700 people out of the USDA headquarters out of the DC area to Kansas City, MO, and that was very controversial, but these are some of the factors that were driving that which were totally legitimate now. Interestingly enough, when they did that and they made that announcement, 50% of those employees turned in the resignation because moving to Kansas City, MO was too far. Their families are in Virginia and Maryland they said, "Look, we get the problem, but that's just too much of an ask." Now, if they just brought them over the Appalachian Mountains to, for example, more central West Virginia then they could have avoided all the problems and still been close enough to that region to allow those folks to reasonably participate [and] you know, be a part of those communities.

Zack: It's not just the cost of living or being too far away from your families that is driving these decisions, add in a global pandemic, and everything is compounded.

Jim: Now what I have seen in the last few months is, I mean, just a flurry of activity. In all the agencies that we talked to on a regular basis, they're like, "Oh my gosh, we can't believe this pandemic happened," but it just demonstrates that we have got to reduce this density. The other factor is we're spending so much money to recover, this deficit is never going to be reduced unless we start moving things outta here. So, I know there's a lot of talk, for example, about can we put money in his fourth stimulus package to start moving some folks. I don't know if that will happen or not, but this is more real than I've

ever seen it and more possible now. Part of that calculation is how can we disperse these federal operations in a way that eliminates the national security problem, doesn't introduce and eliminates the [inaudible] problem, but doesn't introduce a major force retention problem. And I think what—I hope—happens because you know for selfish reasons, is that they view Appalachia as a solution space, but you can imagine for a moment that as they move these federal operations to various strategically placed locations up and down Appalachia that they also adopt and take advantage of this new embracing of telecommuting or teleworking technology, so you have a smaller footprint of that federal operation and more of those workers who are relocating doing it in more rural areas.

Zack: The alarms are sounding, and rural communities have to answer them. We have politicians fighting for us on both sides of the aisle to make this work, but rural communities have to seize the moment.

Jim: And I think if ever there was an opportunity in this country to help you know, get more work in the rural areas, it all goes back to what I just described. This is an opportunity like this country has never seen to have a positive impact on rural areas, and the question is: can we be strategic about this? I would love to see, for example, the Appalachian Regional Commission say, "Look, we recognize this opportunity, and we recognize that Appalachia can be a solution for these problems, and we're going to have a formalized structured initiative to make it happen." I would love to see that.

Zack: This is Jim Estep, CEO of the High Tech Foundation of West Virginia. We heard from Jim back in the first part of the episode talking about how DC and other urban metros are oversaturated and ready to send people and jobs in rural West Virginia. Jim's question of who maintains the lines and how they are shared is identical to the questions that were asked in 1936, and the answer was the creation of rural electrical co-ops. Co-ops number over 700 today all over the country, bringing power to 42 million Americans, and they're all 100% member-owned. If this concept has worked for going on 85 years, why not do it again with broadband?

Jim: Broadband availability is the number one thing, and you know, I probably talked to every telecommunications company there is it at one point or another in the last decade alone, and you know they tell me, "Look, Jim. You know we would love to run new fiber instead of all this stuff out here, you know Barber County or Doddridge County or someplace like that, but you know we're a business. If we

do that and make that capital investment, you know we gotta have a return on investment, and there's not enough of the population density for us to get that return on investment."

Now, if the federal government wants to pay for all that, you know, then we can figure it out, but then of course what complicates that is then you get into, you know, who pays to maintain those lines, how are they shared, because as you know, the Federal Communication Commission, you know, has a lot of regulations about that. [It] can become very complicated, but then of course what we're seeing in the industry on the national—really international—level is the evolution to wireless, specifically the push to 5G, and what you're seeing is less and less emphasis on that terrestrial fiber run. Then, of course, you have the other potential factor of what Elon Musk is doing, what Facebook is doing, and putting satellites in space that are going to provide broadband. So, how do you know what happens in that case?

[24:25] *[Background music fades in]*

Zack: At Alchemy, we often do big sweeping change types of economic development projects like redeveloping vacant schools for housing, turning office buildings into maker spaces and coding academies, and revamping broadband infrastructure, but that might not be the kind of change your community is looking for. Maybe your community doesn't need an economic overhaul; maybe you just need a jump start.

[24:50] *[Background music fades out]*

Zack: In 2008, I started dating Sarah who—spoiler alert—I later married. I just moved to Des Moines from New York City a year before. One of our first dates involved Sarah taking me to Pella, IA, a town of 10,000 that her family had grown up in. It's about 45 minutes southeast of Des Moines. Pella is famous for being Dutch. Dutch people grow tulips. Sarah was taking me to a tulip festival. I wasn't exactly thrilled about this—mind you—sure, I like tulips, but on a scale of festivals I'd like to attend, tulips or any flower for that matter, was not high up on the scale. But she was cute and had a wicked sense of humor, and she appreciated my self-deprecating nature so,

I said, "Sure, I'll go to this tulip festival." Today, I go back to Pella five to six times a year. Not for the tulips, you see, the entire community has been rezoned to resemble a Dutch village. Even the Walmart and the Applebee's on the outskirts of town looks straight out of Rotterdam. I mostly go for the air-dried beef at Ulrich Meat Market and the flaky Dutch letters at Jaarsma Bakery—you can't get them anywhere else. The Tulip festival started in 1936. Hmm, what else happened in 1936?

[26:01] *[Music riff]*

And it didn't even have tulips. A local cabinetmaker built wooden tulips and placed them all over town. A tulip committee was soon formed to plant actual tulips for the following year. All the children dress in Dutch costumes and wooden shoes and sweep the streets before the big parade. The early festivals attracted a few hundred people, mostly of Dutch heritage, coming not only for the tulips but also for the local birch mêester running a maple drill--look it up. Today's festival brings in over 200,000 people, and it's run by a full volunteer staff. The annual economic impact of Tulip Time is \$3.2 million. It's amazing what a little festival can do, especially when you can promote it online.

[26:49] *[Background music fades in]*

This year Tulip Time was sadly canceled due to COVID-19, but the tulips were still there. Sarah still has her street-sweeping dress, so our six-year-old dawned it and swept out the garage. It's our way of keeping the festival spirit alive.

So, we need broadband, and we need it now. We have the resources to make this happen, we just have to act. How can you help? Glad you asked. Write to your Congressperson; tell them that you want the MFA bill to pass the Senate, tell them that you want funding for broadband, tell them that regardless of where you live, and what political persuasion you are, you believe every American should have high-speed Internet access. After all, if we ever want to get "back to normal" after this pandemic, we have to keep communicating, and right now, broadband is the only way to do it.

Thanks to our guests, Congressman Ro Khanna of California, Larry Irving in Washington DC, and Jim Estep in Fairmont, WV. Our original music was composed by Mike Hogan. This podcast was co-produced with our partner Just Place and our executive producer, Joe Crimmings. To learn more about Alchemy, please visit alchemycommunities.com and to learn more about McClure, visit mecresults.com. For more updates, photos of our guests, and long-form stories on our communities, visit ninetysevenpodcast.com.

This has been the Ninety-Seven.

[28:18] [Background music fades out]