REFINITIV STREETEVENTS **EDITED TRANSCRIPT** Q4 2020 Crown Castle International Corp Earnings Call

EVENT DATE/TIME: JANUARY 28, 2021 / 3:30PM GMT

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PRESENTATION

Operator

Good day, and welcome to the Crown Castle Q4 2020 Earnings Call. Today's conference is being recorded.

At this time, I'd like to turn the conference over to Vice President of Corporate Finance, Ben Lowe. Please go ahead, sir.

Benjamin Raymond Lowe Crown Castle International Corp. (REIT) - VP of Corporate Finance & Treasurer

Great. Thank you, David, and good morning, everyone. Thank you for joining us today as we review our fourth quarter 2020 results. With me on the call this morning are Jay Brown, Crown Castle's Chief Executive Officer; and Dan Schlanger, Crown Castle's Chief Financial Officer.

To aid the discussion, we have posted supplemental materials in the Investors section of our website at crowncastle.com, which we will refer to throughout the call this morning.

This conference call will contain forward-looking statements, which are subject to certain risks, uncertainties and assumptions, and actual results may vary materially from those expected. Information about potential factors which could affect our results is available in the press release and the Risk Factors sections of the company's SEC filings. Our statements are made as of today, January 28, 2021, and we assume no obligation to update any forward-looking statements.

In addition, today's call includes discussions of certain non-GAAP financial measures. Tables reconciling these non-GAAP financial measures are available in the supplemental information package in the Investors section of the company's website at crowncastle.com.

So with that, let me turn the call over to Jay.

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Thanks, Ben, and thank you, everyone, for joining us on the call this morning. As you saw from our announcements last night, we delivered another year of solid growth in 2020. We expect to generate double-digit AFFO growth per share in 2021, and we secured our largest-ever small cell commitment with the 15,000 node award from Verizon to support their 5G build-out.



Dan will discuss the results in our full year 2021 outlook in a bit more detail in a minute, so I want to focus my comments on 2 areas: our strategy to maximize long-term shareholder value while also delivering attractive near-term returns and the recent positive developments that increased my confidence on our strategy and growth opportunity.

I believe our strategy and unmatched portfolio of more than 40,000 towers and approximately 80,000 route miles of fiber concentrated in the top U.S. markets have positioned Crown Castle to generate growth in cash flows and dividends per share, both in the near term and for years to come. Despite the challenges presented last year, we continued to build on our long history of consistently delivering compelling growth through various market cycles, highlighting both the strength of our business model and the significant value-creation opportunity our strategy provides to shareholders.

One of the core principles of our long-term strategy is to focus on the U.S. market because we believe it represents the fastest-growing market for wireless network investment with the least amount of risk, leading to superior long-term returns. The demand for our shared infrastructure is fundamentally tied to the insatiable demand for mobile data in the U.S., which increased by 30% again last year. Because these growth outlook and market fundamentals are so compelling, the U.S. wireless market continues to attract a disproportionate amount of capital investment. This dynamic is again apparent with the C-Band spectrum auction with gross proceeds of more than \$80 billion.

During my more than 20 years at Crown Castle, large-scale wireless spectrum auctions in the U.S., like this one, have followed a consistent pattern. First, industry observers questioned whether the capital required to secure the valuable spectrum will crowd out investment in wireless networks. And second, these questions are answered with long periods of sustained significant investment. Similar to the past, the seemingly insatiable demand for data drives the need for additional spectrum. Further, the only way the spectrum can meet the demand is for our customers to deploy it on towers and small cells. I am confident that we will look back in the years to come and recognize how important this auction was for the development of nationwide 5G in the U.S.

In addition to deploying more spectrum, cell site densification has always been a key tool that carriers have used to add network capacity, enabling our customers to get the most out of their spectrum assets by reusing the spectrum over shorter and shorter distances. The nature of wireless networks requires that cell site densification will continue as the density of data demand grows, particularly given the higher-spectrum bands that have been auctioned in recent years and that have shorter propagation characteristics.

Slide 3 illustrates this point. The higher-frequency spectrum bands are valuable because they provide our customers with the ability to significantly increase network capacity given how much more spectrum is available in those higher frequencies. However, as you can also see on this slide, the signal travels over shorter distances, requiring more cell sites. As a result, we expect both the deployment of additional spectrum and this densification trend to drive significant demand for our tower and small cell assets for years to come.

To address this sizable and growing opportunity, we have invested nearly \$40 billion of capital over the last couple of decades in shared infrastructure assets that we believe are mission critical for wireless networks. Our tower investments began more than 20 years ago when we built and acquired assets that we could share across multiple customers, providing a lower cost to each customer while generating attractive returns for our shareholders over time as we leased up those assets.

More recently, as wireless network architecture evolve to require a network of cell sites that is much denser and closer to the end users, we established the leading small cell business in the U.S. with the same thought process in mind: provide a shared infrastructure solution that lowers the cost to each customer while generating compelling returns for our shareholders over time as we lease up those assets. We believe the addition of small cells and fiber to our strategy both complements our tower business and provides substantial potential upside to our 5G growth strategy.

To that point, we recently signed 2 strategic agreements. In November, we announced a 15-year agreement to lease DISH space on up to 20,000 of our tower sites. This strategic agreement established Crown Castle as DISH's anchor tower provider and includes certain fiber transport services to further support their nationwide 5G build-out. This agreement will contribute to our financial results over time as DISH deploys on our tower sites, and we expect to start in the back half of this year. We're excited to partner with DISH to support their long-term infrastructure needs and look forward to working with them as they deploy nationwide 5G network.



As we announced yesterday, we are also excited that we have expanded our strategic relationship with Verizon by signing a long-term small cell agreement to support Verizon's 5G ultra-wide band and 5G nationwide deployment. Under this agreement, Verizon has committed to lease 15,000 new small cells, representing the largest small cell award in our history and demonstrating the value of sharing small cell and fiber infrastructure assets with multiple customers.

While we believe it is our ability to provide the full breadth of wireless infrastructure assets that allowed us to secure the agreements with DISH and Verizon, highlighting the benefits of the unique portfolio we have built over the last 20 years. With our 40,000 towers and 80,000 route miles of high-capacity fiber concentrated in the top U.S. markets, we believe we will continue to reap the rewards of our investments as our customers continue to roll out their nationwide 5G network.

As we noted in our press release, late last year, T-Mobile notified us that they were canceling approximately 5,700 small cells that we initially contracted with Sprint. The majority of the small cells were yet to be constructed and would have been located at the same locations as other T-Mobile small cells once completed. The Sprint cancellation resulted in T-Mobile accelerating the payment of all contractual rent obligations for those small cells as well as the payment of capital costs we had already incurred.

In addition to receiving the future rent associated with the canceled nodes, the small cell locations are now again available for future customers. And this development does not impact the long-term growth opportunity for our small cell business. As a result, we finished 2020 with approximately 50,000 small cells on air, and we have meaningfully increased our backlog of small cells committed or under construction to approximately 30,000.

As I reflect on 2020, I'm proud of how well our team delivered for our customers and our shareholders during a difficult operating environment. Looking forward, I'm excited about the growth opportunity as our customers embark on what is likely to be a decade-long investment cycle to develop 5G in what remains the best wireless market in the world.

Our strategy remains unchanged as we focus on delivering the highest risk-adjusted returns for our shareholders by growing our dividend and investing in assets we believe will drive future growth, and I believe Crown Castle offers shareholders an unmatched opportunity to benefit from the launch of 5G wireless networks. We provide a compelling total return opportunity with a high-quality dividend yielding more than 3%. We are delivering the highest tower revenue growth rate in the U.S. among our peers. We expect to generate double-digit AFFO per share growth this year, even before 5G spending occurs in earnest.

Our customers are affirming the value we bring with our comprehensive portfolio of shared infrastructure assets by entering into long-term agreements to access those assets, and we are investing in new infrastructure assets that we expect will extend the opportunity to grow dividends per share 7% to 8% per year. I believe this combination is as compelling for future value creation as we've ever seen at Crown Castle.

And with that, I'll turn the call over to Dan.

Daniel K. Schlanger Crown Castle International Corp. (REIT) - Executive VP & CFO

Thanks, Jay, and good morning, everyone. As Jay mentioned, our 2020 financial results add to our long history of consistently delivering attractive growth. Specifically, we increased dividends per share by 8%, which reflects our commitment to return capital to shareholders and demonstrate our ability to grow through various market cycles. We delivered approximately 6% growth in organic contribution to site rental revenue, and we continue to improve our financial flexibility as we lowered our weighted average borrowing costs, extended the average maturity of our debt and reduced our leverage.

Before I walk through the financial results in more detail, I wanted to briefly discuss the nontypical items described in our earnings release yesterday that impacted fourth quarter and full year 2020 results. The Sprint cancellation Jay mentioned generated the biggest of these impacts, including an increase to other operating income, partially offset by a related increase in operating expense and the write-off of capital already spent on the construction of the canceled nodes. Additionally, we implemented a reduction in staffing primarily in our fiber segment that resulted in associated severance costs in the fourth quarter. The fourth quarter and full year 2020 net



benefit of these nontypical items, which were not contemplated in our prior full year 2020 outlook on both adjusted EBITDA and AFFO, is approximately \$286 million. We do not anticipate the nontypical items will have a material impact on our 2021 outlook, which remains consistent with the outlook we've provided in October. To make the financial figures in this earnings presentation more comparable, full year 2020 results and growth figures for full year 2021 have been adjusted to exclude the impact of these nontypical items.

Turning to Slide 4 of the presentation. Full year 2020 results were consistent with our prior expectations with site rental revenues and adjusted EBITDA increasing 4%, while AFFO increased 9% when compared to full year 2019. The 4% growth in site rental revenues included approximately 6% growth in the organic contribution to site rental revenues, consisting of approximately 5% growth from towers, 15% growth from small cells and 3% growth from fiber solutions.

Focusing on investment activity during the year, we deployed approximately \$1.5 billion toward discretionary investments in 2020, including \$1.2 billion for fiber and approximately \$320 million for towers. These investments were balanced with approximately \$2.1 billion paid in common stock dividends or \$4.93 per share, representing 8% growth when compared to dividends paid during 2019.

Now turning to Slide 5. Our full year 2021 outlook remains unchanged with 4% growth in site rental revenues, 5% growth in adjusted EBITDA and 12% growth in AFFO.

As shown on Slide 6, the expected 4% growth in site rental revenues includes approximately 6% growth in the organic contribution to site rental revenues, consisting of approximately 6% growth from towers, 15% growth from small cells and 3% growth from fiber solutions. As a reminder, DISH has publicly stated they expect to begin their network deployment later this year, so our outlook does not include a material contribution from DISH's build-out. Likewise, our recent agreement with Verizon is not expected to have a material impact on 2021 results.

As it relates to the balance sheet, we finished the year with approximately 4x debt to EBITDA on a last quarter annualized basis, which includes the net benefit from the nontypical items discussed earlier. Adjusting to include those items as onetime impacts that are not annualized, our leverage would have been approximately 5x. During 2020, we improved our balance sheet flexibility by extending the weighted average maturity by nearly 2 years, reducing our average borrowing cost by 40 basis points and reducing our leverage to our target of approximately 5x.

Looking forward, our expectation for 2021 capital expenditures remains unchanged at approximately \$1.5 billion. We expect we will be able to once again fund this discretionary capital with free cash flow and incremental borrowings, consistent with our investment-grade credit profile.

As I wrap up, we are excited about the positive demand trends in the U.S. wireless market and the opportunity we see to translate that demand into double-digit growth in AFFO per share this year. Looking further out, we believe our focus on the U.S. market and our ability to offer a broad portfolio of towers, small cells and fiber solutions, which are all integral components of communications networks, provides us the best opportunity to deliver superior long-term, risk-adjusted returns for our shareholders.

Before we open the call to questions, I want to also mention that we were recently informed by the SEC that they have concluded the previously disclosed investigation and that they do not currently intend to pursue an enforcement action.

With that, David, I'd like to open the call to questions.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) And we'll take our first question from Mike Rollins with Citi.

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Michael Ian Rollins Citigroup Inc. Exchange Research - Research Analyst

Just curious if you could spend some time discussing more of the small cell deal that you announced with Verizon in terms of how to think about the economics for this larger small cell deal versus maybe some of the others that you signed. How much might be on existing infrastructure versus infrastructure debt to be built and how that can flow through the P&L over the next few years?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Yes. Thanks, Mike. A few things I would mention about this. And obviously, we're careful about the commercial terms under which we negotiate with the customers, but I think there are a few things that we can speak to related to it.

First is the returns that we would expect to gain from this agreement are consistent with the long-term approach that we've taken with deploying small cells. So initial yields of 6% to 7%, if they were to be the anchor deployment and then if they were to be a co-location on existing infrastructure, it would take those returns into the yields on invested capital into the low double digits. So from a return standpoint, really consistent with what we've seen historically.

We don't know the exact locations that these nodes that they've committed to will ultimately land in, so I can't be more specific than that. In terms of what the returns will look like, we'll have to let some time pass and see as they identify the locations, and then we'll update that, obviously, as we go.

I do think broadly, this is a -- the Verizon agreement is a real affirmation of our small cell strategy, and they believe there's real value in a third party providing the infrastructure to them. And I think we're in a great position to do that. So we're focused on making sure we deliver for them and help them get their 5G launched. And this agreement is really -- it's the floor. It's the beginning of what we think is a big start towards 5G, and I think we'll see more of this as time passes as we work to build out these 5G networks, but this is the early days and the start of something pretty exciting that we're doing with Verizon.

Operator

And next, we'll go to Simon Flannery with Morgan Stanley.

Simon William Flannery Morgan Stanley, Research Division - MD

Great. Just following up on that. You've got 30,000 in backlog now. And any ability to think about taking that 10,000 per year install rate higher, anything that maybe under Chairman Rosenworcel would might see some action at the FCC to help on any of those items?

And then on C-Band, presumably, the carriers now know what markets they want in. Do you think you'll see much in terms of prepositioning during '21? Or is it really most of the activity is going to be in '22 at this point?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Yes. Simon, thanks for the questions. Obviously, we're trying everything we can to increase the speed at which we deploy small cells. It's a very difficult and challenging activity to get through the process of working with local communities, making sure the way we design these is consistent with the aesthetic that they would want in their particular communities. And so I don't really have any update to the time line that we're typically seeing as we deploy these. It's generally kind of 2 to 3 years from the time that we identify a location to where we're ultimately able to build them. But there is a lot of work that we're doing, trying to figure out ways to do that faster for our customers. And obviously, it's to the benefit of their networks to be able to get them out there faster.

But there's also a component to this that, as we've talked about, similar to towers, these are very high barriers to entry at the local community level. And so the careful work that we have to do with those communities to make sure we're sensitive to the aesthetics that they want as well as building these within the parameters that they desire into their community is critically important and something we're really focused on making sure we balance those 2 desires for speed as well as doing things the right way.

The question on the FCC and the support that we've seen from the regulatory agency there over time, I think, will continue. Obviously, it's a big push of the current administration to have broadband for all, and they have been very supportive in their public comments about the need and necessity for 5G to be deployed in the U.S. and to lead the world in 5G deployment. So I think the operating environment in



which we're both co-locating on existing assets as well as making investments into future assets, I think the environment that we see from a regulatory standpoint will be pretty similar to what we've seen over the last several years.

On your last question around C-Band and the impact on 2021. Obviously, the auction is just drawing to a conclusion now, and I think we will see later in this year as the carriers start to speak about what their actual deployment plans for that spectrum will be. As we think about the outlook that we've provided, we really didn't include any impact from C-Band. And I think given the calendar, it's probably unlikely that, that would contribute to our financial results in calendar 2021. But as we get into the year and the auction gets completely wrapped up and carriers can speak to the spectrum positions that they gained, I think we'll be able to provide more clarity at that point, probably later this year as we think about 2022 and beyond.

Operator

Next, we'll go to Matt Niknam with Deutsche Bank.

Matthew Niknam Deutsche Bank AG, Research Division - Director

Just 2, if I could. One, on the reduction in staffing, any more color you can provide in terms of what drove this? And maybe where we should think about future cost savings to be recognized?

And then secondly, maybe a little bit related to this. In terms of the fiber business, if you could talk to any change in terms of the day-to-day or strategic outlook for the business with a new COO for fiber now in place.

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Sure. Thanks, Matt. On your first question around the reduction in force, that was focused primarily in the fiber on the network side. We're always focused on trying to operate the business as efficiently as possible. And in those efforts, we found some opportunities to gain some synergies, and so we did that in the fourth quarter of last year. Obviously, there were a number of employees that were affected by that and had done a great job for us, and I wish them all the best in their next endeavors.

As I think about, strategically, around small cells and the fiber business and what we're seeing, there are a lot of positive developments. Obviously, the completion of the agreement with Verizon is a really positive development. We're going to be working hard for them to help them get their network on air. The beginning of the launch of 5G creates another opportunity for cell site densification and then the work that we've talked about over the last several years around 4G. I think the carriers are going to continue to densify their 4G networks. In addition to the investment that they've made -- that they're going to make on the 5G side, I think we'll continue to see 4G sites deployed and -- over time there.

Great to have our new COO in place, Chris Levendos. He's been with the company for a number of years. I think he'll do a terrific job on an operating basis and operating that business efficiently, and he's off to a great start. He's been in the role since December 1 and doing a great job and look forward to the work he'll do ahead.

Operator

Next, we'll go to Colby Synesael with Cowen.

Colby Alexander Synesael Cowen and Company, LLC, Research Division - MD & Senior Research Analyst

Great. Two, if I may. Obviously, a lot of debate on the cadence of T-Mobile churn or, I guess, the legacy Sprint churn over the next several years. Some of your peers have started to give color on what that might look like, even beyond 2021. And I think you guys have actually mentioned that we could start to see some of that come through in 2023. Can you give us just a little more on the quantification of what that could look like in 2023? And then my understanding is that the next big chunk, if you will, would come in 2028. Just curious if that's correct, and again, just trying to get a better sense on the quantification.

And then my second question. Of the \$362 million that was recognized as it relates to the Sprint small cell contract cancellation, how much of the total contract value does that \$362 million equate to?



Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Sure. Colby, I'll take the first question, and Dan can speak to some of the specifics on the cancellation. Big picture, Colby, I would go back to some of the things that we've talked about in the past. And I know you're referencing some of the materials that are available in our supplement, which I would encourage investors to take a look at, if we break down details by customer by year.

Big picture, there's 5 years weighted average remaining on the T-Mobile and legacy Sprint contracts. There's about -- on a consolidated basis, there's about 5% of our revenues that are overlapping sites, sites where both Sprint and then legacy Sprint and T-Mobile are co-located on. And we've used that as kind of a bookend of what the potential impact around churn could be.

At this point, there are no specifics of what their plans are that we have to share. So being specific about what will exactly happen in '23 or '28, we're not prepared to speak to that because we don't know. Broadly, though, I think, and this is where your question is going, broadly, we're always open to working with our customers on structures that meet their needs without compromising our own economics under those lease agreements. We were really intentional several years ago with both Sprint and T-Mobile about extending the agreements that we had -- tower agreements that we had with them over multiple years, and that's why we sit here today with 5-year weighted average life remaining. Obviously, that gives us significant ability to navigate through the work that they're going to do around finding synergies in their network. And I think they will find synergies in the network, and we'll be impacted to some degree by that.

But I think it's also true that we've grown through past events of churn, past events of consolidation, and I'm comfortable that we'll be able to do the same. So as we talk about our long-term goal of being able to grow the dividend 7% to 8% per year, we think about that in the context of a multitude of different opportunities and risks at the top line. And on balance, I think we'll be able to navigate through the one that you're raising here without any significant challenges to our long-term growth rate and targeted dividends per share.

Daniel K. Schlanger Crown Castle International Corp. (REIT) - Executive VP & CFO

Yes. And Colby, this is Dan. I'll take the second question you asked around the \$362 million. That is a payment for the future rent that we would expected -- we would have expected to have received on all of the nodes that were canceled as well as the capital that had been spent to date on those nodes. So I think the short answer is it's all of the future value of the contract that we got paid late last year.

Colby Alexander Synesael Cowen and Company, LLC, Research Division - MD & Senior Research Analyst

And just a real quick follow-up to Jay's response. I mean, assuming -- I guess, regardless if it's a churn or not, am I correct in thinking that the next big chunk of legacy Sprint leases up for renewal is in 2023 and then the next one in 2028?

Daniel K. Schlanger Crown Castle International Corp. (REIT) - Executive VP & CFO

Yes, Colby. Yes. There's an agreement that expires that has some amount coming on in 2023 and then the next one is 2028. But as Jay mentioned, that's going to be a part of how T-Mobile thinks about their network. And just because the agreement comes up doesn't necessarily mean that it's churning that year, so we're going to be working through that with T-Mobile.

As Jay mentioned, we have a good relationship with them and happy to talk to them about how they want to manage those sites in connection with the entirety of their network, which is where we'll head over the course of the next several years with them.

Operator

And next, we'll go to Brett Feldman with Goldman Sachs.

Brett Joseph Feldman Goldman Sachs Group, Inc., Research Division - Equity Analyst

So yes, as you pointed out correctly during your presentation, virtually all of the spectrum that's going to be deployed from here to support 5G networks is that frequency that's much higher than what we've seen in use in the current networks. And so it makes sense that the current site density is insufficient to fully utilize them.

So the question I have is what about the tower inventory? Tower, historically, have been built in locations that are optimized around the frequency bands carriers were using. So are you seeing an emerging opportunity to maybe more meaningfully reengage your tower construction business for your own use because it's been a while since you've materially built out your portfolio? And then are there any



other infrastructure categories that might become increasingly attractive for you to invest in as carriers look at a new degree of density, whether that's helping them build out indoor systems where they can make better use of these high frequencies and maybe looking at the economics around rooftops?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Thanks, Brad. Obviously, the deployment of the spectrum and the acquisition of the spectrum by the carrier is going to need both macro sites and small cells. And similar to the past deployments, I think probably in the early days, we'll see that more weighted towards the macro site.

But the -- where you went with your question around the build of additional assets, the opportunity to build additional towers in the U.S. is really, really limited, and I don't think anything about this spectrum auction is going to change that. So I would not expect that you're going to see either our own allocation of capital or, frankly, investment across our industry broadly, whether that's the large players, public players in the space or even the smaller players in the space. I don't think you're going to see a significant increase in the amount of tower build that happened in the country. It is very, very difficult to co-locate -- or to build new assets, new tower assets in the top 100, top 150 markets in the U.S. That is basically blanketed with an -- with the tower infrastructure that's there today.

The opportunity to densify is really going to come with fiber and small cells. And it's why we made the investment many years ago, got ourselves into the space and started to learn how to build it, how to deploy it and get the right kind of assets for where the world was headed. We saw this densification coming and the need for it, realized that macro towers wouldn't be able to entirely meet that need. And so we began to invest in the complementary assets of small cells and fiber that are going to make this densification possible.

So I think you'll see co-locations on towers. Towers is going to see a great amount of growth from the deployment of these spectrum bands, and then I think you're really going to see the reason why we originally made these investments and have continued to make the investments. As densification happens, I think that will happen in great amounts on fiber and small cells.

Are there other areas of infrastructure that are interesting to us? You spoke to in-building. There are some small number of in-building systems that we are doing. We find venues to be attractive when they meet our rigorous approach to allocating capital, if they exceed our returns and we think there's co-location there. Some of those make sense. But frankly, in terms of the scale of investment, it's really relatively small compared to what we see in the more public right-of-way opportunities to do infill and site densification with small cells and fiber, complementing the tower portfolios that are out there. So I don't see anything on the horizon currently that would cause us to deviate from our plan of the primary investment opportunities in front of us are small cell related.

Brett Joseph Feldman Goldman Sachs Group, Inc., Research Division - Equity Analyst

If I can just ask a quick follow-up question. Your customers, your carrier customers have generally been able to use all of the spectrum bands that they hold licenses for off of their macro tower locations. Are you expecting that any site that they occupy today will eventually be upgraded to use the new mid-bands they're acquiring? Or do you think it's going to maybe be a subset of your towers that are in the right geographic locations to help with those frequencies?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

I think If we took a long view and not kind of -- I don't think you're asking this question over the next 2 to 3 years because I would defer on that answer. But if I think about long term, 10 years, 15 years, 20 years out, in the top 100 markets, I think virtually all of the spectrum bands that the carriers have today will be operating all of those spectrum bands over time. The carriers will upgrade their equipment. They'll add additional lines and antennas and ultimately be broadcasting all of the spectrum bands that they have for the -- on the vast, vast majority of the macro tower sites that they're on.

And then I think based on the amount of usage that ultimately happens, you'll see them be targeted in terms of the deployment and densification inside of those markets to supplement and extend the -- and expand the network capacity by utilizing fiber and small cells to make those macro sites as efficient as they possibly can.

That generally happens over a period of time. So if we go back in history and watch and look at how the carriers have deployed network,



you can almost look at kind of the top urban markets, the most densely populated, and those will see the benefit of this kind of activity first. And then over time, you'd see that expand out to the more suburbia as well as to other markets that maybe are not quite as densely populated. So I think it's a long game and probably focused, at least initially, on the top markets.

Operator

Next, we'll go to Ric Prentiss with Raymond James.

Richard Hamilton Prentiss Raymond James & Associates, Inc., Research Division - Head of Telecommunication Services Equity Research & Research Analyst

A couple of questions. On the small cell side, given the Verizon contract within the Sprint's cancellation, how should we think about pacing of adding small cell nodes each year over the next several years? Is 10,000 still kind of a good number, knowing that you don't have all the details on Verizon yet?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Yes. Ric, our assumption, as we gave the guide and we talk about our 7% to 8% per year growth in dividends per share is based on a level of activity that's pretty similar to what we're seeing today. Obviously, over time, our long-term view would be that there's going to be a demand and a need for a greater number of small cells than that which would increase our pace. But for the near term and as we think about our 7% to 8% per year guide for growth in the dividends per share, that's based on activity that's relatively similar to what we're seeing today.

Richard Hamilton Prentiss Raymond James & Associates, Inc., Research Division - Head of Telecommunication Services Equity Research & Research Analyst

Okay. And is that 7,000, 10,000? Just trying to scale it in our model, thinking through the growth rates.

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Yes. It's about 10,000 per year, yes.

Richard Hamilton Prentiss Raymond James & Associates, Inc., Research Division - Head of Telecommunication Services Equity Research & Research Analyst

Okay. Sure. Great. Okay. And then on Verizon, are there aspects of the -- given that we see Sprint cancellation, is the Verizon deal more of a take-or-pay contract? Is it an MLA sales contract? How should we think about -- not getting into too much of the specifics, but just kind of the commitment level for Verizon?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Yes. So as I mentioned earlier, we try to avoid getting into too much detail around the commercial -- the key commercial terms of the agreement. But what -- the commitment there, it's similar to what we would have seen historically from a tower standpoint, where the carrier is making a commitment to us of a certain number of sites. And obviously, we're making a commitment to Verizon to extend the capital to deploy those small cells for them.

So as we get into the agreement and time passes, then we'll be identifying together the appropriate sites that meet our rigorous return thresholds. And there may be other locations that they have an interest to build small cells that really don't clear our investment hurdles, and they'll end up finding -- building it themselves or finding another third party to provide those. But we'll really just have to go through a passage of time and see ultimately how that comes out.

But the commitment is 15,000 small cells over a long period of time. They're making a 10-year commitment to us in terms of rent on those 15,000 sites, and the rent will commence once we install and build the small cells. And as I mentioned earlier in one of the answers to the question, the returns are really consistent with the returns that we've talked about historically, if we end up anchor building a portion of those as well as the economics around what co-location will look like.



Richard Hamilton Prentiss Raymond James & Associates, Inc., Research Division - Head of Telecommunication Services Equity Research & Research Analyst

Okay. And last one is a left-field technology question that we seem to get every 10 years, at least, as far as what's out there. We get a lot of incoming questions about satellites, low-orbit satellites, what the impact is from low-orbit satellites on wireless companies, the tower companies. Specific to SpaceX Starlink, but also a newer one, AST & Science, can you talk a little bit about how you view where satellites position is in kind of this future world?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Sure. The dynamics and physics of the way these wireless networks work, in the places where we operate infrastructure towers and small cells and fiber, I really don't see any opportunity for satellite to be a meaningful component of the network. Frankly, I think it will be a very, very small component, if any at all, over time.

The ability to transfer data quickly as well as the time it takes to move the data from earth to even a low-orbit satellite is going to create just too much latency in the network to be a viable competitor to the terrestrial-based infrastructure that makes up the vast majority of the infrastructure in the market today.

I think there are places, though, particularly really rural locations where some of the low-orbit satellite opportunities could be really interesting of a way of the delivering broadband to places that just economically don't make sense to build terrestrial networks, too.

And then the other place where I think there will be opportunity over time is in disaster recovery situations where you have -- we've seen this happen in Puerto Rico a couple of years ago and other places where there's a targeted area that needs to be covered. And I think you'll -- you may see some solutions. People have talked about balloons. They've talked about satellites. I really think those are short-term solutions, except in rural locations, but could be helpful in a disaster recovery situation where there's a small area of the terrestrial network that's been removed as a result of a natural disaster, could be interesting in those locations. But beyond that, I really don't see any meaningful portion of the wireless networks that are going to be handled that way.

And I think you can point to -- obviously, we can point to the agreements that our customers are signing. If you look at what DISH just committed to us on -- for the deployment of their network as well as the behavior of our customers, I don't -- I think our contracts speak to the fact that they believe this is -- this terrestrial-based infrastructure and towers and small cells is the way that networks are going to be deployed over the long period of time.

Richard Hamilton Prentiss Raymond James & Associates, Inc., Research Division - Head of Telecommunication Services Equity Research & Research Analyst

Hence, it's law of physics or law of physics.

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Haven't changed.

Richard Hamilton Prentiss Raymond James & Associates, Inc., Research Division - Head of Telecommunication Services Equity Research & Research Analyst

Exactly.

Operator

And next, we'll go to Tim Long with Barclays.

Timothy Patrick Long Barclays Bank PLC, Research Division - MD and Senior Technology Hardware & Networking Analyst

Two questions, if I could. First, on the network services side. I think last quarter, there was talk of a little bit more activity coming up, but it looked like it was down a little bit in the quarter. Understanding it's a lumpy business, could you just kind of give us a sense if there's anything specific to that? And how we should think about that rolling over the next few quarters?



And then the second one, maybe just a little higher level. I wanted to go back to the C-Band. If you could talk a little bit about your expectations. Given the price tag for this spectrum reportedly is much higher than anyone thought, do you think at any point this changes the dynamics for your businesses, maybe for build versus lease on small cells or fiber or any change potentially to the cadence of what you'd expect and maybe touching the towers given the impact on telco fundamentals?

Daniel K. Schlanger Crown Castle International Corp. (REIT) - Executive VP & CFO

Yes. Tim, it's Dan. I'll take the first question on services. The revenue we saw in the fourth quarter was very much in line with what we expected out of services, and the gross margin was as well once you take out the impact of the nontypical items we've been discussing. So I think it would be fair to say that the activity levels are consistent with what we would have expected.

As is typically the case going into the first quarter, there's seasonality to it. So we would expect a downtick going into Q1 in the services business and also some incremental costs that we see that generally happen in the first quarter around property taxes and employee expenses, things like that. But nothing that I would say is indicative of a change in our expectation around activity that's happening in the tower business going forward.

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Yes. To your second question, Tim, and I spoke to some of this in the prepared remarks. But there's a long history of what happens in the U.S. after large spectrum auctions, and that leads to a significant demand for our tower infrastructure and believe this will be similar for our fiber and small cells. And this is a dynamic that will be beneficial to our industry and particularly to our company, and we expect that to be the exact same case once the C-Band spectrum is in the hands of carriers and they're ready to deploy it.

More spectrum is obviously needed. Much has been written on this topic. The FCC has talked about it. The carriers have talked about it that more spectrum is absolutely needed in order to meet this 30-plus percent annual demand of growth in wireless data. And the significant investment that the carriers are making today in that spectrum can only meet that growing demand and generate for -- generate returns for our customers once it's actually deployed. So spectrum goes first and then the operators then deploy that spectrum, and that goes really well for the infrastructure providers.

To the extent, as you were alluding to, that the size of the check raises questions about the capacity for future investment going forward, I think it further highlights the value proposition that we offer as a shared infrastructure provider. We're offering capital, in essence, to the wireless carriers across our towers and small cells, and it's cheaper for them to deploy that spectrum that they acquire across the shared asset because we're willing to take the risk that we'll be able to get multiple users and thereby reduce the cost to the carriers of deploying that spectrum across the market.

So I think it feeds right into our value proposition, and it's one of the most encouraging things that happens in our infrastructure business. Once the spectrum is in the hands of the operators, we're able to come alongside the operators and provide a shared infrastructure solution to help them get it deployed. And I think the C-Band auction is just another example of how the run rate -- the runway of growth is extended in the business and should lead to great things in our industry and for our business.

Operator

And next, we'll go to Phil Cusick with JPMorgan.

Philip A. Cusick JPMorgan Chase & Co, Research Division - MD and Senior Analyst

Just a little bit of a follow-up on a couple that have been asked. First, on the small cell pace. With Sprint canceling 5,000 or 6,000 sites, can you maintain that 10,000 pace this year? It seems pretty optimistic. And again, for next year, if those Verizon backlog numbers are going to probably take 5 years -- 3 to 5 years to get in.

And then on the services side, you gave us some good read. What are you seeing from the municipal approvals at this point?



Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

You bet. Phil, on pacing, we mentioned in the release and in our comments that about 1,000 of the canceled nodes were expected to be put on air in 2021, so we'll go through the year and see kind of where we end up. But I think in and around -- as I mentioned before, in and around that 10,000 small cells deployed per year is what our expectation is. So we would expect to fill up those 1,000 in another way. And then in the years beyond that, again, our best view at the moment is that we'll be at that pace of about 10,000 per year. And if that changes, then we'll go through the process of updating that. But that's our expectation based on what we see today.

In terms of what we're seeing from municipalities, I made this comment in my prepared remarks about a credit to our team for how they've navigated through difficulties. This would be an example of how difficult the operating environment has been. Obviously, all of us working in an office environment have gone through the process of working from home and what that means. That's a little more challenging when you are working with municipalities and gaining the rights to get construction permits and zoning permits. And our teams have done a terrific job this calendar year in working with the municipalities as the processes have had to change without slowing down our ability to deploy the infrastructure that's so critical for our customers.

So it has absolutely changed in the operating environment in terms of how the blocking and tackling of gaining a zoning permit, how does that happen. It's absolutely changed, but our team has done a terrific job of navigating through that and getting to the place where our ability to deliver for customers was unaffected.

Philip A. Cusick JPMorgan Chase & Co, Research Division - MD and Senior Analyst

Can I follow up on the small cell side? You mentioned filling those sites in a different way and maybe again in '22. What's the conversation level like with carriers? Do you have more sort of major backlog discussions that things that aren't signed yet aren't in the backlog but maybe to the tune of this Verizon deal?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

So I think what I'd speak to is we're constantly having conversations about the network and the opportunity for us to provide the infrastructure to them, both on the tower side and on the small cell side. And the dynamics that are in the market today in terms of the spectrum deployment, the growing demand for data, the obvious need for the carriers to continue to invest in their network to meet that growing demand for data are leading to conversations that give us confidence that we'll be in and around that pacing of about 10,000 small cells per year.

One of the things -- just thought might bring up in terms of making parallels to the history and passage of time of small cells and towers. If you think back over the last 20 years of the tower business, the commitments that have been made by the carriers and that have been announced when they commit to a number of new installations or new sites with us, those commitments help establish protocols that enable us, both sides of the agreement, to work collectively and easily through the deployment cycles. And the establishment of a number, like in the case of the Verizon commitment of 15,000 small cells, it enables both parties to set up some ease of doing business together that, frankly, just make it easier for us to go through the process of deploying infrastructure for them.

The same thing has been true on the tower side. But if you zoom out and think about the last 20 years, the same thing was true on the tower side. The carriers, over time, have made commitments to us for a certain number of new sites that they'll co-locate on or that we'll build for them, but those are a fraction of the overall tower activity that they ultimately did with us.

I think the same thing is true on the small cell side. So commitments by the carriers are helpful. I think they're helpful data points for investors to look at and to see that there's commitments by the carriers towards future deployment. But our expectation is that this is more the start of the floor of the activity and that the business will follow more the pattern of the history of the tower business where it establishes the ability for the companies to do business relatively easily. But ultimately, the amount of sites that gets deployed will be far in excess of the sites that just show up on commitments that are talked about in grand scale.



And that's the nature of the type of business that we're doing, where this is really a local business. So working with the local markets at each of the carriers to ensure that we're providing an infrastructure solution that meets their need at the local market area is really how we transact with our customers. And some of these agreements, like the one with Verizon, enabled that to happen more easily.

Operator

And next, we'll go to David Barden with Bank of America.

David William Barden BofA Merrill Lynch, Research Division - MD

Two, if I could. So we've talked a lot about the capacity limitation for the small cell build in terms of incremental nodes. If you look at the glide path of revenue growth in '20 from the first quarter, 18% to the jumping-off point 13% range for fourth quarter, what are the levers that you can pull if you can't pull the volume lever to get to the kind of 15% growth target that you guys talk about? Is that bottleneck in terms of deployment actually may be an advantage for you guys to lever in terms of initial yields? If you could talk about that.

And then the second question was, you evolved on a ton of work on DISH and what they might be doing with open RAN and then beating that to death. But one of the things that has come up in that is that there's this new generation of multi-beam antennas that have much broader range than normal, and that's what DISH's intention is in order to exploit a pretty diverse spectrum portfolio. Do you see any line of sight to the possibility that the carriers are kind of forced through the C-Band process, simply that every one of their towers to kind of come back and maybe economize on their footprint on a tower?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

You bet. Dave, as you know, I think my comments around the pace thing probably still hold. I'm not sure there's much more to add there in terms of we think we're going to be building about 10,000 per year. The places where we could increase the pace of that building would largely be around gaining municipality approvals, permits. And I don't see anything in the current environment that would suggest the pace at which we're doing that would increase or decrease meaningfully from the current operating environment. But we're going to continue to work at it and see opportunities. To the extent that we get kind of a breakthrough there and that changes, we'll obviously let you know.

The other thing I would just mention about this is that the amount of revenue that are -- is added site rental revenue that comes online from small cells is based on the return profile of the systems that we're building or that carriers are deploying on, so there can be pretty significant variance in terms of what those revenues look like on a per-node basis based on the environment in which we're putting those nodes into and what the underlying costs associated with that deployment is.

We think about pricing small cells much more on a return basis rather than just the price per node. It's driven by what our returns are. So that may be part of what causes -- as you kind of do the math and think about it, that's probably the -- one of the places that I would point to is maybe a little bit of a difference in the way that we think and as we're operating the business.

On your second question around DISH and the antennas and how do the carriers economize their network, I think the carriers will continue to use technology to reduce the amount of cell sites that are ultimately needed or antennas or lines that are ultimately needed on infrastructure. It's a way of reducing their deployment costs for deploying sites. And we've seen that happen over a long period of time. I know there've been a number of studies that have talked about how the use of next-generation antennas over time have increased the ability for the carriers to cover a particular location. We've talked about MIMO antennas and the benefits of those of reducing some of the deployment costs.

And I would expect the carriers will continue to be really thoughtful about how they allocate the capital and use technology to reduce the cost of those deployments. And ultimately, that adheres to our benefit. As they reduced the actual cost to deploy, it enables there to be more capital for them to deploy additional sites. So it's synergistic in terms of the densification process that they use technology to reduce the costs. They're able to put more of that capital into densifying their network, which obviously a (inaudible) benefit.



David William Barden BofA Merrill Lynch, Research Division - MD

And Jay, if I could just follow up on your earlier comment. So is it -- is the law of large numbers spend simply going to grind down the rate of growth in small cells?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

I would look at, big picture, we spent some time talking about top line growth in the business, but we're much more focused around at the bottom line, what do we think we can deliver for shareholders? And that growth in dividends of 7% to 8% per year per share, we think we can do that over a long period of time.

Obviously, the law of large numbers is at play in our business because it's a fixed asset that's put in the ground. And then upon which, we start to add co-location and growth. And when we have one tenant on them and add the second tenant, the revenue grows by 100%. And then when we add the third tenant, the growth rate on that individual asset is much lower than it was when we added just second tenant.

So absolutely, the path that has been followed by towers will be followed by small cells where the growth rate comes down. But growth rates don't ultimately drive the value in our business. It's about the return on the invested capital that ultimately adheres to the benefit of shareholders. So our focus around where we're investing the capital and where we see the growth opportunities are about expanding those returns across that investment base and the assets that we own. So yes, at the top line, it will come down over time, but that doesn't necessarily parallel to the growth and the returns that we ultimately achieve by the -- through the asset investments that we've made.

Daniel K. Schlanger Crown Castle International Corp. (REIT) - Executive VP & CFO

And David, this is Dan. Let me just add one thing. Jay mentioned this earlier. We believe that, over time, we're going to see more demand than this. And so you can say that at a constant level of 10,000 a year, the growth rate would go down because of the law of large numbers. But it's not our anticipation that 10 years from now, we're going to be putting 10,000 nodes per year on air. We anticipate that number will be significantly higher. So the transition Jay is talking about like what happened with towers from a higher growth rate to a lower growth rate will happen, and it will just take a really long time because we think that we're at the very beginning of the 5G investment cycle, and this is a decade-long investment that is going to be required to meet the demands that are coming. And a lot of that's going to go to small cells, and we're just now seeing the beginnings of that.

Operator

Next, we'll go to Jon Atkin with RBC.

Jonathan Atkin RBC Capital Markets, Research Division - MD & Senior Analyst

So a couple of questions. On DISH, you talked about second half's activity. And I just wondered about -- from a revenue recognition standpoint, do you see that commensurate with completion of site construction? Or is the timing dictated more by kind of higher-level MLA considerations?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Jon, it's going to show up in our revenue as they deploy the site. As we identify the location and then they deploy those sites, then the revenue will start to run through our site rental revenues. So the impact we would expect will be relatively limited in our 2021 financials, and then we'll just have to see -- as we give guidance for '22, we'll update that as we get further along. But the impact to the site rental revenue specifically will be tied to the actual deployment schedule.

Daniel K. Schlanger Crown Castle International Corp. (REIT) - Executive VP & CFO

Yes. And Jon, we tried to talk about this the last time we had a discussion around DISH. But it's a little odd that we have a contracted payment that we have with DISH that's going to come. We won't recognize that until we identify those sites because you have to have a lease, which is a single site, before we can start recognizing site rental revenues on a lease. So we have contracted payments, but what will happen and run through the income statement will be very much associated with the activity that we see from DISH on a site-by-site basis.



Jonathan Atkin RBC Capital Markets, Research Division - MD & Senior Analyst

On the small cells with Verizon, I just wondered the -- does that commitment incorporate small cells that were already in your sales pipeline from that customer? Or is it additive?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

It's additive. So there are small cells that are in the pipeline doing with them that would not be included in that 15,000 commitment.

Jonathan Atkin RBC Capital Markets, Research Division - MD & Senior Analyst

And then lastly, on headcount. There's quite a lot of job openings on your website, and a lot of them seem to be kind of field-related roles related to fiber and network and so forth. And so I just want to get a sense as to kind of what the trajectory is to expect? And are we seeing kind of realignment in the type of role within that segment? Or what explains kind of the reductions that you saw but also the fact that you seem to have quite a lot of openings in that for the same segment.

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Sure. From a big-picture standpoint, as you think about building your model and where our financial results are, I think the operating expenses that we've disclosed would be our view for 2021. And I don't frankly see based on the comments that I was making around pacing, I don't really see any change to that. We're constantly making sure we have the right talent in place. And depending on the markets that we're operating in and where we're deploying activities for customers, we're going to need to make sure we have the right resources in those markets for that kind of activity. So I wouldn't point to anything relative to your question that I think changes the financial outcome or the economics of the business.

Operator

Next, we'll go to Walter Piecyk with LightShed.

Walter Paul Piecyk LightShed Partners - Partner & TMT Analyst

Jay, I think a couple of years ago at one of the conferences, we talked about kind of this establishing your fiber position and waiting for this inflection point to really get the returns on the fiber business. And we talked about like tens of -- hundreds of thousands of small cells sale. I'm just looking at this Verizon deal. It took 4 years for I think it's whatever it is, 15,000 sites. The scale just doesn't seem to be there, and that's a 4-year commitment. When do you think this inflection point is going to happen?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Well, I think I would point to the Verizon agreement again to some of my earlier comments. I think it represents a significant investment on the case of -- by Verizon. It's the largest in our company history in terms of the commitment by any customer to us. So from a scale standpoint, it would point to sort of a meaningful increase or inflection point, as you described it, from what we've seen historically.

I think that -- and I made these comments a little bit earlier around thinking about the Verizon agreement is more of a floor than a ceiling, but the agreement is also a significant investment commitment of capital on our part.

And as you know, when we invest for these multiple -- as we invest -- make those investments, we're thinking about multiple carriers that are ultimately going to need these sites in order for us to make those investments. And we're not going to do all of the small cells in the market. So there are going to be locations, markets, where, frankly, the growth in small cells are not going to align with places where we think there will be multiple carriers. And so we're not going to do it all. And the carriers need flexibility when they make commitments to be able to go out and build where they're -- they have need but in places where our -- we don't think our returns are going to align with that. And when that happens, then they'll either use another third party or they'll build it themselves.

So I think there will be -- as Dan was speaking to a moment ago, I think there will continue to be growth over a long period of time, and we will see increasing numbers of small cells. And I think the Verizon agreement is sort of a first step towards the benefit that's going to come with 5G and the increased need for small cells. And I think you'll see -- you are going to see, I believe, millions of small cells



ultimately in the U.S. market. And we'll get our share of those in places where we own the fiber, but there's also going to be lots of places where the carriers decide to do it themselves. And some of that will be because, frankly, we don't see the opportunity to put capital to work at risk-adjusted returns that make sense for our shareholders.

Walter Paul Piecyk LightShed Partners - Partner & TMT Analyst

So why don't you think Verizon would have, at the time, if I'm understanding the agreement correctly, use the opportunity of a negotiation to also secure small cell locations that are co-locations on top of -- -- it sounds like all the 15,000 is -- are going to be tied to CapEx. I mean it would seem like if you're going to do a 4-year agreement, especially that long period of time, kind of like you would have a master lease agreement that you'd also secure rights or commitments to doing some level of colo, which shouldn't seem to be the case here.

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

No. Please don't take my comments to be inferring that we're going to build all anchor nodes for them. That's not the case. The locations haven't been identified, and I would expect that portions of these will be co-locations on existing systems. It makes their deployment faster and...

Walter Paul Piecyk LightShed Partners - Partner & TMT Analyst

Right. So that's actually my initial point where that's like the aggregate amount. And some, you will get additional tenants on. But some, it is the additional tenants.

Let me just try the question one more way. Forget about law of large numbers. Again, I realize that the small cell opportunity is massive over time when it comes. But if you only add, again, a certain number of nodes every year, by definition, the law of large numbers kicks in. So is there a time frame when you would think that the 15,000-or-so nodes that you're activating per year, whether co-location or newbuilds, inflect up to something more meaningful like 50,000?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Well, I think it's relative to the investment base and relative to the number of assets and markets that we own. The business -- I mean just stepping back from it. And it's a good question to say, "Okay. At what point do you ultimately get the returns in the business?" And I think a couple of quarters ago, we went back and walked through kind of what we saw on the tower space.

It took us nearly or like I think a little over 10 years just to get to the point where we were clearing the cost of capital on the tower side from a return standpoint. This is a business that's marked by making sure we get the right locations early and then, over time, incrementally growing those returns.

And there's nothing that I see in the small cell business that would say our yield on invested assets from a fiber standpoint is north of 7% today, and it's basically right around where our blended cost of capital is. And I don't see anything on the horizon that would suggest to me that we're going to market -- see a significant increase in the yield in that capital.

What I do think will happen over a long period of time through operating the business well, adding co-locations is we'll incrementally increase that yield over a long period of time, such that when we look back after 10 or 20 years, we look at it and see the benefit of the investment that we're making, which is really incumbent upon us then as we think about where do we put the capital, we're trying to align that with the places that are most likely to need that lease-up over a long period of time in the exact same way that we did it with towers.

And as we talked about a couple of quarters ago, as we took a deep dive into certain markets, then we'll update that again and the midyear of 2021. As we go down to the market level and to the asset level, we can see it playing out exactly like that, where in certain markets where the investments are really new and early, the yields on the invested capital are relatively low. In markets where we've been in for a long period of time and the assets have started to see the co-location, then the returns that you're asking about start to come to fruition.



Big picture, the entire pie of opportunity, we think, directionally, is going to increase over time. And if you ask my really long view, then, yes, I think there is going to be a day when we're doing meaningfully more small cells than what we're doing in the calendar year. But then we'll have to look at, "Okay. What's the appropriate capital base against that?" And as time passes, then we'll update you on what that looks like and where the opportunity is.

Operator

And next, we'll go to Nick Del Deo with MoffettNathanson.

Nicholas Ralph Del Deo MoffettNathanson LLC - Analyst

You hit on everything substantive I wanted to ask. Just thought maybe one accounting question for Dan. Maybe can you break out how the \$76 million in incremental OpEx related to nontypical items was spread between the various line items?

Daniel K. Schlanger Crown Castle International Corp. (REIT) - Executive VP & CFO

Sure, Nick. Happy to. It's about \$25 million in cost of sales, about \$10 million that impacted service gross margin and around \$40 million in G&A.

Nicholas Ralph Del Deo MoffettNathanson LLC - Analyst

Okay. And the G&A, how much of that was segment level versus unallocated overhead?

Daniel K. Schlanger Crown Castle International Corp. (REIT) - Executive VP & CFO

I would say about half-and-half, segment and unallocated overhead.

Operator

And next, we'll go to Spencer Kurn with New Street Research.

Spencer Harris Kurn New Street Research LLP - Analyst of Towers and Infrastructure

I just had a question. I was a little bit curious Verizon signing a big small cell deal combined with T-Mobile, Sprint small cell deal at the same time. On the T-Mobile cancellation, was there an opportunity for them to repurpose those 5,700 small cells that Sprint had contracted with you for other locations? Or was there another reason why that small cell contract ended up being canceled and repaid?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Yes. Spencer, thanks. I think that's probably a question you should ask T-Mobile. They gave us notice that they wanted to cancel the nodes at the end of late last year, and so we just worked through it with them. But in terms of their rationale or their reasoning for doing that, I'd let them speak to that.

Spencer Harris Kurn New Street Research LLP - Analyst of Towers and Infrastructure

Okay. Understood. And just one more, if I may. In the past few months, you've signed 2 large, long-term leasing deals, one with DISH and one with Verizon. My question is are these deals in any way a function of a shift in your selling strategy, maybe from negotiating leases on a site-by-site basis to taking a more holistic approach to your portfolio?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

I think they are different in one respect. They're different because of the actual dynamics that are occurring in the market in the situations that the customers are in with the assets.

In the case of DISH, they have no existing infrastructure or they're not on any meaningful number of tower sites in the market. So they're deploying a nationwide network, and it is helpful and cost-effective for them to pick an anchor provider upon which they design their entire network around. They chose Crown Castle to do that, we believe, in part, because of the quality of our tower assets as well as our ability to deliver fiber transport services to them. And that means that they're anchoring or building, designing their network around our sites. We think that creates a significant opportunity for us, both in the near-term years to come, but also over the long term, as they deploy that network.



I can't think of another example in the last 15 years where a carrier, from scratch, was looking at deploying a nationwide network. So I think the basic idea of having to deploy a network from scratch drives the need to pick an anchor provider and then work closely with them, and we're obviously pleased to be their partner and working hard to deliver on their expectations of getting their network built.

In the case of Verizon, again, I would point to some of the comments that I made before that whenever there's a commitment of size like this and obviously the largest one we've ever done with a carrier with Verizon this quarter that we're announcing, this creates, really, an opportunity for us to work together through some of the operating protocols to make sure that we're able to work together well. And the commitment and size enables us to go do that work together as to how we're going to work together. And we think it's a good start for the deployment of 5G small cells, but it's just to start and think there will be more to come. I think there will be some operating benefits going through this for us and then ultimately the returns as we both co-locate those nodes on existing infrastructure and then deploy capital to build anchor nodes for them in places where we think there will be future returns.

Operator

And next, we'll go to Brandon Nispel with KeyBanc Capital Markets.

Brandon Lee Nispel KeyBanc Capital Markets Inc., Research Division - Research Analyst

I'm curious if you could just comment on the pacing of 3G network shutdowns and the impact that churn could have on your business. I know some of your customers have sort of delayed and pulled forward both 3G network shutdown?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Yes. Brandon, similar to history, as the carriers transition from the current generation, whatever that is, to the next generation of infrastructure, they go through a process of going through their network, generally starting in the most urban densely populated areas, converting those networks into the new generation, in this case, converting towards 5G, and then over time, moving themselves out from that core to more rural locations.

And the carriers have been in the process of converting 3G networks into 4G networks for better part of the last decade. And I think as we build out 5G, that will be at least a decade-long process would be our estimation. And you'll see the carriers continue to convert legacy 3G into either 4G or maybe skipping a generation and going directly to 5G. The sites upon which they were previously, we would expect those will be largely repurposed into the next generation of communications infrastructure.

Operator

We'll move to the next question. Next, we'll go to Tim Horan with Oppenheimer.

Timothy Kelly Horan Oppenheimer & Co. Inc., Research Division - MD and Senior Analyst

So Jay, do you think ultimately the mid-band spectrum we need like twice as much cell sites as we would given the limitations on physics? And can you talk about what type of ARPU risk you would expect as they upgrade each one of these cell sites? I know there's a million moving parts. The antennas are smaller, that there's MIMO in it, maybe they're deploying C-RAN with it, but just rough idea on both of them.

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Yes. Ultimately, the number of sites that will be needed will be a function of what's the growth rate of traffic and demand from a wireless standpoint. I think the table that we put into the presentation is helpful because it shows directionally the move and the need for investment towards site densification. How much site densification ultimately happens I think will be a function of what's the growth rate in data. And under, I think, any scenario that you could come up with, we feel really good about where we're positioned against that growth rate and think that we'll be able to continue to deliver on our long-term target of 7% to 8% per year growth in our dividends per share.

On your second question around ARPU, I think I'd defer that to our customers and let them speak to what they see as the revenue opportunity per user as the spectrum bands get deployed and built out.



Timothy Kelly Horan Oppenheimer & Co. Inc., Research Division - MD and Senior Analyst

Well, I was referring a little bit more how much revenue you could get per cell site for upgrades roughly. I mean the antennas are a lot smaller, and it's much less money than a 600-megahertz upgrade to do a 3.5. Or any thoughts around how much more they have to spend per site?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Sure, Tim. As they deploy the spectrum, sometimes we'll see on a tower site, based on traffic or usage that -- or need that they have, they'll deploy a full installation. And that may be 9 antennas and lines or more. And occasionally, we'll see it more in the form of an amendment where they're swapping out antennas, increasing size of antennas, and it's really a site-by-site decision that the carriers are going to make. So being really specific as to what the opportunity of dollars per site will ultimately be for us is probably more precise than we're able to be.

But directionally, in terms of return on assets, both on the tower side and on the small cell side, I think the deployment of these spectrum bands enables us to increase both our revenues and gross margin at the per-site level and then most importantly increase our yield on assets over time as we lease up the assets.

Operator

Next, we'll go to David Guarino with Green Street.

David Anthony Guarino Green Street Advisors, LLC, Research Division - Analyst of Data Centers and Towers

I just want to follow up. I think it was on a question Spencer had asked. Could you guys give your view on T-Mobile's activity on the small cell leasing side over the next few years? And the reason I asked is just trying to understand the rationale for making a large upfront payment today rather than just amending the contract, assuming that was an option.

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Yes. David, we really don't like to speak to our customers' deployment plans. Let them -- we want to let them speak for themselves around why they make the decisions that they make around network investment and view. These sites that they canceled were locations where T-Mobile is going to have small cells, and I believe they just thought they didn't need the Sprint co-locations in those same locations. But beyond that, I think that's really just a question for them to speak to the way that they were thinking about their network over a longer period of time.

David Anthony Guarino Green Street Advisors, LLC, Research Division - Analyst of Data Centers and Towers

Okay. That's helpful. And then on the Verizon deal, just circling back to that. Do you guys anticipate needing to make additional investments in fiber? Or was the agreement specifically for small cell nodes on top of the fiber you guys have already laid? And then depending on the answer to that question, is there any change to your discretionary CapEx guidance for '21 that you provided last quarter?

Jay A. Brown Crown Castle International Corp. (REIT) - President, CEO & Director

Sure. On the first question, there will be some places where we need to build some additional fiber for them as a part of the capital that we'll spend on their behalf to extend the network. There'll be other places where they'll be able to co-locate on fiber that we've already built or acquired.

In expanding out your question, just broadly, I would say it does not change our view around acquisitions or the -- or our interest in those acquisitions. I think from this point forward, the vast majority of what will happen in the space will really be organically built rather than acquisitions. And I think our capital and investments will be focused more around those organic builds rather than looking at acquisitions in the market, even though some capital will be expended on -- and needed for the Verizon deployment of small cells.

Thanks, everyone, for joining this morning. And I just want to give a shout-out to our team one more time. Thanks for all the work that



you did in 2020 to deliver for the customers. Obviously, a really challenging operating environment, but you all did a terrific job delivering for them and providing great returns for our shareholders. So thanks to the team, and thanks, everyone, for joining the call this morning. Talk soon.

Operator

And that does conclude today's conference. We thank you for your participation. You may now disconnect.

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