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# Opportunity Awaits in the Rural Wireless Tower Business



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## Key Points:

- Rural wireless service is emerging as a growth opportunity for wireless operators and as such, network expansion in these markets is on the rise.
- T-Mobile has aggressive market share growth expectations driven by densifying and expanding its rural network with its 2.5GHz spectrum.
- More than \$42 billion in broadband grants are up for grabs in rural America, with some of this money going to build new fixed wireless networks in high cost and ultra-high cost areas.
- Rural communication operators are well positioned to support these efforts by building wireless towers, leveraging their local knowledge and access to local resources.
- Stable cash flows and extremely attractive valuations make the rural wireless tower industry profitable. Additionally, rural towers are ideal edge computing locations which provides cash flow and valuation upside.

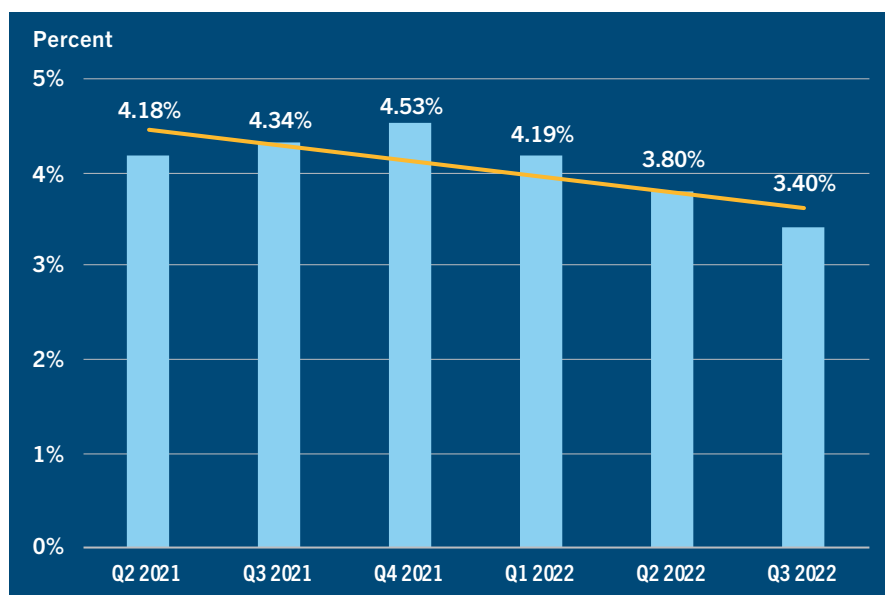
## Introduction

Providing wireless coverage in rural America has not been a priority for the national wireless operators as the limited market opportunity didn't justify the cost to provide "urban like" coverage in remote parts of the country. However, that is shifting for a number of reasons. Postpaid subscriber growth, which represents the bulk of wireless subscribers and carry the highest valuation from investors, while still outpacing the population growth, is starting to show signs of slowing down. And the market is becoming more competitive with cable operators' foray into the market (*Exhibit 1*). Demographic shifts driven by the pandemic are also playing a role as people move from large urban markets to rural and suburban markets. This is creating an opportunity for rural communication operators to enter the lucrative wireless tower business.

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## EXHIBIT 1: Wireless Carriers' YoY Postpaid Subscriber Growth is Declining



Source: S&P Capital IQ

In this report we look at some of the underlying drivers behind the growing wireless footprint in rural America, and the rationale for why it makes good business sense for rural communication operators to become wireless tower owner/operators.

### National wireless carriers move into rural markets

#### T-Mobile

T-Mobile is aggressively targeting the rural market and plans to increase its market share to 20% by 2025, up from approximately 15%. And these market share gains, in part, will be driven by its network expansion that will increase demand for rural towers. T-Mobile's network footprint had doubled by the end of 2022, covering approximately 60% of the households living in small and rural cities, up from 30% a year ago. The company has further network expansions planned as well.

T-Mobile plans to deploy 5G over its mid band 2.5GHz spectrum in rural markets to complement its existing 600MHz spectrum. T-Mobile walked away the big

winner from the recent 2.5MHz auction where it acquired over 7,100 licenses covering over 2,700 counties, many of which are in rural America. And from a network perspective, the 2.5MHz band will require a denser configuration versus the 600MHz band given its inferior propagation characteristics. A denser network configuration equals more wireless towers.

Fixed wireless is a major focus for the company in rural America. In fact, the chief marketing officer stated that one-third of its second quarter fixed wireless gross additions came from rural America where T-Mobile

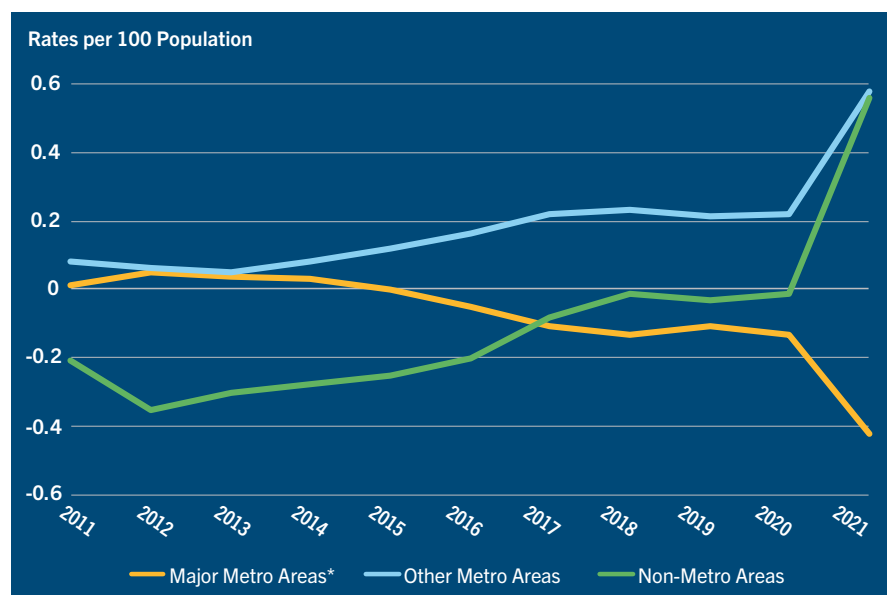
was the only high speed broadband option. T-Mobile has set a goal of acquiring 8 million fixed wireless subscribers by 2025, with a sizable chunk coming from rural markets. Note that offering fixed wireless on a mobile network by itself has minimal impact on deploying new towers, but it could increase the amount of equipment that is placed on a tower, which is a new revenue opportunity for tower owners.

#### AT&T and Verizon

The big driver behind AT&T's efforts in rural America is FirstNet (First Responder Network Authority), a federal entity created to establish, operate, and maintain an interoperable public safety broadband network. AT&T won the government contract to build the FirstNet network and is finishing up its network build in remote parts of the country. This has given AT&T a big competitive advantage in rural America as the company claims that its network is now 50,000 square miles larger than the largest commercial network. And while AT&T's FirstNet build does not necessarily represent a major growth opportunity for the rural tower industry (most of which has been

## EXHIBIT 2: Americans Are Migrating Away From Major Metro Areas

### Annual Net Domestic Migration



Source: The Brookings Institution, William H. Frey analysis of U.S. Census Bureau estimates released March 24, 2022

\*Metro areas with populations exceeding 1 million

built), their expanded network build is clearly garnering a competitive response from T-Mobile, and appears to be getting Verizon's attention as well.

Verizon bought rural wireless operator Triangle Mobile in 2021, which is the latest rural operator Verizon has acquired following agreements to acquire Bluegrass Cellular, Chat Mobility and Blue Wireless. These acquisitions suggest that the rural market is becoming a bigger priority for Verizon, which has recently struggled to acquire new postpaid subscribers.

Another factor in the mix is rising domestic migration to non-metropolitan areas, further fueling wireless interest in rural markets. COVID-19 and the trend to work from anywhere has been the driving force. Cities with a population of 1 million or more are seeing migration outflows while smaller cities and rural areas are seeing inflows (*Exhibit 2*). These migration trends increase the market opportunity for wireless operators, which will translate into them densifying / expanding their networks – both of which are positive developments for tower owners.

## BEAD program

A total of \$42.5 billion in broadband grant money from the federal Broadband Equity, Access, and Deployment (BEAD) program is up for grabs for rural communication operators, which will create opportunities to build new wireless towers. Most of this money will go towards building fiber networks in unserved and underserved areas, but for areas that are deemed high cost or ultra-high cost, fixed wireless will likely play a role. These are areas where the cost to deploy fiber-to-the-home is not justified due to factors such as low population density. Fixed wireless access networks have a lower cost per passing versus fiber, making them an ideal solution to

connect those living in unserved areas. And by virtue of the fact that they are unserved, it's unlikely any tower infrastructure currently exists.

## Rationale for tower business

Owning wireless towers is a relatively low risk business with stable cash flows. The lease agreements are long term (think 10 plus years) and the lessors are high-quality tenants who pay their bills. Maintenance is minimal; if new equipment compromises the integrity of the tower, it may need to be reinforced. For rural telecom operators, the tower industry offers an attractive new source of revenue from a stable business. Rural telecom operators have the benefit of local knowledge, access to resources and relationships with city officials that can help streamline the building process.

With their remote locations and established connectivity, wireless towers can also double as edge computing resources. New applications that require low latency network performance are one of the driving forces behind

**EXHIBIT 3: Basic Rural Tower Valuation**

|                                   |                              |
|-----------------------------------|------------------------------|
| <b>Annual Cash Flow</b>           | <b>\$22,000</b>              |
| <b>Today's Cash Flow Multiple</b> | <b>x 30</b>                  |
| <b>Valuation</b>                  | <b>= \$660,000</b>           |
| <b>Cost to Build Tower</b>        | <b>- \$500,000</b>           |
|                                   | <b>= Equity of \$160,000</b> |

Source: CoBank estimates

edge computing. Cost is another factor as being able to transmit data to an edge location versus the cloud can reduce data transmission fees. The value proposition of edge computing is well documented, but one of the challenges is building the infrastructure to support it. Wireless towers are emerging as an ideal configuration for edge computing as the incremental cost to offer the service could be limited to installing a new cabinet and the necessary service equipment. And in remote parts of the country where access to buildings with fiber and power is limited, wireless towers would face little competition.

From a valuation perspective, the story gets even better. On average, tower assets in rural America have valuations in excess of 30x free cash flow, which have come off their recent highs given the increase in interest rates. With the high amounts of leverage in the business, tower valuations have an inverse relationship with interest rates: Higher interest rates increases debt payments without an offsetting increase in rental rates.

To make the business case pencil out, only one wireless operator tenant is usually needed. Tower owners can expect to generate \$20,000 – \$24,000 in annual cash flow from a single tenant tower, and assuming the cost to build the tower is \$500,000, owners build instant equity with today's valuation (*Exhibit 3*). The important point here is that it's not necessary to own a portfolio of towers that requires millions in capital to build. Owning just one tower can be a very profitable investment.

Creative and forward-thinking operators have opportunities beyond simply providing a structure for wireless operators to install their equipment such as financing the cost of the radio access network equipment (RAN) for a wireless carrier tenant. This type of off balance sheet arrangement enables the carrier greater cash management flexibility. We note that AT&T recently entered into a joint venture with Black Rock to build new fiber networks,

so perhaps these types of financing arrangements may start to gain traction across the industry. Having a deeper strategic partnership via RAN financing could lead to more opportunities for rural operators.

Lastly, the national wireless operators would like to see more tower owners enter the market as it limits the large tower operators' market leverage. Therefore, would-be tower owners might find the national operators receptive to their efforts to enter the market. Of course getting a deal done with a national operator is no slam dunk. Rural communication companies looking to build towers for national operators should leverage their existing relationships as much as possible. For some companies, a logical path might be to parlay a wholesale fiber relationship into a tower opportunity.

### Summary

The flow of government grant money and the national wireless operators' thirst for growth is creating opportunities for rural communication companies to enter the lucrative wireless tower market. Rural operators have the advantage of local knowledge and access to local resources to efficiently build wireless towers. And given that the national wireless operators are looking to manage the large national tower companies' market leverage, the path to becoming a partner to these companies has gotten a little easier. Even as interest rates rise, rural tower valuations are extremely attractive and the cash

flow from just one tenant can generate instant equity with today's valuations. Rural towers can also double as an edge computing location, which provides upside to cash flow and valuation multiples. Opportunity awaits for rural communication operators to diversify their business with steady cash flows from a stable business model. ■

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