Rural vs. Urban: Examining Residential Broadband and Access Line Trends 2008

A Pivot Media Market Report

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Executive Summary

The days of hyper broadband growth may be behind us, but understanding the growth of broadband, in both urban and rural markets remains quite relevant, especially in the context of the broadband stimulus portion of the American Recovery and Reinvestment Act of 2009. This report analyzes the rate of broadband growth and penetration across the U.S. in calendar year 2008 and compares and contrasts those metrics between urban and rural markets.

Without question, broadband remains the most important factor for the future of wireline telecom service providers. Indeed the transition of 'local service' from a primarily voice centric product to a broadband product is already well under way. Regardless of company size or geographic footprint, today's telecom carrier faces unprecedented change in their core business. The stark reality suggests that the acceleration in access line loss can only be addressed through growing broadband penetration. The stakes are high and the new competitive environment guarantees no winner will be easily crowned in the broadband battle between telco, cable, and wireless. Yet it is a battle that no credible service provider can afford to lose. Broadband is the future of the business – those who execute well against it will have a bright future.

For the purpose of this market report, we analyzed broadband growth and access line loss from both tier 1 carriers including AT&T, Verizon, and Qwest (identified as 'urban carriers' throughout the remainder of the report)[1], as well as leading independent rural carriers (identified as 'rural' carriers' throughout the remainder of the report). The rural carriers analyzed in this report include:

- Alaska Communications
- CenturyTel
- Consolidated Communications
- D & E Communications
- Embarq
- Fairpoint
- Frontier
- Hickory Tech
- Iowa Telecom
- nTelos
- Otelco
- TDS
- Windstream

[1] AT&T, Qwest, and Verizon serve rural territory in addition to their urban markets, but for the sake of this analysis, we classify them as urban broadband providers since broadband line counts in their urban markets represent a super majority of their total broadband line counts

The data used for this analysis was obtained from quarterly financial reports of these identified companies. Additionally we analyzed data reported by the National Exchange Carrier Association (NECA), the administrator of the interstate access charge plan for rural tier 3/4 telecom carriers.

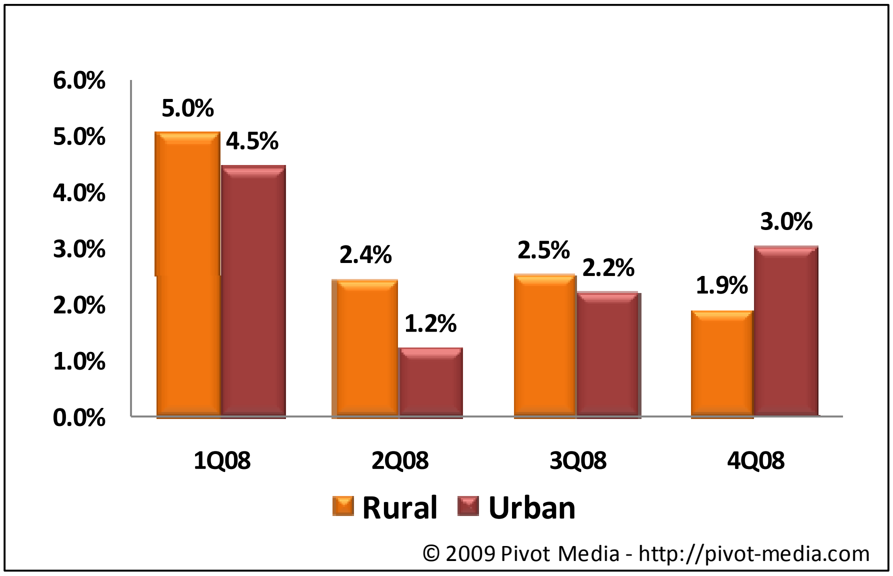
Key findings from this analysis include:

- Rural telecom carriers enjoyed slightly better sequential broadband growth in 2008 than urban carriers.
  - In 2Q08, broadband growth slowed significantly for both sectors, but rural carriers enjoyed roughly a two-to-one sequential rate of growth over their urban counterparts in the period.
  - While demonstrating slower growth rates than rural, urban carriers still dominate actual broadband net adds. For example, total net new 2008 residential broadband adds for all the rural carriers examined in this study combined for 465,000, which represents roughly one-third of just Verizon's 1.6 million net new residential broadband adds.
  - Urban residential broadband growth rebounded in 4Q08, outpacing rural residential broadband growth by over 60 percent.
- Of the 496,000 net new Verizon residential broadband adds in 4Q08, 57 percent of them were new Verizon FiOS Internet subscribers.
- Year-over-year (YOY) residential broadband growth rates for rural carriers have slowed each quarter, from 26 percent in 1Q08 to a 4Q08 12.4 percent growth factor that roughly mirrors urban carrier growth trends.
  - Among rural providers, CenturyTel and nTelos saw the most precipitous decline in YOY growth throughout 2008. CenturyTel peaked in YOY growth during 1Q08 at 42 percent but ended the year in 4Q08 at 15.5 percent, a decline of 170 percent.
- There is a disparity in the intensity of residential access line loss between rural and urban carriers.
  - Urban carrier sequential residential line loss improved by 12 percent in 4Q08, compared to only 4 percent for rural carriers.
  - Urban carriers lost 10 percent of their access lines between 4Q07 and 4Q08, while rural carriers lost 7.14 percent.

Sequential Broadband Growth

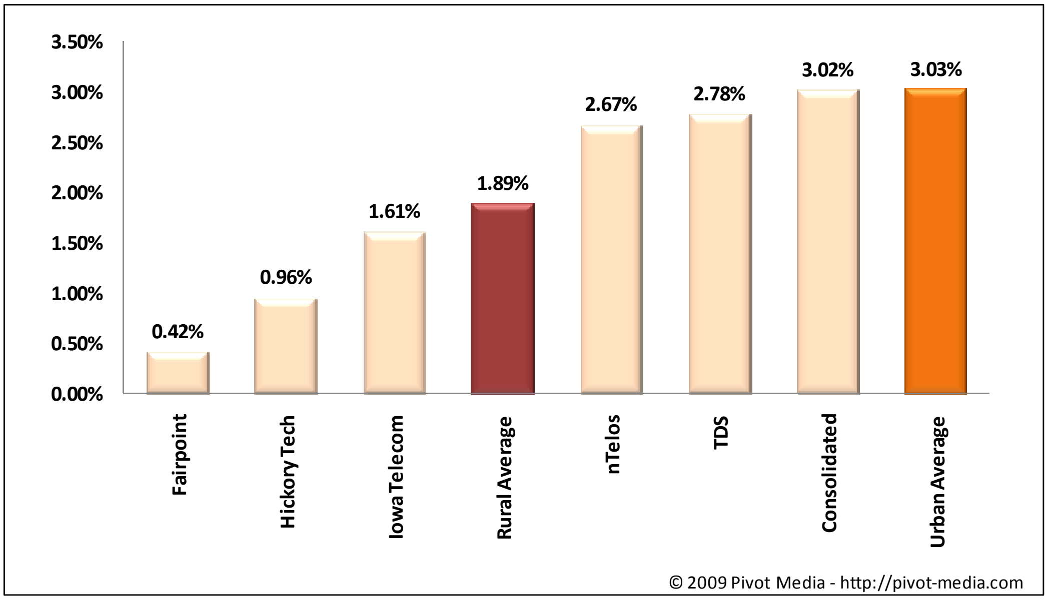
Broadband saw continued, albeit inconsistent, sequential growth (quarter to quarter) in 2008 for both rural and urban carriers.

Figure I – 2008 Sequential Residential Broadband Growth



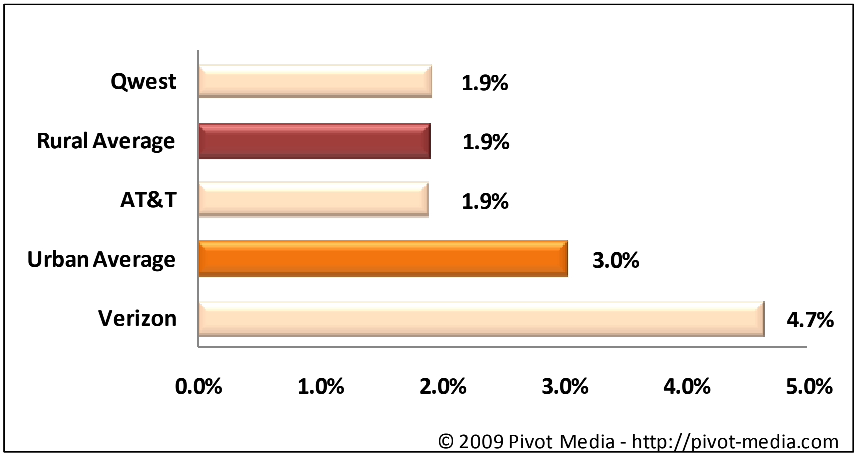
As Figure I above illustrates, rural carriers enjoyed slightly more growth than urban. Pivot attributes these higher rural growth rates to the fact that penetration of broadband in rural markets still lags urban, providing more room for growth. It's been well documented that broadband growth slowed significantly in 2008 compared to previous years. This assertion is supported by data illustrated in Figure I. In 2Q08, broadband growth slowed significantly for both sectors, but rural carriers enjoyed roughly a two-to-one sequential rate of growth over their urban counterparts in the period. Urban broadband growth rebounded slightly in 4Q08, due in large part to Verizon and their success with FiOS Internet, but also as a result of aggressive marketing and price cutting for DSL services from all three urban carriers. While demonstrating slower growth rates than rural, urban carriers still dominate actual broadband net adds. For example, total net new 2008 residential broadband adds for all the rural carriers examined in this study combined for 465,000, which is less than one-third of Verizon's 1.6 million net new residential broadband adds.

Figure II – 4Q08 Sequential Rural Residential Broadband Growth



As outlined in Figure II above, during 4Q08, Fairpoint, Hickory Tech, and Iowa Telecom exhibited slower growth than the rural industry average, while nTelos, TDS, and Consolidated exhibited higher growth. As mentioned previously, urban residential broadband growth rebounded in 4Q08, outpacing rural residential broadband growth by over 60 percent.

Figure III – 4Q08 Sequential Urban Residential Broadband Growth

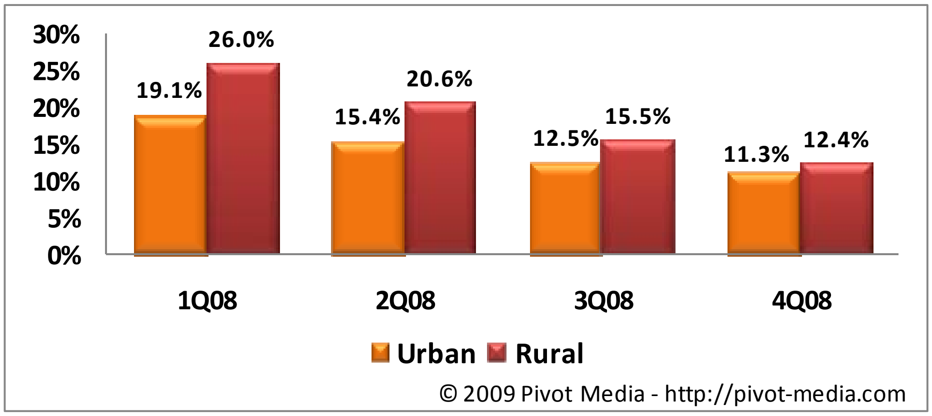


Verizon led all urban carriers with sequential residential broadband growth in 4Q08, contributing greatly to the overall rebound of residential broadband growth in 4Q08 for urban carriers. Much of Verizon's growth can be attributed to their success with FiOS. Of the 496,000 net new Verizon residential broadband adds in 4Q08, 57 percent of them were new Verizon FiOS Internet subscribers. As Figure III above outlines, both AT&T and Qwest virtually matched rural residential broadband growth in 4Q08.

Year-over-Year Broadband Growth

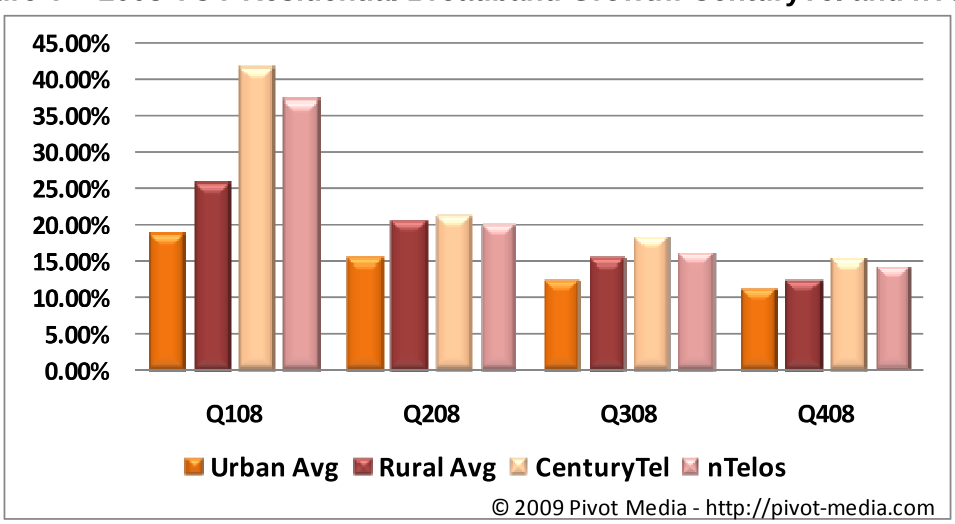
The heyday of broadband growth culminated in 2006 with respectable continuation into 2007. But by 2008, we began to see much slower growth in both urban and rural markets. Several theories address this slowdown including the declining economy and a suggestion that residential broadband penetration saturation may be in reach. After all, hyper growth can't go on forever.

Figure IV – Year-over-Year Residential Broadband Growth



Rural markets saw more residential broadband growth in 2008 and while they recorded 26 percent year-over-year (YOY) growth from 1Q07 to 1Q08, they are not immune to the slowing growth trend. As noted above in Figure IV, YOY growth rates have slowed each quarter, from 26 percent in 1Q08 to a 4Q08 12.4 percent growth factor that roughly mirrors urban growth trends.

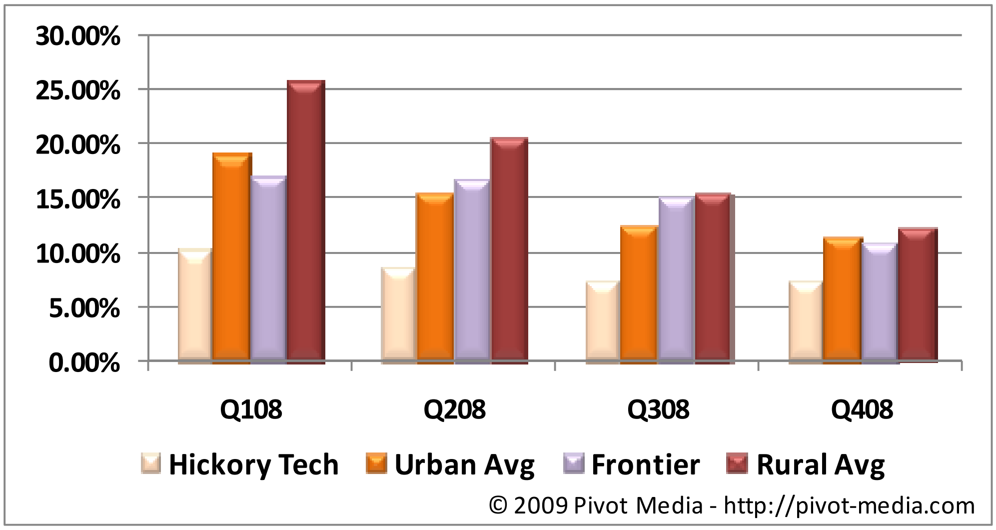
Figure V – 2008 YOY Residential Broadband Growth: CenturyTel and nTelos



Among rural providers, CenturyTel and nTelos saw the most precipitous decline in YOY growth throughout 2008. CenturyTel peaked in YOY growth during 1Q08 at 42 percent but ended the year in 4Q08 at 15.5 percent, a decline of 170 percent. Similarly, nTelos'

1Q08 YOY residential broadband growth of 37.4 percent declined by 156 percent to 14.4 percent. As Figure V above illustrates, rural YOY residential broadband growth declined by 110 percent from 26 percent growth in 1Q08 to 12.4 percent in 4Q08. Despite these rapid declines, both CenturyTel and nTelos remained above the urban YOY residential broadband growth average throughout the entire year.

Figure VI – 2008 YOY Residential Broadband Growth: Hickory Tech and Frontier

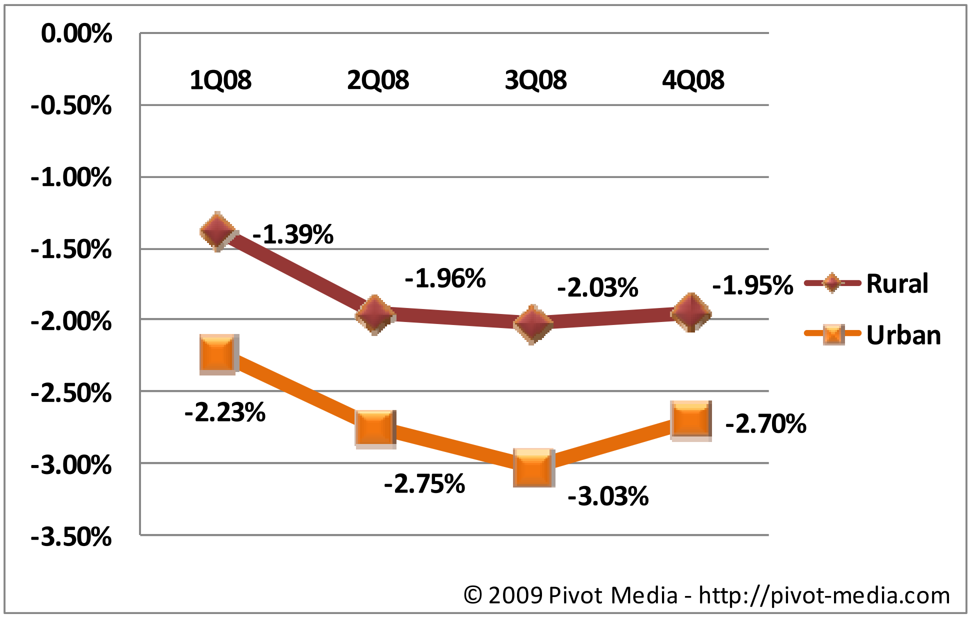


Hickory Tech's 2008 YOY residential broadband growth was consistently lower than both urban and rural averages. As outlined above in Figure VI, Frontier's growth was also consistently lower than the rural average, but did manage to close the gap towards the end of the year.

Access Line Declines

The decline of access lines in the overall telecom space is well documented. Carriers of all sizes are feeling significant pain from access lines lost to wireless substitution, pure IP voice players, and cable competition. There is a disparity in the intensity of residential access line loss between rural and urban markets, as outlined below in Figure VII.

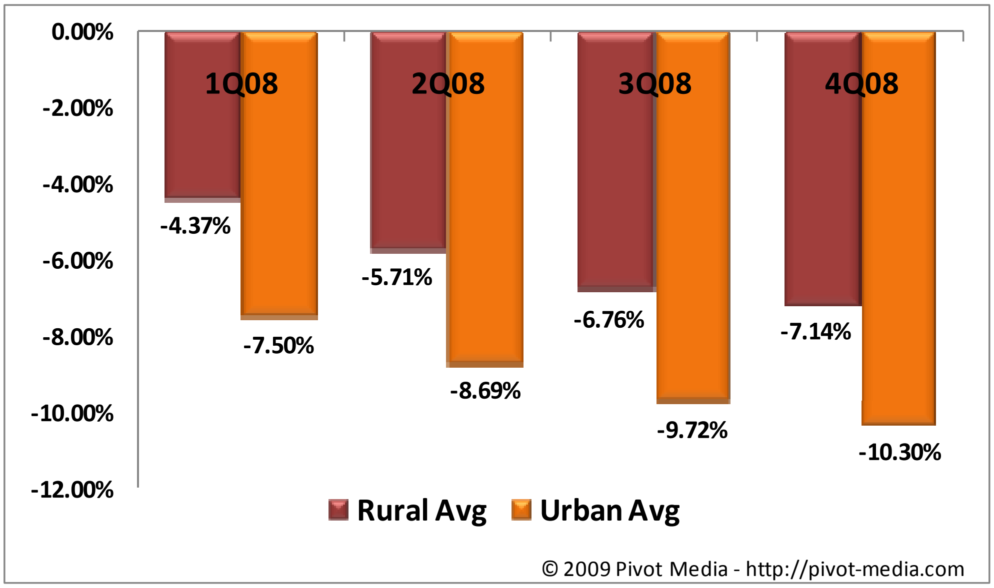
Figure VII – 2008 Residential Sequential Access Line Loss



There was a slight rebound in residential access line loss in 4Q08 for both rural and urban service providers. Urban sequential residential line loss improved by 12 percent in 4Q08, compared to only 4 percent for rural carriers. YOY access line loss paints a more accurate picture of the long term effect of access line loss. Smaller rural companies are not immune to this trend. NECA reports that on average, members of the traffic sensitive pool[2] lost 5% of their access lines in 2008, compared with 2007.

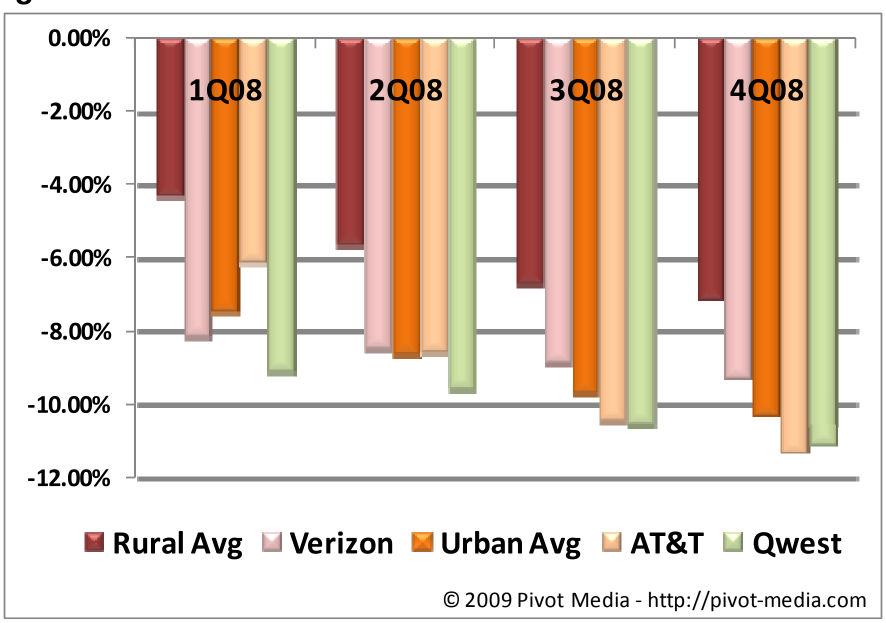
[2] The NECA traffic sensitive pool is made up of smaller rural telecom operators commonly referred to as independent operating companies (IOCs) or tier 3 and 4 companies

Figure VIII – 2008 Residential YOY Access Line Loss



According to Figure VIII, urban carriers lost 10 percent of their access lines between 4Q07 and 4Q08, while rural carriers lost 7.14 percent. As the figure illustrates, the trend continues to decline rapidly.

Figure IX – YOY Urban Carrier Residential Access Line Loss

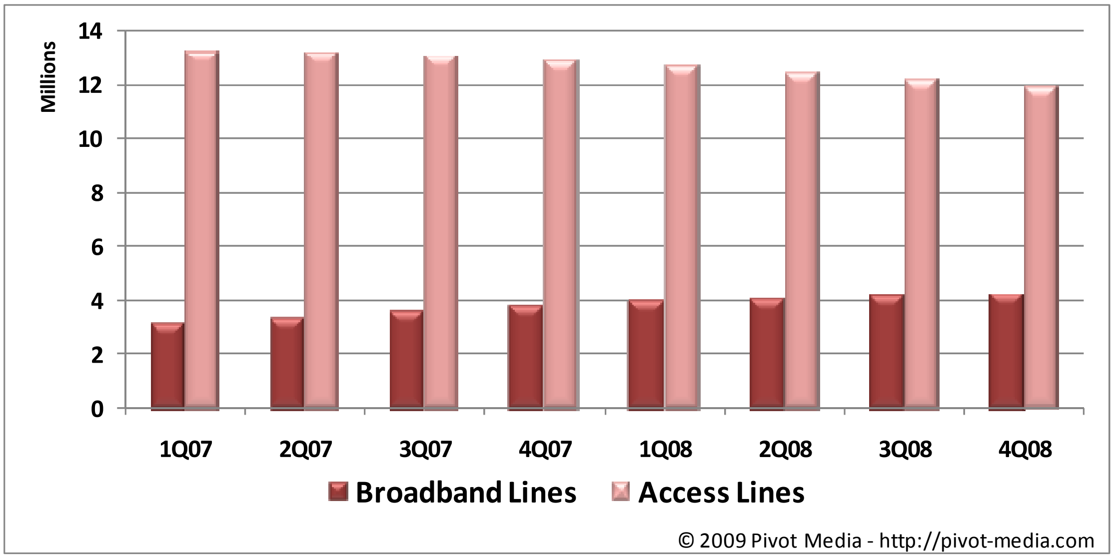


Among urban carriers, Qwest YOY residential access line loss consistently exceeded both the rural and urban averages. According to Figure IX, Verizon saw the least decline of access lines among urban carriers for most of calendar year 2008.

Conclusions

The prevailing trends of broadband growth and access line decline are impacting rural and urban carriers differently. While the overall trends are similar, rural carriers saw slightly more broadband growth in 2008 and slightly less decline in access lines.

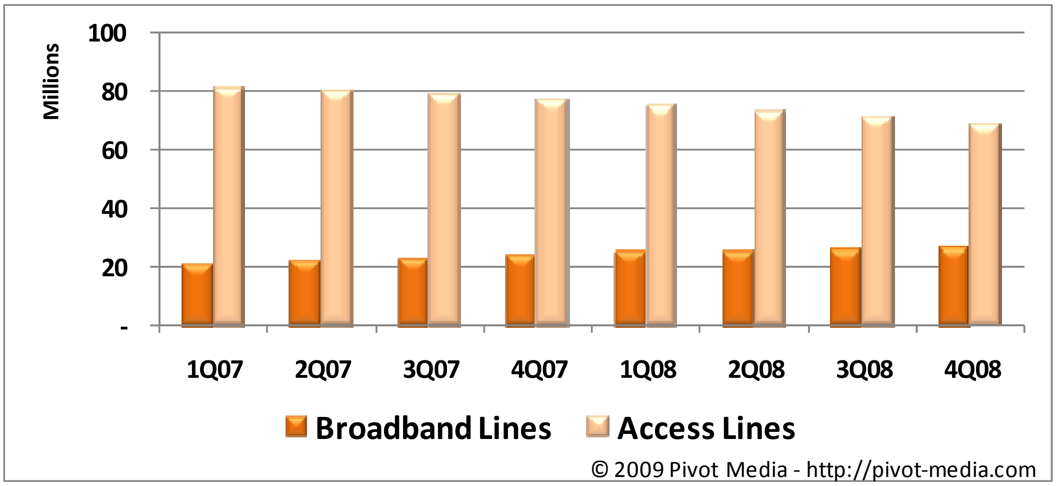
Figure X – Rural Carrier Broadband Line – Access Line Trending



Pivot attributes better percentage broadband growth in rural markets primarily to lower penetration of overall broadband, leading to more room for growth. Smaller percenatge declines in access lines can be attributed to a variety of factors including a less intense competitive environment from cable companies, as well as a lower wireless substitution effect due to wireless coverage challenges in rural territory. Figure X compares the growth in the total number of wireline residential broadband connections with the decline in residential access lines for rural carriers.

Among urban telecom carriers, the decline in residential broadband growth in 2008 was noteworthy. Several factors played a role in this decline including a slowing economy, dramatic reductions in home building, and pressures from cable and wireless competitors.

Figure XI – Urban Carrier Broadband Line – Access Line Trending



Access line decline among both urban and rural carriers seems to be accelerating. The trend may be intensifying due to the prolonged economic recession, as consumers may view wireless substitution more favorably as a way to cut overall communications wallet spend. Figure XI compares the growth in the total number of wireline residential broadband connections with the decline in residential wireline access lines for urban carriers.

About Pivot Media

Pivot Media is a leading telecom market research, analysis, and consulting firm. Our areas of focus include the independent and rural telecom sectors, broadband, IP convergence, IPTV, digital media, and broadband wireless. We leverage our telecom industry research, analysis, and knowledge base to help clients recognize and maximize business opportunities. Visit us at http://pivot-media.com.