

NTCA 2009 WIRELESS SURVEY REPORT

April 2010

DISCLAIMER: Data from the survey has been presented as reported.

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EXECUTIVE SUMMARY

In the winter of 2009 the National Telecommunications Cooperative Association (NTCA) surveyed its members on their activities in the area of providing wireless services to their customers. The survey was sent to each of the companies in NTCA's membership database; 136 members (27%) responded.

Sixty-four percent of survey respondents indicated that they hold at least one wireless license below 2.3 GHz; 34% hold at least one license above 2.3 GHz. Sixty-five percent are providing wireless service to their customers.¹ Sixty-one percent of those providing wireless service offer fixed broadband, 54% mobile voice, and 32% mobile broadband. Thirty-three percent of survey respondents not currently offering wireless service are considering doing so.

The average total (cumulative) investment in wireless facilities, excluding spectrum, is \$9.1 million; average total (cumulative) investment in spectrum totaled \$824 thousand.

Forty-three percent of survey respondents characterized the process of obtaining financing for wireless projects as "relatively easy" or "very easy;" 33% characterized the process as "very difficult" or "virtually impossible."

Forty-six percent of respondents are utilizing unlicensed spectrum to provide some wireless services, despite problems with interference.

Eighty-four percent of all respondents indicated that competition from nationwide carriers was their greatest concern, 55% selected the ability to obtain spectrum at auction, 51% negotiating roaming agreements, and 49% their ability to make necessary investments. Fourteen percent noted other concerns: the ability to obtain the latest handsets, and limited availability of unlicensed spectrum.²

Twenty-three percent of those survey respondents offering wireless resell another carrier's service under their own brand, 18% do so under a national brand. Forty-two percent sell service for which they own spectrum under their own brand, and 13% do so under a national brand. Seventy-seven percent find it difficult to compete with promotions offered by the national carriers.

Ninety percent of all respondents offer their customers wireless customers voice mail, caller ID, and text messaging. Eighty percent offer family plans; 73% offer Internet access, and 70% offer unlimited local calling. Eighty-one percent of survey respondents experience annual customer churn of less than 10%, while 19% reported annual churn of

¹ Includes respondents utilizing unlicensed spectrum to provide wireless service.

² Totals exceed 100% as respondents were allowed to select more than one concern.

between 10% and 25%. These figures are well below the FCC's reported industry annual average of between 18% and 36%.

INTRODUCTION

In early winter of 2009, the National Telecommunications Cooperative Association (NTCA) surveyed its members on their activities in the areas of providing wireless services to their members/customers. NTCA is a national association of more than 580 local exchange carriers in 44 states that provide service primarily in rural areas.

All NTCA members are small carriers that are “rural telephone companies” as defined in the Communications Act of 1934, as amended (“Act”). While some offer local exchange service to as few as 44 lines and a small handful to 50,000 or more, nearly 50% of NTCA members serve between 1,000 and 5,000 lines. Population density in most member service areas is in the 1 to 5 customers per square mile range. Approximately half of NTCA’s members are organized as cooperatives and the other half are commercial companies.

This latest wireless survey is a follow-up to a similar survey last conducted by NTCA in 2008, and seeks to build upon the results of that survey.³

OVERVIEW OF SURVEY

The 2009 NTCA Wireless Survey was conducted online. Member companies were provided with a URL through which they could access the survey. Every effort was made to minimize the reporting burden on the survey respondents.

The survey itself was organized into two sections. The first section was comprised of general questions about the respondent’s current operations and future plans. The second section, which applied only to those respondents providing CMRS services to their customers, asked more specific questions about technology, customers, revenues, features offered, and capabilities.

SURVEY RESULTS

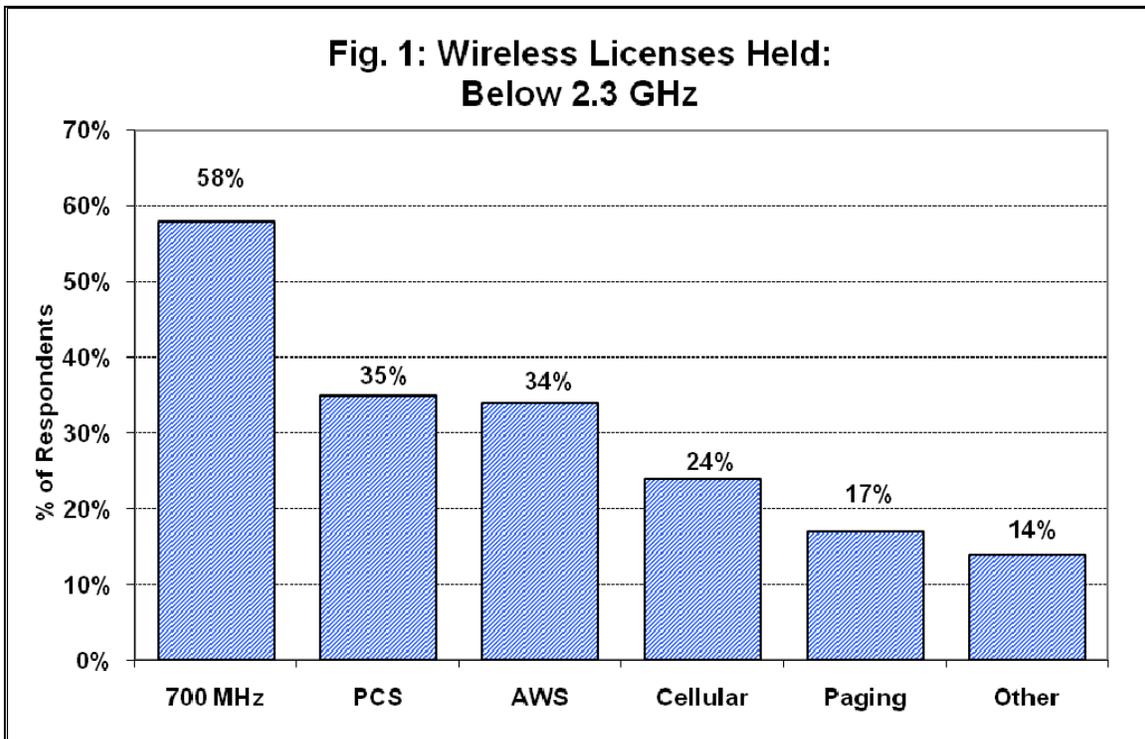
The survey URL was distributed via email to all of the NTCA member companies in NTCA’s database. The messages contained instructions for online access to the survey. Responses were received from 136 member companies, a 27% response rate.⁴

³ Copies of this and previous NTCA survey reports may be downloaded from the NTCA website, www.ntca.org.

⁴ Response rate is calculated based on the number of verified email addresses in NTCA’s member database. Based on the sample size, results of this survey can be assumed to be accurate to within $\pm 7\%$ at the 95% confidence level.

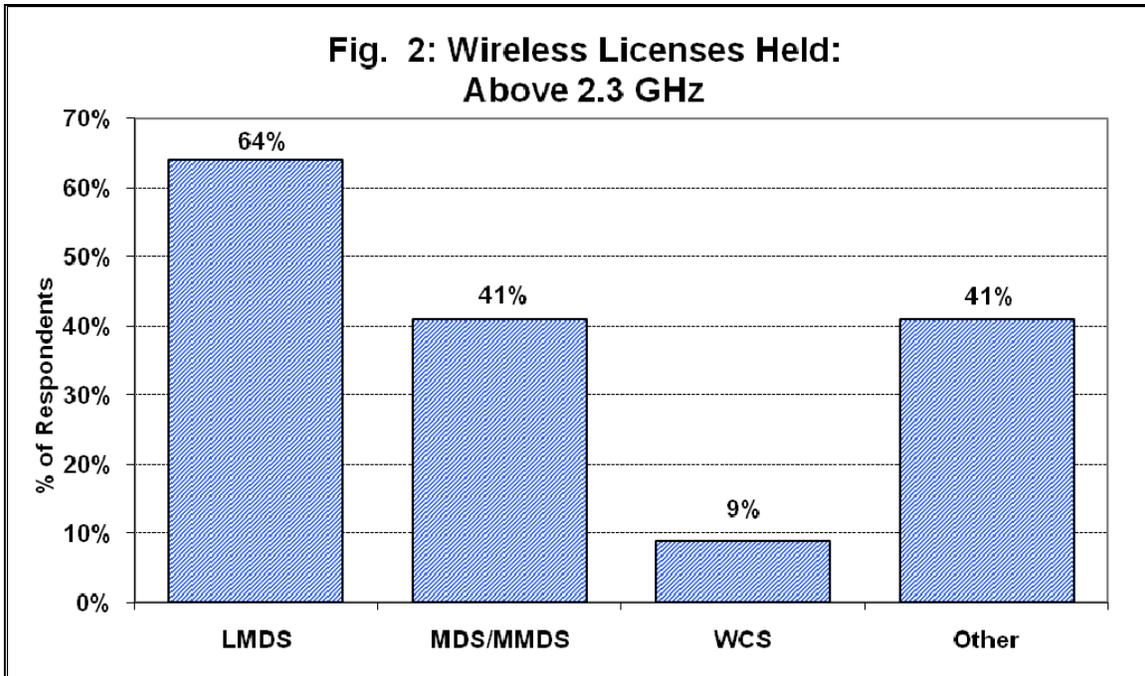
Survey responses were received from companies in 35 states, plus Canada. While those respondents providing wireless services range in size from approximately 60 wireless customers to more than 53,000, the average respondent served just over 7,000 wireless customers. This heterogeneity in size and geographic location mirrors that of NTCA’s membership as a whole.

Sixty-four percent of survey respondents indicated that they currently hold at least one wireless license below 2.3 GHz. Fifty-eight percent of those who hold a license below 2.3 GHz have a 700 MHz license, 35% a PCS license, 34% AWS, 24% cellular, and 17% paging. (See Fig. 1.)



Note: Totals exceed 100% as carriers may hold more than one wireless license.

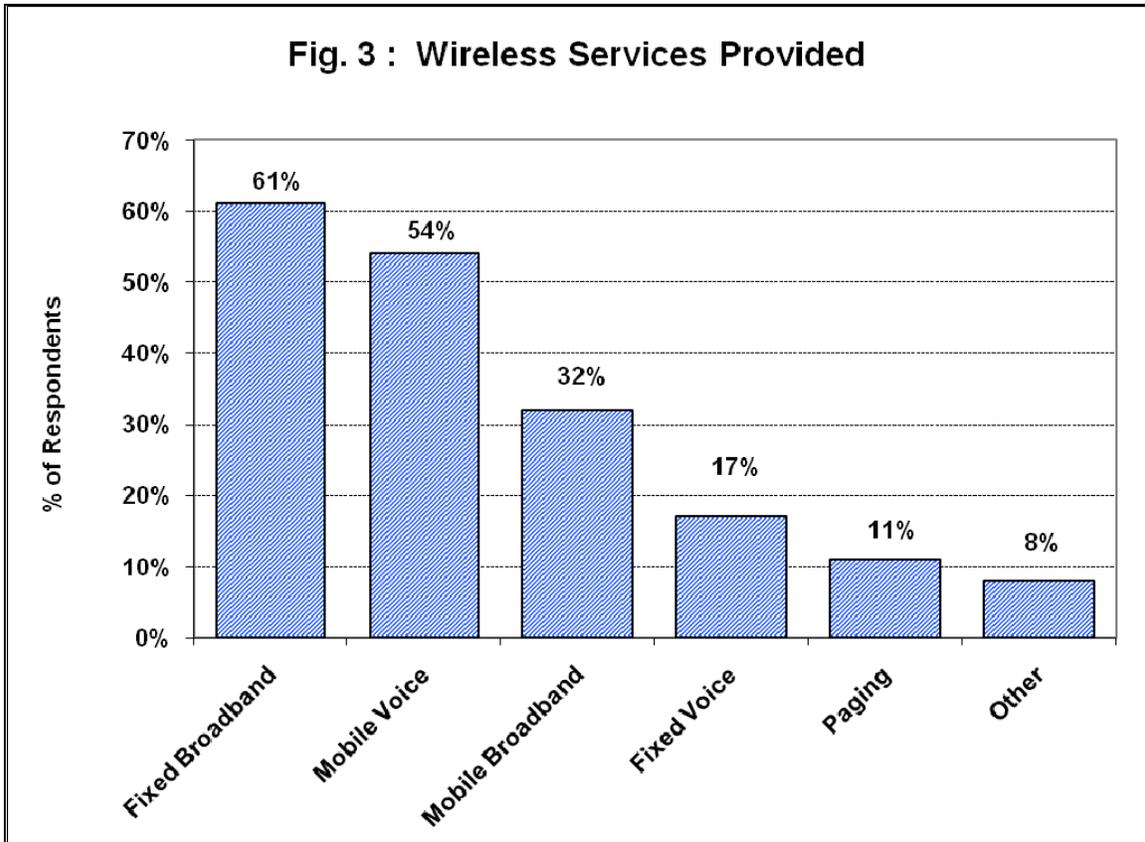
Thirty-four percent of survey respondents indicated that they currently hold at least one wireless license above 2.3 GHz. Sixty-four percent of those who hold a license above 2.3 GHz have an LMDS license, 41% a MDS/MMDS license, and 9% WCS. Forty-one percent of survey respondents hold another license above 2.3 GHz, including 3.5 GHz, 3.65 GHz, 5 GHz, 11 GHz, and fixed microwave. (See Fig. 2.)



Note: Totals exceed 100% as carriers may hold more than one wireless license.

Forty-two percent of survey respondents indicated that they use wireless spectrum for backhaul. Of those, 23% utilize licensed spectrum, while 77% use unlicensed spectrum. Fifty-six percent of survey respondents' existing sites deployed today are currently IP backhaul ready.

Seventy-six percent of survey respondents are providing wireless services to their customers⁵. Of those providing wireless service, sixty-one percent offer fixed broadband,⁶ 54% mobile voice, 32% mobile broadband, 17% fixed voice and 11% paging. (See Fig. 3.) Of those offering paging service, 48% intend to discontinue it in the near future, while 9% plan to evolve it into a different type of service.

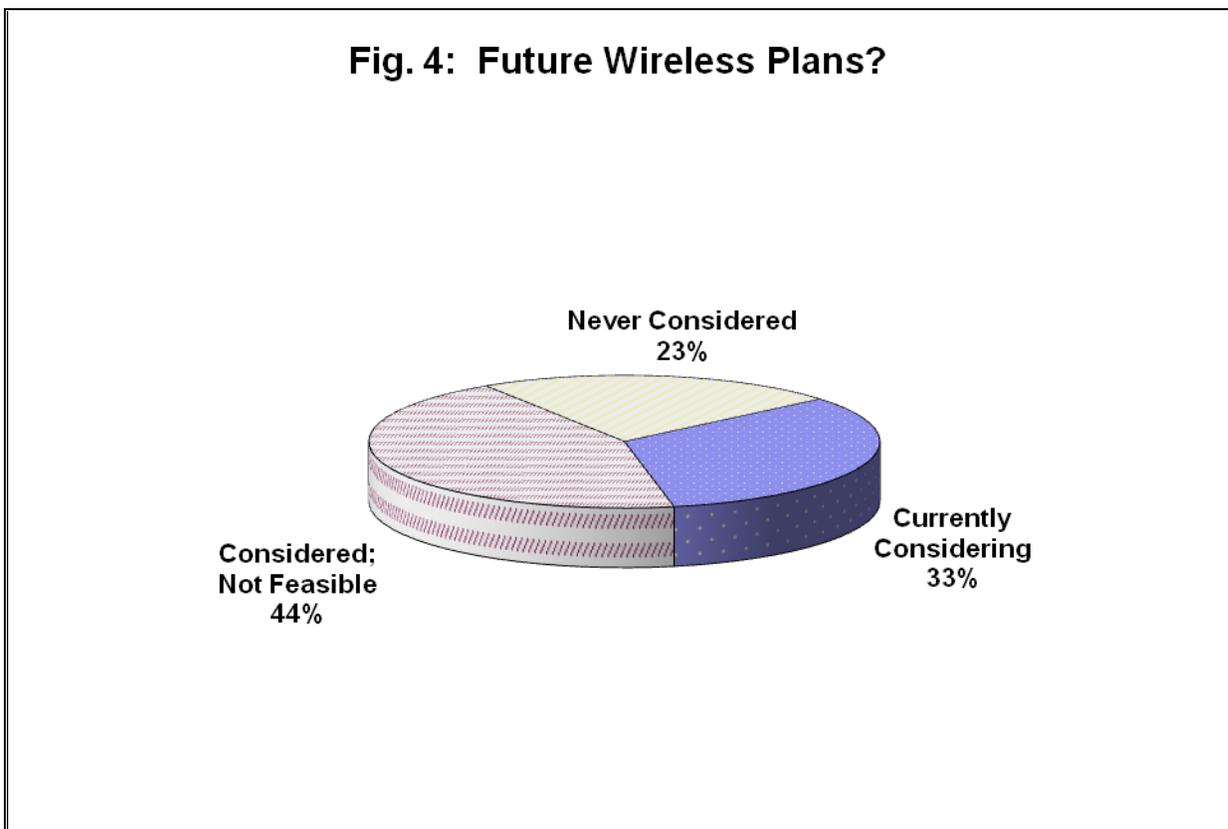


Note: Totals exceed 100% as carriers may provide more than one wireless service.

⁵ Includes respondents utilizing unlicensed spectrum to provide wireless service.

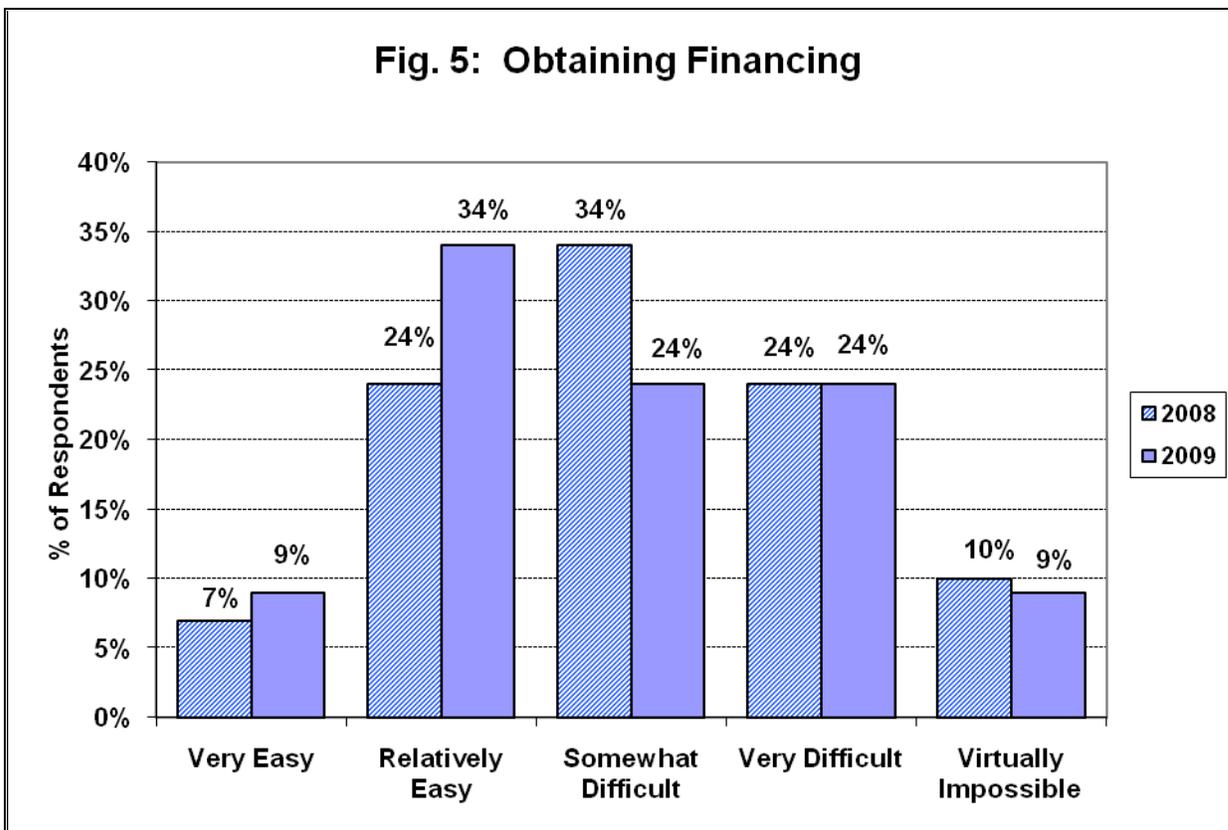
⁶ For the purposes of this survey, broadband is defined to be data transmission speeds of at least 756 kilobits per second in one direction.

Thirty-three percent of the respondents not currently offering wireless service indicated they are considering doing so. Forty-four percent have previously considered offering wireless service and deemed it not feasible, while 23% have never considered wireless. (See Fig. 4.)



Survey respondents indicated that they have invested considerable resources in wireless. For those companies investing in wireless, the average total (cumulative) investment in wireless facilities, excluding spectrum, was \$9.1 million, ranging from a high of \$237 million to a low of \$5,000. Average total (cumulative) investment in spectrum totaled \$824 thousand. Average annual wireless revenues were \$8.4 million.

Not surprisingly, given the slight improvement in the state of the overall economy, obtaining financing for wireless projects posed less of a challenge for many survey respondents in 2009 than in 2008. More respondents classified the process as “relatively easy” (34% in 2009 versus 24% in 2008) and “very easy” (9% vs. 7%) in 2009 than in 2008. Similarly, more respondents classified the process as “somewhat difficult” in 2008 than in 2009, 34% to 24%. (See Fig. 5.)

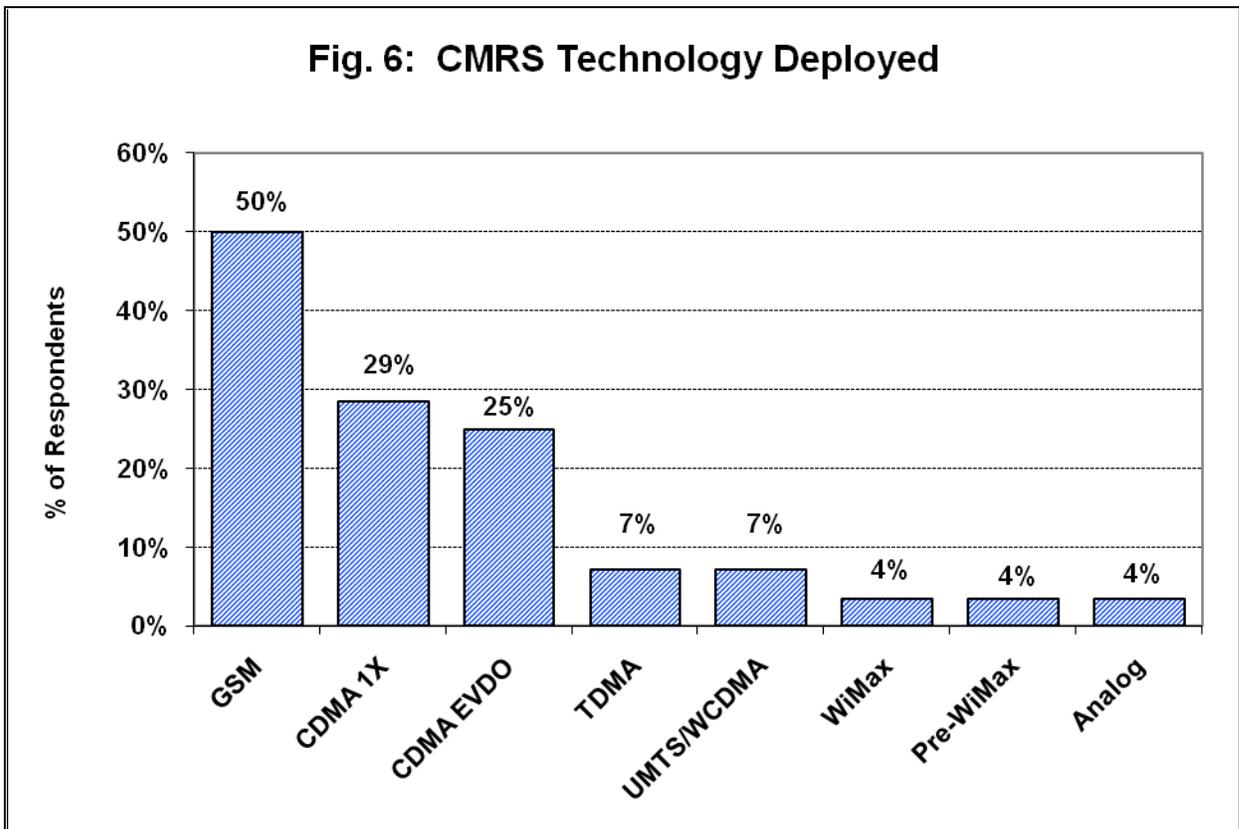


Fifty-two percent of survey respondents indicated that they had acquired spectrum in the preceding twelve-month period, while another 29% made arrangements for the utilization of previously acquired spectrum. Twenty-four percent entered into negotiations for the acquisition of spectrum.

Fifty-seven percent of survey respondents are looking to provide wireless service to both their wireline service area and neighboring territories; 25% seek to serve neighboring territories only; and 18% their own wireline service territory only.

Forty-six percent of survey respondents are utilizing unlicensed spectrum to provide wireless services to their customers. Among the services identified are fixed broadband and backhaul. Sixty-one percent of those respondents using unlicensed wireless spectrum indicated that they had experienced difficulties doing so, mainly interference problems.

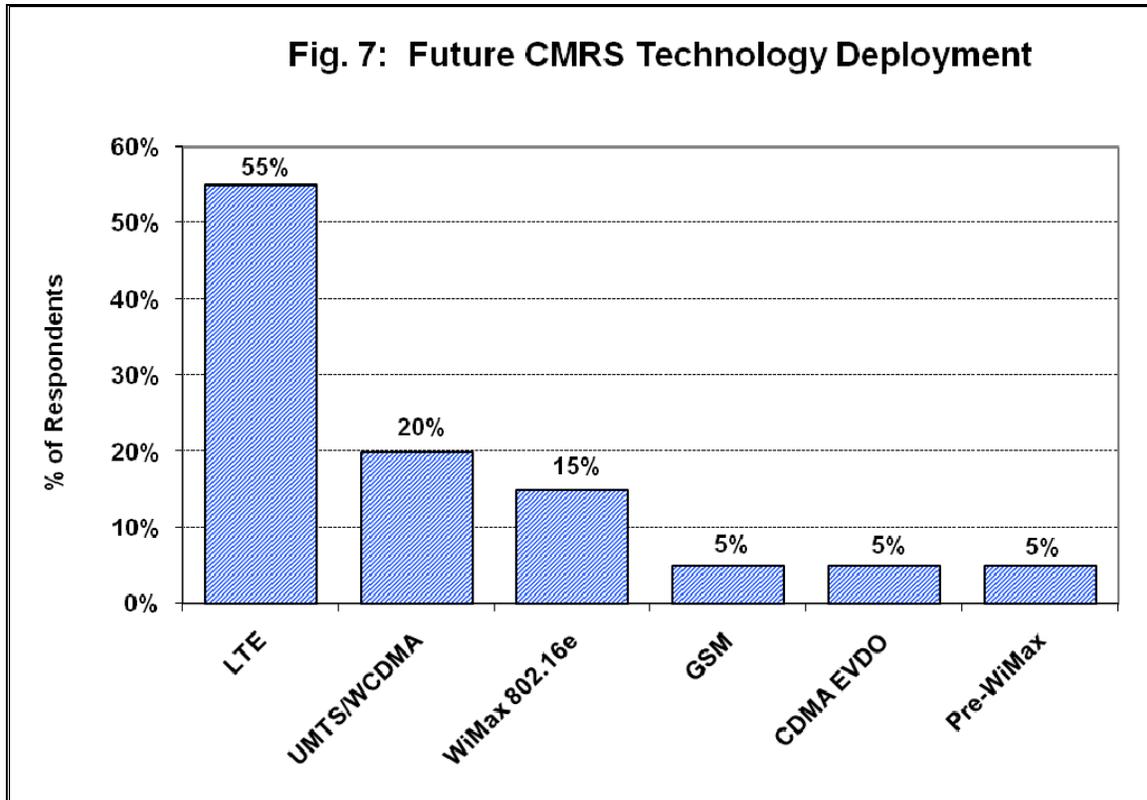
Asked which wireless CMRS technologies their company has deployed with, 50% percent of survey respondents indicated GSM service, 29% CDMA 1X, 25% CDMA EVDO, and 7% each TDMA and UMTS/WCDMA. (See Fig. 6.)



Note: Totals exceed 100% as respondents were allowed to select more than one technology.

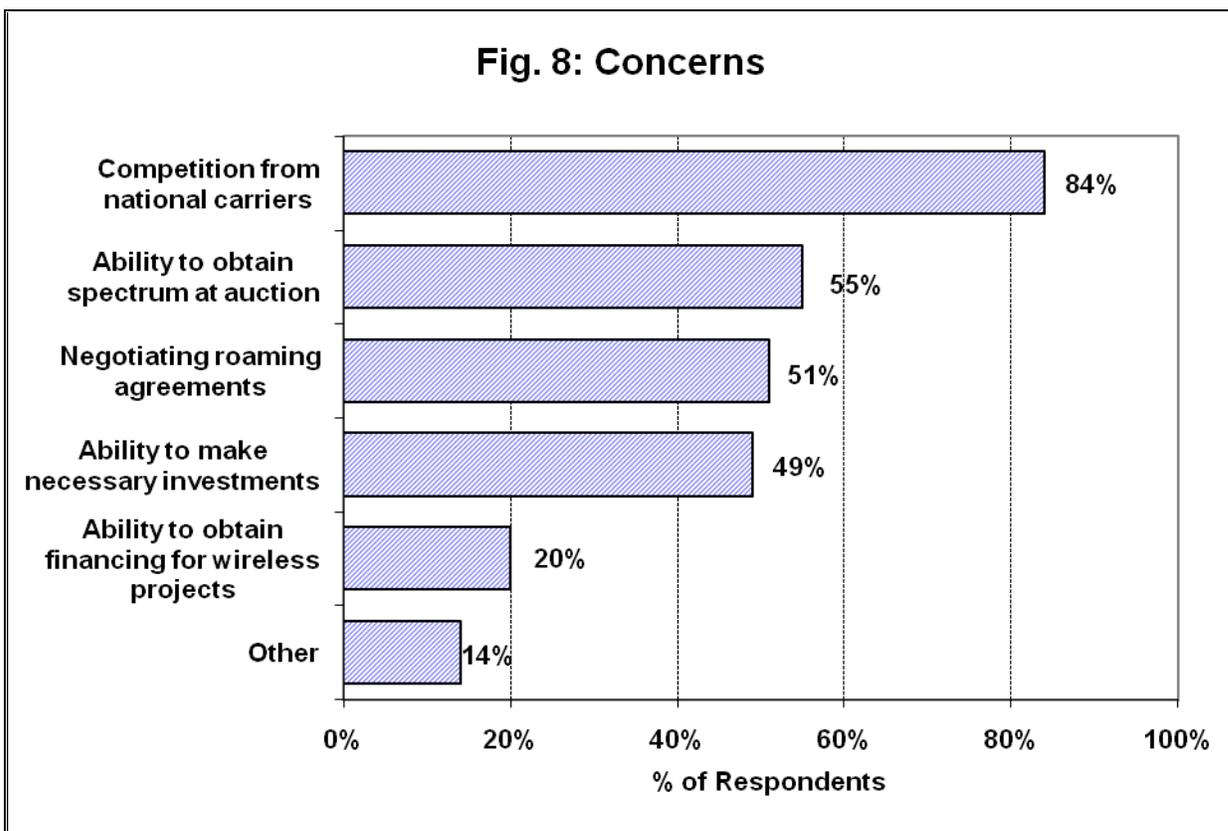
Eighty-eight percent of those survey respondents currently offering wireless indicated that they had plans to deploy next generation technology. Of those, 25% plan to deploy in the next 1-2 years, 12% within three years, 3% within four years, 3% within five years, and 57% within the next ten years.

Fifty-five percent of those survey respondents who have plans to deploy next generation technology said that they would be deploying LTE. Twenty percent indicated their next deployment would be UMTS/WCDMA, 15% WiMax 802.16e, and 5% each GSM, CDMA EVDO and pre-WiMax. (See Fig. 7.)



Note: Totals exceed 100% as respondents were allowed to select more than one technology.

Respondents intend to offer their customers a wide variety of new services over the next 12 to 18 month period: fixed and mobile data, VoIP, WiMax, and 700 MHz service were all noted. A number of concerns, however, threaten survey respondents' future plans. Eighty-four percent indicated that they were concerned about competition from national carriers, 55% cited their ability to obtain spectrum at auction, 51% their ability to negotiate roaming agreements, 49% their ability to make the investments necessary to continue to provide the latest services, and 20% their ability to obtain financing for wireless projects. (See Fig. 8.)



Note: Totals exceed 100% as respondents were allowed to select more than one concern.

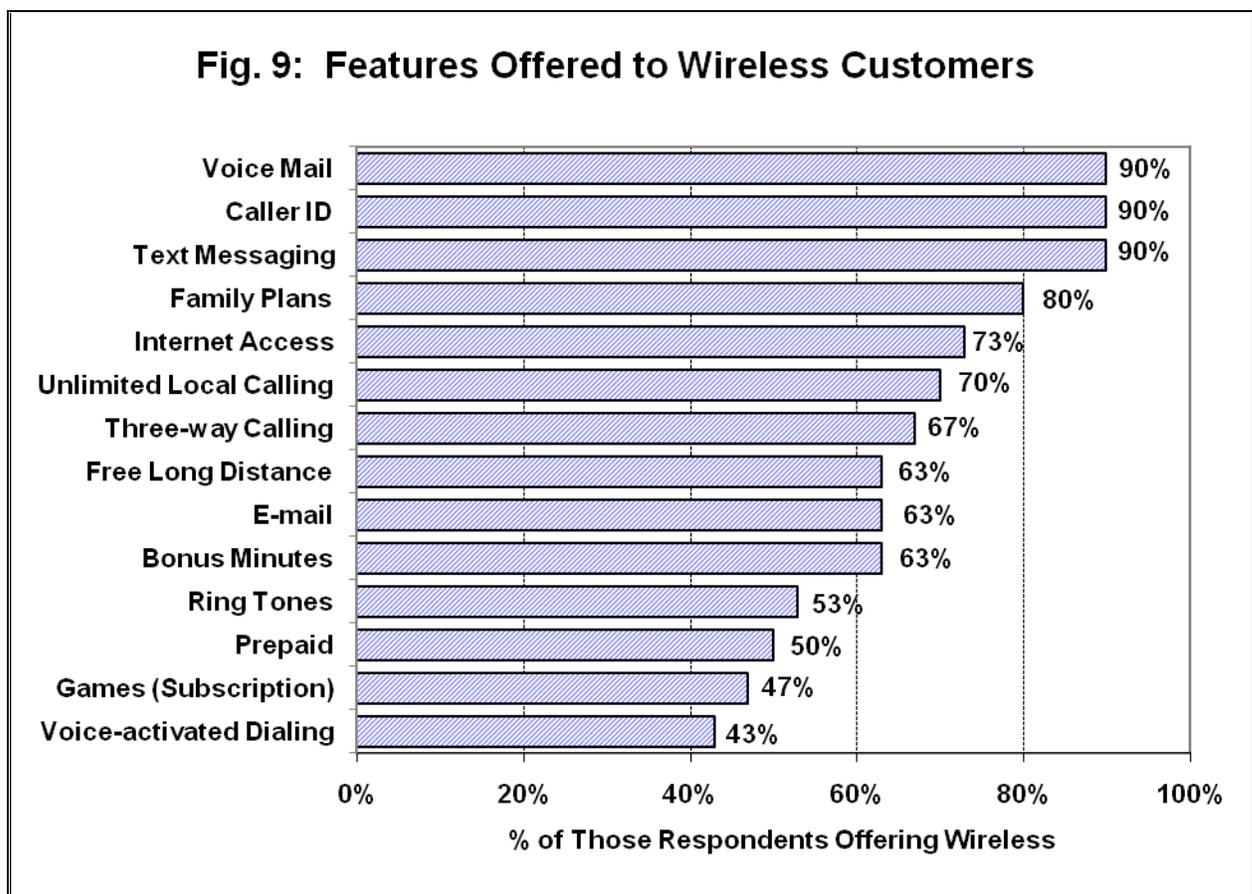
Survey respondents are facing competition from other carriers—the average respondent indicated that their company competes with between two and five other carriers. However, many of these competitors serve only a small portion of the respondent's service area.

Twenty-three percent resell another carrier's service under their own brand, while 18% do so under a national brand. Forty-two percent sell service for which they own spectrum under their own brand, and 13% do so under a national brand. Twelve percent have at one time been prevented from offering wireless service due to the actions of a national

wireless carrier. Forty-six percent have at one time entered into a joint venture with another wireless carrier.

Survey respondents serve an average of 7,300 wireless subscribers with an average of 42 cell sites. The average customer's monthly wireless bill is between \$40 and \$60, and the typical customer uses more than 1,400 minutes monthly. Seventy-seven percent of responding companies find it difficult to compete with promotions—such as buckets of long-distance minutes—being offered by the national carriers.

Survey respondents offer myriad features to their wireless customers. Ninety-two percent of survey respondents offer their wireless customers family plans, voice mail, and caller ID, 83% text messaging, 75% unlimited local calling, 67% Internet access and bonus night/weekend minutes, and 58% email and prepaid. (See Fig. 9.)



Note: Totals exceed 100% as respondents may provide more than one wireless feature.

Respondents indicated considerable customer loyalty. Seventy-five percent of survey respondents experience annual customer churn of less than 10%, while 19% reported annual churn of between 10% and 25%. Six percent of respondents reported no customer churn. This compares favorably to the FCC's most recent estimate of industry-wide churn rate monthly averages of 1.5% to 3.0%, or from 18% to 36% annually.⁷

CONCLUSIONS

A significant number of smaller companies are offering wireless service, and have invested significant sums of money to be able to do so. More than three-quarters of survey respondents indicated they are providing a wide variety of wireless services to their customers. On average, these companies have invested more than \$9 million each in wireless facilities, and an additional average investment of \$824 thousand each in spectrum. For smaller companies in particular, this represents a substantial commitment to wireless in general and to serving their customers in particular.

A substantial portion of those respondents not currently providing wireless services are looking to add a wireless offering. Fully one-third of those survey participants not currently providing wireless service indicated they are considering a wireless offering in the near future. Their ability to successfully enter the wireless arena will be, in large part, determined by their abilities to obtain financing and gain access to wireless spectrum.

Overall, respondents found obtaining financing for wireless projects to be somewhat easier in 2009 than in 2008. The slow but steady economic recovery over the past several months is evidenced in the survey results. Overall, respondents found it slightly easier to obtain financing for wireless projects than in 2008. At that time, 68% of respondents described the process as "somewhat difficult" to "virtually impossible," as opposed to 57% in 2009. Similarly, 31% characterized the process as "relatively easy" to "very easy" in 2008, versus 43% in 2009. Continued lowering of financing barriers could serve to encourage those looking to begin providing wireless to take the plunge.

While competition from national carriers remains the top obstacle for survey respondents to overcome, the ability to obtain spectrum at auction has become a greater concern. In the 2008 survey, ability to obtain spectrum at auction was the fourth most commonly-cited concern by survey respondents; in 2009, it was second. These frustrations are well illustrated by the 46% of survey respondents who indicated they are making use of unlicensed spectrum, despite the myriad associated problems. Continued focus on policies that make spectrum more readily available to small, rural carriers will go a long way toward alleviating this concern.

⁷ Federal Communications Commission, *Thirteenth Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, DA 09-54, WT Docket No. 08-27 (Terminated), rel. January 16, 2009, at 87.