

NTCA 2006 WIRELESS SURVEY REPORT

January 2007

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

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TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	3
INTRODUCTION.....	4
OVERVIEW OF SURVEY.....	4
SURVEY RESULTS.....	4
CONCLUSIONS.....	11

FIGURES

Figure 1. Wireless Licenses Held.....	5
Figure 2. Wireless Services Provided.....	6
Figure 3. Future Wireless Plans?.....	7
Figure 4. Obtaining Financing.....	8
Figure 5. Concerns.....	9
Figure 6. Features Offered to Wireless Customers.....	10

EXECUTIVE SUMMARY

In the fall of 2006, 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; 106 members (21%) responded.

Sixty-five percent of survey respondents indicated that they hold at least one wireless license; 68% are providing wireless service to their customers. Seventy percent of those providing wireless service offer broadband data, 38% mobile voice, and 27% non-broadband data. Fifty-three percent of the thirty-five respondents not currently offering wireless service are considering doing so.

The average total (cumulative) investment in wireless facilities, excluding spectrum, is \$5.1 million; average total (cumulative) investment in spectrum totaled \$1.3 million.

Approximately half of all survey respondents characterized the process of obtaining financing for wireless projects as "very easy" or "relatively easy;" the other half characterized the process as "somewhat difficult" or "very difficult."

Sixty-one percent of respondents are utilizing unlicensed spectrum to provide some wireless services to their customers, and half of those indicated they have experienced problems with interference. Nearly two-thirds are looking to expand their wireless service area.

Two-thirds of all respondents indicated that competition from nationwide carriers was their greatest concern, 54% selected the ability to make necessary investments and 46% their ability to obtain spectrum at auction. Twelve percent noted other concerns, such as the ability to obtain cost effective equipment, the ability to secure roaming agreements, rural population depletion, and changing regulations.¹

Thirty-six percent of survey respondents serve as a local presence for a national carrier, or market a national brand. Approximately two-thirds find it difficult to compete with promotions offered by the national carriers.

All respondents offer their wireless customers voice mail and caller ID. Ninety-six percent offer family plans, 85% free long distance, and 81% three-way calling. Sixty-four percent of survey respondents experience annual customer churn of less than 10%, while 23% reported annual churn of between 10% and 25%. These figures are well below the FCC's reported industry annual average of between 18% and 36%.

¹ Totals exceed 100% as respondents were allowed to select more than one concern.

INTRODUCTION

In late fall of 2006, 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 approximately 570 local exchange carriers in 44 states that provide service primarily in rural areas. Approximately 300 of NTCA's member companies offer some type of wireless service. 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 2005, and seeks to build upon the results of that survey.²

OVERVIEW OF SURVEY

The 2006 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

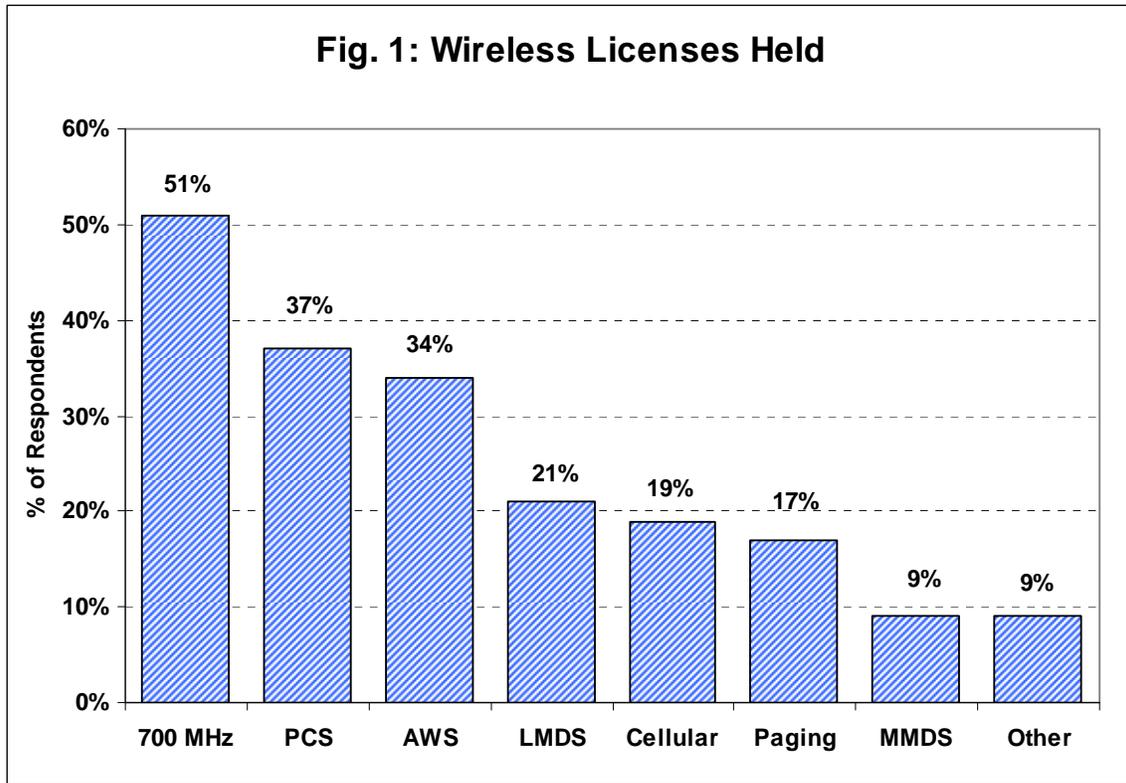
The survey URL was distributed via email and fax to all of the NTCA member companies in NTCA's database. The messages contained instructions for online access to the survey. Responses were received from 106 member companies, a 21% response

² Copies of this and previous NTCA survey reports may be downloaded from the NTCA website, www.ntca.org.

rate.³ Twenty-six percent of those NTCA member companies providing PCS service responded to the survey.

Survey responses were received from companies in 34 states. While those respondents providing wireless services range in size from approximately 200 wireless customers to more than 75,000, the average respondent served approximately 14,000 wireless customers. This heterogeneity in size and geographic location mirrors that of NTCA’s membership as a whole.

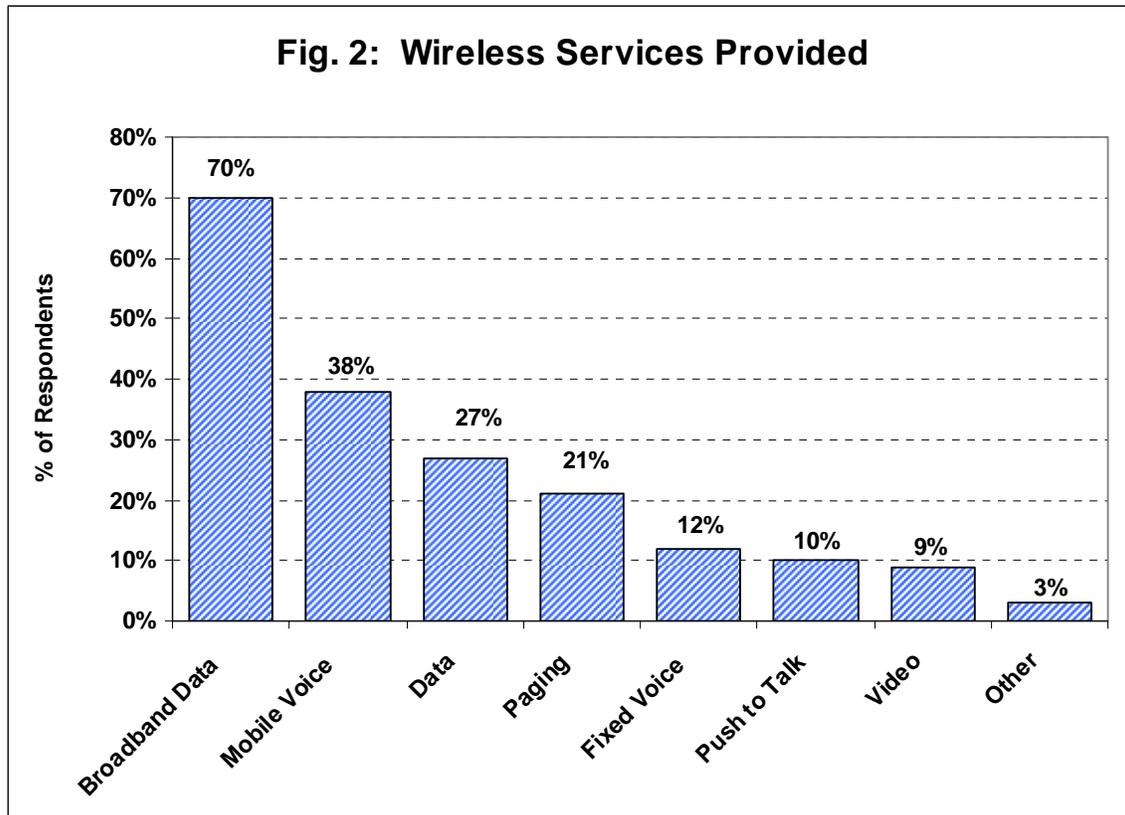
Sixty-five percent of survey respondents indicated that they currently hold at least one wireless license. Fifty-one percent of those who hold a license have a 700 MHz license, 37% PCS, 34% AWS, 21% LMDS, 19% cellular, 17% paging, and 9% MMDS. (See Fig. 1.)



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

³ 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 ± 9% at the 95% confidence level.

Sixty-eight percent of survey respondents are providing wireless services to their customers⁴. Of those providing wireless service, seventy percent offer broadband data,⁵ 38% mobile voice, 27% data, and 21% paging. (See Fig. 2.)

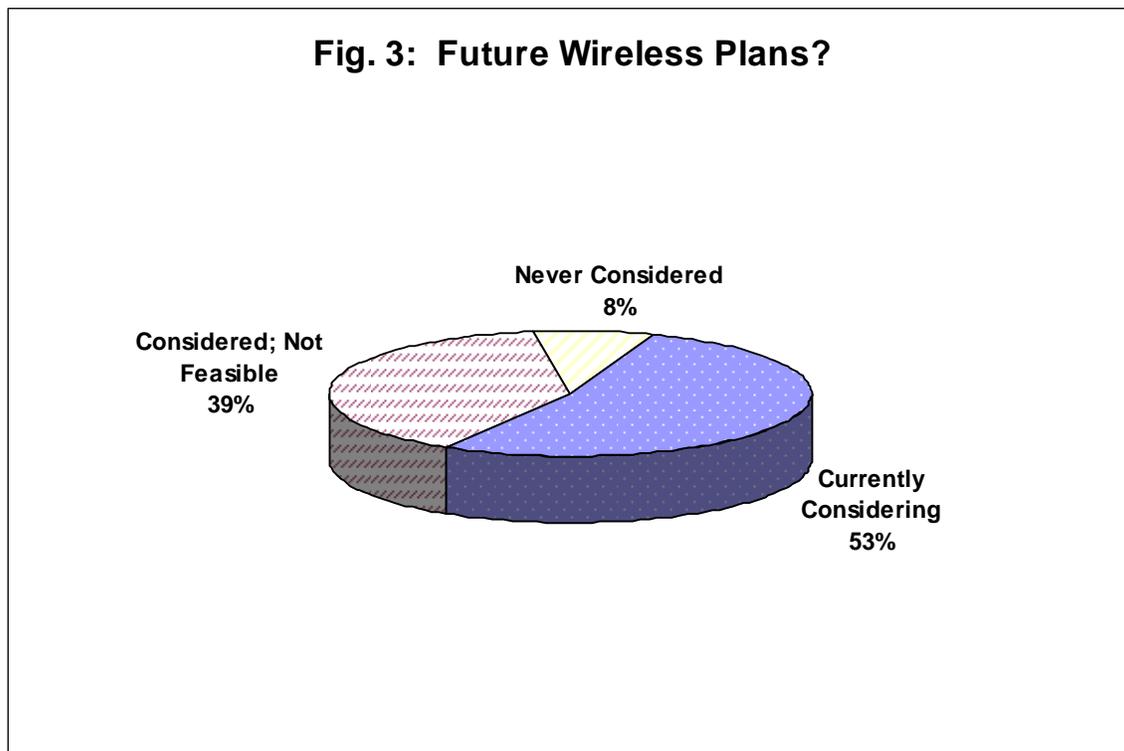


Note: Totals exceed 100% as carriers may provide more than one wireless service.

⁴ Includes respondents utilizing unlicensed spectrum to provide wireless service.

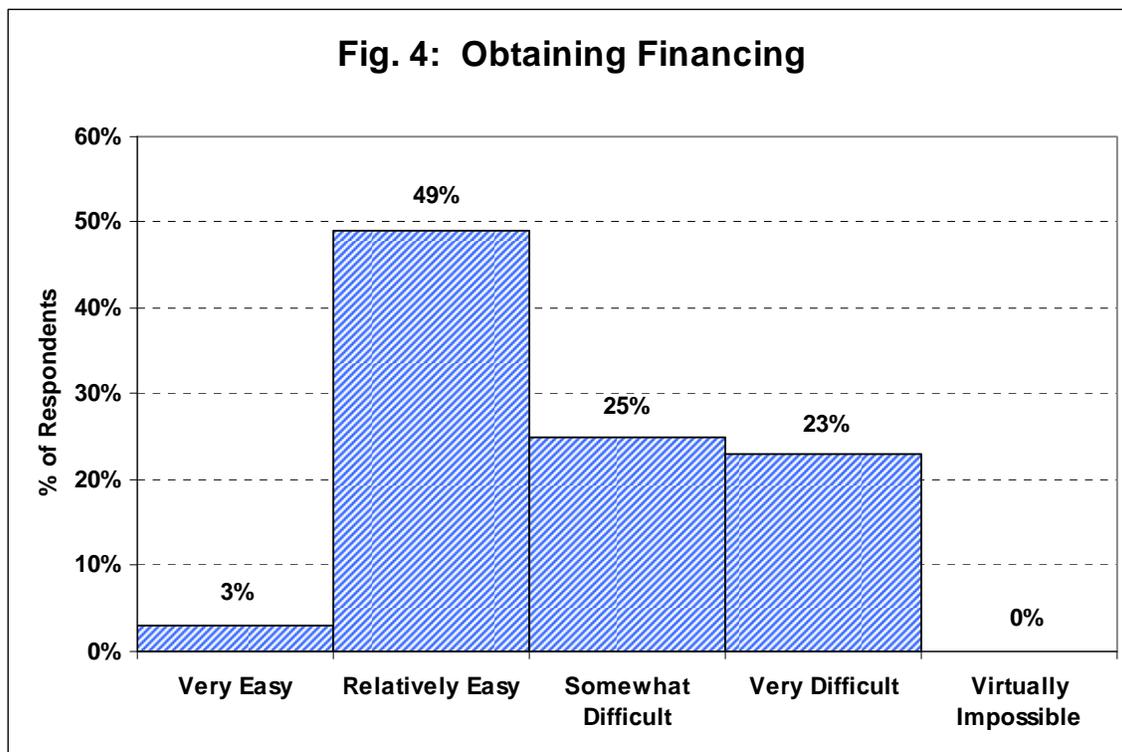
⁵ For the purposes of this survey, broadband is defined to be data transmission speeds of at least 200 kilobits per second in one direction.

Fifty-three percent of the thirty-five respondents not currently offering wireless service indicated they are considering doing so. Thirty-nine percent have previously considered offering wireless service and deemed it not feasible, while 8% have never considered wireless. (See Fig. 3.)



Survey respondents indicated that they have invested considerable resources in wireless. The average total (cumulative) investment in wireless facilities, excluding spectrum, was \$5.1 million, ranging from a high of \$94 million to a low of \$1,000. Average total (cumulative) investment in spectrum totaled \$1.3 million. For those companies reporting both investment and subscribership data, average cumulative investment per subscriber was \$2,441 in facilities and \$411 in spectrum. Survey respondents invested an average of \$1.1 million in wireless facilities in the twelve-month period prior to the survey.

Obtaining financing for wireless projects continues to pose a challenge for some survey respondents. Of those with experience in obtaining financing, 49% categorized the experience as “relatively easy,” 25% “somewhat difficult,” and 23% “very difficult.” (See Fig. 4.)

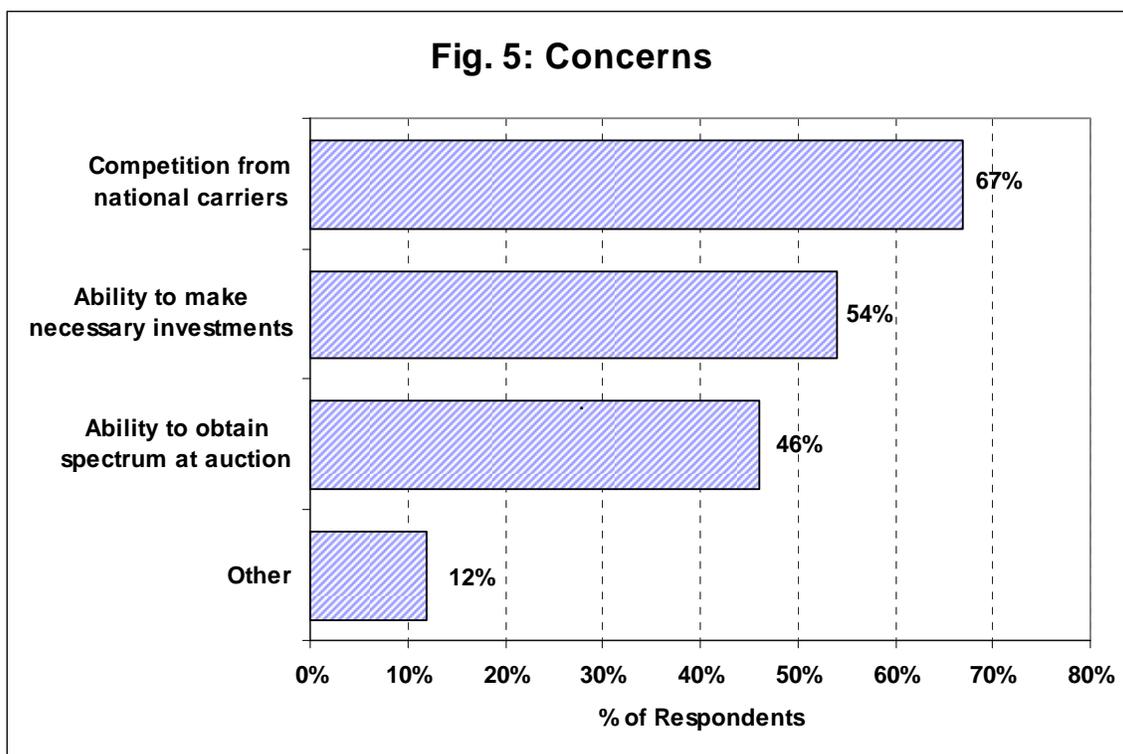


Thirty percent of survey respondents indicated that they had acquired spectrum in the preceding twelve-month period, while another 10% made arrangements for the utilization of previously acquired spectrum. Seventeen percent entered into negotiations for the acquisition of spectrum.

Sixty-three percent of survey respondents are looking to expand their wireless service area. Sixty-one percent of respondents are looking to serve both their wireline service area and neighboring territories; 23% seek to serve neighboring territories only; and 16% their own wireline service territory only.

Sixty-one percent of survey respondents are utilizing unlicensed spectrum to provide wireless services to their customers. Among the services identified are broadband data, Wi-Fi, point-to-point microwave, backhaul and voice. Fifty-two percent of those respondents using unlicensed wireless spectrum indicated that they had experienced difficulties with interference.

Respondents intend to offer their customers a wide variety of new services over the next 12 to 18 month period: VoIP, cellular and fixed wireless broadband, voice, data and Internet, WiFi and WiMax, video, and push-to-talk were all noted. A number of concerns, however, threaten survey respondents' future plans. Sixty-seven percent indicated that they were concerned about competition from national carriers, 54% cited their ability to make the investments necessary to continue to provide the latest services, and 46% their ability to obtain spectrum at auction. Twelve percent noted other concerns, such as cost to serve, achieving a satisfactory return on investment, developing a business case for wireless, service area topography, realignment of previously purchased spectrum, interference from unlicensed spectrum, and not having a national roaming partner. (See Fig. 5.)



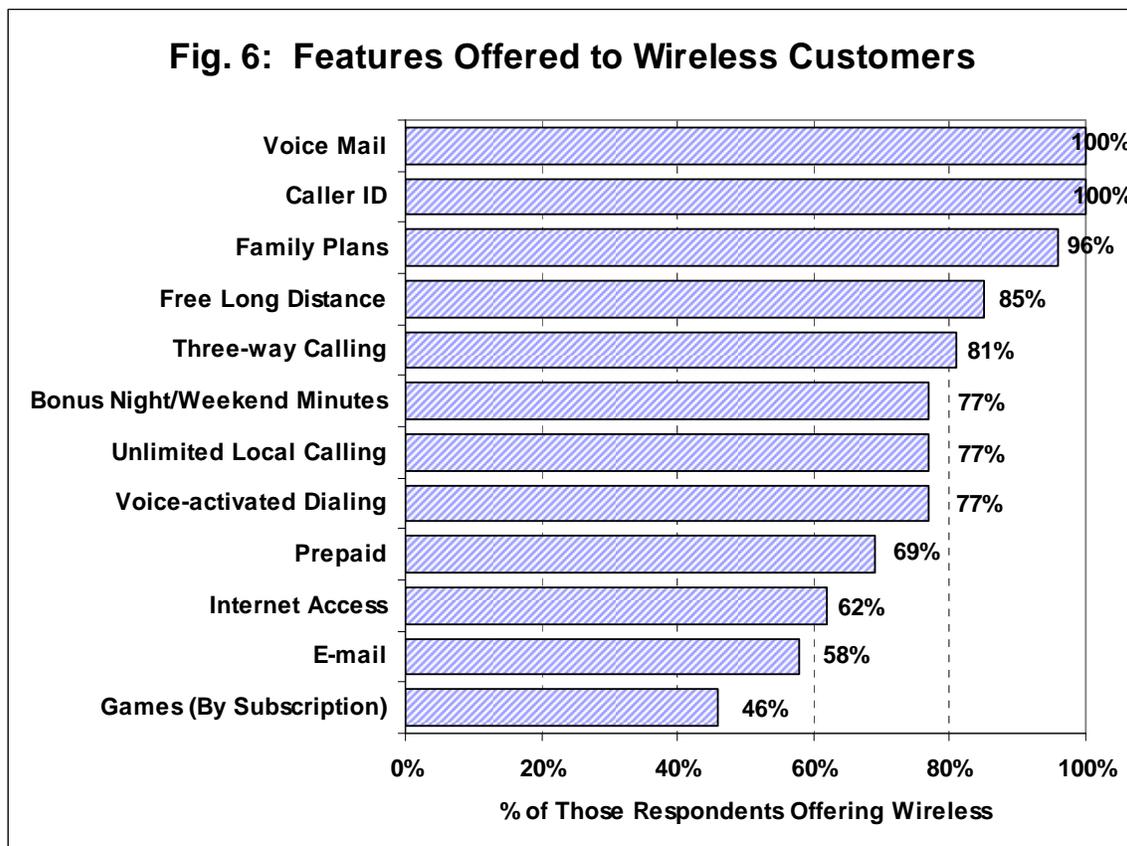
Note: Totals exceed 100% as respondents were allowed to select more than one concern.

Survey respondents are facing considerable competition from other carriers—the average respondent indicated that their company competes with between three and five other carriers.

Thirty-six percent of survey respondents serve as a local presence for a national carrier, or market a national brand. Thirty-two percent report having had difficulty negotiating an automatic roaming agreement with a national carrier. More than half - 56% - have at one time entered into a joint venture with another wireless carrier.

The average customer's monthly wireless bill is between \$40 and \$45. Seventy percent of survey respondents offer a wireless package that they feel is competitive with the national carriers, while 64% 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. All respondents offer their wireless customers voice mail and caller ID, 96% family plans, 85% free long distance, 81% three-way calling, and 77% bonus night and weekend minutes, unlimited local calling, and voice-activated dialing. (See Fig. 6.)



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

Respondents indicated considerable customer loyalty. Sixty-four percent of survey respondents experience annual customer churn of less than 10%, while 23% reported annual churn of between 10% and 25%. This compares favorably to the FCC's estimate

of industry-wide churn rate monthly averages of 1.5% to 3.0%, or from 18% to 36% annually.⁶

CONCLUSIONS

Broadband data is the most common application provided by survey respondents, and is likely to grow in the future. The vast majority of survey respondents providing wireless service provide broadband data, almost twice as many as provide mobile voice. This can only be expected to grow, especially as mobile broadband data applications become more cost effective and consumer demand grows.

The majority of survey respondents want to be able to provide more wireless service to their customers. More than half of those survey respondents not currently offering wireless indicated they are considering doing so. Nearly two-thirds of those respondents currently offering wireless are looking to expand their wireless service area. Removal of the barriers currently facing rural providers will make it easier for them to provide more of these vital services.

Many rural providers are able to obtain access to licensed spectrum. Nearly one-third of survey respondents were able gain access to licensed spectrum in 2006, a marked increase over a year earlier. Much of this can be attributed to the steps taken by the FCC to ensure that small carriers would be able to effectively compete in Auction #66 – AWS-1. While this auction was a promising start, much more needs to be done to make spectrum available to those who are willing to put it to productive use.

The use of unlicensed spectrum is widespread, but significant problems remain. While 61% of survey respondents are utilizing unlicensed spectrum to serve their customers, 52% of those using unlicensed spectrum have experienced interference problems. Allowing these providers—who clearly have both the desire to offer service and the customer base to make it feasible—affordable access to licensed spectrum will increase the quality of service provided.

Small rural companies continue to face significant challenges. If smaller carriers are expected to compete with larger carriers in the marketplace, they will need to be assured of certain protections to compensate for the disadvantages inherent to their size and geographic location. In addition to spectrum access, small carriers will need to be assured of mutually equitable roaming agreements with other carriers, for example. Absent these and other assurances, smaller wireless carriers will find it extremely difficult, if not impossible, to serve rural America.

⁶ Federal Communications Commission, *Eleventh Report on Competitive Market Conditions in the CMRS Industry*, FCC 06-142, WT Docket No. 06-17 (Terminated), September 2006, at 65.