

NTCA 2003 WIRELESS SURVEY REPORT

December 2003

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

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EXECUTIVE SUMMARY

In the fall of 2003, 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; 135 members (28%) responded.

Fifty-nine percent of survey respondents indicated that they hold at least one wireless license; 56% are providing wireless service to their customers. Forty-six percent of those providing wireless service offer mobile voice, 32% broadband, 31% data, and 29% paging. Fifty-two percent of those respondents not currently offering wireless service are considering doing so.

The average total (cumulative) investment in wireless facilities, excluding spectrum, is \$4.1 million; average total (cumulative) investment in spectrum totaled \$1.6 million.

Three-quarters of survey respondents characterized the process of obtaining financing for wireless projects as ranging between "somewhat difficult" and "virtually impossible." Nineteen percent have sought an RUS loan for the deployment of wireless or broadband services.

Thirty-eight percent of respondents are utilizing unlicensed spectrum to provide wireless services to their customers. Given the choice, however, 71% would prefer access to additional licensed spectrum over additional unlicensed spectrum.

Nearly half of all respondents indicated that the ability to make investments necessary to continue to provide the latest services was their greatest concern, 44% selected competition from nationwide carriers, and 23% their ability to obtain spectrum at auction. Fourteen percent noted other concerns, such as the cost of changing technology and maintaining a sufficient level of technical expertise, equipment availability, and the costs of complying with wireless local number portability and E911 regulations.

Of those subscribers providing CMRS services, 38% utilize TDMA, 31% CDMA, 24% GSM, and 7% AMPS. The average subscriber's monthly minutes of use are 378, and the average monthly bill is just over \$43. Respondents' average total wireless revenues are \$7.8 million annually.

Twenty-eight percent of respondents serve as a local presence for a national carrier, or market a national brand; 76% have a partnership agreement with a national wireless carrier to handle their roaming traffic at a contracted fee. Nearly 80% find it difficult to compete with promotions offered by the national carriers.

Twenty-one percent of respondents offer their wireless customers caller ID and voice mail, 18% buckets of long distance minutes, and 16% three-way calling and text messaging.

Forty-eight percent of survey respondents experience annual customer churn of less than 10%, while 33% reported annual churn of between 10% and 25%.

INTRODUCTION

In late fall of 2003, 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 560 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 Telecommunications Act of 1996 (“Act”). While some offer local exchange service to as few as 44 lines and a small handful to 90,000 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 2002, and seeks to build upon the results of that survey¹.

OVERVIEW OF SURVEY

The 2003 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

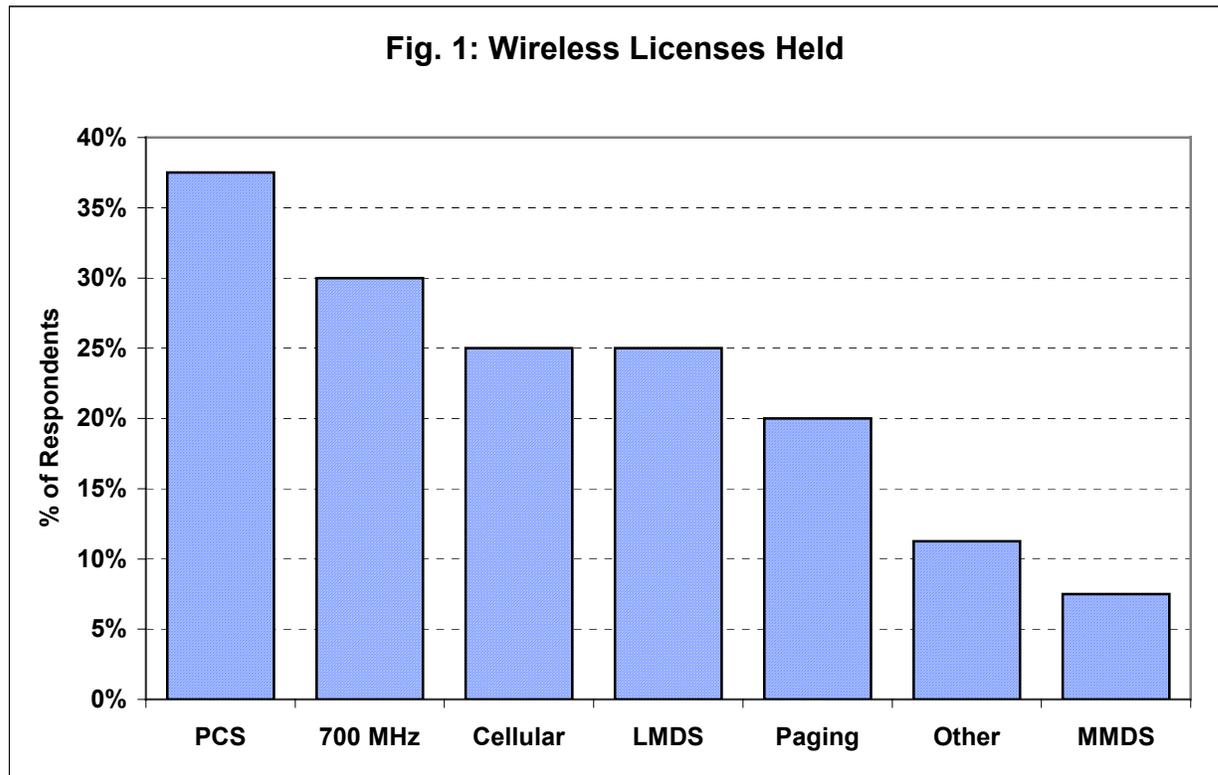
The survey URL was distributed via email and fax to all of the NTCA member companies in NTCA’s database. The messages contained instructions for online access to the survey. Responses were received from 135 member companies, a 28% response rate.

Survey responses were received from companies in 32 states. Respondents (or, in some cases, their parent companies) ranged in size from approximately 100 access lines to more than 95,000, and the average respondent served 7,800 access lines. This

¹ Copies of this and previous NTCA survey reports may be downloaded from the NTCA website, www.ntca.org.

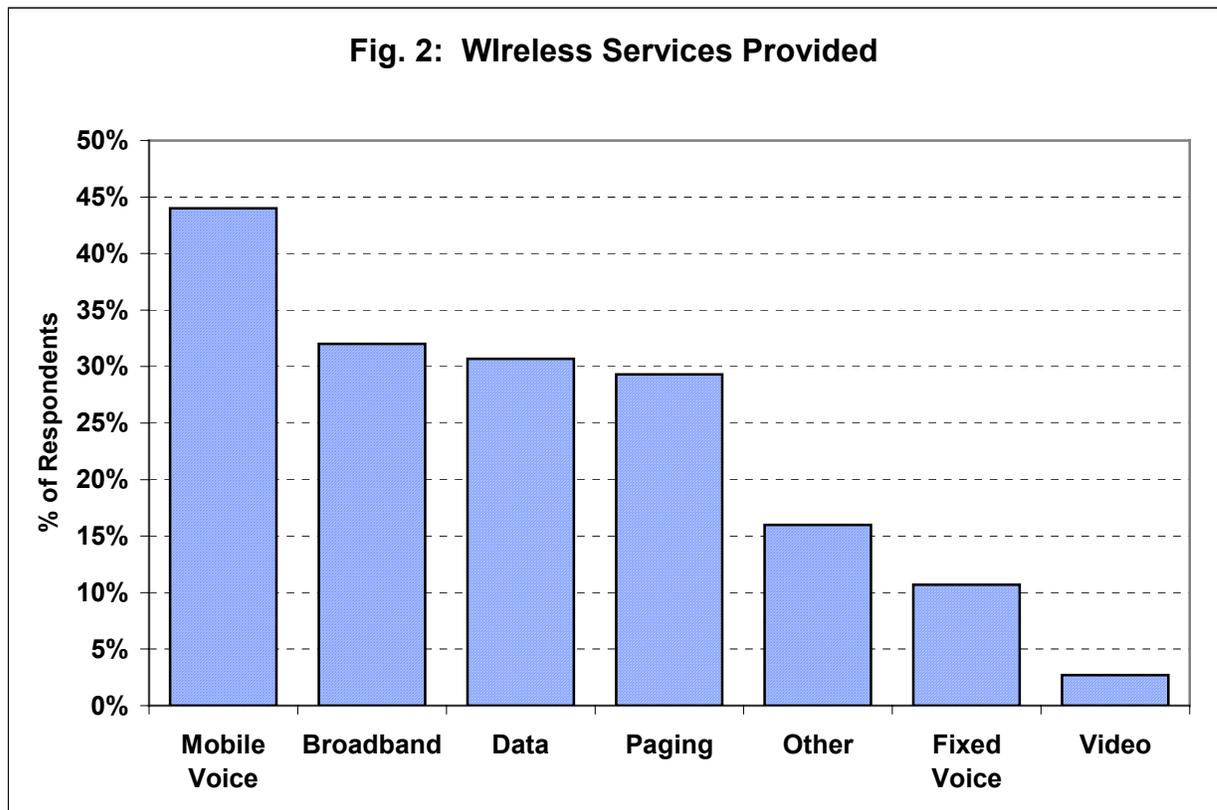
heterogeneity in size and geographic location mirrors that of NTCA’s membership as a whole.

Fifty-nine percent of survey respondents indicated that they currently hold at least one wireless license. Thirty-eight percent of those who hold a license have a PCS license, 30% 700 MHz, 25% each cellular and LMDS, and 20% paging. (See Fig. 1.)



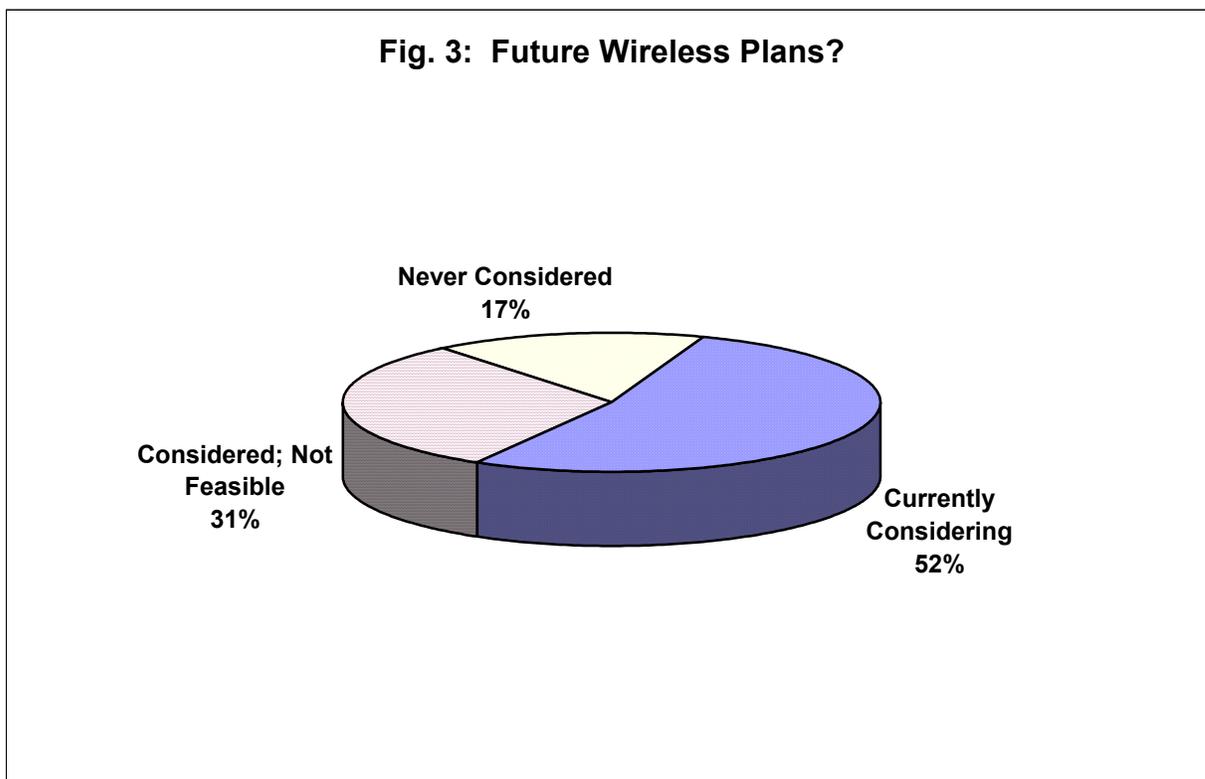
Note: Totals exceed 100% as respondents may hold more than one license.

Fifty-six percent of survey respondents are providing wireless service to their customers. Forty-four percent of those providing wireless service offer mobile voice, 32% broadband, 31% data, and 29% paging. (See Fig. 2.)



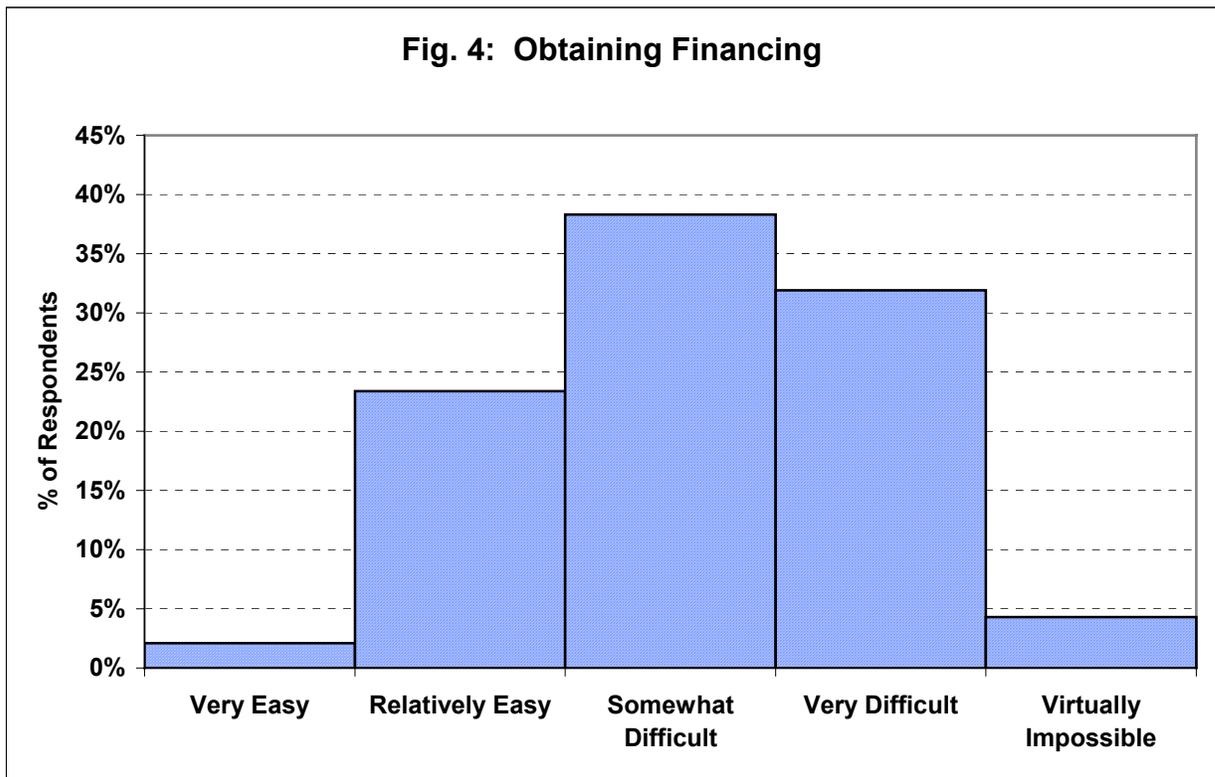
Note: Totals exceed 100% as respondents may provide more than one service.

Fifty-two percent of those respondents not currently offering wireless service indicated they are considering doing so. Thirty-one percent have previously considered offering wireless service and deemed it not feasible, while 17% 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 \$4.1 million, ranging from a high of \$61 million to a low of \$1,500. Average total (cumulative) investment in spectrum totaled \$1.6 million. Survey respondents invested an average of \$1.7 million in wireless facilities in the twelve-month period prior to the survey.

Obtaining financing for wireless projects continues to pose a challenge for survey respondents. Of those with experience in obtaining financing, 38% categorized the experience as “somewhat difficult,” 32% “very difficult,” and 23% “relatively easy”. Three-quarters characterized the process as ranging within “somewhat difficult” to “virtually impossible.” (See Fig. 4.)



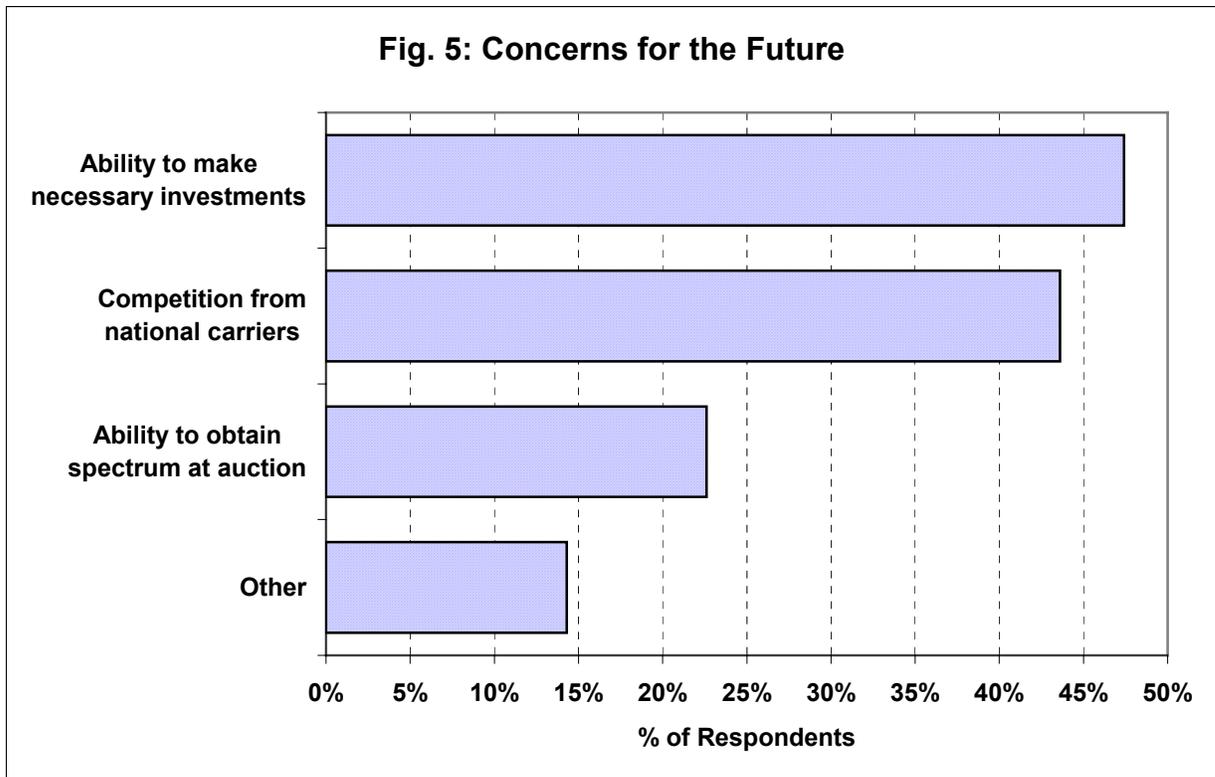
Nineteen percent of respondents have sought an RUS loan for the deployment of wireless or broadband services. Every one of those respondents indicated that their efforts were either successful or still pending.

Respondents have been active: 23% indicated that they had acquired spectrum in the preceding twelve-month period; 11% entered into negotiations for the acquisition of spectrum; and 5% made arrangements for the utilization of previously-acquired spectrum.

Thirty-eight percent of survey respondents are utilizing unlicensed spectrum to provide wireless services to their customers. Among the services identified are point-to-point microwave, Wi-Fi, wireless Internet, internal WAN/LAN, and T1 backhaul. Only a handful of respondents indicated that they had experienced difficulties with interference

in their use of unlicensed spectrum. Unlicensed spectrum is, evidently, far from an ideal solution: given their choice, respondents indicated they would prefer access to additional licensed spectrum over additional unlicensed spectrum by a 71% to 29% margin.

Respondents intend to offer their customers a wide variety of new services over the next 12 to 18 month period: broadband, GSM/GPRS, fixed wireless, bundled voice, data and Internet, video over DSL, push-to-talk, paging, and text messaging were all noted. A number of concerns, however, threaten survey respondents' future plans. Forty-seven percent indicated that they were concerned about their ability to make the investments necessary to continue to provide the latest services, 44% selected competition from national carriers, and 23% their ability to obtain spectrum at auction. Fourteen percent noted other concerns, such as the cost of changing technology and maintaining a sufficient level of technical expertise, equipment availability, and the costs of complying with wireless local number portability and E911 regulations. (See Fig. 5.)



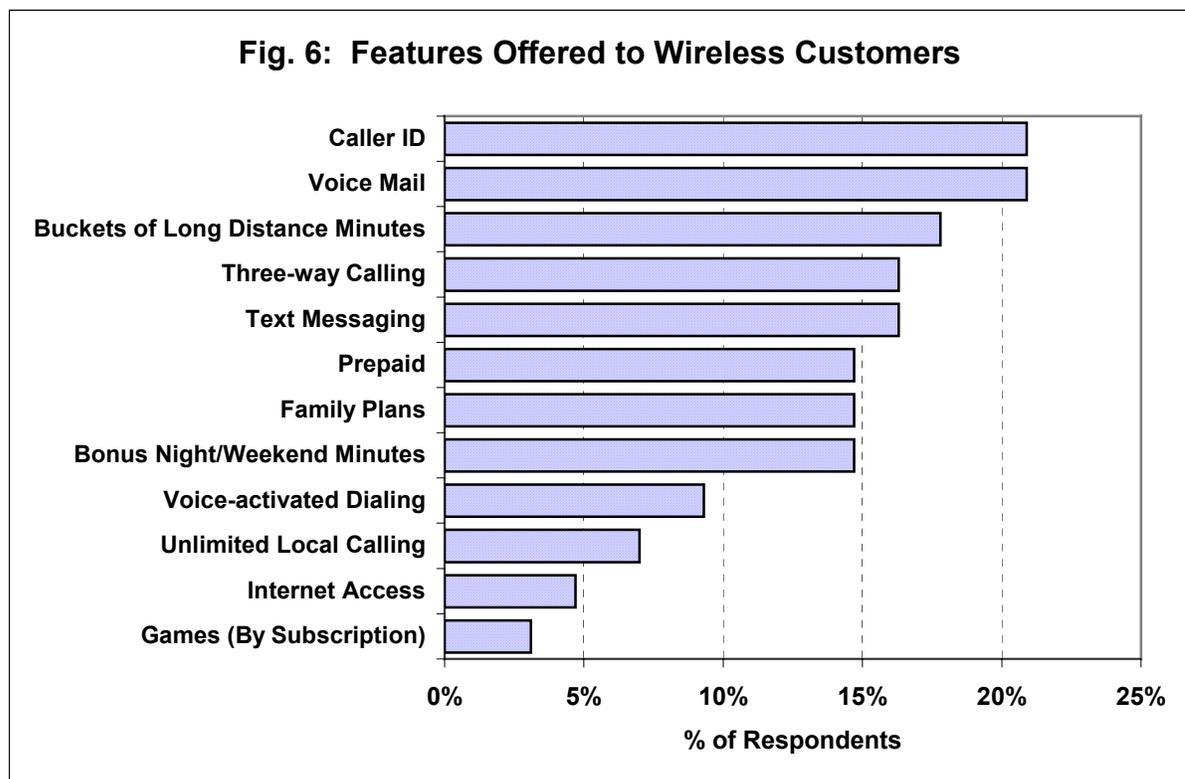
Note: Totals exceed 100% as respondents were allowed to select more than one concern.

Of those subscribers providing CMRS services, 38% utilize TDMA, 31% CDMA, 24% GSM, and 7% AMPS. Of the 45% utilizing either TDMA or AMPS, virtually all indicated that they intend to upgrade within the next 12 months, with GSM preferred over CDMA by more than two to one.

The average customer's monthly minutes of use are 378, and the average monthly bill is just over \$43. Respondents' average total annual wireless revenues are \$7.8 million.

Twenty-eight percent of survey respondents serve as a local presence for a national carrier, or market a national brand. Seventy-six percent have a partnership agreement with a national wireless carrier (AT&T, Verizon, Cingular, Sprint, Voice Stream, Nextel) to handle their roaming traffic at a contracted fee. Fifty percent offer a wireless package that they feel is competitive with the national carriers, while 79% 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. Twenty-one percent offer caller ID and voice mail; 18% offer buckets of long distance minutes, and 16% offer three-way calling and text messaging. (See Fig. 6.)



Respondents indicated considerable customer loyalty. Forty-eight percent experienced an annual customer churn rate of less than 10%, while 33% reported annual customer churn of between 10% and 25%.

CONCLUSIONS

NTCA member companies continue to do an admirable job of providing wireless services to their customers. Despite the economic and technological impediments inherent to providing wireless to rural customers, NTCA member companies continue to provide a variety of wireless services to a large number of rural Americans. Further, survey respondents indicated their intention to expand their service offerings in the near future.

Financing wireless operations poses a formidable challenge for NTCA member companies. According to the survey, financing wireless operations poses the greatest challenge to rural providers. The ability to make necessary investments was cited as the number one impediment to providing wireless services. Unless rural providers are able to obtain necessary funding for wireless projects, customers in those areas will be underserved.

While unlicensed spectrum provides some relief for those carriers who are unable to obtain spectrum licenses at auction, it is far from an ideal solution to the problem. Nearly forty percent of survey respondents are currently utilizing unlicensed spectrum to provide wireless services. Several, however, indicated difficulties with interference from other unlicensed spectrum users—a problem that will continue to worsen as more and more wireless users try to use a limited available quantity of unlicensed spectrum. Tellingly, an overwhelming majority of respondents would prefer access to additional licensed spectrum over additional unlicensed spectrum.