

NTCA 2005 WIRELESS SURVEY REPORT

January 2006

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

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EXECUTIVE SUMMARY

In the fall of 2005, 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 (23%) responded.

Fifty-seven percent of survey respondents indicated that they hold at least one wireless license; 62% are providing wireless service to their customers. Fifty-six percent of those providing wireless service offer broadband data, 46% mobile voice, and 27% paging. Sixty-two percent of the forty respondents not currently offering wireless service are considering doing so.

The average total (cumulative) investment in wireless facilities, excluding spectrum, is \$2.6 million; average total (cumulative) investment in spectrum totaled \$290,000.

Twenty-eight percent of survey respondents characterized the process of obtaining financing for wireless projects as "very difficult" or "virtually impossible." Twenty-seven percent have sought an RUS loan for the deployment of wireless or broadband services.

Forty-six percent of respondents are utilizing unlicensed spectrum to provide some wireless services to their customers. Given the choice, however, three-quarters would prefer access to additional licensed spectrum over additional unlicensed spectrum.

Half of all respondents indicated that competition from nationwide carriers was their greatest concern, 27% selected the ability to make necessary investments and their ability to obtain spectrum at auction, respectively. Ten 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-five percent of those respondents offering CMRS services serve as a local presence for a national carrier, or market a national brand (up significantly from 19% in the 2004 survey). Seventy-one percent have a partnership agreement with a national wireless carrier to handle their roaming traffic at a contracted fee (down only slightly from 74% a year ago). Approximately two-thirds find it difficult to compete with promotions offered by the national carriers.

Ninety-five percent of respondents offer their wireless customers voice mail, 91% free long distance, family plans, caller ID and text messaging, respectively, and 86% bonus

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

night and weekend minutes. Seventy-three 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%.

INTRODUCTION

In late fall of 2005, 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. 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 Telecommunications Act of 1996 ("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 2004, and seeks to build upon the results of that survey².

OVERVIEW OF SURVEY

The 2005 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

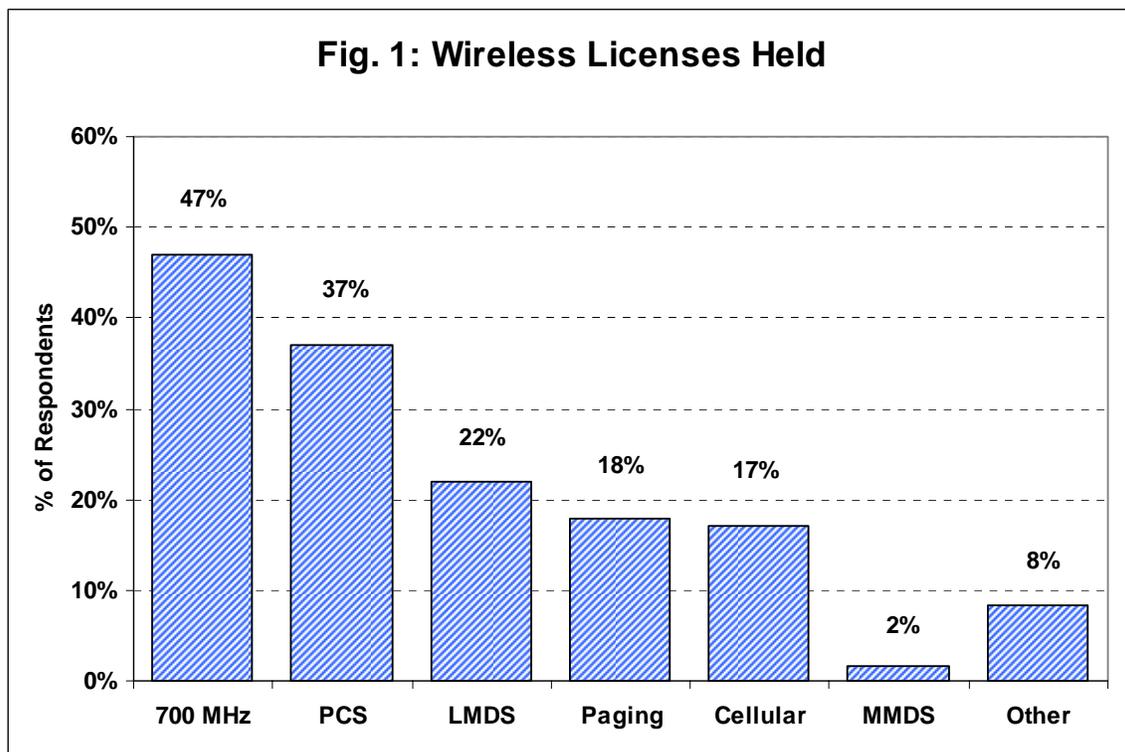
The survey URL was distributed via email and fax to all of the NTCA member companies in NTCA's database. The messages contained instructions for online access to the survey. Responses were received from 106 member companies, a 23% response rate.³ Twenty-four percent of those NTCA member companies providing cellular service responded to the survey, as well as 20% of those providing PCS service.

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

³ Based on the sample size, results of this survey can be assumed to be accurate to within $\pm 9\%$ at the 95% confidence level.

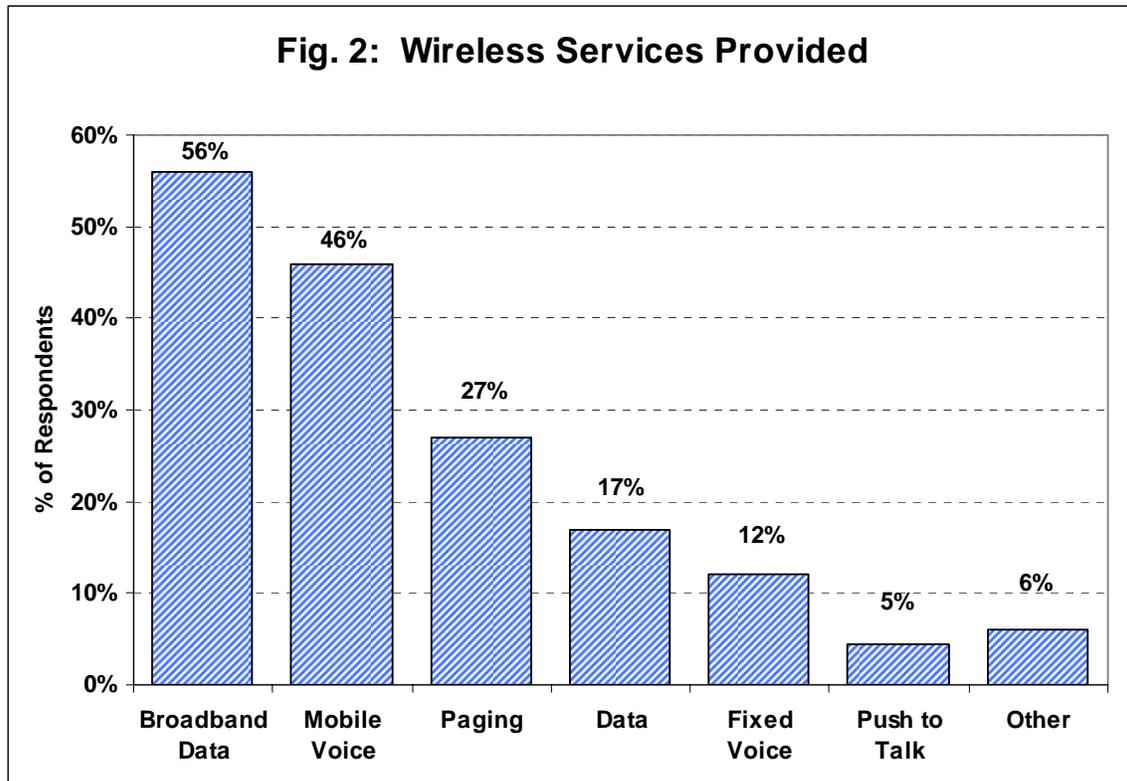
Survey responses were received from companies in 33 states. Those respondents providing wireless services range in size from approximately 50 wireless customers to more than 60,000, and the average respondent served approximately 6,700 wireless customers. This heterogeneity in size and geographic location mirrors that of NTCA’s membership as a whole.

Fifty-seven percent of survey respondents indicated that they currently hold at least one wireless license. Forty-seven percent of those who hold a license have a 700 MHz license, 37% PCS, 22% LMDS, 18% paging, and 17% cellular. (See Fig. 1.)



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

Sixty-two percent of survey respondents are providing wireless services to their customers⁴. Of those providing wireless service, fifty-six percent offer broadband data,⁵ 46% mobile voice, 27% paging, and 17% data. (See Fig. 2.)

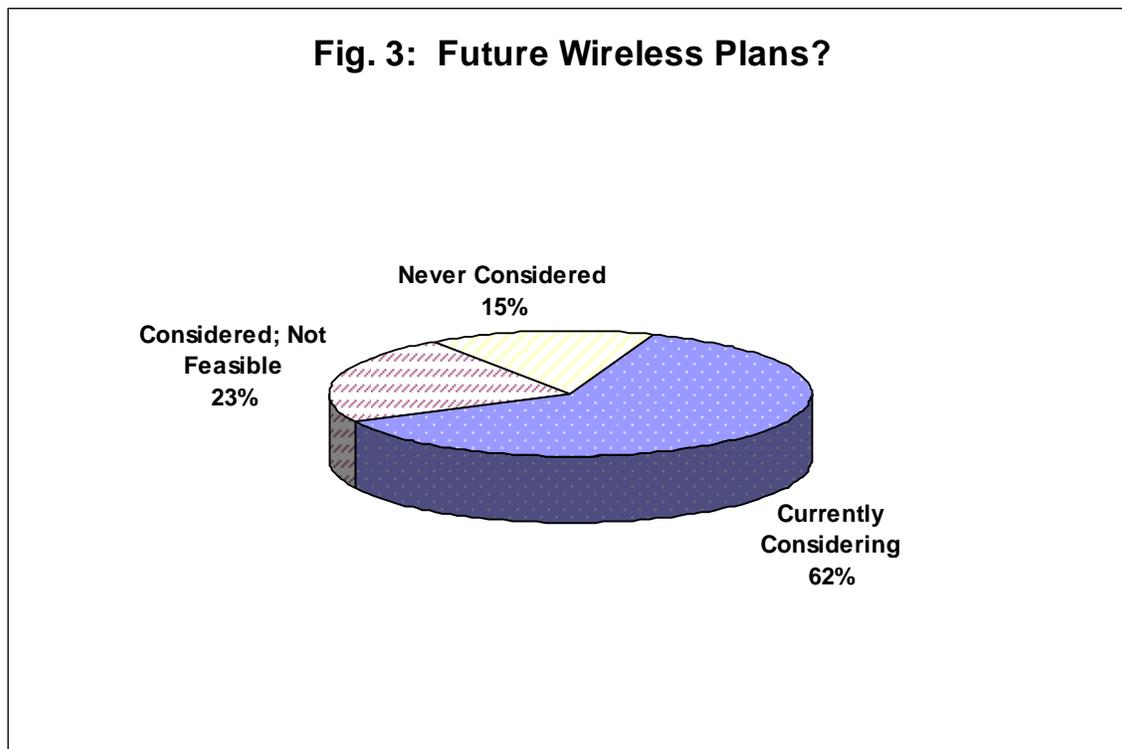


Note: Totals exceed 100% as carriers may provide more than one wireless service.

⁴ Includes respondents utilizing unlicensed spectrum to provide wireless service.

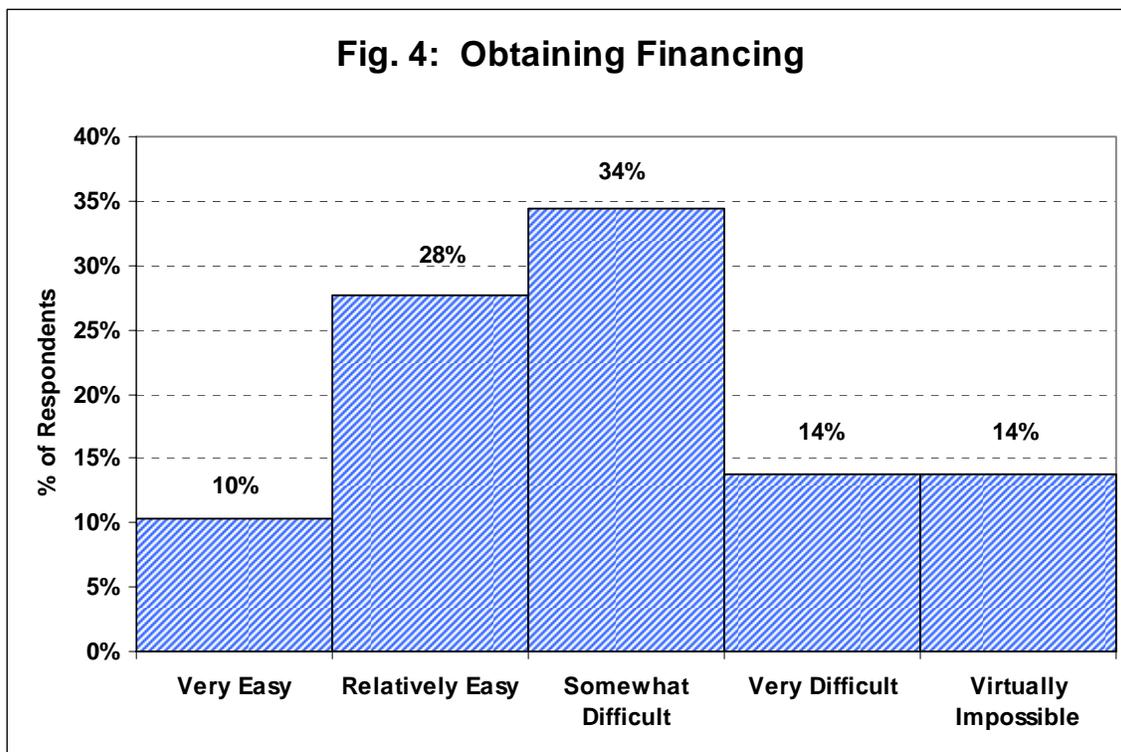
⁵ For the purposes of this survey, broadband is defined to be data transmission speeds of at least 200 kilobits per second in one direction.

Sixty-two percent of the forty respondents not currently offering wireless service indicated they are considering doing so. Twenty-three percent have previously considered offering wireless service and deemed it not feasible, while 15% 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 \$2.6 million, ranging from a high of \$20 million to a low of \$5,000. Average total (cumulative) investment in spectrum totaled \$270,000. Survey respondents invested an average of \$1.2 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, 34% categorized the experience as “somewhat difficult,” 28% “relatively easy,” and 14% “very difficult” or “virtually impossible,” respectively. (See Fig. 4.)



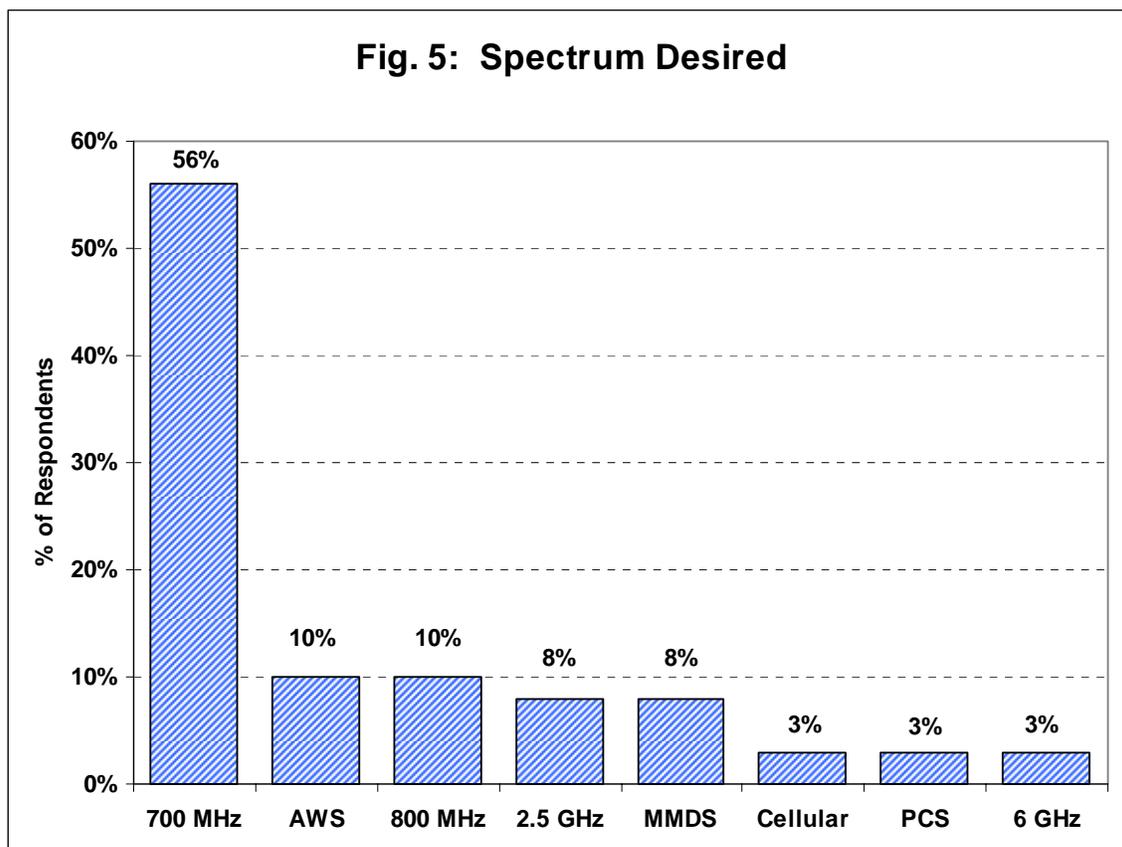
Twenty-seven percent of respondents have sought an RUS loan for the deployment of wireless or broadband services. Eighty-seven percent of those who have sought an RUS loan indicated that their efforts were either successful or still pending.

Six percent of survey respondents indicated that they had acquired spectrum in the preceding twelve-month period, while another 8% made arrangements for the utilization of previously acquired spectrum. Eleven percent entered into negotiations for the acquisition of spectrum.

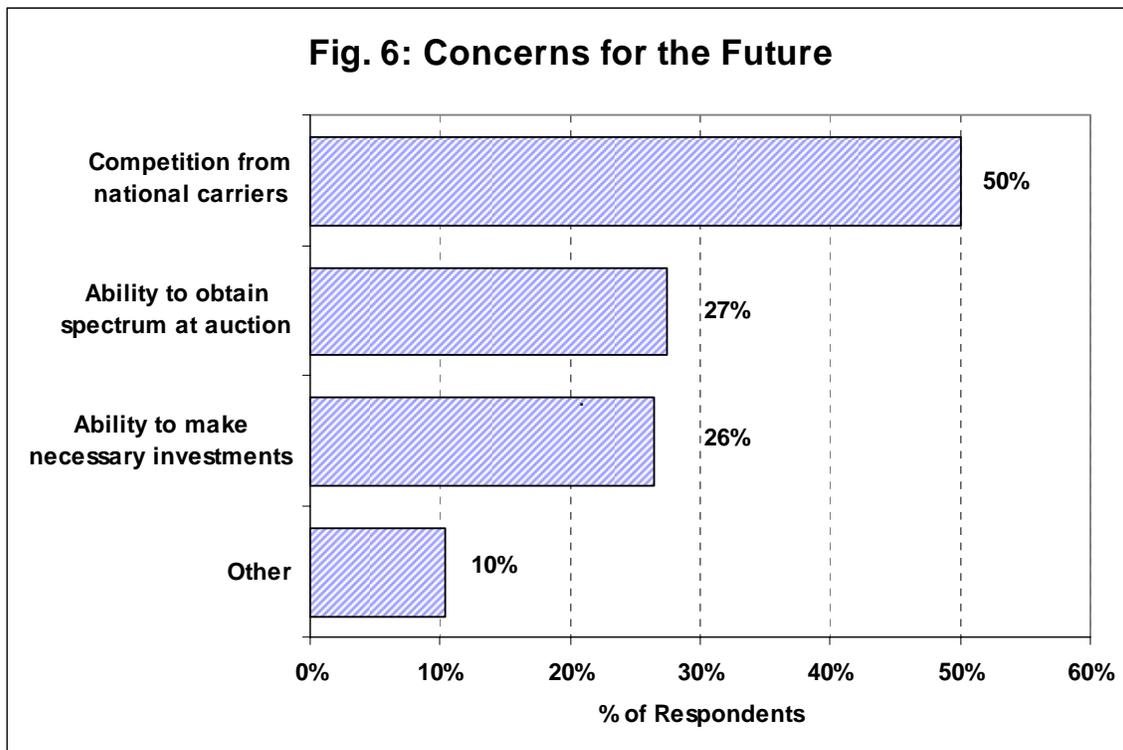
Thirty-nine percent of survey respondents are looking to expand their wireless service area. Sixty-six percent of respondents are looking to serve both their wireline service area and neighboring territories; 19% seek to serve neighboring territories only; and 15% their own wireline service territory only.

Forty-six percent of survey respondents are utilizing unlicensed spectrum to provide wireless services to their customers. Among the services identified are Wi-Fi, point-to-

point microwave, and voice. Fifty-four percent of those respondents using unlicensed wireless spectrum indicated that they had experienced difficulties with interference. Given their choice, respondents indicated they would prefer access to additional licensed spectrum over additional unlicensed spectrum by a 73% to 27% margin. The most desired spectrum was 700 MHz, cited by 56% of those who indicated they wished to add additional spectrum. Advanced wireless services (AWS) spectrum and 800 MHz spectrum were a distant second and third at 10% each. (See Fig. 5.)



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. Fifty percent indicated that they were concerned about competition from national carriers, 27% cited their ability to obtain spectrum at auction, and 26% their ability to make the investments necessary to continue to provide the latest services. Ten percent noted other concerns, such as achieving a satisfactory return on investment, developing a business case for wireless, service area geography, interference in unlicensed spectrum, and clearing 700 MHz spectrum. (See Fig. 6.)



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

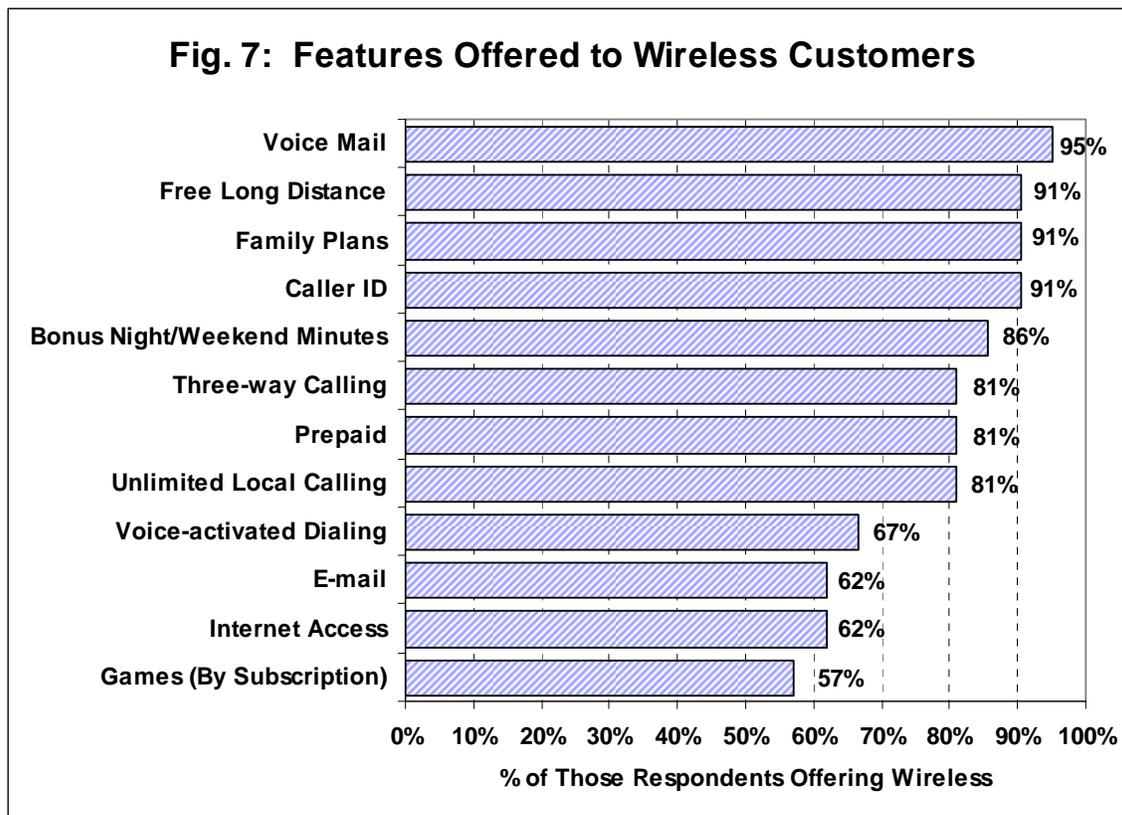
Survey respondents are facing considerable competition from other carriers—the average respondent indicated that their company competes with between two and five other carriers.

Thirty-five percent of survey respondents serve as a local presence for a national carrier, or market a national brand. Seventy-one percent have a partnership agreement with a national wireless carrier (AT&T, Verizon, Cingular, Sprint, T-Mobile, Nextel) to handle their roaming traffic at a contracted fee. Eighty-one percent of respondents pay the same rate for the national wireless carrier to handle their roaming traffic as they themselves charge the national carrier to handle the national carrier’s roaming traffic. Fourteen percent pay the national carrier more, and 5% pay the national carrier less.

The average customer’s monthly wireless bill is between \$40 and \$45. Sixty-nine percent of survey respondents offer a wireless package that they feel is competitive with the national carriers, while 62% 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-five percent of respondents offer their wireless customers voice mail, 91% free long distance,

family plans, caller ID and text messaging, respectively, and 86% bonus night and weekend minutes. (See Fig. 7.)



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

Respondents indicated considerable customer loyalty. Seventy-three 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

⁶ Federal Communications Commission, *Tenth Report on Competitive Market Conditions in the CMRS Industry*, FCC 05-173, WT Docket No. 05-71, September 2005, at 56.

CONCLUSIONS

Respondents' investment in wireless shows the level of their commitment to providing the service. Survey respondents' average total (cumulative) investment in wireless facilities, excluding spectrum, is \$2.6 million; their average total (cumulative) investment in spectrum is nearly \$300,000. For smaller carriers with limited capital resources, these are significant investments. This is indicative of the carriers' determination to meet their customers' demands for new services.

Many more survey respondents want to get into wireless. Almost two-thirds of those respondents who are not currently providing wireless service indicated they are considering entering the wireless arena. If these carriers are able to overcome the financial and regulatory challenges ahead, the end result will be higher quality service and more choices for rural customers.

Ambitious plans to provide a wide variety of new and innovative wireless services will depend upon rural carriers' ability to obtain both spectrum and financing. Half of all respondents cited competition from national carriers as a concern for the future, while just over a quarter noted their ability to obtain spectrum at auction and their ability to make necessary investments, respectively. Without adequate capital or access to spectrum, the ability to compete is moot.

Many NTCA members are working closely with national carriers, cooperating to better serve rural customers. Thirty-five percent of respondents serve as a local presence for a national carrier, and 71% have roaming partnership agreements with nationwide carriers. Regulations which foster this continued cooperation and prevent the large carriers from forcing small carriers from the marketplace will benefit all involved parties—not just carriers, but consumers as well.