# FLORIDA PUBLIC SERVICE COMMISSION

# Consumer Survey Results: January - December 2006

# PREPARED BY:

**Division of Competitive Markets & Enforcement** 

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# TABLE OF CONTENTS

Consumer Survey Results	5
Statistical Methodology	6
Report Highlights	6
Wireline Service and Consumer Preference.	8
Wireless Competition	11
Internet and Broadband	14
Lifeline Awareness	25
Lifeline Enrollment	28
Conclusion	31

# **Consumer Survey Results**

The Florida Public Service Commission (Commission) has gathered a variety of consumer survey information since mid-1997. The University of Florida's Bureau of Economic and Business Research (BEBR) conducts the actual monthly survey after receiving topical input from the Commission. The Commission's Office of Standards Control and Reporting receives the monthly updates, prepares a monthly report of survey results, and distributes those results to the technical divisions. This report presents results for telecommunications and Internet-related topics and was compiled and analyzed by staff in the Division of Competitive Markets and Enforcement.

The current survey questions primarily address telecommunications service offerings and competitive market development. The questions are designed to gather data on consumer preferences and buying patterns in the telecommunications market. Analysis of this data allows broad conclusions to be drawn regarding trends in consumer use of telecommunication and information services. Understanding consumer preferences and market trends improves the Commission's ability to promote a balanced policy for Florida consumers and utilities. The survey questions will continue to be modified in order to address current issues before the Commission.

The BEBR survey data also yield important information that the Commission cannot obtain from other sources, either because the information is proprietary or, in the case of wireless and broadband data, the Commission lacks jurisdiction. Without the survey data to supplement data provided directly by the industry, the Commission would only have a partial picture of communications competition in Florida.

Lifeline service has become an integral part of current telecommunications regulatory policy. Lifeline service is designed to be a safety net for economically disadvantaged individuals to maintain telecommunications service in an increasingly deregulatory environment. The survey provides a vehicle to assess consumer Lifeline awareness. The Lifeline survey data results give the Commission a valuable tool to assess whether certain promotional efforts are likely to have a positive effect on Lifeline subscribership.

This report presents results of the surveys conducted in 2006. Results are compared by quarter in order to show emerging market trends. In some cases, where survey questions have been asked consistently over several years, longer trend analyses appear. Results from selected questions have also been compiled according to demographics and, in some instances, by different serving local service providers. The report highlights trends in:

•	Wireline Service and Consumer Preference	Page	8
•	Wireless Competition	Page	11
•	Internet and Broadband	Page	14
•	Lifeline Awareness	Page	25
•	Lifeline Enrollment	Page	28

## **Statistical Methodology**

BEBR employees conduct random-digit dialing telephone screening calls to reach endusers based within specific geographic locations. Each month, a minimum of 500 households are asked a series of questions, including those questions developed by PSC staff.

The data collected by BEBR are based solely on survey responses from residential households and is limited to subscribers of landline telephones. The sample excludes all wireless subscribers, including households that currently use wireless telephones as their sole technology for telecommunications. The exclusion of these "wireless only" households limits the current survey's ability to measure some consumers' preferences for substituting wireless telephony for landline-based services.

BEBR conducts the survey according to the basic requirements of statistical randomness and weights the results to ensure that the data is representative of the population of each county in Florida. Moreover, statistical confidence improves each month as the aggregate sample size increases. However, as in all surveys, the validity of the data is largely dependent on the accuracy of the respondents' answers.

## **Report Highlights**

Competition in the communications industry has brought significant consumer benefits in the form of expanded provider choice and innovation in service offerings for communications services. The major findings of this report include the following:

- In 2006, approximately 26% of respondents only subscribed to basic local telecommunications service and did not subscribe to additional services. (Page 8)
- In 2006, approximately half of respondents preferred bundled service offerings. (Page 10)
- Subscribership to wireless telephone service continued to grow, reaching a peak of 76% of all wireline subscribers in 3<sup>rd</sup> quarter 2006. (Figure 5)
- Internet penetration in Florida between 1<sup>st</sup> quarter 2004 to 3<sup>rd</sup> quarter 2006 ranged from 69% to 73%. (Figure 8)
- Internet penetration reached 74% for urban residents and 63% for rural residents in 2006. (Figure 9)
- Broadband penetration in Florida more than doubled from 24% to 53% from 1<sup>st</sup> quarter 2003 to 4<sup>th</sup> quarter 2006. (Page 17)
- Broadband penetration reached 48% of rural customers in 2006, an increase from 27% in 2004. (Figure 19)

- Lifeline awareness improved throughout 2006 and rose to 22% as of 4<sup>th</sup> quarter 2006. (Figure 22)
- In 2006, Lifeline program awareness was highest for respondents served by Verizon at 23%. (Figure 23)
- In 2006, Lifeline program awareness was highest among respondents in the lowest income group and for those 71 years of age and older. (Figures 24 and 25)

#### **Wireline Service and Consumer Preference**

The survey results show that a percentage of respondents subscribe only to basic local telecommunications service. This group of respondents accounts for approximately one-quarter of the surveyed population ranging from 24% to 28% from 2<sup>nd</sup> quarter 2004 to 4<sup>th</sup> quarter 2006 with an overall average for 2006 of 26%. That percentage varies inversely with income and directly with age.

Figure 1, Florida Respondents that Do Not Subscribe to Additional Services by Income, indicates that the propensity to add additional services increases as annual income increases, or conversely, the number of respondents with no additional services increases as annual income decreases.

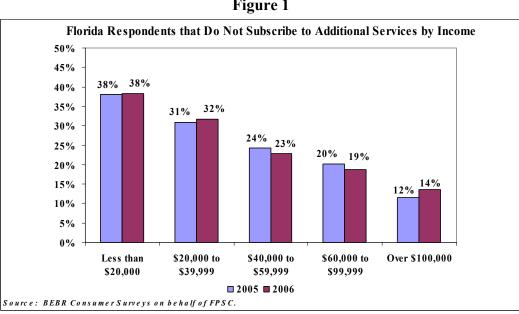


Figure 1

Figure 2, Florida Respondents that Do Not Subscribe to Additional Services by Age, shows that the likelihood of adding additional features, such as call waiting, call forwarding, etc., decreases with age. Conversely, the likelihood of a respondent not subscribing to additional features increases with age. The decline in subscription to additional services is particularly evident in the two categories encompassing those 61 to 70 years of age and 71 years of age and older.

Figure 2

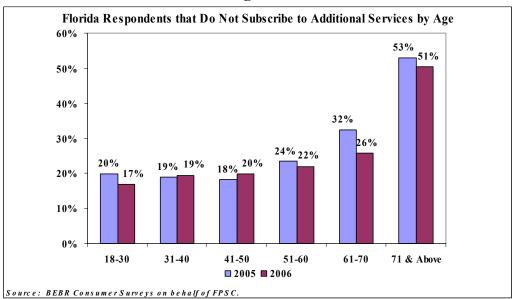


Figure 3, Florida Respondents that Prefer Bundled Packages by Age, reflects the percentage of Florida respondents that prefer bundled pricing packages for their communications services by age. The preference for bundled packages declined in the most recent period for five of seven age groups and four of six income group. In 2006, approximately half of all survey respondents preferred bundled service offerings.

Figure 3

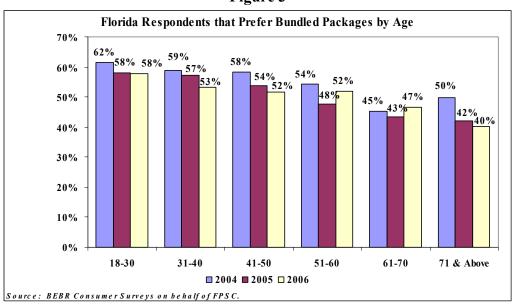
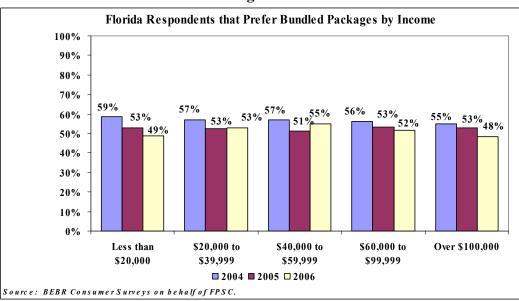


Figure 4



<sup>&</sup>lt;sup>1</sup> The survey asked respondents if they prefer to receive one bill for all of their telecommunication services such as local and long-distance phone service, wireless telephone service, Internet access, and cable television.

# **Wireless Competition**

Floridians continue to value the convenience and portability of wireless services. There was little or no growth in wireline respondents who also subscribed to wireless service from 1<sup>st</sup> quarter 2003 through 1<sup>st</sup> quarter 2004.<sup>2</sup> However, as shown in Figure 5, Florida Wireline Respondents Subscribership to Wireless Telephone Service, penetration began to increase in 2<sup>nd</sup> quarter 2004 through 4<sup>th</sup> quarter 2006, to 75% of respondents.

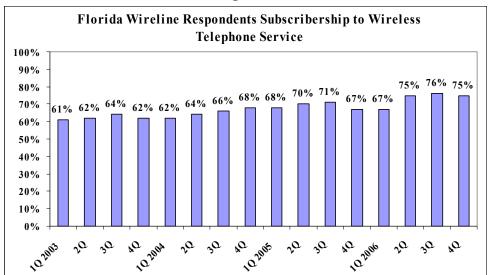


Figure 5

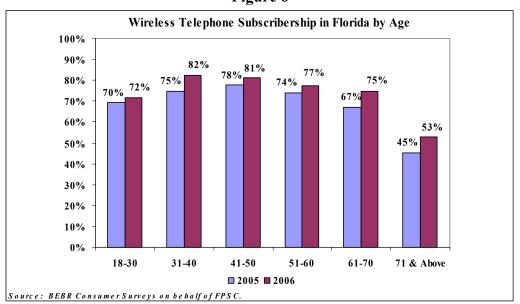
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Source: BEBR Consumer Surveys on behalf of FPS C.

<sup>&</sup>lt;sup>2</sup> The survey universe includes only subscribers to landline services. Therefore, the estimated wireless subscription percentage does not reflect those wireless subscribers that have abandoned landline service for wireless only.

Figures 6 and 7 show wireless penetration by age and income groupings. Survey results indicate that older respondents, and those with lower annual income, are less likely to subscribe to wireless service. As shown on Figure 6, Wireless Telephone Subscribership in Florida by Age, subscribership for those 18-30 years of age continues to be lower than for the next three older age groups. This belies a common perception that younger people are more likely to subscribe to wireless service than other age groups. However, according to the National Center for Health Statistics, adults aged 18-24 are most likely to live in households with only wireless phones.<sup>3</sup>

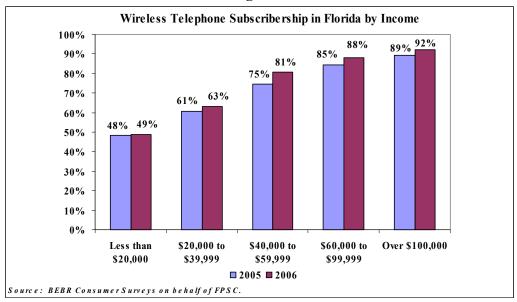




<sup>&</sup>lt;sup>3</sup> Blumberg, Stephen and Luke, Julian V., "Wireless Substitution: Preliminary Data from the January-June 2006 National Health Interview Survey," Nation Center for Health Statistics, Center for Disease Control. Retrieved April 26, 2007 from <a href="http://www.cdc.gov/nchs/products/pubs/pubd/hestats/wireless2006/wireless2006.htm">http://www.cdc.gov/nchs/products/pubs/pubd/hestats/wireless2006/wireless2006.htm</a>

Figure 7, Wireless Telephone Subscribership in Florida by Income, shows that respondents with higher income are more likely to subscribe to wireless service. All age groups and all income levels showed at least some growth from 2005 to 2006.

Figure 7



#### **Internet and Broadband**

Figure 8, Florida Internet Subscribership, shows that Internet subscribership in Florida has varied by three percentage points or less from 2<sup>nd</sup> quarter 2004 to 4<sup>th</sup> quarter 2006. Florida Internet penetration reached 73% in four of the last seven quarters. This suggests that the demand for in-home Internet access has leveled off.

Figure 8

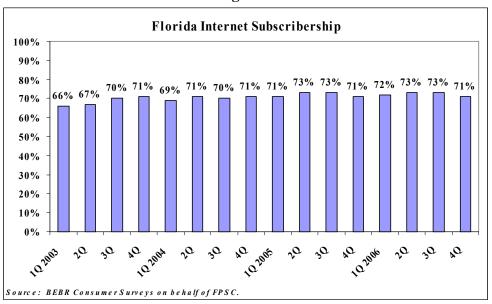
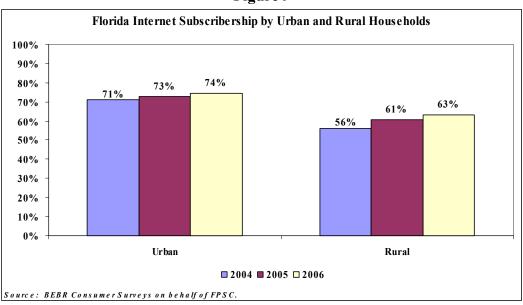


Figure 9, Florida Internet Subscribership by Urban and Rural Households, shows that from 2004 to 2006 Internet subscription by rural customers increased from 56% to 63%. This is consistent with the national average, according to a report by the PEW Research Center. During the same period, the rate for urban users increased slightly, from 71% to 74%. This is slightly higher than the national average of 70% reported by PEW.

Figure 9



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 $<sup>^4</sup>$  Rural Broadband Internet Use Data Memo as of February 2006, The Pew Research Center for the People and the Press, p 1.

Figure 10, Florida Internet Subscribership by Age, shows that 31-40 year olds have the highest subscription rate at 85% for 2006. It is noteworthy that the penetration rate for 61-70 year olds increased from 63% to 72% from 2004 to 2006. Both the 31-40 year old and 61-70 year old age groups experienced an increase in Internet subscribership of five percentage points in 2006, representing the largest increase among all age groups.

Figure 10

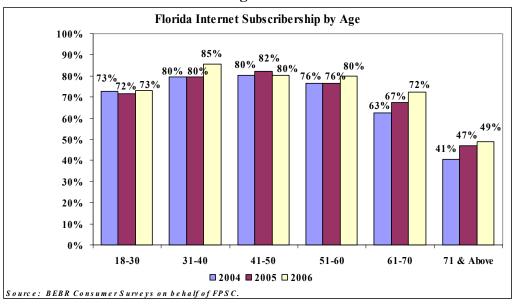
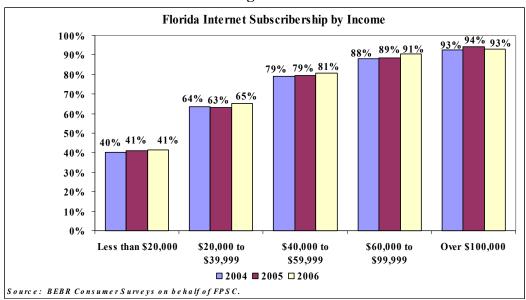


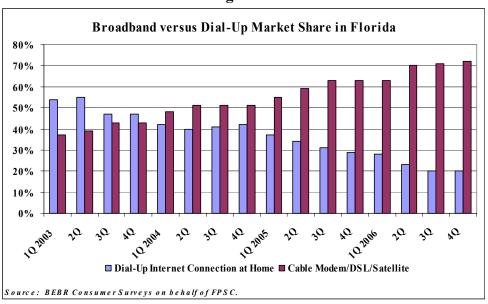
Figure 11, Florida Internet Subscribership by Income, shows Internet subscription increases as annual income increases. The subscription rate is 41% for those respondents with incomes less than \$20,000 annually. This would seem to indicate that Internet access is a high priority at all income levels.

Figure 11



Internet access is achieved predominantly through either dial-up or broadband connections. Figure 12, Broadband versus Dial-Up Market Share in Florida, shows that the broadband market share has been steadily increasing and is now more than three times higher than dial-up market share for those respondents with Internet subscription. Broadband includes cable modem service, Digital Subscriber Line (DSL) service, and satellite-provided broadband. Broadband subscribers more than doubled in Florida, from 24% to 53%, from 1<sup>st</sup> quarter 2003 to 4<sup>th</sup> quarter 2006. Even though broadband subscription continues to grow, a significant portion of Internet users (approximately 20%) continue to access the Internet through dial-up connections.

Figure 12



Figures 13, 14, 15, and 16 show the demographics for the group of Internet users that subscribe to dial-up services. The survey revealed that respondents that are older, have a lower income, have not attended college, and are black are more likely to subscribe to dial-up services rather than broadband, or other types of Internet services.

Figure 13, Florida Dial-Up Subscribers by Age, shows that the propensity to subscribe to dial-up Internet access is approximately equal for those respondents 50 years of age or younger. However, the likelihood of dial-up subscription increased with age for those respondents 51 years old and older.

Figure 13

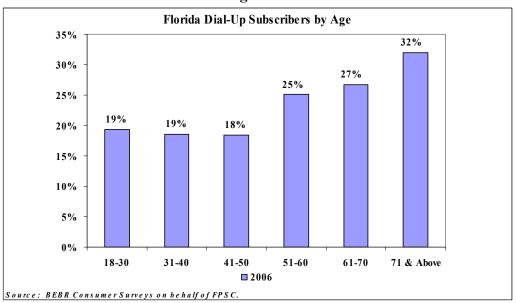


Figure 14, Florida Dial-Up Subscribers by Income, and Figure 15, Florida Dial-Up Subscribers by Education, show the propensity to subscribe to dial-up Internet access has an inverse relationship to both income and education.

Figure 14

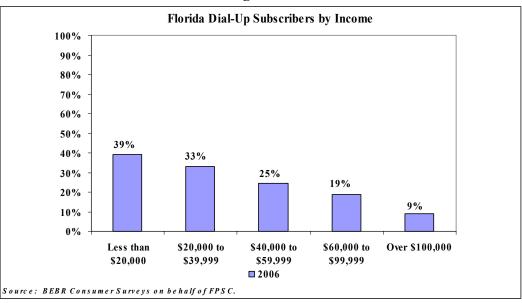
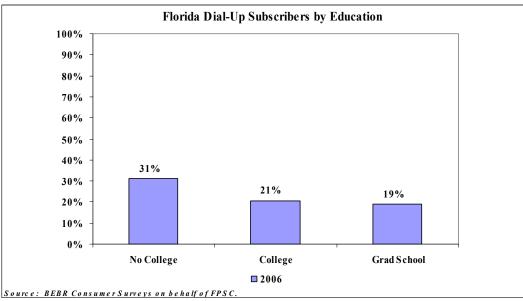


Figure 15



The survey collects information on race providing respondents with the following choices: black, white, Asian or Pacific Islander, American Indian or Alaska native, multiracial or other. Figure 16, Florida Dial-Up Subscribers by Race, shows that blacks and whites with Internet access are more likely to choose dial-up Internet than the rest of the survey population. It is interesting to note that those respondents considering themselves to be neither black or white are more likely to have broadband service, if they subscribe to Internet access at all.

Florida Dial-Up Subscribers by Race 100% 90% 80% 70% 60% 50% 40% 27% 30% 23% 17% 20% 10% 0% White Black Other **2006** Source: BEBR Consumer Surveys on behalf of FPSC.

Figure 16

Figure 17, Florida Internet Subscribers by Race, shows that whites are more likely to subscribe to Internet access while blacks are least likely compared to the rest of the population.

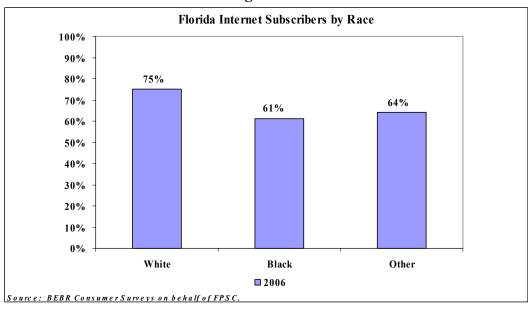


Figure 17

Figure 18, DSL versus Cable Modem Market Share by LEC (local exchange company), shows DSL's market share in the territory of each of the three LECs and for the Other category (comprising other incumbent and competitive carriers, including cable companies). DSL is the preferred technology in BellSouth, Embarg, and Verizon territories, ranging from a market share high of 66% in BellSouth's territory to a low of 52% in Embarg's territory. For the Other category, cable modem is the preferred provider with 59% of the market. At the national level, the gap between DSL and cable is narrower, with DSL subscribers comprising 46% of all broadband users compared to 44% for cable modem subscribers.<sup>5</sup>

Assuming that cable companies market VoIP service first to their cable modem customers, Figure 18 also portrays the short-term potential market for cable VoIP service. From this perspective, it appears that cable VoIP is well positioned to be a major competitor to the voice services marketed by incumbent LECs and other competitive wireline providers.

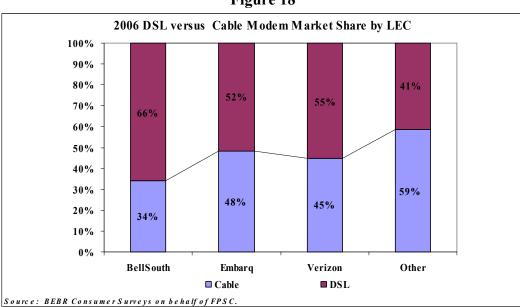


Figure 18

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<sup>&</sup>lt;sup>5</sup> Rural Broadband Internet Use Data Memo as of February 2006, The Pew Research Center for the People and the Press, Composition of Home Broadband Access, p 2.

Figure 19, Florida Broadband Subscribership by Urban and Rural Households, analyzes broadband growth for urban and rural markets among those customers who already have access to the Internet. The urban subscribership rate increased from 51% in 2004 to 71% in 2006. The broadband subscribership rate for rural customers increased as well, from 27% to 48%.

Florida broadband subscribership is higher among both urban and rural subscribers when compared to national broadband subscribership. Nationwide, only 24% of rural residents subscribe to broadband service while 39% of urban and suburban residents subscribe to broadband access.<sup>6</sup>

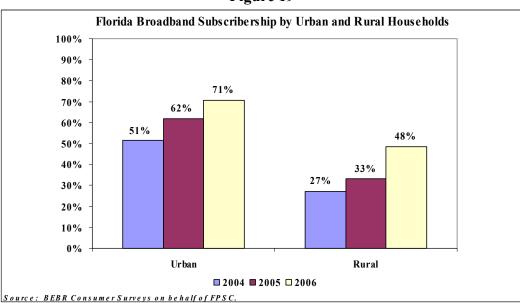


Figure 19

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<sup>&</sup>lt;sup>6</sup> Rural Broadband Internet Use Data Memo as of February 2006, The Pew Research Center for the People and the Press, Portrait of Internet Access, p 2.

Figure 20, Florida Broadband Subscribership by Age, shows that the age group with the highest broadband subscribership is 41-50 years old. Between 2004 and 2006, each age group experienced an increase – at least ten percentage points – in the subscription rate. The largest percentage point increase in broadband subscription was for the 41-50 age group, from 53% to 77%. The 71 and above age group experienced the smallest increase, from 36% to 48%, during the same time period.

Figure 20

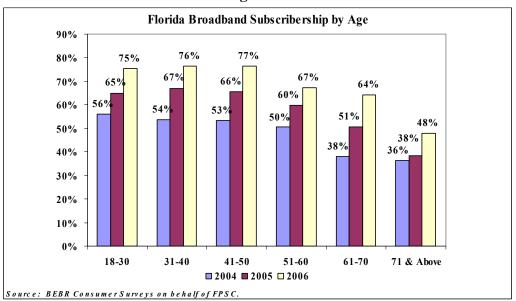
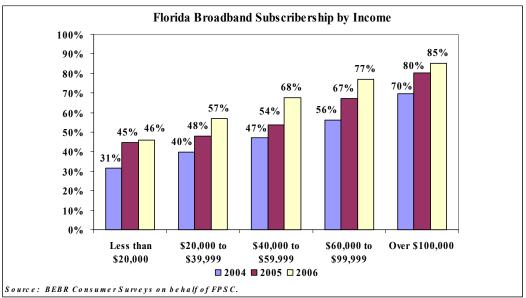


Figure 21, Florida Broadband Subscribership by Income, shows that broadband subscribership increases with income. Between 2004 and 2006, broadband subscribership increased between 15 and 21 percentage points across all income levels. Especially noteworthy is that for those with annual incomes of less than \$20,000, broadband subscribership is 46%. The subscription rate of 46 % indicates a strong demand for broadband service by those with the least income.

Figure 21



While Internet subscribership in Florida has remained relatively flat during the last three years, those Internet respondents subscribing to broadband service have steadily increased to 72% of total Internet respondents surveyed. The increase of broadband households is present among all age levels and income groups and for both urban and rural customers.

#### **Lifeline Awareness**

Raising awareness and enrollment for the Lifeline and Link-Up assistance programs remains a Commission objective as pro-competitive deregulatory policies evolve for the telecommunications industry. Despite the efforts of the Commission, the telecommunications industry, other state agencies, and citizen action groups like AARP, program awareness among the general population of households continued to be low. Figure 22, Lifeline Awareness in Florida, indicates that since 4<sup>th</sup> quarter 2003, the first quarter that the survey tracked this information, awareness of the Lifeline program has ranged from a high of 27% in 1<sup>st</sup> quarter 2004 to a low of 18% in 1<sup>st</sup> quarter 2006. It is encouraging to note that awareness levels in Florida increased overall in 2006.

Figure 22
Awareness in Flo

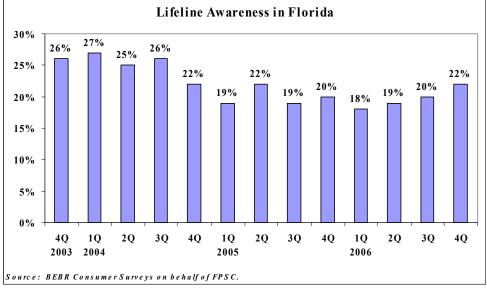
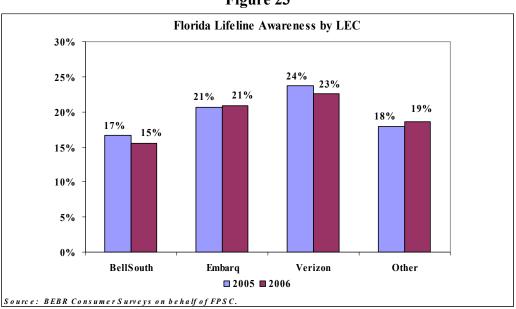


Figure 23, Lifeline Awareness by LEC<sup>7</sup>, shows that respondents who claim Verizon as their LEC continue to have a higher level of Lifeline awareness than any other LEC. Respondents identifying BellSouth as their LEC continue to have the lowest level of Lifeline awareness. Verizon and Embarq each account for approximately 20% of Florida residential access lines. BellSouth accounts for approximately half of all residential access lines in Florida and the rural and competitive LECs account for slightly less than 9%.<sup>8</sup>

Figure 23



<sup>&</sup>lt;sup>7</sup> The Other category includes competitive local exchange carriers and cable companies providing voice services.

<sup>&</sup>lt;sup>8</sup> Report on the Status of Competition in the Telecommunications Industry as of May 31, 2006, Florida Public Service Commission, Table 3, 2006 Florida CLEC Market Penetration by ILEC Service Territory, p. 25.

Figure 24, Florida Lifeline Awareness by Income, shows that the highest level of awareness occurs among households whose annual income is less than \$20,000. This is important because it means that the highest level of awareness occurs among the income group most likely to be eligible to receive Lifeline benefits. Households whose annual income is \$40,000 or higher, experienced a decline in awareness in each of the last three years.

Florida Lifeline Awareness by Income 50% 45% 40% 35% 28% 30% 25% 24% 24% 25% 19% 18% 19% 20% 16% 15% 10% 5% 0% \$40,000 to \$60,000 to Less than \$20,000 to Over \$100,000 \$20,000 \$39,999 \$59,999 \$99,999 **■ 2004 ■ 2005 ■ 2006** Source: BEBR Consumer Surveys on behalf of FPSC.

Figure 24

Figure 25, Florida Lifeline Awareness by Age, shows variation in awareness across the different age groups from 2004 through 2006. From 2005 to 2006, four of the six groups reflected an increase, while the remaining two groups, 41-50 and 51-60 years of age, experienced a decrease. Total Florida Lifeline awareness remained relatively flat for the three year period.

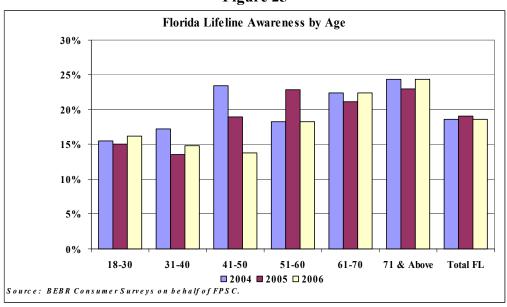


Figure 25

#### Lifeline Enrollment

Figure 26, Lifeline Enrollment in Florida, shows increased enrollment for the 2<sup>nd</sup> quarter and 3<sup>rd</sup> quarter of 2006. However, by the 4<sup>th</sup> quarter of 2006 enrollment dropped back down to the same level as the 4<sup>th</sup> quarter of 2005.<sup>9</sup> The decrease seen in 2004 may be attributed to the changes in the eligibility criteria for Florida consumers. Eligibility was increased to include 125% of the poverty level. The number of eligible households increased, however, the number of enrolled households did not increase at the same rate. Therefore the percentages reflect an overall decline despite the fact that the number of actual enrolled households remained the same or increased slightly. In recent years, several local exchange carriers have implemented eligibility verification efforts in the 4<sup>th</sup> quarter of each year which has also impacted enrollment levels for in that time period. In 2005, participation may have decreased due to a federally mandated annual verification process.<sup>10</sup>

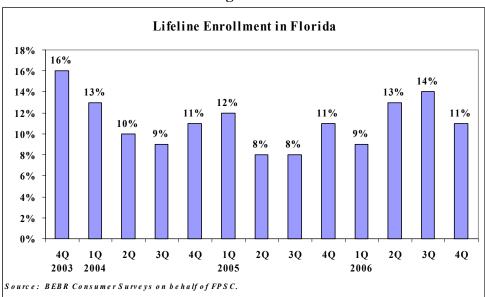


Figure 26

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<sup>&</sup>lt;sup>9</sup> The participation in Lifeline was 12.7% for 2006, according to the Florida Public Service Commission's Lifeline and Link-up Report based on information collected through September of 2006. *Link-Up & Lifeline Florida Assistance Programs: Number of Customers Subscribing to Lifeline Service and the Effectiveness of Procedures to Promote Participation*, December 2006, Florida Public Service Commission, Table 2: Lifeline Participation Rate in Florida, p. 11. Survey results may differ due to the accumulation of an additional quarter of data and the variance of individual survey responses.

<sup>&</sup>lt;sup>10</sup> Link-Up & Lifeline Florida Assistance Programs: Number of Customers Subscribing to Lifeline Service and the Effectiveness of Procedures to Promote Participation, December 2006, Florida Public Service Commission, p. 11.

Figure 27, Lifeline Enrollment in Florida by Age, shows an increase for all but two age groups in 2006. Total Florida enrollment increased by 2%, reflecting an improvement in enrollment practices despite a relatively stable level of awareness of the Lifeline program.

Figure 27

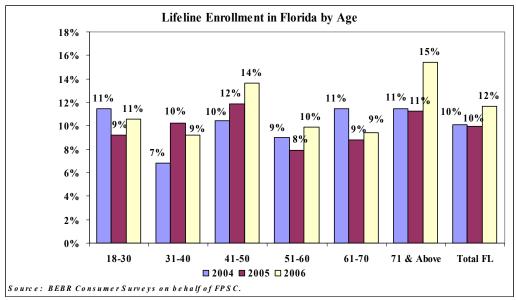


Figure 28, Respondents Knowledgeable of Lifeline Eligibility Criteria, shows that knowledge of Lifeline eligibility criteria is lower than general Lifeline awareness.

Figure 28

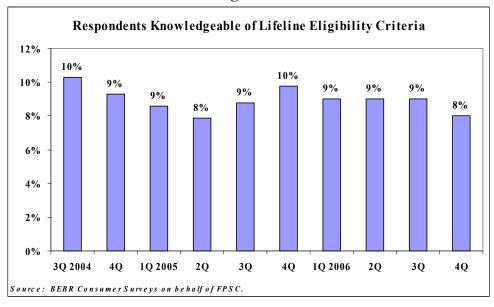
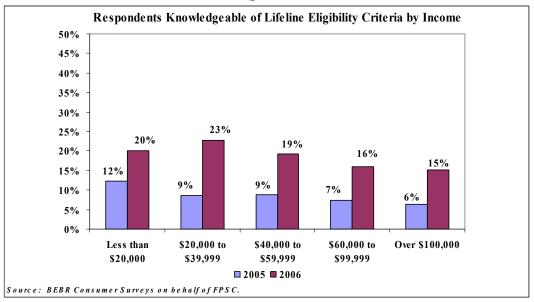


Figure 29, Respondents Knowledgeable of Lifeline Eligibility Criteria by Income, shows that those at the lowest income levels have the greatest awareness of Lifeline eligibility criteria. This income group is the most likely to qualify for Lifeline benefits. In 2006, knowledge of Lifeline eligibility criteria increased for each household income group.

Figure 29



In summary, awareness of the Lifeline program in Florida remains low across the universe of Florida households. However, awareness has recently increased after a period of decline. Awareness appears to be greatest among those respondents whose annual income is less than \$20,000 and those 61 years of age or older. These are also the categories of characteristics in which the highest levels of eligibility would be expected. Finally, there is some variation in Lifeline awareness levels across different demographic characteristics and between customers of different serving LECs.

#### Conclusion

The survey data for 2006 continues to reflect growth trends from prior periods for wireless subscription and broadband Internet subscription. The data also reveal that both Internet subscribership and broadband subscribership continues to grow for both rural and urban respondents. In addition, the increase of broadband households is present across all age levels and income groups for both urban and rural respondents. However, the data also show that in 2006 respondents without a college education, with the lowest income, and those indicating black as their race are more likely to have dial-up Internet access than broadband if they have Internet access at all.

Lifeline awareness remains low, approximately 18% for 2006, however, quarterly survey results for 2006 indicate an increase in awareness through the year. In addition, those respondents at the lowest incomes and greater than 61 years of age have the highest level of awareness. These groups are most likely to be eligible for Lifeline benefits.