



FLORIDA
PUBLIC
SERVICE
COMMISSION

REPORT ON THE

Relationship of the Costs
and Charges of Various
Services Provided by Local
Exchange Companies and
Conclusions as to the
Fair and Reasonable
Florida Residential Basic
Local Telecommunications
Service Rate

as Required by
Chapter 98-277, Section (2) (1)
and (2) (a), Laws of Florida

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VOLUME ONE

VOLUME I

REPORT OF THE FLORIDA PUBLIC SERVICE COMMISSION ON THE RELATIONSHIPS
AMONG THE COSTS AND CHARGES ASSOCIATED WITH PROVIDING BASIC LOCAL
SERVICE, INTRASTATE ACCESS, AND OTHER SERVICES PROVIDED BY LOCAL
EXCHANGE COMPANIES, IN COMPLIANCE WITH CHAPTER 98-277, SECTION 2(1),
LAWS OF FLORIDA

AND

THE CONCLUSIONS OF THE FLORIDA PUBLIC SERVICE COMMISSION AS TO THE
FAIR AND REASONABLE FLORIDA RESIDENTIAL BASIC LOCAL
TELECOMMUNICATIONS SERVICE RATE, IN COMPLIANCE WITH CHAPTER 98-277,
SECTION 2(2)(A), LAWS OF FLORIDA

FLORIDA PUBLIC SERVICE COMMISSION
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VOLUME I

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LIST OF ACRONYMS

AARP	American Association of Retired Persons
AG	Attorney General
ALEC	Alternative Local Exchange Company
AOL	America On-Line
APSC	Alabama Public Service Commission
BEBR	Bureau of Economic and Business Research
BST	BellSouth Telecommunications, Inc.
CATI	Computer Assisted Telephone Interview
CCL	Carrier Common Line
CHCF-A/CHCF-B	California High Cost Funds
CPS	Current Population Survey
CPUC	California Public Utilities Commission
DDD	Direct Distance Dialing
DEC	Direct embedded cost
DTMF	Dual tone multifrequency dialing or TouchTone
EAS	Extended Area Service
ECS	Extended Calling Service
FCC	Federal Communications Commission
FCCA	Florida Competitive Carriers Association
FLS	Florida Legal Services
GDP-PI	Gross Domestic Product Price Index
GPSC	Georgia Public Service Commission
GTEFL	GTE Florida, Inc.
ILEC	Incumbent Local Exchange Company
IPUC	Idaho Public Utilities Commission
IXC	Interexchange Carrier
LRIC	Long Run Incremental Cost
LATA	Local access and transport area
LEC	Local Exchange Company
NTS	Non-traffic sensitive
OPASTCO	Organization for the Protection and Advancement of Small Telephone Companies
OPC	Office of Public Counsel
PANS	Pretty Awesome New Services
PCS	Personal Communications Services
PICC	Presubscribed Interexchange Carrier Charges (pronounced "pixie"); also called Carrier Line Charge
POTS	Plain Old Telephone Service
PBX	Private Branch Exchange
SAC	Stand-alone cost
SCB	South Central Bell Telephone Company
SLC	Subscriber Line Charge
TA96	Federal Telecommunications Act of 1996
TASA	Telecommunications Access System Assessment
TMI	Technologies Management, Inc.
TSLRIC	Total Service Long Run Incremental Cost

UAF
USF
USWC
WPB
ZUM

Universal Access Fund
Universal Service Fund
U.S. WEST Communications, Inc.
West Palm Beach
Zone Usage Measurement

EXECUTIVE SUMMARY

INTRODUCTION

- In 1998, the Florida Legislature enacted a number of changes relating to telecommunications services. As part of those changes, the Legislature directed the Florida Public Service Commission to study basic local telecommunications rates in Florida.
- The Commission determined that no hearing should be held in this study. Rather, other vehicles were used to gather information. In addition to the cost studies filed by the LECs, as required by law, information was gathered through an affordability survey, customer testimony, studies of rates and rate actions in other states, and a technical workshop.

RATES AND COSTS FOR LEC-PROVIDED SERVICES

- To meet the requirements of Chapter 98-277, Laws of Florida, the Commission requested Total Service Long Run Incremental Cost (TSLRIC) studies to be provided. On August 1, 1998, LECs filed cost and other data with the Commission. BellSouth, GTEFL, and Sprint filed the studies as requested. However, the smaller LECs had no such information available; instead, they filed embedded cost information.
- The TSLRIC studies for basic local telecommunications service submitted by the three large LECs all consider the costs of the local loop to be inextricably associated with the provision of basic local service.

- The data for BellSouth showed that the costs for residential basic local services, including the subscriber line charge, exceed the revenues generated, with the shortfall ranging from \$7.25 to \$47.27, depending upon the rate group. The results for Sprint and GTEFL show a similar pattern, with Sprint's shortfall ranging from \$3.12 to \$45.49, while GTEFL's is \$12.42 to \$51.94.

BellSouth's cost study indicates that the associated revenues are below costs by \$581,706,890 or (60)%. Sprint's study reflects that revenues are below costs by \$ 13,791,153, or (43)%. This data is not included for GTEFL due to its claim of confidentiality.

- The same analysis performed for single-line business service indicated that for BellSouth the costs exceed the revenues generated in the lower rate groups, with the shortfall as much as \$22.03, but rates exceed costs in the higher rate groups. The results for Sprint and GTEFL show a similar pattern, with Sprint's contribution ranging from \$(10.28) in rate group 2 to \$13.75 in rate group 6, while GTEFL's contribution ranges from \$(23.50) (rate group 1) to \$6.56 (rate group 5).

BellSouth's single-line business cost study indicates that the total revenues exceed total costs by \$5,305,369 or 18%. Sprint's study also reflects that in the

aggregate revenues exceed costs by \$3,304,577 or 72%. This data is not included for GTEFL due to its claim of confidentiality.

- Analyses were also provided for a number of other services, including ESSX/Centrex; PBX trunks; other multi-line circuit-switched services; intrastate switched access charges; intraLATA toll; and 10 features that can be purchased as adjuncts to local service (e.g., Call Waiting, Caller ID, etc.).

With a few exceptions, for each service revenues exceeded costs. Contribution levels for residential features were as high as 48680% for BellSouth's Call Waiting service; the highest level for business features was 154662% for BellSouth's Call Forwarding Busy Line service. Corresponding dollar amounts for these services were modest, \$3.99 and \$3.25, respectively. Sprint and GTEFL reported similarly high levels of contribution.

- The embedded cost analyses show that the three large LECs all earned above a 12.5% return on equity in 1997. BellSouth earned 20.3%, GTEFL earned 18.8% and Sprint earned 13.4%. The small LECs earned from 8.6% (Quincy) to 22.8% (Vista-United). These figures were adjusted to include the effects of the 1998 access charge reductions. The actual earnings for 1997 for GTEFL and Sprint were higher than shown.

THE COST OF RESIDENTIAL BASIC LOCAL TELECOMMUNICATIONS SERVICE

- Not all participants agreed with the LECs regarding the proper treatment of the cost of the loop.
 - The LECs believe that once the loop is provisioned, the cost has been incurred. That cost is not affected by the way in which the loop is used. Therefore, the cost of the local loop is not shared by the various services provisioned over the loop.
 - Other participants argued that loop costs should be treated as either a shared or a joint and common cost. Accordingly, the costs would be spread among a number of services.
 - In a slightly differing view, FCCA alleged that any allocation scheme one selected would be inherently arbitrary. FCCA believes the Legislature should assess the profitability of serving residential customers and determine whether the need for a "subsidy" exists, based on all costs and all revenues associated with the typical family of residential services used by customers in Florida.
- It is the Commission's position that the cost of local loop facilities is properly attributable to the provision of basic local telecommunications service.

AFFORDABILITY SURVEY

- An affordability survey was developed to gauge affordability in the eyes of the consumer. Based on the results of the survey, the typical Florida household has an average of 1.3 telephone lines. Households responded that the telephone is used for a number of purposes, such as social calling (97.0% of households), and business calling (57.2% of households), and to a lesser extent for Internet access (31.0% of households), shopping (29.8% of households), or faxing (19.7% of households). Few households pay an extra charge to reach essential services, such as the local schools (3.2% of households) or family physician (8.7% of households). Floridians use their telephone frequently, about 13.5 times a day, on average. Nearly 90% of the homes in this profile responded that they can call anyone they like, because everyone they want to call has local telephone service.
- In addition to local telephone service, Florida households subscribe to a variety of optional calling features and other household services. They subscribe to an average of 2.3 features, the most popular being Call Waiting (60.3%) and Caller ID (39.3%). They typically have cable TV service (62.6%), and may also have other services such as cellular telephone service (36.7%), Internet service (28.7%), pager/beeper service (21.9%), or alarm service (15.2%).
- Most customers (70.0%) said they receive a consolidated bill for local and long-distance telephone service. They pay \$39.40 on average for local service, less than what they pay for long distance service, which averages \$45.47. Thus, their monthly bill is \$84.87 for both services combined.
- When asked what reaction customers might have to a \$2 increase in local telephone rates, 25.9% said they would reduce their spending on other goods or services, and another 7.1% said they would discontinue service. When asked what their reaction would be to a \$5 increase in local telephone rates, 31.0% said that they would reduce spending on other items and another 13.4% said they would discontinue local telephone service. When asked what they would do if prices increased to a level that was unacceptable, slightly over half of the respondents (52.4%) indicated that they would switch to cellular telephone service, but slightly under one-fourth of the respondents (23.0%) indicated that they would simply use payphones for their household communication needs.
- Low income customers provided similar responses. When asked what reaction they might have to a \$2 increase in local telephone rates, 37.0% said they would reduce their spending on other goods or services and another 9.5% said they would discontinue service. When asked what their reaction would be to a \$5 increase in local telephone rates, 41.7% answered that they would reduce spending on other items and another 20.5% indicated that they would discontinue local telephone service. When asked what they would do if prices increased to a level that was unacceptable, slightly more than one-third (37%) indicated that they would use payphones for their household communication needs, but a large number said that they would never discontinue service (20.5%).
- Econometric demand models have consistently shown that local telephone service is very price inelastic, which implies that the demand for local service varies little at different price levels. However, the price/demand relationship can change over time as substitutes become more or less

viable in terms of price, quality, and functionality. The survey results may be signaling a possible change for the future.

- Households with incomes over \$20,000 indicate that they would use a cellular phone as an alternative. Given that 36.7% of the surveyed households already subscribe to cellular service, the idea of using cellular service as a substitute for wireline service is plausible.

CUSTOMER TESTIMONY

- Twenty-two customer hearings were held throughout the state. In addition, the Commission received 628 letters from customers who were unable to attend the hearings in person.
- The greatest concerns appeared to be the numerous add-on charges to the local bill, the difficulty of elderly fixed-income individuals to pay for further increases, and a desire for expanded local calling areas. Several things are important to remember from the customer's point of view.
 - First, when discussing the current rates, one cannot consider the local rate alone. While the local rate has remained fairly stable over the last two decades, countless other charges have been added to the bill.
 - Second, there are many customers in Florida who live on fixed incomes. Not only are the elderly fixed-income individuals at risk of being dropped off the system, but modest wage earners have concerns as well.

RATES FOR RESIDENTIAL BASIC LOCAL SERVICE IN OTHER STATES

- Florida rates were first compared to rates in other states after controlling for differences in average per capita income and local calling scope. This analysis looked at comparability from the customer's standpoint (affordability and value).
- The Commission also tried to assess comparability from the standpoint of the provider. A local telephone company would be concerned about the cost of providing basic service in one location versus another. Florida rates were compared to rates in other states after controlling for differences in population density, a key determinant in the cost of providing service.
- Both approaches produced similar results. Taking the two analyses together, Florida's rates are typically lower than those in the rest of the country by four to five dollars per month.
- The Commission also analyzed recent rate actions in other states.
 - Twenty-six states are either considering, or have recently concluded, universal service fund proceedings. Of those, eleven states have approved increases to basic local rates for one or more providers in the last several years. Where local rate increases have

occurred, they have generally ranged from \$1.00 to \$3.50 per month for residential rates.

- Increases to local rates have not been an across-the-board occurrence. At least five states have rejected increases sought by local telephone companies. Cases are pending in five other states. Twenty-eight states have not undertaken any recent local rate initiatives.

COMMENTS OF INTERESTED PERSONS

- The Commission conducted a four-day technical workshop in Tallahassee on October 1, 2, 8, and 9, 1998. Considerable discussion centered around rate rebalancing and its impact on competition in the market, particularly for residential and small business customers.
- The LECs claimed that most residential customers are not profitable to serve. For rates to be fair and reasonable, they must be rebalanced. The LECs believe basic local residential rates should be increased, while switched access charges and rates for vertical services should be reduced.
- Other participants pointed out that rebalancing the rates could have a substantial negative impact on consumers, particularly low-income customers and the elderly. However, the LECs believe the benefits would outweigh the costs to consumers. They contended that, particularly for rural and higher cost areas, rebalanced rates could attract new entrants. But not all participants were convinced that local competition would become a reality for most consumers.
- Consumer advocates believe that access charges can be reduced for the large LECs without any corresponding rate increases, without imposing significant harm on the telephone industry. The LECs have enjoyed substantial increases in earnings in the last three years, while at the same time reducing access charges.
- However, should competition become widespread, the effect of competition on the small LECs may be more dramatic than for the larger ones. Rural networks are typically high cost, whereas the service areas of the larger LECs may be high cost only in certain areas.
- Participants also provided definitions of affordability and suggested factors to be considered in evaluating it.
- The LECs argued that residential basic local rates should not be set so low that every subscriber could afford service. They believe the best regulatory policy is one under which the residential basic service rate is affordable to most households. For the low-income customers for whom the rate is unaffordable, subsidies should be targeted, as is the case with Lifeline.
- Participants believe affordability and value of service are linked.

- The value of the telephone has grown over time. The LECs believe that customers are provided more value in terms of the services they receive today.
- The local telephone network provides access to numerous services, including
 - the Internet;
 - FAX and data transmission;
 - toll-free numbers (800, 888);
 - larger local calling area in terms of additional extended area service routes and growth in access lines within exchanges;
 - complementary non-basic services, e.g. Caller ID; and
 - wireless communications (cellular, PCS, paging).

CONCLUSIONS

- Rates could be increased by modest amounts in Florida and still remain affordable for most citizens. However, there are many customers in Florida who live on fixed incomes, to a greater extent than in many other states for which rates may appear comparable. Not only are many elderly fixed-income individuals at risk of being dropped off the system, but modest wage earners have concerns as well. Those who are on the edge must be protected. The discussion suggests several approaches to mitigate this problem.
- It is clear that customers receive tremendous value of service for their telephone dollars. In determining what is fair and reasonable for Floridians, it is important to ensure that they continue to receive high quality service.
- The analysis supports two views regarding the fair and reasonable rate for residential basic local telecommunications service in Florida. The two views are seemingly contradictory in many respects, but in reality, the differences are more a function of timing. The key timing issue is how soon local competition, whether it be wireline or wireless, will be sufficiently established to constrain prices.
- If adequate competition is imminent (most likely from wireless), more reliance can be placed on allowing market forces to control pricing. Under this scenario, only the more vulnerable types of customers, low income customers and minimalist users who would not likely benefit from competition, need to be protected. Lifeline and a "no-frills" rate would fulfill this need. The rates for other forms of basic service could float with the market. While portions of the analysis support this view, we believe further study is needed to evaluate how likely and how soon wireless will be considered a viable substitute for wireline service.
- Alternatively, if adequate competition is not imminent, regulatory controls are needed since wireline competition is developing very slowly in residential markets. While it is difficult

to say whether price increases for residential basic local service would stimulate wireline competition, modest price increases would make wireless service a more viable option for a greater number of people. In addition, we do not believe this action would compromise the affordability of residential basic local service for the vast majority of customers.

- Based on the four criteria enumerated in the statute, we conclude that a rate increase falling in a range from \$0 to \$5 per month would yield a fair and reasonable rate for most citizens in Florida. However, one should recognize that the greater the rate increase, the greater the impact on affordability. Other policy considerations may also impact a determination as to where to set the rate along this continuum. If the Legislature determines that residential basic local rates should be increased, we believe that up to a \$5 increase in the rates in Florida may be construed as meeting the four elements we were charged with considering. However, we also believe that it is in the best interests of Florida's consumers to consider other actions in conjunction with any rate increase that is considered. If an increase in basic local telecommunications rates is implemented, we believe the following recommendations would yield the greatest overall benefit to consumers:
 - Price regulated companies should be allowed to increase residential and single line business basic local rates by an amount not to exceed \$5 per month, as part of a Commission-verified revenue-neutral rate rebalancing plan. Any such monthly rate increase should be phased in over a three to five year period at not more than \$2 per year.
 - As part of any rate rebalancing plan, TouchTone charges should be eliminated. Reductions in intrastate switched access charges to parity with interstate rates as of 1/1/99 (or to the extent rebalancing revenues are available) should be required to be implemented over a three to five year period. For purposes of this provision, interstate rates should include both the traffic sensitive and non-traffic sensitive portions. However, no flat rate element analogous to the federal presubscribed interexchange carrier charge (PICC) should be established. Any remaining revenues generated by a rate increase should be offset by reductions in rates for other services, subject to a Commission-approved rate rebalancing plan.
 - All carriers receiving the benefit of switched access charge reductions must pass through those benefits to consumers, subject to Commission verification.
 - It should be noted that the rates for basic local telecommunications service are currently capped, as set forth in Section 364.051(2)(a), Florida Statutes. Those caps are scheduled to terminate by January 1, 2000, or January 1, 2001, depending upon the number of access lines served by a local exchange company, after which increases tied to inflation are permitted. Absent a change to the statute, the price-cap mechanism contained in that statute would thus become effective during the pendency of any rate rebalancing plan that may be contemplated, resulting in additional rate increases. It may, therefore, be advisable to revisit the price-cap mechanism set forth in Section 364.051(2), Florida Statutes, to determine if further policy considerations necessitate a change in those provisions. Further policy considerations should include the status of competition in the local telecommunications market.

- Rate increases for small business and residential non-basic services should be limited by a Commission-established index until meaningful competition is shown to exist. The index amount should be adjusted downward for any company that does not achieve a Commission-established service quality performance level.
- The Legislature should consider a “no-frills” rate. Several options for such a rate are discussed in the body of this report.

CHAPTER I: INTRODUCTION

In 1998, the Florida Legislature enacted a number of changes relating to telecommunications services. As part of those changes, the Legislature directed the Florida Public Service Commission to study basic local telecommunications rates in Florida. This directive included the following requirements:

(1) The Legislature has determined that charges for intrastate switched access and other services may be set above costs and may be providing an implicit subsidy of residential basic local telecommunications service rates in this state. Therefore, the Public Service Commission shall, by February 15, 1999, study and report to the President of the Senate and the Speaker of the House of Representatives the relationships among the costs and charges associated with providing basic local service, intrastate access, and other services provided by local exchange telecommunications companies.

(2)(a) The commission shall, by February 15, 1999, report to the President of the Senate and the Speaker of the House of Representatives its conclusions as to the fair and reasonable Florida residential basic local telecommunications service rate considering affordability, the value of service, comparable residential basic local telecommunications rates in other states, and the cost of providing residential basic local telecommunication services in this state, including the proportionate share of joint and common costs. The commission shall hold at least one public hearing in the service territory for each local telecommunications company to elicit public testimony about such rates.

(b) The local exchange companies shall provide to the commission by August 1, 1998, cost data and analysis that support the cost of providing residential basic local telecommunications service in their service area, as prescribed by the commission for purposes of recommending the fair and reasonable rate. For the purpose of verifying the submitted cost data and analysis, the commission and all intervenors shall have access to the records related to the cost of providing residential basic local telecommunications service of each local exchange company. (Section 2, Chapter 98-277, Laws of Florida)

Thus, in Chapters II and III of this report, relationships among those costs and charges associated with providing basic local service, intrastate access and other services, will be discussed. In the remaining chapters, other portions of the study conducted by the Commission will be discussed including conclusions as to the fair and reasonable Florida residential basic local telecommunications service rate considering the four criteria outlined in the statute.

On June 4, 1998, the Commission opened Special Project No. 980000A-SP, titled Fair and Reasonable Residential Basic Local Telecommunications Rates, to provide the forum to address the issues in this study. A related docket, Docket No. 980733-TL, was opened for the filing of formal discovery and the disposition of related motions. That docket was titled "Discovery Related to Study on Fair and Reasonable Rates and on Relationships among Costs and Charges Associated with

Certain Telecommunications Services Provided by Local Exchange Companies (LECs), as Required by Chapter 98-277, Laws of Florida.” Numerous interested persons, representing various segments of the telecommunications industry as well as consumer advocates and the public, participated in this project. The Commission determined, after consideration at both its Internal Affairs and Agenda Conference, that no hearing should be held in this study. Rather, other vehicles were used to gather information. Those vehicles are discussed below. Additional information is included in the appendices which are bound as a separate volume.

COST STUDIES

To meet the requirements of the law, the Commission prescribed Total Service Long Run Incremental Cost (TSLRIC) studies to be provided. On August 1, 1998,¹ the local exchange companies (LECs) filed cost and other data with the Commission. BellSouth, GTEFL, and Sprint filed the studies as requested. However, the smaller LECs have no such information. Due to timing and cost considerations, they were unable to perform studies to satisfy this request. The information that was filed, along with an executive summary, was made available to consumers through the public libraries in each county. Customers were notified through bill inserts from their local exchange company of its availability. Results are discussed in Chapter II, with additional discussion of costs discussed in Chapter III.

AFFORDABILITY SURVEY

The Commission staff, in conjunction with interested persons developed an affordability survey to gauge affordability in the eyes of the consumer. The telephone survey was conducted through the University of Florida's Bureau of Economic and Business Research (BEBR) Survey Program. The results are discussed in Chapter IV.

CUSTOMER TESTIMONY

Twenty-two customer hearings were held throughout the state. In addition, customers who were unable to attend the hearings in person wrote letters. Customer input is discussed in Chapter V. A list of the hearings held, with dates and locations, is included in Appendix V-1. Also included in the appendices is a list of customers filing letters including the topics discussed (Appendix V-2), and a summary of customer testimony at hearing (Appendix V-3).

RATES AND RATE ACTIONS IN OTHER STATES

This portion of the study consists of two pieces. First, a survey of rates in other states was conducted. Florida rates were compared to rates in other states after controlling for differences in average per capita income, local calling scope, and population density (a surrogate for cost).

¹Because August 1, 1998, fell on a Saturday, some companies filed the data on the following Monday, August 3, 1998.

In addition, the Commission analyzed recent rate actions in other states. A number of states have conducted rate rebalancing and have held other proceedings which have impacted the rates during the last few years. Both of these components are discussed in Chapter VI.

TECHNICAL WORKSHOP

The Commission conducted a four-day technical workshop in Tallahassee on October 1, 2, 8, and 9, 1998. At that workshop, ten organizations sponsored speakers, including Sprint, GTEFL, BellSouth, the small LECs, AT&T, American Association of Retired Persons (AARP), Office of Public Counsel (OPC), the Attorney General (AG), Florida Legal Services (FLS), and the Florida Competitive Carriers Association (FCCA). The discussion largely centered on the cost of providing service, with the debate on the merits of allocating loop costs being the most contentious issue. All interested persons filed final comments on November 13, 1998.

Comments dealing with costs are discussed in Chapter III. The remaining topics, including rate rebalancing, affordability, and value of service, are discussed in Chapter VII.

THE FOUR ELEMENTS

How do the various components apply to the four elements the Commission was required to examine? Each of the components included in the study speaks to one or more of those elements: affordability, the value of service, comparable residential basic local telecommunications rates in other states, and the cost of providing residential basic local telecommunication services in this state.

While clearly the cost studies obtained from the companies speak to the issue of the cost of providing basic local telecommunications services, the other areas have considerable overlap. The customer survey provides insight into value of service as well as affordability. Customer testimony ran the full gamut from affordability to cost of service, but primarily focused on affordability and value of service issues. Rates in other states goes beyond just a comparison of rates, addressing affordability, value of service, and even cost of providing service. Input from interested persons also provided information in all four areas, concentrating heavily on cost of service.

CHAPTER II: RATES AND COSTS FOR LEC-PROVIDED SERVICES

This chapter is divided into a discussion of LEC incremental cost studies, contribution analyses, and embedded costs. Incremental costs are shown as reported by the companies, without any adjustments.

LEC INCREMENTAL COST STUDIES

DATA REQUEST

Section 2 (1) of Chapter 98-277 requires the Commission to study and report to the Legislature “. . . the relationships among the costs and charges associated with providing basic local service, intrastate access, and other services provided by local telecommunications companies.” To fulfill this statutory mandate, on June 19, 1998, the Division of Communications sent a data request to each of the 10 Florida incumbent local exchange companies to obtain contribution analyses for a variety of services, and to obtain available reports and studies that could shed light on any of the four criteria listed in Section 2(2)(a) for evaluating the fair and reasonable Florida residential basic local telecommunications rates. (On this same date, the Division of Auditing and Financial Analysis also submitted a data request to the Florida LECs; the responses to this data request form the basis for the discussion of the LECs’ embedded costs contained in the next section of this chapter.)

A contribution analysis can be conducted in either of two ways. First, such an analysis can compare a service’s various rates with their respective unit costs; here, “contribution” equals, for each rate element, the difference between the rate and its cost. Second, a contribution analysis can instead compare a service’s total revenues generated to its total costs incurred. This second characterization is equivalent to the first if the service has a single rate element, or if all rate elements have a uniform mark-up over their unit costs. We asked the LECs to provide both types of analyses, using as the cost standard total service long-run incremental cost (TSLRIC), as defined in Section 364.3381(2), Florida Statutes, for the following services:

- (a) “voice-grade, flat-rate residential local exchange service,” as used in Section 364.02(2);
- (b) “voice-grade, flat-rate single line business local exchange service,” as used in Section 364.02(2);
- (c) ESSX/Centrex;
- (d) PBX trunks;
- (e) other multi-line circuit-switched services;
- (f) intrastate switched access charges;
- (g) intraLATA toll; and

- (h) 10 features that can be purchased as adjuncts to local service (e.g., Call Waiting, Caller ID, etc.).

Of the 10 Florida LECs, BellSouth, Sprint, and GTE Florida (GTEFL) provided contribution analyses for the above services. All of the small LECs indicated that they had not previously been required to submit TSLRIC studies, and did not have available any such studies for the services listed in Communications staff's data request. However, ALLTEL stated that it would be reasonable to consider the average of the TSLRIC results for BellSouth, GTEFL and Sprint to represent the minimum economic cost that the small LECs would incur to provide the same services. ALLTEL said that it had examined several of the major cost drivers that would be incorporated in a typical forward-looking cost study, and compared ALLTEL's values for these drivers to those of BellSouth, GTEFL, and Sprint. ALLTEL reported that compared to its data, the analyses indicated that on average BellSouth, GTEFL and Sprint have:

- 91% less switching investment per line
- 77% less circuit equipment per line
- 63% less investment per line in cable and wire investment
- 77% less total investment per line
- 88% less total expenses per line
- Nine times more lines per exchange

While these characteristics generally imply that smaller LECs would tend to have higher costs than larger LECs, one must be cautious in applying these statistics and drawing conclusions. As discussed below, local exchange companies tend to have significant amounts of investments that are volume insensitive -- that is, the level of investment does not directly vary with demand. For example, a local exchange company incurs a substantial portion of the cost of a digital switch before a single access line is provided, or a single call is switched. Because of these relatively high start-up costs for certain components, depending on how many access lines they serve, two LECs might have different switching costs on a per line basis, but virtually identical overall total switching costs.

TSLRIC STANDARD

As noted above, the LECs were asked to provide TSLRIC studies that comport with the definition in Section 364.3381(2), Florida Statutes. Section 364.3381 contains a statutory prohibition against basic services subsidizing non-basic services. Section 364.3381(2) spells out the specific test to identify whether cross-subsidization exists:

. . . The cost standard for determining cross-subsidization is whether the total revenue from a non-basic service is less than the total long-run incremental cost of the service. Total long-run incremental cost means service-specific volume and non-volume sensitive costs.

Volume sensitive costs are those costs for which there is a causal link with the provision of a specific unit of the given service; an example might be a drop wire that connects a residence to the LEC's network. In contrast, volume insensitive costs cannot be causally linked to specific units of a service, but can be attributed to offering the service itself; an example could be a software package that must be loaded into a switch to offer the service.

The TSLRIC of a service is often equivalently characterized as the costs incurred by a multiproduct firm due to its decision to offer the service, but would be avoided by not offering the service, holding all else constant. It is significant to note that shared and common costs are *not* included in the TSLRIC of a particular service. (Shared costs are those which are attributable to a group of two or more services, but for which there is no causal basis to assign them to specific services. Common costs, such as executive and legal, tend to vary with the overall size of the firm but are not causally attributable to individual services.) Although shared and common costs are not included in the TSLRIC of a service, they ultimately will be recovered, in the aggregate, through the rates charged for the firm's various services.

TSLRIC studies are "bottoms up" analyses, in that the investment associated with the various network components and functionalities required to provide a given service are identified, as well as an estimate of the expenses that would be incurred to offer the service. Based on the assumed useful lives of the investments, recurring capital costs (consisting of depreciation, return and income taxes) are computed. Since a service's TSLRIC includes return, or the cost of money, as a component, the concept of profitability is not really applicable; instead, it is more appropriate to analyze a service's mark-up, or contribution, over the rates charged.

Although there are differences in implementation between the studies submitted by BellSouth, GTEFL and Sprint, all appear to comport with general TSLRIC methodological principles. The most controversial aspect of these TSLRIC studies centers around what costs should be considered as causally linked to the provision of specific services, as opposed to being treated as shared or common costs. Specifically, the TSLRIC studies for basic local telecommunications service submitted by the three large LECs in response to staff's data request all consider the costs of the local loop to be inextricably associated with the provision of basic local service. As discussed at length in the next chapter, there was an ardent dispute between various interested persons that participated in the workshops on fair and reasonable rates whether this was theoretically correct, and whether an alternative assumption should be adopted on public policy grounds.

For purposes of the data contained in this chapter, we have accepted the cost data as presented by the LECs, and reserve for Chapter III a detailed discussion of the appropriate treatment of loop costs in a TSLRIC study. However, it is possible here to describe the impacts of alternative assumptions on the LECs' TSLRIC studies. On the one hand, if it is assumed that loop costs are properly considered to be shared or common costs, the costs of access line services would decrease significantly, while the costs shown for the other services would remain unchanged. On the other hand, if loop costs are assumed to be attributable to services other than just access line services, the costs of access lines would decrease, while the costs of the other services would increase over the levels in the LECs' cost analyses.

RESULTS OF LEC CONTRIBUTION ANALYSES

1. Voice-grade, flat-rate residential local exchange service:

Tables II-1 through II-3 show rate element/unit cost comparisons, by rate group, for BellSouth, Sprint, and GTEFL Florida. The contribution analyses submitted by BellSouth and Sprint include as revenues associated with local service the local rate, TouchTone (for Sprint), the subscriber line charge, and average EAS/ECS revenues per line. However, GTEFL considered all of its underlying data to be proprietary, except for its rate element-specific unit costs. To generate comparable results for all three companies, the "Rate" amount shown includes the tariffed rate, the subscriber line charge, and the charge for TouchTone (for Sprint). (BellSouth and GTEFL do not charge separately for TouchTone.) As shown in Table II-1, the results for BellSouth indicate that the costs exceed the revenues generated, with the shortfall ranging from \$7.25 to \$47.27, depending upon the rate group. The results for Sprint and GTEFL in Tables II-2 and II-3 show a similar pattern, with Sprint's shortfall ranging from \$3.12 to \$45.49, while GTEFL's is \$12.42 to \$51.94. The reason for the shortfall is primarily due to the inclusion of all local loop costs in the associated cost study.

Tables II-4 and II-5 show, for BellSouth and Sprint, the aggregate contribution from voice-grade flat-rate residential service, measured as the difference between total revenues and total costs. (This data is not shown for GTEFL due to its claim of confidentiality.) Overall, BellSouth's cost study indicates that revenues are below costs by \$581,706,890 or (60)%. Sprint's study reflects that revenues are below costs by \$ 13,791,153, or (43)%.

TABLE II-1

BellSouth - Flat Rate Residential				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	\$10.80	\$47.79	(\$36.99)	-77%
Rate Group 2	11.20	58.47	(47.27)	-81%
Rate Group 3	11.60	39.63	(28.03)	-71%
Rate Group 4	11.90	33.51	(21.61)	-64%
Rate Group 5	12.30	33.16	(20.86)	-63%
Rate Group 6	12.65	28.72	(16.07)	-56%
Rate Group 7	13.00	26.93	(13.93)	-52%
Rate Group 8	13.30	24.18	(10.88)	-45%
Rate Group 9	13.55	24.82	(11.27)	-45%
Rate Group 10	13.80	23.87	(10.07)	-42%
Rate Group 11	13.95	24.23	(10.28)	-42%
Rate Group 12	14.15	21.40	(7.25)	-34%

TABLE II-2

Sprint - Residential				
	Rate	Cost	Contribution	
			Amount	Percentage
United				
Rate Group 1	\$10.97	\$41.10	(\$30.13)	-73%
Rate Group 2	11.72	30.40	(18.68)	-61%
Rate Group 3	12.48	25.66	(13.18)	-51%
Rate Group 4	13.23	23.74	(10.51)	-44%
Rate Group 5	13.98	18.98	(5.00)	-26%
Rate Group 6	14.73	17.85	(3.12)	-17%
Centel				
Rate Group 1	\$11.90	\$48.26	(\$36.36)	-75%
Rate Group 2	12.35	57.84	(45.49)	-79%
Rate Group 3	12.75	42.57	(29.82)	-70%
Rate Group 4	13.20	39.15	(25.95)	-66%
Rate Group 5	13.65	17.41	(3.76)	-22%
Rate Group 6	14.15	26.40	(12.25)	-46%

TABLE II-3

GTEFL - Residential Flat Rate				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	\$13.01	\$64.95	(\$51.94)	-80%
Rate Group 2	13.91	32.82	(18.91)	-58%
Rate Group 3	14.36	34.24	(19.88)	-58%
Rate Group 4	14.86	30.47	(15.61)	-51%
Rate Group 5	15.31	27.73	(12.42)	-45%

TABLE II-4

BellSouth - Total Residential			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$380,908,349	\$962,615,239	(\$581,706,890)	-60%

TABLE II-5

Sprint - Total Residential			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$18,163,769	\$31,954,922	(\$13,791,153)	-43%

2. Voice-grade flat-rate single line business local exchange service:

Tables II-6 through II-8 show rate element/unit cost comparisons, by rate group, for BellSouth, Sprint, and GTEFL. As was the case for voice-grade flat-rate residential local exchange service, the values shown in the column labeled "Rate" include the tariffed rate, the subscriber line charge, and the charge for TouchTone (for Sprint), in order to yield an "apples to apples" comparison. As shown in Table II-6, the results for BellSouth indicate that the costs exceed the revenues generated in the lower rate groups, with the shortfall as much as \$22.03 in rate group 2, but rates exceed costs in the higher rate groups. The results for Sprint and GTEFL in Tables II-7 and II-8 show a similar pattern, with Sprint's contribution ranging from \$(10.28) in rate group 2 to \$13.75 in rate group 6, while GTEFL's contribution ranges from \$(23.50) (rate group 1) to \$6.56 (rate group 5). As was the case for residential service, the negative mark-ups are due to the treatment of local loop costs, offset in the higher rate groups by the higher rates charged to business customers.

Tables II-9 and II-10 show, for BellSouth and Sprint, the aggregate contribution from voice-grade flat-rate single-line business service, measured as the difference between total revenues and total costs. (This data is not shown for GTEFL due to its claim of confidentiality.) Overall, BellSouth's cost study indicates that revenues exceed costs by \$5,305,369 or 18%. Sprint's study also reflects that in the aggregate revenues exceed costs by \$3,304,577 or 72%.

TABLE II-6

BellSouth - Flat Rate Business				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	\$23.30	\$27.12	(\$3.82)	-14%
Rate Group 2	24.30	46.33	(22.03)	-48%
Rate Group 3	25.40	32.45	(7.05)	-22%
Rate Group 4	26.40	27.00	(0.60)	-2%
Rate Group 5	27.35	29.32	(1.97)	-7%
Rate Group 6	28.40	25.10	3.30	13%
Rate Group 7	29.25	24.67	4.58	19%
Rate Group 8	30.10	23.58	6.52	28%
Rate Group 9	30.90	23.48	7.42	32%
Rate Group 10	31.50	21.59	9.91	46%
Rate Group 11	32.10	21.75	10.35	48%
Rate Group 12	32.60	20.39	12.21	60%

TABLE II-7

Sprint - Business				
	Rate	Cost	Contribution	
			Amount	Percentage
United				
Rate Group 1	\$19.70	\$28.54	(\$8.84)	-31%
Rate Group 2	21.46	24.14	(2.68)	-11%
Rate Group 3	23.21	21.46	1.75	8%
Rate Group 4	24.97	19.02	5.95	31%
Rate Group 5	26.78	16.55	10.23	62%
Rate Group 6	28.53	14.78	13.75	93%
Centel				
Rate Group 1	\$21.15	\$23.87	(\$2.72)	-11%
Rate Group 2	22.15	32.43	(10.28)	-32%
Rate Group 3	23.05	27.24	(4.19)	-15%
Rate Group 4	24.10	32.86	(8.76)	-27%
Rate Group 5	25.10	15.41	9.69	63%
Rate Group 6	26.25	12.75	13.50	106%

TABLE II-8

GTEFL - Business Flat Rate				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	\$27.45	\$50.95	(\$23.50)	-46%
Rate Group 2	29.75	36.24	(6.49)	-18%
Rate Group 3	30.95	35.71	(4.76)	-13%
Rate Group 4	32.20	29.37	2.83	10%
Rate Group 5	33.40	26.84	6.56	24%

TABLE II-9

BellSouth - Total Business			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$35,036,013	\$29,730,644	\$5,305,369	18%

TABLE II-10

Sprint - Total Business			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$7,871,892	\$4,567,314	\$3,304,577	72%

3. ESSX/Centrex:

Tables II-11 and II-12 show, for BellSouth and Sprint, the aggregate contribution generated from ESSX/Centrex services, where contribution is measured as the difference between total revenues and total costs. Both LECs indicate positive contributions: 50% for BellSouth and 64% for Sprint. (Rate element/unit cost comparisons are not presented due to the large number of distinct rate elements; results are not shown for GTEFL due to its claim of confidentiality.)

TABLE II-11

BellSouth - ESSX/Centrex			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$5,924,142	\$3,953,105	\$1,971,037	50%

TABLE II-12

Sprint - Centrex			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$2,928,413	\$1,789,632	\$1,138,781	64%

4. PBX trunks:

Tables II-13 through II-15 show rate element/unit cost comparisons, by rate group, for BellSouth, Sprint, and GTEFL. The values shown in the column labeled "Rate" include the tariffed rate, the subscriber line charge, and charge for TouchTone (for Sprint). As shown in Table II-13, the results for BellSouth indicate that with the exception of Rate Group 2, rates consistently exceed costs in all rate groups, with the contribution ranging from \$5.66 in rate group 3, to \$39.27 in rate group 12. The results for Sprint and GTEFL in Tables II-14 and II-15 show a similar pattern, with Sprint's contribution ranging from \$0.81 in rate group 1 to \$32.22 in rate group 6, while GTEFL's contribution ranges from \$2.70 (rate group 1) to \$33.60 (rate group 5). The positive mark-ups are due to the higher rates charged for PBX trunks.

Tables II-16 and II-17 show, for BellSouth and Sprint, the aggregate contribution from PBX trunk service, measured as the difference between total revenues and total costs. (This data is not shown for GTEFL due to its claim of confidentiality.) Overall, BellSouth's cost study indicates that revenues exceed costs by \$26,125,908, or 84%. Sprint's study also reflects that in the aggregate revenues exceed costs by \$1,437,916, or 199%.

TABLE II-13

BellSouth - PBX Trunks with Hunting				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	\$48.20	\$34.48	\$13.72	40%
Rate Group 2	50.23	53.69	(3.46)	-6%
Rate Group 3	52.45	39.81	12.64	32%
Rate Group 4	54.48	34.36	20.12	59%
Rate Group 5	56.4	36.68	19.72	54%
Rate Group 6	58.49	32.46	26.03	80%
Rate Group 7	60.25	32.03	28.22	88%
Rate Group 8	61.96	30.94	31.02	100%
Rate Group 9	63.58	30.84	32.74	106%
Rate Group 10	64.80	28.95	35.85	124%
Rate Group 11	66.01	29.11	36.90	127%
Rate Group 12	67.02	27.75	39.27	142%
BellSouth - PBX Trunks without Hunting				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	\$41.80	\$34.38	\$7.42	22%
Rate Group 2	43.50	53.59	(10.09)	-19%
Rate Group 3	45.37	39.71	5.66	14%
Rate Group 4	47.07	34.26	12.81	37%
Rate Group 5	48.69	36.58	12.11	33%
Rate Group 6	50.47	32.36	18.11	56%
Rate Group 7	51.92	31.93	19.99	63%
Rate Group 8	53.36	30.84	22.52	73%
Rate Group 9	54.72	30.74	23.98	78%
Rate Group 10	55.74	28.85	26.89	93%
Rate Group 11	56.76	29.01	27.75	96%
Rate Group 12	57.61	27.65	29.96	108%

TABLE II-14

Sprint - PBX trunks				
	Rate	Cost	Amount	Percentage
United				
Rate Group 1	\$38.98	\$29.59	\$0.81	3%
Rate Group 2	42.49	25.19	8.72	35%
Rate Group 3	46.05	22.51	14.96	66%
Rate Group 4	49.56	20.07	20.91	104%
Rate Group 5	53.11	17.60	26.93	153%
Rate Group 6	56.64	15.84	32.22	203%
Centel				
Rate Group 1	\$41.88	\$24.92	\$8.38	34%
Rate Group 2	43.88	33.48	1.82	5%
Rate Group 3	45.68	28.29	8.81	31%
Rate Group 4	47.78	33.91	5.29	16%
Rate Group 5	49.78	16.46	24.74	150%
Rate Group 6	52.08	13.80	29.70	215%

TABLE II-15

GTEFL - PBX Trunk Service				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	??	\$52.22	ERR	ERR
Rate Group 2	??	36.67	ERR	ERR
Rate Group 3	??	36.14	ERR	ERR
Rate Group 4	??	30.64	ERR	ERR
Rate Group 5	??	27.27	ERR	ERR

TABLE II-16

BellSouth - Total PBX Flat trunks (with and without hunting)			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$57,085,547	\$30,959,639	\$26,125,908	84%

TABLE II-17

Sprint - Total PBX Trunk Service			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$2,162,179	\$724,263	\$1,437,916	199%

5. Other Multi-Line Circuit-Switched Services:

Tables II-18 through II-20 show rate element/unit cost comparisons, by rate group, for BellSouth, Sprint, and GTEFL. The values shown in the column labeled "Rate" include the tariffed rate, the subscriber line charge, and charge for TouchTone (for Sprint). The contributions for these services are generally positive for all three LECs, ranging from 3% to 128% (BellSouth), 9% to 230% (Sprint), and 4% to 91% for GTEFL. The positive mark-ups are due to the higher rates charged for PBX trunks.

Tables II-21 and II-22 show, for BellSouth and Sprint, the aggregate contribution from business flat and rotary key service, measured as the difference between total revenues and total costs. (This data is not shown for GTEFL due to its claim of confidentiality.) Overall, BellSouth's cost study indicates that revenues exceed costs by \$87,756,128 or 64% for business flat key service, and by \$40,437,922 or 23% for business rotary service. The analogous results for Sprint are \$601,878 or 80% (business flat key), and \$2,009,693 or 144% (business rotary key).

TABLE II-18

BellSouth - Multi-Line Circuit Switched Business Service with Hunting				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	\$34.34	\$27.22	\$7.12	26%
Rate Group 2	35.67	46.43	(10.76)	-23%
Rate Group 3	37.12	32.55	4.57	14%
Rate Group 4	38.45	27.10	11.35	42%
Rate Group 5	39.70	29.42	10.28	35%
Rate Group 6	41.09	25.20	15.89	63%
Rate Group 7	42.22	24.77	17.45	70%
Rate Group 8	43.34	23.68	19.66	83%
Rate Group 9	44.40	23.58	20.82	88%
Rate Group 10	45.20	21.69	23.51	108%
Rate Group 11	45.99	21.85	24.14	110%
Rate Group 12	46.65	20.49	26.16	128%
BellSouth - Multi-Line Circuit Switched Business Service without Hunting				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	\$27.94	\$27.12	\$0.82	3%
Rate Group 2	28.94	46.33	(17.39)	-38%
Rate Group 3	30.04	32.45	(2.41)	-7%
Rate Group 4	31.04	27.00	4.04	15%
Rate Group 5	31.99	29.32	2.67	9%
Rate Group 6	33.04	25.10	7.94	32%
Rate Group 7	33.89	24.67	9.22	37%
Rate Group 8	34.74	23.58	11.16	47%
Rate Group 9	35.54	23.48	12.06	51%
Rate Group 10	36.14	21.59	14.55	67%
Rate Group 11	36.74	21.75	14.99	69%
Rate Group 12	37.24	20.39	16.85	83%

TABLE II-19

Sprint - Business Flat Key				
	Rate	Cost	Contribution	
			Amount	Percentage
United				
Rate Group 1	\$23.78	\$28.28	(\$4.50)	-16%
Rate Group 2	25.54	23.88	1.66	7%
Rate Group 3	27.29	21.20	6.09	29%
Rate Group 4	29.05	18.76	10.29	55%
Rate Group 5	30.86	16.29	14.57	89%
Rate Group 6	32.61	14.53	18.08	124%
Centel				
Rate Group 1	\$25.23	\$23.61	\$1.62	7%
Rate Group 2	26.23	32.17	(5.94)	-18%
Rate Group 3	27.13	26.98	0.15	1%
Rate Group 4	28.18	32.60	(4.42)	-14%
Rate Group 5	29.18	15.15	14.03	93%
Rate Group 6	30.33	12.49	17.84	143%
Sprint - Business Rotary Key				
	Rate	Cost	Contribution	
			Amount	Percentage
United				
Rate Group 1	\$31.85	\$28.28	\$3.57	13%
Rate Group 2	34.55	23.88	10.67	45%
Rate Group 3	37.26	21.20	16.06	76%
Rate Group 4	39.97	18.76	21.21	113%
Rate Group 5	42.68	16.29	26.39	162%
Rate Group 6	45.39	14.53	30.86	212%
Centel				
Rate Group 1	\$33.58	\$23.61	\$9.97	42%
Rate Group 2	35.08	32.17	2.91	9%
Rate Group 3	36.43	26.98	9.45	35%
Rate Group 4	37.98	32.60	5.38	17%
Rate Group 5	39.48	15.15	24.33	161%
Rate Group 6	41.23	12.49	28.74	230%

TABLE II-20

GTEFL - Multi-Line Business Service Flat Rate w/Rotary				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	\$43.79	\$50.98	(\$7.19)	-14%
Rate Group 2	46.09	35.42	10.67	30%
Rate Group 3	47.29	34.9	12.39	36%
Rate Group 4	48.54	29.41	19.13	65%
Rate Group 5	49.74	26.11	23.63	91%
GTEFL - Multi-Line Business Service Message Rate w/Rotary				
	Rate	Cost	Contribution	
			Amount	Percentage
Rate Group 1	\$33.14	\$47.44	(\$14.30)	-30%
Rate Group 2	33.14	31.88	1.26	4%
Rate Group 3	33.14	31.36	1.78	6%
Rate Group 4	33.14	25.87	7.27	28%
Rate Group 5	33.14	22.57	10.57	47%

TABLE II-21

BellSouth - Total Multi-Line Business				
	Total Revenue	Total Cost	Contribution	
			Amount	Percentage
w/hunting	\$224,684,438	\$136,928,310	\$87,756,128	64%
w/o hunting	\$217,567,600	\$177,129,678	\$40,437,922	23%

TABLE II-22

Sprint - Total Business Flat Key and Rotary				
	Total Revenue	Total Cost	Contribution	
			Amount	Percentage
Flat Key	\$1,353,283	\$751,405	\$601,878	80%
Rotary	\$3,409,182	\$1,399,489	\$2,009,693	144%

6. Intrastate switched access charges:

Tables II-23 and II-24 show, for BellSouth and Sprint, the aggregate contribution generated

from intrastate switched access service, where contribution is measured as the difference between total revenues and total costs. Both LECs indicate significant positive contributions: 215% for BellSouth and 1259% for Sprint. (Rate element/unit cost comparisons are not presented due to the large number of distinct rate elements; results are not shown for GTEFL due to its claim of confidentiality.)

TABLE II-23

BellSouth - Intrastate Switched Access			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$73,551,907	\$23,352,812	\$50,199,095	215%

TABLE II-24

Sprint - Intrastate Switched Access			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$12,152,596	\$894,093	\$11,258,503	1259%

7. IntraLATA Toll:

Tables II-25 and II-26 show, for BellSouth and Sprint, the aggregate contribution generated from intraLATA toll service, where contribution is measured as the difference between total revenues and total costs. Like access charges, BellSouth and Sprint indicate significant positive contributions: 2252% for BellSouth and 3481% for Sprint. (Rate element/unit cost comparisons are not presented due to the large number of distinct rate elements; results are not shown for GTEFL due to its claim of confidentiality.)

TABLE II-25

BellSouth - IntraLATA Toll			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
58,179,818	2,473,995	55,705,823	2252%

TABLE II-26

Sprint - IntraLATA Toll			
Total Revenue	Total Cost	Contribution	
		Amount	Percentage
\$2,431,246	\$67,885	\$2,363,361	3481%

8. Vertical Services:

Tables II-27 through II-29 show rate element/unit cost comparisons for BellSouth, Sprint, and GTEFL, for the following vertical services purchased as adjuncts to basic service:

- (a) 3-Way Calling
- (b) Call Waiting
- (c) Call Forwarding Busy Line
- (d) Call Forwarding Don't Answer
- (e) Call Return
- (f) Repeat Dialing
- (g) Call Selector
- (h) Preferred Call Forwarding
- (i) Caller ID Deluxe
- (j) Custom Code Restrictions

As seen from these tables, these various services yield extremely large contributions -- as large as 154662%. Their low costs are due to the fact that they are switch-based features for which there is little directly identifiable investment. However, for many consumers these services are perceived as conveying great value, thus allowing the LECs to sustain a price well in excess of cost.

TABLE II-27

BellSouth - Vertical Services				
(Residential)	Rate	Cost	Contribution	
			Amount	Percentage
3-Way Calling	\$3.75	\$0.6236	\$3.13	501%
Call Waiting	4.00	0.0082	3.99	48680%
Call Forwarding Busy Line	1.00	0.0021	1.00	47519%
Call Forwarding Don't Answer	1.00	0.0041	1.00	24290%
Call Return	4.00	0.2603	3.74	1437%
Repeat Dialing	4.00	0.2898	3.71	1280%
Call Selector	4.00	0.0650	3.94	6054%
Preferred Call Forwarding	4.00	0.0362	3.96	10950%
Caller ID Deluxe	7.50	0.2230	7.28	3263%
Custom Code Restrictions	0.30	0.0284	0.27	956%
(Business)				
3-Way Calling	\$4.00	\$0.8661	\$3.13	362%
Call Waiting	5.80	0.0205	5.78	28193%
Call Forwarding Busy Line	3.25	0.0021	3.25	154662%
Call Forwarding Don't Answer	3.25	0.0041	3.25	79168%
Call Return	5.00	0.3657	4.63	1267%
Repeat Dialing	4.50	0.4304	4.07	946%
Call Selector	4.50	0.0702	4.43	6310%
Preferred Call Forwarding	5.00	0.0427	4.96	11610%
Caller ID Deluxe	9.99	0.3679	9.62	2615%
Custom Code Restrictions	0.43	0.0284	0.40	1414%

TABLE II-28

Sprint - Vertical Services				
(Residential)	Rate	Cost	Contribution	
			Amount	Percentage
3-Way Calling	\$3.00	\$0.0442	\$2.96	6687.3%
Call Waiting	5.00	0.0051	4.99	97939%
Call Forward Busy	1.00	0.0087	0.99	11394%
Call Forward Don't Answer	1.00	0.0170	0.98	5782%
Return Call	4.00	0.1875	3.81	2033%
Repeat Dialing	3.00	0.0940	2.91	3091%
Call Forwarding	4.50	0.3540	4.15	1171%
Caller ID with Name	8.00	0.8680	7.13	822%
Custom Code Restrictions	2.50	0.0295	2.47	8375%
In-Touch w/Call Forward	7.00	0.4288	6.57	1532%
In-Touch w/Call Return	8.00	0.2625	7.74	2948%
Call Manager	10.00	0.7103	9.29	1308%
Call Manager Plus	14.00	1.54311	12.46	807%
Advantage	15.00	2.5800	12.42	481%
(Business)	Rate	Cost	Contribution	
			Amount	Percentage
3-Way Calling	\$4.50	\$0.0442	\$4.46	10081%
Call Waiting	6.00	0.0051	5.99	117547%
Call Forward Busy	1.00	0.0087	0.99	11394%
Call Forward Don't Answer	1.00	0.0170	0.98	5782%
Return Call	4.50	0.1875	4.31	2300%
Repeat Dialing	3.50	0.0940	3.41	3623%
Call Forwarding	4.50	0.3540	4.15	1171%
Caller ID with Name	10.00	0.8680	9.13	1052%
Custom Code Restrictions	4.00	0.0295	3.97	13459%
In-Touch w/Call Forward	9.00	0.4288	8.57	1999%
In-Touch w/Call Return	10.00	0.2625	9.74	3710%
Call Manager	12.00	0.7103	11.29	1589%
Call Manager Plus	16.00	1.5431	14.46	937%
Advantage	17.00	2.5800	14.42	559%

TABLE II-29

GTEFL - Vertical Services				
	Rate	Cost	Contribution	
(Residential)			Amount	Percentage
3-Way Calling	\$3.50	\$1.39	\$2.11	152%
Call Waiting/Cancel Call Waiting	4.00	0.08	3.92	4900%
Call Forwarding Variable*	2.50	0.23	2.27	987%
Automatic Call Return	5.00	0.23	4.77	2074%
Automatic Busy Redial	5.00	0.10	4.90	4900%
VIP Alert	3.00	0.20	2.80	1400%
Special Call Forwarding	5.00	0.32	4.68	1462%
Caller ID - Name and Number	7.95	0.55	7.40	1345%
Custom Code Restrictions				
Option 1	2.50	1.34	1.16	87%
Option 2	2.50	1.35	1.15	85%
Option 3	0.00	1.35	(1.35)	-100%
Option 4	2.50	1.35	1.15	85%
Option 5	0.00	1.35	(1.35)	-100%
	Rate	Cost	Contribution	
(Business)			Amount	Percentage
3-Way Calling	\$4.00	\$1.39	\$2.61	188%
Call Waiting/Cancel Call Waiting	5.00	0.08	4.92	6150%
Call Forwarding Variable*	4.00	0.23	3.77	1639%
Automatic Call Return	6.00	0.23	5.77	2509%
Automatic Busy Redial	6.00	0.10	5.90	5900%
VIP Alert	4.00	0.20	3.80	1900%
Special Call Forwarding	6.00	0.32	5.68	1775%
Caller ID - Name and Number	11.50	0.55	10.95	1991%
*Replaces Call Forwarding-Busy Line & Call Forwarding - Don't Answer				

EMBEDDED COST ANALYSIS

The telecommunications network is used to provide many services over the same facilities. Local calling, long distance calling within Florida (intrastate toll), long distance calling to other states (interstate toll), and special features such as call waiting and call forwarding all use the telecommunications network. Since the same facilities are used in providing multiple services, the determination of the costs of providing these various services is difficult and controversial.

The cost of joint use facilities consists primarily of the local loop, which are the wires from the central office to the home or business, and the switching costs, which are the costs for equipment in the central office. The following analysis recognizes that about 25% of the cost of joint use facilities of the telecommunications network is recovered from the interstate (federal) jurisdiction. The remaining 75% of the costs are recovered through intrastate rates. In this analysis, the remaining 75% of the cost of joint use facilities has been allocated to access charges, local toll and local services based on the amount of time that the service uses the telecommunications network. For example, if 10% of the minutes of calling are for local toll, then 10% of the cost of joint use facilities have been allocated to local toll.

Table II-30, on the following page, shows the revenues and costs related to intrastate operations for the largest local exchange companies, based on 1997 data. The revenues and costs included are those that are normally included by the Commission in setting rates for a company. The costs include a 12.5% return on equity or profit component. This is based on Sprint's last authorized return on equity, which was one of the most recent set by this Commission. The revenues are the actual revenues of the companies. GTE's and Sprint's revenues have been reduced to reflect the access charge reductions required by the Legislature for 1997 and 1998.

Column 1 represents all services other than long distance. It includes services such as residential service, business service, custom calling features, operator services and directory operations. BellSouth, GTE, and Sprint each make a profit from these services in total, as indicated by the positive return on equity. A negative return on equity for a service indicates that the company is not making a profit on the service. The methodology used in this analysis does not allocate costs between individual services included in the local category. Within the local category the individual services may be priced above or below cost.

Columns 2 and 4 are the revenues and costs for interLATA and intraLATA dedicated or private line services. Column 3 is long distance calling within the LATAs and is often referred to as local toll. Much of this local toll is carried by the local exchange company. Column 5 represents the revenues and costs related to access charges paid by the interexchange carriers to the local exchange company. Column 6 is the total intrastate revenue, costs, and return on equity from the regulated operations of the company.

The revenues and costs related to access charges are shown in column 5. GTEFL's and Sprint's revenues have been reduced by \$32.6 and \$36.6 million, respectively, to reflect the access charge reductions ordered by the Legislature for 1997 and 1998. The increase in access charge revenue due to growth in long distance calling has not been included. BellSouth, GTEFL, and Sprint each collect more access charge revenues than their costs, including a 12.5% return on equity.

The total intrastate regulated results are shown in column 6. Based on this analysis, BellSouth has significant revenues in excess of costs. For BellSouth, most of the excess revenue comes from local operations. As part of a settlement with the OPC in 1994, BellSouth made large reductions in its access charge rates. However, BellSouth has not reduced its access charges since March 1997. Based on the above analysis of revenues and costs, if BellSouth's access charges are reduced the company will still have a large amount of revenue above a 12.5% profit.

Even after GTEFL's 1997 and 1998 access charge reductions, GTEFL has revenues in excess of its costs. For GTEFL, most of the excess revenue comes from access charges. Sprint's revenues in excess of its costs, after the 1997 and 1998 access charge reductions, are not as great as GTEFL or BellSouth.

TABLE II-30
1997 REVENUES AND COSTS
(\$ Millions)

	(1)	(2)	(3)	(4)	(5)	(6)
	Local	Private Line IntraLATA	Local Toll IntraLATA	Special Access InterLATA	Switched Access InterLATA	Total Intrastate
<u>BellSouth</u>						
Revenue	\$2,261.9	\$80.1	\$62.2	\$9.7	\$233.4	\$2,647.3
Costs	2,063.5	83.2	73.1	10.6	189.9	2,420.3
Revenue above (below) 12.5% ROE	<u>198.4</u>	<u>(3.1)</u>	<u>(10.9)</u>	<u>(.9)</u>	<u>43.5</u>	<u>227.0</u>
Return on Equity	20.4%	10.0%	-3.9%	6.5%	31.1%	20.3%
<u>GTEFL</u>						
Revenue	\$801.0	\$27.7	\$55.4	\$3.2	\$132.6	\$1,019.9
Costs	786.1	20.7	57.7	6.9	65.9	937.3
Revenue above (below) 12.5% ROE	<u>14.9</u>	<u>7.0</u>	<u>(2.3)</u>	<u>(3.7)</u>	<u>66.7</u>	<u>82.6</u>
Return on Equity	13.9%	35.3%	9.1%	-23.7%	88.3%	18.8%
<u>Sprint</u>						
Revenue	\$549.8	\$13.3	\$27.1	\$3.0	\$164.3	\$757.5
Costs	568.1	18.2	52.7	12.5	95.7	747.2
Revenue above (below) 12.5% ROE	<u>(18.3)</u>	<u>(4.9)</u>	<u>(25.6)</u>	<u>(9.5)</u>	<u>68.6</u>	<u>10.3</u>
Return on Equity	10.5%	-5.2%	-26.8%	-43.0%	64.3%	13.4%

Table II-31, on the next page, shows the revenues and costs related to intrastate operations for six of the nine smallest local exchange companies, based on 1997 data. The revenues and costs included are those that are normally included by the Commission in setting rates for a company. For companies that are rate of return regulated, the costs include each company's current authorized return on equity or profit component. For companies that have elected price regulation, the costs include that company's return on equity last authorized by the Commission, except for Vista-United which has never had a return on equity authorized by the Commission. The revenues are the actual revenues of the companies. The amount of federal high cost support received by each company has been included in the local revenue of the company.

As can be seen in column 1 of the table, most small companies make a profit from local operations. However, this is due primarily to the revenue received from the federal high cost fund. The amount of revenue received from access charges in excess of cost (column 5) varies from company to company, as does the excess revenue received from local toll operations (column 3). There are many reasons for the differences in results among the small companies. The access charge rates and the rates charged to customers vary greatly from company to company. The costs of some of the small companies are significantly higher than costs of other small companies.

TABLE II-31

1997 REVENUES AND COSTS
(\$ Thousands)

	(1)	(2)	(3)	(4)	(5)	(6)
	Local	Private Line IntraLATA	Local Toll IntraLATA	Special Access InterLATA	Switched Access InterLATA	Total Intrastate
<u>ALLTEL</u>						
Revenue	\$20,192	\$722	\$4,886	\$94	\$7,973	\$33,867
Costs	<u>26,073</u>	<u>822</u>	<u>3,002</u>	<u>163</u>	<u>4,874</u>	<u>34,934</u>
Revenue above (below) 11.5% ROE	<u>(5,881)</u>	<u>(100)</u>	<u>1,884</u>	<u>(69)</u>	<u>3,099</u>	<u>(1,067)</u>
Return on Equity	-1.5%	5.2%	73.5%	-10.0%	48.3%	9.7%
<u>ITS</u>						
Revenue	\$1,537	\$17	\$627	\$116	\$243	\$2,540
Costs	<u>1,028</u>	<u>145</u>	<u>921</u>	<u>61</u>	<u>412</u>	<u>2,567</u>
Revenue above (below) 11.8% ROE	<u>509</u>	<u>(128)</u>	<u>(294)</u>	<u>55</u>	<u>(169)</u>	<u>(27)</u>
Return on Equity	45.7%	-45.0%	-25.4%	69.2%	-18.3%	10.9%
<u>Northeast</u>						
Revenue	\$3,923	\$94	\$508	\$8	\$468	\$5,001
Costs	<u>3,863</u>	<u>85</u>	<u>458</u>	<u>21</u>	<u>468</u>	<u>4,895</u>
Revenue above (below) 12.9 ROE	<u>60</u>	<u>9</u>	<u>50</u>	<u>(13)</u>	<u>0</u>	<u>106</u>
Return on Equity	14.3%	21.4%	44.5%	-34.8%	13.0%	15.0%
<u>Quincy</u>						
Revenue	\$4,949	\$191	\$431	\$41	\$837	\$6,449
Costs	<u>5,180</u>	<u>151</u>	<u>611</u>	<u>77</u>	<u>714</u>	<u>6,733</u>
Revenue above (below) 11.65% ROE	<u>(231)</u>	<u>40</u>	<u>(180)</u>	<u>(36)</u>	<u>123</u>	<u>(284)</u>
Return on Equity	8.8%	33.4%	-21.5%	-17.8%	42.3%	8.6%
<u>GTCCom</u>						
Revenue	\$8,322	\$724	\$2,659	\$108	\$2,798	\$14,611
Costs	<u>9,292</u>	<u>474</u>	<u>2,406</u>	<u>133</u>	<u>1,851</u>	<u>14,156</u>
Revenue above (below) 11.65% ROE	<u>(970)</u>	<u>250</u>	<u>253</u>	<u>(25)</u>	<u>947</u>	<u>455</u>
Return on Equity	5.2%	40.4%	25.6%	1.7%	53.1%	13.9%
<u>Vista-United</u>						
Revenue	\$11,059	\$124	\$1,245	\$5	\$3,478	\$15,911
Costs	<u>10,328</u>	<u>261</u>	<u>519</u>	<u>48</u>	<u>1,385</u>	<u>12,541</u>
Revenue above (below) 12.0% ROE	<u>731</u>	<u>(137)</u>	<u>726</u>	<u>(43)</u>	<u>2,093</u>	<u>3,370</u>
Return on Equity	14.7%	-32.9%	243.3%	-122.5%	76.6%	22.8%

CHAPTER III: THE COST OF RESIDENTIAL BASIC LOCAL TELECOMMUNICATIONS SERVICE

In this chapter, the cost portion of interested persons' comments will be discussed. First, however, it is important to have a basic understanding of the different types of costs to understand the following analysis. Interested persons provided a discussion of various cost definitions that are included here to provide the necessary knowledge. Citations throughout the Chapter refer to final comments of the participants unless otherwise noted.

Direct Cost: Cost that is directly attributable to individual services. (OPC, p. 10) It may be volume sensitive and/or volume insensitive. (BST, GTEFL, Sprint, p. 22)

Long Run Incremental Cost (LRIC): Provides a cost floor below which rates will not recover direct costs. Volume sensitive costs are considered to be LRIC. (BST, GTEFL, Sprint, p. 22)

Total Service Long Run Incremental Cost (TSLRIC): Represents the direct cost of a particular service or group of services. (OPC, p. 12) Defined by the Commission as "the costs to the firm, both volume sensitive and volume insensitive, that will be avoided by discontinuing, or incurred by offering an entire product or service, holding all other products or services offered by the firm constant." (Commission Order PSC-96-1579-FOF-TP, p. 25) (BST, GTEFL, Sprint, p. 21) TSLRIC represents the minimum cost per unit that the service must recover, and thus provides a test for subsidy. Incremental costs include those costs directly caused by expanding production, or alternatively, costs that would be saved if the production levels were reduced. (BST, GTEFL, Sprint, p. 22)

Shared Costs: Incurred to produce a family of products but not a direct cost of any one product of the family. (BST, GTEFL, Sprint, p. 23; OPC, p. 10)

Common Costs: Incurred for the benefit of a firm as a whole, but not attributable to an individual product or family of products. (BST, GTEFL, Sprint, p. 23)

Shared Common Costs: Incremental to the firm but not to any particular product. These costs are incurred as a result of being in business and avoided by going out of business. (OPC, p. 11)

ALLOCATION OF LOOP COST

One of the most contentious issues debated by the participants was how and whether to allocate the cost of the loop. If the loop is considered to be a joint and common cost, then the loop cost would not be included as a component in the TSLRIC of any specific service. This position was argued by OPC, the AG, AARP and FLS. On the other hand, if the cost of the loop is directly attributable to local service, as espoused by the LECs, then the full cost is included in the TSLRIC of basic local service.

THE LOOP IS A DIRECT COST

The LECs claimed that basic local service rates are well below their underlying costs. They believe as a result that competitors will not enter the market, but will instead "enter markets where prices are well above costs and siphon off the subsidies that today support basic service." (BST, GTEFL, Sprint, p. 9) This position is based on the notion that the cost of the loop is a direct cost attributable to basic local service. The LECs argued that

[i]n order to attain access to the network (which is equivalent to residential basic telephone service), a residential customer requires all of the following: a loop, a physical point of presence in the switch (termination), and interoffice connections. Costs associated with these pieces of equipment are directly caused by the residential customer's request for this service and thus are appropriately included in the cost analyses conducted by BellSouth, GTE and Sprint-Florida. (BST, GTEFL, Sprint, pp. 19-20)

The LECs noted that other workshop participants have advocated treating the loop cost as a common cost, thus allocating it among various services. The LECs argued that this method is incorrect for several reasons. They observe that common costs do not vary proportionally with changes in demand. In contrast,

. . . [A]n increase in demand for basic residential service increases loop costs since the loop is the main vehicle required for access to the telephone network. . . . [T]he customer's request for service triggers loop costs. The loop cost is directly caused because of the request for the service thus it is appropriately included in a TSLRIC study. (BST, GTEFL, Sprint, p. 20)

Thus, the LECs believe that once the loop is provisioned, the cost has been incurred. That cost is not affected by the way in which the loop is used. Therefore, the cost of the local loop is not shared by the various services provisioned over the loop. (BST, GTEFL, Sprint, p. 21) Dr. William Taylor, appearing on behalf of the LECs, was most adamant that the cost of the local loop should be properly attributable to the provision of customer access to the network.

Cost causation explains why the resources used in providing the loop have been expended. The answer is that costs associated with the loop are caused by a customer gaining access to the network. That is true whether that access is gained as part of a standard bundled offering like residential basic local service or, in the new environment, by purchasing an unbundled loop. Once the loop is provisioned, the cost has been incurred. The way in which it is used (if at all) does not change that cost. Therefore, the cost of the local loop is not shared by all the usage services that can be delivered over the loop. . . . The only economically efficient form of pricing is one based squarely on the principle of cost causation. Use per se, or the benefit derived

from use, is irrelevant to the manner in which cost is caused. Therefore, if public policy is properly designed to recover cost as it is caused, then the loop's cost should be recovered in the rate for the service of which it is an integral part, namely, residential basic local service. (BST, GTEFL, Sprint, p. 21; emphasis omitted)

THE LOOP IS A JOINT AND COMMON COST

OPC, AG, AARP and FLS were in agreement that loop costs should be treated as a shared, or joint and common, cost.

William Dunkel, representing AG, disputed the cost studies of the major LECs, claiming they have distorted their cost studies in an attempt to "sell" their proposals. He characterized the LECs' treatment of loop facility costs as a "mistreatment." The manner in which loop cost is allocated has a major impact on the costs of specific services because the loop investment is a major part of a company's investment. For example, the loop represents 55% of BellSouth's total investment. (Dunkel, p. ii)

Although the facility is shared by several services, the LECs include the entire cost of the loop facility in what they claim to be the "TSLRIC" of basic exchange service, while placing none of the loop facility costs in the TSLRIC of toll, switched access, and vertical services. Mr. Dunkel argued that, "[s]ince the need for the loop does not disappear even if basic service is not offered, obviously something other than just basic exchange service is causing the cost of the loop." (Dunkel, p. ii)

Mr. Dunkel noted that "[t]here would have to be loop facilities to provide toll service even if [local service] was not provided." (Dunkel, p. iv) Even if a certain customer does not place toll calls, the loop to that premises may be still used for toll service, because that loop may be used to receive toll calls, which produces revenue for LECs. (Dunkel, p. v) He continued

The fact that 100% of all customers do not subscribe to vertical services or use toll services in a given month does not mean revenues from those services can be ignored. A fast food restaurant recovers a portion of their rent in the prices of their french fries and soft drinks, even if 100% of the customers do not buy these products. (Dunkel, p. v)

AARP agreed, stating that "[t]he loop is a facility shared by many services including basic local service, vertical services, intraLATA long distance and data. Services that share the loop have always contributed to the recovery of its costs." (AARP, p. 1) FLS added that "[t]he local loop is as necessary for call waiting or long distance calls as it is for basic residential service. Local exchange network costs therefore fall within the 'joint and common' category of costs that the Commission has been requested to review by Public Law 98-277." (FLS, p. 9)

Mr. Dunkel further argued that inclusion of 100% of the loop costs violates both Section 254(k) of the Federal Telecommunications Act of 1996 (TA96), and Florida Statute 364.025 Section 2(2)(a). Both of these laws require that only a reasonable or proportionate share of joint and common costs be allocated to basic exchange services. Since Mr. Dunkel believes the loop cost is a joint and common cost, he contends that the inclusion of the entire amount in the cost of local service would be a violation of the law. (Dunkel, pp. iii-iv)

FAMILY OF SERVICES CONCEPT

While the LECs and the AG disagreed as to whether or not the TSLRIC of basic local service should include the cost of the local loop, the FCCA basically redefined how the issue at hand should and could be resolved. Initially, FCCA asserted its belief that the primary purpose for these efforts is to determine whether the incumbent LECs require an explicit subsidy in order to sustain universal service. FCCA proceeded to note two "misconceptions" that the Commission must avoid. First, the Commission must avoid concluding ". . . that the fixed costs of the loop and switch that serve a residential customer can be allocated among services in a rational way," because any allocation scheme one selected would be inherently arbitrary. (FCCA, p. 2) While the FCCA states that loop and switching costs are fixed, it is not clear whether it also believes them to be shared or common, or just volume insensitive.

Second, the FCCA contends that it is equally important that the Commission ". . . avoid the mistake of assuming that the facilities used to provide local service do no more than that," noting that ". . . the fixed costs of the loop and switch that provide basic service, also permit the carrier to provide other services." (FCCA, p. 2) Disregarding this fact would "distort" the Commission's analysis as to the possible need for an explicit universal service subsidy.

Instead, FCCA alleged that ". . . the only way to provide a meaningful answer . . . is to report to the Legislature information concerning all costs and all revenues associated with the typical family of residential services used by customers in Florida. With that information, the Legislature can assess the profitability of serving residential customers and determine whether the need for a "subsidy" exists." FCCA believes that given the requisite information, one will be able to conclude ". . . that in the aggregate residential customers are profitable to serve." (FCCA, pp. 2-3)

Although it is unclear exactly how FCCA intends "in the aggregate" to be understood, F. Ben Poag on behalf of Sprint-Florida presented data concerning the relative profitability of Sprint's residential customers. His analysis was based on revenues for a sample of 2,750 residential customers in Sprint's United service area from September 1996. According to Mr. Poag's data, 71% of Sprint's residential customers do not generate revenues sufficient to cover the costs of serving them and thus are not profitable to serve. Moreover, his analysis reflects that there is an average monthly shortfall per access line of slightly over \$5.00 per month.

TOLL SERVICE AS PART OF LOOP COST

One of the most compelling notions in support of allocating loop costs to services other than basic local was contained in a white paper contributed by AARP, titled "The Impact of Premium Telephone Services on the Technical Design, Operation and Cost of Local Exchange Plant," by Richard Gabel. Mr. Gabel explained that in the past toll was responsible for a large portion of the cost of the loop.

At the very beginning of the telecommunications industry, local and long distance service were delivered over separate networks. The technical problem was that sending telephone signals over long distances was considerably more difficult than telecommunications over shorter local distances. As a result, two different technologies were utilized. Local service was delivered to the home of individual subscribers over a single wire. Long distance service was offered between telephone company central offices over two wires.

Integrating the two systems greatly improved the convenience of long distance services, but it also imposed heavy costs on local exchange plant, since that plant had to be upgraded to meet the demands of long distance communications. The costs of this change were imposed almost entirely on the local customers, rather than the long distance customers. The local exchange companies and their customers were used both to absorb the costs of long distance service and to undercut competing independent telephone companies. (Gabel, pp. 7-8)

Mr. Gabel noted that further costly changes and improvements were needed to implement Direct Distance Dialing (DDD). Five requisites had to be met.

- Conversion to local dial services,
- Mechanization of billing and accounting,
- Modification of the signaling system,
- Improvement in switching equipment, and
- Development of a uniform numbering system.

These requirements had a major cost impact. Although these were largely improvements necessitated by long distance (toll) service, the bulk of the additional costs were borne by local exchange ratepayers. (Gabel, pp. 8-9)

According to Gabel, throughout the twentieth century, long distance services were given preferential pricing treatment over local services, with respect to cost. For example, the average investment in central office equipment per telephone line increased 43 percent between 1948 and 1959. (Gabel, p. 25) "Although expensive technical changes to implement DDD were the critical factor driving costs in the industry during years 1949-1960, the price of basic local service rose by 27 percent between 1949 and 1959, while interstate long distance (toll) rates increased by only 6 percent and state toll rates by only 13 percent." (Gabel, p. 9)

Mr. Gabel noted that even more demanding changes will be needed to meet the requirements of data or video services. "From the point of view of a data network, the voice network is noisy, slow and relatively narrow." Gabel notes that "[t]he limitation of the analog network for premium services can be summarized by noting that it takes over two minutes to send a page of facsimile over an analog network, while it takes about 5 seconds to send it on a digital network." (Gabel, pp. 9-10)

The importance of this fact in the current proceeding is that the cost of providing new services should not be placed on local service. Gabel remarked, "the incentives for creating the new plant are solely directed to meeting the needs of new and premium services and the basic local exchange services should be insulated from any cost effects." (Gabel, p. 13)

His recommendation was that,

[r]ather than attempt elaborate cost allocation schemes on a service-by-service basis, commissions should consider allocating costs on the basis of generic service categories, such as voice POTS, voice long distance, data and video. One possible use of this method would involve assigning no more cost to the basic POTS classification than can be identified as necessary under "stand-alone" attribution, the cost of providing POTS alone, independent of the provision of other services. (Gabel, p. 13)

The concept of stand-alone cost is addressed further in the comments of OPC and others in the following discussion of tests for subsidy.

TESTS FOR SUBSIDY

OPC believes a fair and reasonable rate structure is one that is "subsidy-free." The test for the absence of subsidy is to determine whether all rates are above their respective incremental costs and below their stand-alone costs. (OPC, p. 1)

- If rates charged are above incremental cost, then prices are established to fully recover all additional cost incurred due to the provision of that service. Moreover, if the firm is recovering all forward-looking costs, including shared and common, prices above incremental cost mean that no service (or group of services) is receiving revenue support from any other.
- Stand-alone cost (SAC) is the maximum price that can be expected to exist in a competitive market. Any price in excess of stand-alone cost would simply invite entry of less efficient firms. In a monopoly environment with entry barred, price is limited to stand-alone costs. Thus, price set no higher than SAC provides the potential for a competitive outcome. Since a multiproduct firm realizes benefits from joint production processes, pricing below SAC results in these benefits from joint production being reflected in the product price. (OPC, p. 2)

Mr. Dunkel agreed with this analysis, noting that the universally accepted test to determine whether a service is being subsidized is that a service is subsidized only if it is priced below its TSLRIC. (Dunkel, p. iii) He argued that, at present rates, toll, switched access, vertical services, and local services are all subsidy-free because each service is priced above its TSLRIC "floor" and below its stand alone "ceiling." (Dunkel, p. iii)

STAND-ALONE COSTS

To aid in the determination of subsidy, or its absence, OPC provided a stand-alone cost study which it based on BellSouth's most currently available data. "A stand-alone cost study identifies costs that would be incurred in the independent provision of any one or combination of the Company's services." (OPC, p. 11) Based on OPC's calculations, the stand-alone cost of local service is approximately \$2.3 billion, with an incremental cost of approximately \$600 million. The stand-alone cost of toll and access services is approximately \$2 billion, with an incremental cost of approximately \$200 million. Revenues for local service and access and toll services fall between the stand-alone and incremental cost levels. OPC concludes, based on its analysis, that the rate structure for local, toll and access services is subsidy free. (OPC, p. 5)

POSITION OF LECS

Predictably, the LECs disagreed with OPC and others that local rates are not subsidized. Representing the LECs was Dr. William E. Taylor of the National Economic Research Associates (NERA). Dr. Taylor submitted that if the residential service rate is subsidized for public policy reasons as claimed by the LECs, that would imply that the price of residential service is below TSLRIC. It would necessarily also mean that one (or more) of the LEC's services is priced above its stand-alone cost (SAC). (Taylor, p. 6)

While Dr. Taylor disagreed regarding the absence of subsidy, he was in agreement in principle with the tests for subsidy proposed by other participants. However, he claimed that this apparently simple SAC test for cross-subsidy is actually impossible to implement correctly. He noted that

for a multi-service firm, the SAC of a service differs, in general, from the TSLRIC of that service. If the firm uses shared facilities in order to provide that service, the SAC (price ceiling) of the service will exceed the TSLRIC (price floor). Any price that lies in the range between TSLRIC and SAC is subsidy-free and is often considered "fair." In particular, a service that is priced *above* TSLRIC cannot be *receiving* a subsidy, and a service that is priced *below* SAC cannot be *providing* a subsidy. (Taylor, p. 7)

He proposed that a test for cross-subsidy based on TSLRIC only is "mathematically equivalent to the test that uses both SACs and TSLRICs, while it does not involve the highly contentious process of determining the SACs." (Taylor, p. 11) He disagreed with Mr. Dunkel, who claimed that

it is possible for all services to be priced at or above TSLRIC and still have at least one service priced above SAC as well. He noted that, in such a case, the service in question would be providing a subsidy, pointing out that Mr. Dunkel insisted that SACs would have to be known to avoid such a result. He argued that Mr. Dunkel was in error.

- First, Mr. Dunkel's contrived example is mathematically impossible. Suppose there are three services, two of which are priced at TSLRIC. The total cost of the firm must then be the sum of the three service TSLRICs and the shared and common costs. A firm that breaks even must recover that sum of costs. Now, if two services recover exactly their TSLRICs, then the third service would recover *at most* its own TSLRIC and the shared and common cost. But that is exactly what Mr. Dunkel calls the SAC of the third service, no more or no less. Therefore, it is impossible for any service to be priced above SAC if the other services are recovering at least their TSLRICs. (Taylor, p. 11)
- Second, what if the firm is *more* than breaking even? In that case, it is possible in *theory* that the third service would be priced above its SAC. But, that is not germane to the question here, namely, is at least one service (residential service) *receiving* a subsidy, i.e., being priced below TSLRIC? Now, if all services are recovering at least their TSLRICs, then *no* service can be receiving a subsidy. Therefore, it is of no importance whatsoever that the firm may be positioned to *provide* a subsidy by pricing at least one service above SAC. If a subsidy is not received, then it is irrelevant whether--in theory--a subsidy could be provided. More importantly, pricing above SAC for its own sake is not even sustainable in competitive markets. Any equally-efficient entrant could provide the same service at least at the TSLRIC and, if that's the only service it provides, at most at the SAC. Thus, the competitor would always provide a better price than the incumbent that tries to price above SAC--a point Mr. Dunkel himself appeared to acknowledge. (Taylor, p. 11)

CONCLUSIONS AND OBSERVATIONS

The concepts of cost determination and cost recovery were occasionally confused with one another during this proceeding. Cost determination is relatively straightforward: having specified the cost object to be analyzed, what costs are incurred due to the decision to provide that cost object? On the other hand, cost recovery -- how prices are set -- potentially takes into consideration numerous factors, only one of which is the cost of the item or service.

Is the cost of local loop facilities properly attributable to the provision of basic local telecommunications service? By definition, yes. Section 364.02(2), Florida Statutes, defines "basic local telecommunications service" as

voice-grade, flat-rate residential and flat-rate single-line business local exchange services which provide dial tone, local usage necessary to place unlimited calls within a local exchange area, dual tone multi-frequency dialing, and access to the following: emergency services such as "911," all locally available interexchange companies,

directory assistance, operator services, relay services, and an alphabetical directory listing.

Given such an identification of the cost object to be studied, the principle of cost causation leads one to the unavoidable conclusion that the decision to have local service leads to the incurrence of loop costs. Dr. Taylor succinctly explained the fundamental reasoning underlying this point:

Economists generally agree that the cost of the local loop is caused when a customer asks for local exchange service, of which subscriber access to the public switched network is an integral part. . . . The customer's decision to seek such access is important at two levels: (i) access precedes any actual usage and is, therefore, separate from it, and (ii) that decision to seek access is the cost-causing action. In other words, access is a service that can be demanded in its own right by the customer, regardless of any or all uses to which he or she may wish to put such access. (Taylor, p. 14)

Another area of dispute between the participants was whether or not it was necessary to conduct both stand-alone and TSLRIC cost studies in order to guard against the presence of cross-subsidization. While a stand-alone cost allows for the identification of whether a specific service is providing a subsidy to another service, TSLRIC is the threshold for ensuring that a service is not receiving a subsidy. As long as all prices are set at or above their respective TSLRIC levels, no service is being subsidized. Accordingly, TSLRIC results are sufficient, and SAC data are unnecessary. It is important to note that this view is consistent with Section 364.3381(2), Florida Statutes, which deals with cross-subsidization of LEC non-basic services by basic service.

Although the inclusion of loop costs in the cost of basic service follows from the definition of the service being modeled, two observations are warranted. First, it is conceivable that a different cost object should instead be analyzed, especially if the goal is to ensure that all rates equal or exceed their costs. Instead of testing for subsidy by comparing the rate and TSLRIC of basic local service, perhaps it would be more appropriate also to factor into the analysis the rates and costs of those adjunct-to-basic services whose revenue streams are virtually guaranteed. For example, whichever local exchange provider provides local service to an end user, is essentially guaranteed to receive the switched access revenues associated with the toll calls that customer either makes or receives. In addition to including subscriber line charges in the rate/cost comparison, it may be appropriate to count revenues for those vertical services that have achieved extremely high subscription levels. We would clarify here that we do not endorse the total revenues/total costs approach advocated by FCCA, as it would presumably include in its analysis revenues from services for which a high degree of rivalry exists. Inclusion of such services could put the LECs at a competitive disadvantage relative to any additional pricing flexibility that may be afforded them.

Second, as alluded to above cost is only one variable in the equation that ultimately leads to the prices established for services. Although all firms must recover all of their costs, this does not necessarily require that the price of every rate element must be set to track an associated unit cost. Moreover, the most economically efficient pricing structure is worthless if customer dissatisfaction

is high. As an example, throughout the United States during the 1980s local exchange companies attempted to introduce (often mandatory) local measured service. Countless studies were conducted and submitted to regulatory authorities which demonstrated that the vast majority of all local subscribers would be better off with measured rate service, than with flat-rate residential service. Nevertheless, there was a vehement uproar from consumers who opposed the proposed pricing scheme. As a result, local measured service offerings were generally defeated or withdrawn. With respect to the project at hand, it may be that charging consumers full cost-based rates (whether by a LEC or an alternative LEC) for residential basic service, even with reductions in rates for other services that would be beneficial to customers, could yield a similar reaction.

CHAPTER IV: AFFORDABILITY SURVEY

In this portion of the study, the Commission endeavored to measure affordability as seen through the eyes of the consumer. The survey instrument used was developed by the Commission in conjunction with interested persons, as well as the University of Florida's Bureau of Economic and Business Research (BEER) Survey Program, which was the entity that performed the actual telephone survey. The survey and associated results are summarized in this chapter. The survey instrument and a detailed presentation of the results are contained in Appendix IV-1.

Although the discussion centers around the affordability aspect, it also reflects on the value of service. This is shown by the ranking assigned to telecommunications services, as compared with other services.

DEFINITION OF "AFFORDABLE"

The Federal Communications Commission (FCC) adopted the Federal-State Joint Board's November 7, 1996 Recommended Decision on Universal Service that addressed, in part, the notion of affordability. In its recommended decision, the Joint Board used the Webster Dictionary definition of affordability, which included both an absolute and a relative component of the term. The absolute component would imply that one would "have enough or the means for" a desired service, and the relative component would imply that one would be able to "bear the cost without serious detriment."² The FCC agreed with the Joint Board's determination of affordability and adopted the Joint Board's finding on May 7, 1997.³ The combination of both of these concepts provided the basis for the development of the Commission's Affordability Survey, hereafter referred to as the Florida Survey. However, it is recognized that the relative component is difficult to measure, in that whatever may constitute "serious detriment" has been defined by neither the FCC, the Florida Legislature, nor the Florida Public Service Commission.

AFFORDABILITY RESEARCH AND SURVEYS

Commission staff performed a literature search and review on the topic of affordability and local telephone service, and a few studies were found that addressed both the issue of affordability and local telephone service. One study reviewed the 1993 subscriber survey of the Organization for the Protection

²Federal Communications Commission, Docket No. 96-45, Recommended Decision of the Federal-State Joint Board on Universal Service, adopted November 7, 1996, paragraph 125.

³Report and Order, Federal-State Joint Board on Universal Service, CC Docket No. 96-45, adopted May 7, 1997, paragraph 110.

and Advancement of Small Telephone Companies (OPASTCO), which was a mail-out survey to 5,000 business and residential subscribers of 20 small telephone companies from throughout the U.S. A variety of information was gathered, including customer reactions to hypothetical local telephone price increases, the ability of respondents to call their local doctor and/or school without paying an additional charge, available telecommunications options, number of subscribed telephone numbers and demographic information such as household income, household size, race, age, and residency information. Another study conducted on behalf of the Wyoming PSC entitled, "Telephone Affordability Study of Selected Wyoming Residents," was based on a direct-mail survey designed to measure whether affordability of local telephone service was being maintained as the state moved toward the paradigm of competitive telecommunications markets.⁴ The survey included a series of questions which allowed respondents to rank the importance of local telephone service and several other services used by households, such as cable TV.

According to an article by K. E. Hancock entitled, "Can Pay? Won't Pay? or Economic Principles of Affordability," affordability is attained only when the service can be secured at a price that does not impose an unreasonable burden on household incomes.⁵ Another article, "Perceptions of Affordability: Their Role in Predicting Purchase Intent and Purchase," by Arti S. Notani, argues that affordability perceptions may have the power to influence purchase decisions.⁶ This concept helped lend perspective to the importance of customer perceptions when developing the Florida Survey. For instance, the series of "willingness to pay" questions, which are based upon individuals' perception of the affordability of local telephone services at different price levels, are not unrelated to the actual purchase decisions of the survey respondents.

The OPASTCO survey, the Wyoming survey, the Hancock and Notani articles, as well as a variety of other related literature, were relied upon by staff in developing the Florida Survey.

STAFF WORKSHOPS

Two staff workshops were held to consider input from interested persons on the design and implementation of the Florida Survey.⁷ A number of representatives of groups impacted by the

⁴Annmarie Burg, "Telephone Affordability Study of Selected Wyoming Residents," *Quarterly Bulletin*, Vol. 18, No. 4, 1997, pp. 483-492.

⁵K. E. Hancock, "'Can Pay? Won't Pay?' or Economic Principles of 'Affordability'," *Urban Studies*, Vol. 30, No. 1, 1993, pp. 127-145.

⁶Arti Sahmi Notani, "Perceptions of Affordability: Their Role in Predicting Purchase Intent and Purchase," *Journal of Economic Psychology*, 18, 1997, pp. 525-546.

⁷The first workshop was held on June 17, 1998 and the second was held on June 23, 1998. Interested persons included representatives from Incumbent Local Exchange Companies (ILECs), Interexchange Companies (IXCs), cable associations, the State of Florida Attorney

legislation offered their input during the workshops. In addition, Dr. Christopher McCarty, Director of the University of Florida's BEBR Survey Program, offered advice regarding survey implementation and questionnaire design during the workshops.

After developing a preliminary survey instrument, which purposefully excluded demographic questions, Commission staff considered and incorporated into the design of the survey specific suggestions offered by interested persons pertaining to both demographic and non-demographic concerns. This collaborative effort allowed the opportunity for the concerns of interested persons to be considered in order to improve the instrument to the greatest extent possible. Probably the most significant change to the survey instrument was offered by OPC and others, who requested that the survey include a series of questions regarding respondent's reactions to hypothetical price changes. In addition, BellSouth requested that the survey include questions pertaining to the relative importance of residential telephone service compared to other essential household services, such as water and electric service. Staff subsequently included a question regarding electric service expenditures. Sprint expressed concerns that the survey be based on a sample size large enough to allow for meaningful analysis by key demographic groupings. The issue of sample size is addressed in a later section.

Several persons offered suggestions regarding the types of demographic questions to include in the survey. AARP and others wanted to be able to tabulate survey responses according to household income categories, but other demographic questions were requested as well. For instance, GTEFL requested that the survey include a question identifying the population density of the respondent's county (rural and urban). Questions pertaining to income, senior citizen status, and population density were incorporated in the final survey instrument.

Much of the workshop discussion pertained to the technique of asking the specific survey questions in such a way as to prevent bias or confusion. The final survey questionnaire incorporated many of the design suggestions offered by the workshop attendees.

OVERVIEW OF SURVEY QUESTIONS

The factors which affect the affordability of residential basic local exchange service are complex and varied. As alluded to earlier, the definition of affordability goes beyond the purchase decision. If that were the only consideration, the study of local telephone service affordability could be limited to an econometric demand model for residential basic local exchange service. Telephone service demand would be shown to be a function of various factors which determine whether a purchase is made, including local telephone service price, the price of near substitutes, and household income.

The survey includes questions pertaining to each of these factors. However, since the definition of local telephone service affordability includes not only demand for telephone service but also the

General, the Office of the Public Counsel, and the American Association of Retired Persons (AARP).

impact of the purchase of local telephone service on the demand for other household goods and services, another layer of concerns must also be investigated. Those concerns include "How essential is local telephone service?", "How essential are other services?", and more specifically, "How valuable is local telephone service, relative to other services, in terms of the price paid for other services?" The supposition here is that, if some other household service(s) is being purchased that is not as valuable to the household as telephone service, but for which households pay more, then the household *may* be able to "bear the cost without serious detriment" if the price increases. Conversely, if other services of equal or greater importance are provided at a lower price than local telephone service, then increases in telephone prices *may* cause "serious detriment," and therefore be unaffordable.

Since the definition of local telephone service affordability includes the ability of customers to "bear the cost without serious detriment," and "serious detriment" is not defined, any determination regarding the affordability of telephone service is, to some extent, subjective. Nonetheless, the collection of information pertaining to the economic value which households receive from local telephone service relative to other services is relevant to understanding the impacts of local telephone service price changes.

In order to address those concerns, the survey was designed to elicit responses regarding household consumption behavior and "value of service" perceptions. Some questions were designed to determine whether respondents subscribed to any optional calling features, such as Call Waiting and Caller ID. Respondents were also asked to report their monthly expenditures (bills) for local and long distance telephone service in the aggregate, as well as for long distance service alone, cable TV service, pager/beeper service, Internet service, alarm service, and electric service. Several questions were designed to measure the importance that one would assign to residential basic local exchange service as well as other household services. Also, several questions were designed to allow respondents to indicate how they would react in the event of an increase in the price of local telephone service. Finally, respondents were asked to indicate which alternative to local telephone service they would choose in the event that the price of local telephone service increased enough to motivate them to consider discontinuing service.

IMPLEMENTATION

The Florida Public Service Commission contracted with the University of Florida's BEBR Survey Program to conduct a fifty-question telephone survey of Florida residents in July and August 1998. The BEBR Survey Program was then responsible for transmitting the entire set of survey responses to the Commission.

SURVEY AGENT

The BEBR Survey Program operates a computerized telephone survey lab at the University of Florida in Gainesville, Florida and recruits university students to work as interviewers and as night shift supervisors. Interviewers participate in regular monthly training sessions, and are monitored to ensure

that the interview took place and that responses were recorded accurately. The Survey Program uses a Computer Assisted Telephone Interview (CATI) lab to administer its survey program known as CASES.⁸ For the Florida Survey, the telephone numbers used were randomly generated by a survey sampling product designed for this purpose and a minimum of ten callbacks were made before classifying a telephone number as unproductive. The University of Florida's BEBR Survey Program provided a compilation of the approximately 80,000 individual survey responses from 1,582 respondents to the Commission.

SAMPLE SIZE AND STATISTICAL ANALYSIS

The Florida Survey attempted to obtain information from a representative sample size in order to be able to generalize information regarding perceptions and behaviors within a reasonable range of error. Staff determined that a sampling size of 1,500 respondents would be required in order to allow for acceptable sample tolerances at the 95% confidence interval (two standard deviations), when developing profiles for key demographic groups.

SURVEY COVERAGE

Since 7.2% of Florida households do not have telephone service, one obvious concern with performing a telephone survey regarding telephone affordability is that it excludes those households without telephone service.⁹ Their exclusion presents a degree of coverage bias which can be reduced in some measure by insuring that the income distribution of the sampled households closely resembles the population as a whole. Thus, a special effort can be made to oversample those income groups (primarily, low-income groups) which would not otherwise be fully represented via telephone sampling. The trade-off for achieving representative sampling by income is that the survey sampling cannot be considered completely randomized; therefore, this survey is based on a representative sample.

REPRESENTATIVE SAMPLING

In addition to calculating descriptive statistics covering all respondents, the survey responses were also grouped according to income, population density, and age of household members. In order to establish that the survey was representative of the households in Florida, the demographic profile of the respondents was compared to the demographic profile of all Florida households. These comparisons

⁸The CASES survey software is written and maintained by the Survey Center at the University of California at Berkeley.

⁹Telephone Subscribership in the United States, Data through 1998, Released July 1998, Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission. Penetration is estimated on a unit basis rather than available basis.

were performed by income (ten household categories), population density (three household categories), and age (senior and non-senior citizen categories). However, oversampling was necessary in order to achieve representation of specified income groups. The following section describes the analyses and the methods used for achieving representative sampling.

REPRESENTATION BY INCOME GROUPS

Early during the survey implementation process, it became evident that a lower percentage of survey questionnaires was being completed for low-income households than would be necessary for these households to be adequately represented, according to the proportion of such households existing in the State of Florida. Thus, an effort to "oversample" the two lowest income groups was undertaken. This problem was addressed by targeting respondents within selected low-income geographic locations, thereby increasing the representation of low-income groups to more accurately reflect the proportion of low-income households in the state.

The oversample consisted of 349 completed surveys, or approximately 22% of the completed 1,582 surveys. The telephone numbers randomly generated were limited to those working numbers contained within census tracts where 40% of the households made less than \$15,000 a year, according to the Current Population Survey (CPS) produced by the United States Bureau of Census.

The income data for the survey respondents indicates that the highest and lowest income categories are slightly over represented as compared to the income distribution of households in Florida, and the middle income categories are slightly under represented.

REPRESENTATION BY POPULATION DENSITY LEVEL

In order to gauge the impact of population density on affordability of basic local exchange service, responses were grouped based on the population density of the respondent's county. For the purposes of the Survey, population density was specified as the number of persons per square mile of the county in which a respondent resides. Using population density information as published by the *Florida Statistical Abstract, 1997*, Florida's sixty-seven counties were divided into three density groups. The proportion of respondents in each of the three population density levels closely approximates the proportion of total households in each of the three population density levels in the state.

REPRESENTATION OF SENIOR CITIZENS (OVER AGE 65)

Responses were grouped based on whether one or more senior citizens lived in the household in order to gauge whether local telephone service is either more or less affordable for households with senior citizens compared to households without senior citizens. Approximately 21.5% of all households surveyed had at least one person in the household over the age of 65. Since 18.5% of Florida residents are aged 65 or over, according to population estimates for July 1997, the sample appears to include

adequate representation of the state's elderly population.¹⁰

SURVEY CALL DISPOSITION

A review of the call disposition report provided by BEBR reveals that an attempt was made to contact a total of 14,108 telephone numbers. Of those attempts made, 3,884 were deemed ineligible, 3,804 were non-working numbers, 2,602 had no answer, and 435 were incomplete. Of the remaining 3,383 calls made, 1,585¹¹ were completed and 1,798 were refused. Thus, the overall success rate of the telephone survey was approximately 47%.

TABULATION PROCEDURES PERFORMED BY STAFF

Commission staff tabulated the data using SAS software, and then presented the results in written, tabular, and graphical format. Sample tolerances were calculated for all descriptive statistics. The tabulations were segregated into four basic categories, including all responses and responses stratified by income, population density, and household members over age 65.

SUMMARY OF FINDINGS

One way to summarize the varied descriptive statistics presented in this report is to provide a profile of the typical Florida household on measures which either directly or indirectly impact the affordability of local telephone service. The same approach can be made for selected demographic groups that may be more impacted than other groups by changes in local telephone rates. The following discussion is an attempt to provide such profiles, including profiles of the typical "Florida household," the "very low income Florida household (less than \$10K)," the "moderate low-income Florida household (\$20-30K)," the "low population density Florida household," and the "senior citizen Florida household."

THE TYPICAL FLORIDA HOUSEHOLD AND LOCAL TELEPHONE SERVICE AFFORDABILITY

The typical Florida household has an average of 1.3 telephone lines. Households responded that the telephone is used for a number of purposes, such as social calling (97.0% percent of households),

¹⁰Source: Estimates of the Population of the U.S., Regions, Divisions, and States by 5-year Age Groups and Sex: Annual Time Series, July 1, 1990 to July 1, 1997. Population Estimates Program, Population Division, U.S. Bureau of the Census, Washington, D.C. 20233.

¹¹Staff identified 1,582 completed surveys, not 1,585 as indicated in the Call Disposition Report. In addition, some respondents did not answer all questions; therefore, the number (n) of responses per question is typically less than 1,582.

business calling (57.2 percent of households), and to a lesser extent for Internet access (31.0 percent of households), shopping (29.8 percent of households), or faxing (19.7 percent of households). Few households pay an extra charge to reach essential services, such as the local schools (3.2 percent of households) or family physician (8.7 percent of households). Florida households use their telephone frequently, about 13.5 times a day, on average. Nearly 90 percent of the homes in this profile responded that they can call anyone they like, because everyone they want to call has local telephone service.

In addition to local telephone service, Florida households subscribe to a variety of optional calling features and other household services. They subscribe to an average of 2.3 features, the most popular being Call Waiting (60.3 percent) and Caller ID (39.3 percent). They typically have cable TV service (62.6 percent), and may have other services such as cellular telephone service (36.7 percent), Internet service (28.7 percent), pager/beeper service (21.9 percent), or alarm service (15.2 percent).

There is a 70.0 percent chance that the household receives a consolidated bill for local and long-distance telephone service. They pay on average \$39.40 for local service, less than what they pay for long distance service, which averages \$45.47. Thus, their monthly bill is \$84.87 for both services combined. There is one other monthly service that usually costs more than these two services combined, however. Electric service during the summer months is over \$100.

When asked to rate the importance of local telephone service compared to other household services, they said that local telephone service was more important to them than any other. In fact, on average they rated it 4.6 on a scale of 1 to 5, with 5 being the most important. They believe local telephone service is a good deal, considering the value they get for what they pay for the service, especially compared to some other household services, such as cellular telephone or cable TV service, but other services, such as pager/beeper service and security alarm service, may have an economic value to them as high as that of telephone service.

When asked what reaction they might have to a \$2 increase in local telephone rates, 25.9 percent said they would reduce their spending on other goods or services, and another 7.1 percent said they would discontinue local telephone service. When asked what their reaction would be to a \$5 increase in local telephone rates, 31.0 percent said that they would reduce spending on other items and another 13.4 percent said they would discontinue local telephone service. At the \$10 level, 36.3 percent indicated that they would reduce spending on other items, while 25.1 percent answered that they would discontinue service. When asked what they would do if prices increased to a level that was unacceptable, slightly over half of the respondents (52.4 percent) indicated that they would switch to cellular telephone service, but slightly under one-fourth of the respondents (23.0 percent) indicated that they would simply use payphones for their household communication needs.

THE VERY LOW-INCOME FLORIDA HOUSEHOLD AND LOCAL TELEPHONE SERVICE AFFORDABILITY

For this profile, a household is considered very low-income if it reported income of less than \$10,000 per year. On average, these households have 1.1 telephone lines and responded that they use

telephone service for social calling (95.3 of households), and business calling (37.8 percent of households). They are unlikely to use it for purposes of Internet access (2.4 percent of households), shopping (10.2 percent of households), or faxing (4.1 percent of households). They may have to pay an extra charge to reach essential services, such as local schools (7.1 percent of households) or family physician (18.9 percent of households). Very low-income households use their telephone frequently, on average 10.7 times a day. On average, the households in this profile find that there is one home they would like to call but cannot call because that targeted home does not have telephone service.

In addition to local telephone service, the homes in the lowest profile subscribe to optional calling features and other household services, albeit at a lower rate than other income groups. They subscribe to an average of 1.8 features per household. Almost half of these households subscribe to Call Waiting (49.6 percent), and about a third of them subscribe to Caller ID (31.5 percent). Some have cable TV service (39.4 percent), but they are unlikely to have cellular telephone service (11.0 percent), pager/beeper service (11.0 percent), security alarm service (4.7 percent), or Internet service (3.2 percent).

Most customers (77.2 percent) said that they receive a consolidated bill for local and long-distance telephone service. On average, they receive a monthly bill of \$37.06 for local service and \$28.38 for long distance service, for a total of \$65.44 per month. Over half (56.7 percent) of these respondents pay less than \$100 per month for electric service.

When asked to rate the importance of local telephone service on a scale of 1 to 5, with 5 being the most important, very low-income households rated local telephone service 4.6 on average.

When asked what reaction they might have to a \$2 increase in local telephone rates, 37.0 percent said they would reduce their spending on other goods or services and another 9.5 percent said they would discontinue service. When asked what their reaction would be to a \$5 increase in local telephone rates, 41.7 percent answered that they would reduce spending on other items and another 20.5 percent indicated that they would discontinue local telephone service. At the \$10 level, 36.2 percent indicated that they would reduce spending on other items, while 44.1 percent answered that they would discontinue service. When asked what they would do if prices increased to a level that was unacceptable, slightly more than one-third (37.0 percent) indicated that they would use payphones for their household communication needs, but a large percentage of very low-income households said that they would never discontinue service (20.5 percent).

THE MODERATE LOW-INCOME FLORIDA HOUSEHOLD AND LOCAL TELEPHONE SERVICE AFFORDABILITY

For the purposes of this profile, the moderate low-income household in Florida is one with income between \$20K and \$30K. The typical household in this profile has 1.2 telephone lines on average. Households responded that the telephone is used for a number of purposes, such as social calling (95.6 percent of households), business calling (56.2 percent of households), and to a lesser extent for shopping (26.6 percent of households), Internet access (19.5 percent of households), or faxing (14.0

percent of households). Few households pay an extra charge to reach essential services, such as the local school (1.8 percent of households) or family physician (5.3 percent of households). They use their telephone frequently, 12.1 times a day, on average. Households in this profile report that the number of households they cannot contact because the targeted home does not have local telephone service is 0.4 homes, on average.

In addition to local telephone service, they subscribe to optional calling features and other household services. They subscribe to an average of 2.3 features, the most popular being Call Waiting (57.1 percent), Caller ID (38.5 percent) and 3-way Calling (37.2 percent). They typically have cable TV service (60.6 percent), and may have other services such as cellular telephone service (27.4 percent), pager/beeper service (23.0 percent), or Internet service (17.3 percent).

Most customers (73.9 percent) said they receive a consolidated bill for local and long-distance telephone service. Their bill is divided between local service (\$38.13) and long distance service (\$39.89), so their monthly bill is \$78.02 on average for both services. There is one other monthly service that usually costs more than these two services combined, however. They pay very close to \$100 per month for electric service during the summer months.

When asked to rate the importance of local telephone service on a scale of 1 to 5, with 5 being the most important, moderate low-income households rated local telephone service 4.5 on average.

When asked what reaction they might have to a \$2 increase in local telephone rates, 31.4 percent said they would reduce their spending on other goods or services, and another 8.0 percent said they would discontinue local telephone service. When asked what their reaction would be to a \$5 increase in local telephone rates, slightly over one-third (35.8 percent) answered that they would reduce spending on other items, while 14.6 percent indicated that they would discontinue local telephone service. At the \$10 level, 38.5 percent indicated that they would reduce spending on other items, while 28.3 percent answered that they would discontinue service. When asked what they would do if prices increased to a level that was unacceptable, over half of the respondents (55.3 percent) indicated that they would switch to cellular telephone service, but slightly over one-quarter (28.3 percent) said that there was a chance that they would simply use payphones for their household communications needs.

THE LOW POPULATION DENSITY FLORIDA HOUSEHOLD AND LOCAL TELEPHONE SERVICE AFFORDABILITY

The average number of telephone lines for households in the lowest population density group is 1.2. Households responded that the telephone is used for a number of purposes, such as social calling (98.1 percent of households), business calling (57.9 percent of households), and to a lesser extent for shopping (36.6 percent of households), Internet access (30.7 percent of households), or faxing (16.0 percent of households). Few households have to pay an extra charge to reach essential services, such as local schools (2.6 percent of households) or family physician (10.2 percent of households). They use their telephone 12.1 times a day, on average. In this profile, the average number of homes that cannot be called because the targeted home does not have local telephone service is 0.3.

In addition to local telephone service, they subscribe to optional calling features and other household services, albeit at a lower rate than the other density levels. They subscribe to an average of 1.7 features, the most popular being Call Waiting (50.1 percent) and Caller ID (28.8 percent). They typically have cable TV service (66.0 percent), and may have other services such as cellular telephone service (34.8 percent), Internet service (28.4 percent), or satellite/Direct TV service (18.5 percent).

Most customers (68.8 percent) said that they receive a consolidated bill for local and long-distance telephone service. On average, they pay \$42.11 for long distance service and about \$34.02 for local service, so their monthly bill is \$76.13 for both services. There is one other monthly service that usually costs more than these two services combined, however. A large number (66.2 percent) reported that they pay over \$100 for electric service during the summer months.

When asked to rate the importance of local telephone service on a scale of 1 to 5, with 5 being the most important, they rated local telephone service 4.6 on average.

When asked what reaction they might have to a \$2 increase in local telephone rates, 23.2 percent of these households said they would reduce their spending on other goods or services, and another 5.9 percent said they would discontinue local telephone service. When asked what their reaction would be to a \$5 increase in local telephone rates, 28.1 percent said that they would reduce spending on other items, and another 12.8 percent said that they would discontinue local telephone service. At the \$10 level, 31.2 percent indicated that they would reduce spending on other items, while 25.5 percent answered that they would discontinue service. When asked what they would do if prices increased to a level that was unacceptable, more than half of the respondents (55.8 percent) indicated that they would switch to cellular telephone service, but others said that they would simply use payphones for their household communication needs (22.2 percent).

THE SENIOR CITIZEN FLORIDA HOUSEHOLD AND LOCAL TELEPHONE SERVICE AFFORDABILITY

For those Florida households with one senior citizen, the average number of telephone lines is 1.3. Households in this category responded that the telephone is used for social calling (97.0 percent of households), business calling (47.0 percent of households), and to a lesser extent for shopping (32.8 percent of households). They were less likely to use it for Internet access (18.1 percent of households), or faxing (14.7 percent of households). Few would have to pay a special charge to reach essential services such as their schools (1.7 percent of households) and doctors (7.8 percent of households). They use their telephone frequently, approximately 10.0 times per day. In this profile, the average number of households that cannot be called because the targeted home does not have local telephone service is 0.3.

In addition to local telephone service, they subscribe to optional calling features and other household services, but they average fewer features than other households. They subscribe to an average of 1.4 features, the most popular being Call Waiting (40.3 percent) and Caller ID (27.3 percent). They typically subscribe to cable TV service (55.2 percent), and may subscriber to other services such

as cellular telephone service (25.0 percent), Internet service (17.7 percent), or satellite/Direct TV service (7.3 percent).

Most customers (72.7 percent) said that they receive a consolidated bill for local and long-distance telephone service. On average, households with one senior citizen report that they pay \$32.78 for local service and \$25.76 for long distance service, so that their average total telephone bill is \$58.53 for both telephone services combined. There is one other monthly service that usually costs more than these two services combined, however. Close to one half of all households (46.1 percent) with one senior citizen report that they pay over \$100 for electric service during the summer months.

When asked to rate the importance of local telephone service on a scale of 1 to 5, with 5 being the most important, senior citizen households rated local telephone service 4.7 on average.

When asked what reaction they might have to a \$2 increase in local telephone rates, 31.2 percent of households with one or more senior citizens said that they would reduce their spending on other goods or services, and another 6.8 percent of these households said they would discontinue local telephone service. When asked what their reaction would be to a \$5 increase in local telephone rates, 32.9 percent of households answered that they would reduce spending on other items, while only 11.8 percent answered that they would discontinue local telephone service. At the \$10 level, 36.5 percent indicated that they would reduce spending on other items, while 24.1 percent answered that they would discontinue service. When asked what they would do if local telephone service prices increased to a point that would cause them to consider an alternative, households with only one senior citizen indicated that they may switch to cellular telephone service (32.8 percent), or they may simply use payphones for their household communication needs (25.4 percent). However, a number of households with only one senior citizen (17.2 percent) said they would never disconnect, despite the price increase.

INFERENCES

Using the survey findings as a foundation, we can draw certain inferences regarding the affordability and value of basic local telecommunications service, and how that might affect the determination of a fair and reasonable rate for basic local residential telephone service. For purposes of this analysis, the discussion is organized according to (1) adequacy and use of service, (2) opportunities to rearrange spending, (3) expenditures vs. importance, and (4) tolerance for price increases.

ADEQUACY AND USE OF SERVICE

The vast majority of customers report being able to call essential services and indicate that there are very few homes which they cannot call (0-1, depending on income) because the household does not have a telephone. Households make 4.8-8.6 local calls per day, on average, depending on income; households receive 5.9-11.2 calls (local and toll), on average, depending on income. Households which have one or more members over age 65 place and receive somewhat fewer calls, on average 4.5-4.8 and 4.5-5.2, respectively. Based on customers having the ability to make desired calls, and the volume of

calls actually made and received, basic service appears to be meeting the needs of customers.

OPPORTUNITIES TO REARRANGE SPENDING

Customers subscribe to optional features in significant numbers, averaging 1.8-2.7 features, depending on income, and 1.7-2.7 features, depending on population density. Households which have one or more members over age 65 subscribe to approximately half the number of features as compared to the typical household, but this still indicates that even seniors are more than basic customers. In addition, households are subscribing to second lines in increasing numbers, based on the fact that surveyed households have 1.1-1.8 lines on average, depending on income. This statistic does not vary materially by number of household members over age 65. In addition, the average household spends \$55 a month on other communications related services such as cable TV, cellular telephone, Internet access, alarm service, satellite TV, and pager/beeper. These findings suggest that there is room to rearrange spending, particularly in light of the high importance attached to telephone service (see expenditures vs. importance). Nonetheless, there appear to be limits on the extent to which households would be willing to rearrange spending to accommodate a higher price for basic local telephone service. (see tolerance for price increases).

EXPENDITURES vs. IMPORTANCE

The survey provides information on the importance of local telephone and other household communications related services, as well as the expenditures for these same services. By comparing expenditures to importance, this can suggest whether these services are priced appropriately compared to one another. Median values were used for the comparison since average expenditures could not be calculated due to the open-ended nature of the highest bill response category for each service. Figure IV-1 on the next page is a scatter diagram of the results. As would be expected, the diagram shows an upward trend, implying that the higher the median expenditure, the higher the importance. For services other than local telephone, the median expenditure and median importance rating include non-subscribers. This was done in order to determine how the surveyed phone subscribers valued various communications related services. Based on this comparison, local telephone service does not appear to be priced inappropriately compared to the other services. The analysis may support a higher price for local telephone service, but this could be problematic if cellular prices continue to decline, creating a realistic alternative to wireline service.

TOLERANCE FOR PRICE INCREASES

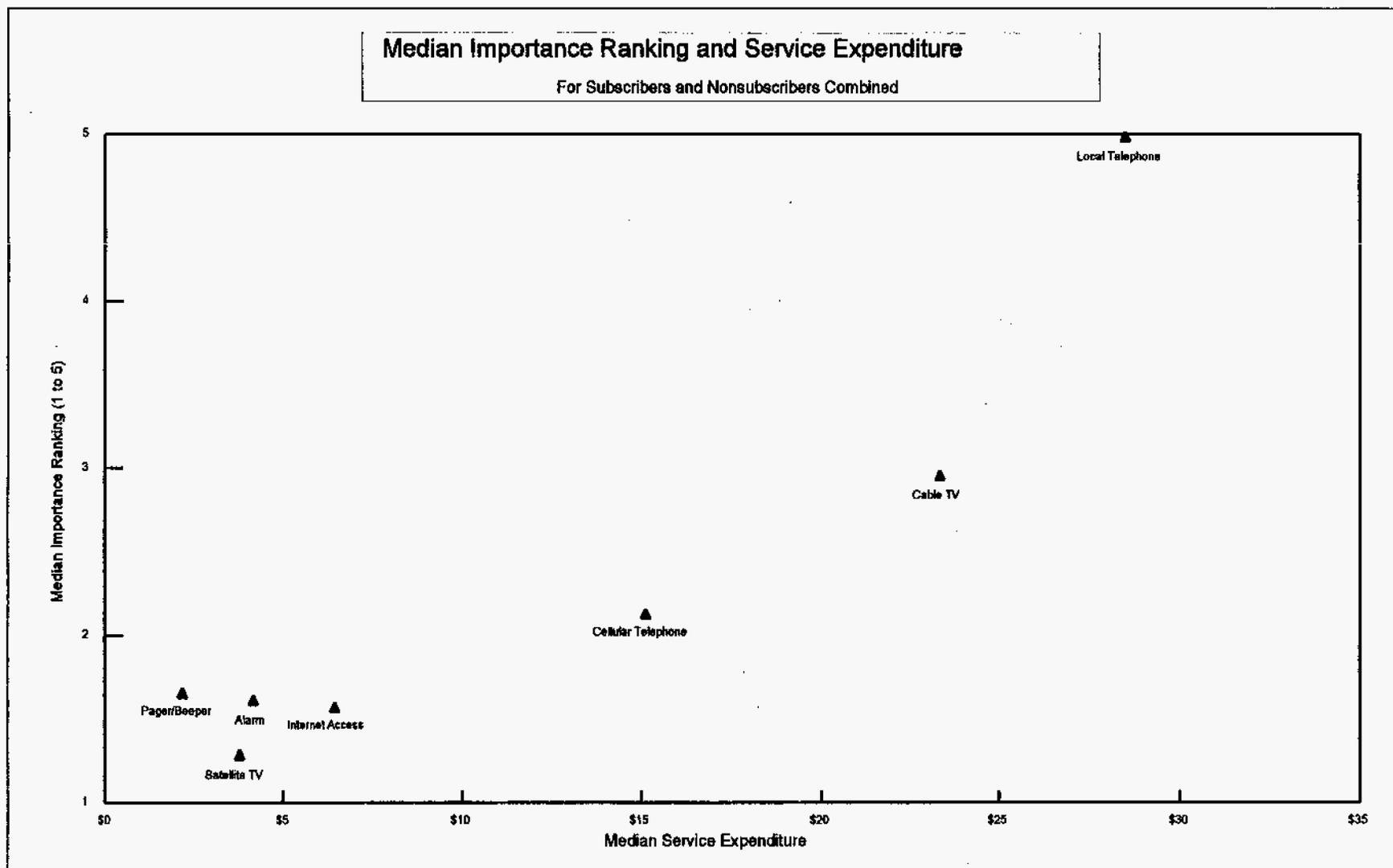
Econometric demand models have consistently shown that local telephone service is very price inelastic, which implies that the demand for local service varies little at different price levels. These models typically use historical data in estimating the price/demand relationship. This price/demand relationship can change over time as substitutes become more or less viable in terms of price, quality, and functionality. In addition, the issue here is affordability, which goes beyond the concept of price elasticity to also consider the impact on the household budget.

While these models show that local telephone service has been very price inelastic, the survey results suggest that the situation may be changing. Although one would expect customers to be more tolerant of price increases than their survey responses suggest, the survey results are nonetheless instructive in that they signal a possible change for the future. The percentage of respondents who said they would discontinue local telephone service at various price increases is significant. The lowest income customers indicate that they would use a payphone as an alternative to local telephone service, while those with household incomes over \$20,000 indicate that they would use a cellular phone as an alternative. Given that 36.7% of the surveyed households already subscribe to cellular service, the idea of using cellular service as a substitute for wireline service is plausible. While wireline and wireless service have heretofore been complementary, prices changes for either service could change that relationship, and the two could become substitutes.

While the minimum monthly charge for wireless service has traditionally been significantly higher than the price of basic service, wireless service provides a much wider calling scope before any roaming charges apply. In addition, many of the same optional features available through the LEC are included with wireless service. Wireless providers also offer incentives such as a free phone and free weekends. One drawback with wireless is that all or a portion of the incoming and outgoing usage is chargeable. Wireless providers are attempting to address this drawback by offering plans which include a usage allowance in the fixed monthly rate.

The 522 surveyed households which subscribe to cellular service report a median bill amount of \$39.40 for cellular. For the survey as a whole, the median bill amount for local telephone service, defined as the total bill less long distance service, is \$28.50. The difference between these two median bill amounts is approximately \$11. If the rate for basic local residential telephone service is increased by \$5.50, and the market price for wireless drops by \$5.50, the typical consumer would be faced with essentially the same price for either service, which implies that quality and functionality would then be the key swing factors in the purchasing decision. In addition, since wireless prices are a function of usage, this means that the economic cross-over point between wireline and wireless will vary by household. Any purchasing analysis between wireline and wireless services will be sensitive to incoming usage, outgoing usage, and the destination/origination points.

FIGURE IV-1



CHAPTER V: CUSTOMER TESTIMONY

During the customer testimony phase of the study, the Commission held 22 public hearings, with at least one in the service territory of every LEC, as required by Chapter 98-277, Laws of Florida. The locations and dates of the hearings are shown in Appendix V-1. In addition, the Commission received 628 letters on various topics. Those letters are listed, including the issues discussed, in Appendix V-2.

While many issues were introduced, some were clearly of greater concern than others. Topping the list were the numerous add-on charges to the local bill, the difficulty of elderly fixed-income individuals to pay for further increases, and a desire for expanded local calling areas. There was also a dose of skepticism that they would receive the benefit of any legislative or commission action taken. The following list is intended to give the reader a flavor of what the customers' concerns are. Issues were raised in both public hearings and the many letters the Commission received. Some of the more frequently mentioned items are discussed at length in the remainder of the chapter. The discussion is not intended to reflect the position of the Commission, but rather to portray the concerns of the public.

Concerns with specific items included:

- Add-on charges, such as:
 - FCC Access Charge (Subscriber Line Charge or SLC);
 - PICC (also called Carrier Line Charge);
 - Federal Universal Service Charge (also called Universal Connectivity charge);
 - 911 charge;
 - TASA charge;
 - federal excise tax;
 - Florida gross receipts tax; and,
 - franchise fees.

- Other charges, such as:
 - inside wire maintenance (called Lineguard and other terms);
 - excessive charges for repairs, jack installation, and other non-regulated items;
 - excessive connection fees;
 - vacation service rates, including add-ons and taxes;
 - increases in charges for ancillary services, such as Call-Waiting;
 - TouchTone charges for some companies, notably Sprint;
 - charges for directory information;

- excessive charges for credit card, collect and other non-direct-dialed calls;
 - confusion over charges for a myriad of long-distance calling plans;
 - AT&T's \$3.00 monthly minimum charge; and,
 - increases in payphone rates.
- Local Calling Area (Extended Area Service or EAS).
 - Slamming/Cramming.

General concerns noted were:

- Concern that persons on fixed incomes could not pay for an increase, particularly retirees who depend on the phone as a "lifeline."
- Vital to maintain free local calls for seniors.
- Concern that rates for numerous items have already increased, resulting in steadily rising bills.
- A desire to return to the way things were in the past.
- Concern that businesses currently subsidize residential service.
- Concern that customers no longer receive quality service, in that they do not have access to a physical location to pay bills, and have great difficulty in reaching a live person with whom to speak about their service.

THE GOOD OLD DAYS

Many customers seem to view competition, and the accompanying choice of services, as a mixed blessing, providing a two-headed dragon with which they must deal. Telephone subscribers today have many choices that they did not have 20 years ago. Where TouchTone was once a cutting-edge service, now customers can choose everything from Call Waiting to Caller ID. They know when someone is trying to call, and they know who is calling without picking up the phone.

Customers can choose from an overwhelming array of long-distance carriers and calling plans, plans that seem to change by the minute. Television ads implore them to dial 10-10-321, and they can purchase pre-paid phone cards at the drug store. Beware the contest for a trip to Hawaii; it can result in a change in long-distance carrier.

Customers can purchase their own phones at Wal-Mart, with so many features that only the most dedicated will ever learn how to use them. They may have as many jacks in their homes as

they wish, self-installed with only the most minimal cost. But they must also maintain their own inside wire, unless they are willing to pay an "insurance" fee, a fee which recently almost doubled for many Florida subscribers. If they do not subscribe to the service, but need a repair they cannot perform, they tell us they are shocked to learn of \$85-\$88 per hour repair rates. In some areas, competitors provide much less expensive repairs, but the customer's view is how does one shop for a repairman, when the telephone does not work?

For customers who just want POTS ("Plain Old Telephone Service") but do not want any PANS ("Pretty Awesome New Services"), they may perceive that they derive no benefit from the choices in phones and services. The same is true of the choice of long-distance carriers. So many subscribers still depend on a handful of carriers, that it seems not to matter to them how many extra charges are heaped on them. They will complain, but they say they will not switch. It is not that they do not want a better deal. It is just too confusing and time-consuming for customers to shop around. Even when they do think they have found a good deal, they tell us careful analysis may prove otherwise. As one customer pointed out, his analysis of the bill proved that the \$4.95 that he had to pay to receive \$0.10 per minute long distance rates really turned out to be \$0.14 per minute when the \$4.95 was divided by his minutes of use. Other customers are so confused, they say they can no longer determine what is best for them.

Some customers wistfully expressed a longing to return to the old days, asking why AT&T and BellSouth could not get back together. Many customers ask for things easy and simple, like they used to be. The customer would pay the local rate, and receive a listing in the directory, free directory assistance, a phone, and installation and maintenance of the wiring.

Customer Graydon Thompson summed it up.

When Ma Bell started, I remember those old days. They came out and installed your phone, wires and all, and even gave you a telephone at no charge. Now, you helped us out by breaking up Ma Bell, told us things would be a lot better and cheaper. You said Ma Bell was subsidizing long distance by local phone rates. That worked so good we now pay a \$3.50 charge for the privilege of making long distance rates (sic). You didn't cut any rates, just charged us \$3.50 more for the privilege.

In the beginning, the company had to supply everyone in the area as a prerequisite to getting a franchise. You now save us money by charging us a telephone access charge to pay the phone company for what they were required to service, for nothing. That saves us a lot of money.

They used to fix the line in your house for free. Now they allow us to save money by charging us \$1.95 a month, unless we want to fix our own line -- another savings. It was \$1 last month. Now it's \$1.95.

Oh, by the way, remember that free phone? Now you save money by buying a phone, so you don't have to pay rent for a phone that was originally free.

Now, along with all the extra charges, we have a Florida interstate gross receipts tax, and then we are even taxed on a tax, as the federal excise tax taxes that, too.

Then, with all the scamming, cramming, and slamming, I just don't know how long we can stand having you people helping so much. (Sarasota, p. 40)

For many of the customers who wrote or testified, they perceive the situation for them is careening wildly out of control. To top it all off, they experience difficulty in trying to reach a live person when they have a question or problem, reporting a 30 minute wait, and longer. They can no longer pay their bill locally, either. They must mail it to the distant, unseen telephone company.

Yet in spite of the additional charges, some customers state that telephone service is still a bargain. Customer Scott Sherman remarked, "I think for the price of two theater tickets you get a month of service and have enough left over for popcorn. It's really amazing to me." (WPB-1, p. 28) Bob Marx agreed that residential telephone service is "an absolute bargain." He compared it favorably with the rates in Atlanta.

ADD-ONS AND OTHER CHARGES

While customers now have many choices in their service, they also have many new charges, and perceive they have no choice, even for services they do not use. Overwhelmingly, based on the number of letters received, the increasing add-ons to the basic phone bill are a major concern for consumers.

While the actual rate for basic local service has not increased in recent years for most customers in Florida, nevertheless, customers have received numerous increases in other ways. Customer Wendy Dohanian explained that "we got the minimum rate, which was, they told us six-thirty a month, you get thirty calls. . . . We felt \$6.00 per month, that's not too bad. But as it turns out, the bottom line after this toll access and other charges, its ten forty-two is our basic rate." (WPB-1, pp. 120-121) Customer Robert Kuehneisen advised that the "ten sixty-five they're telling you about is a misnomer. The three fifty you add to it, all of the other things you add to it brings that bill up to where it is even higher." (Miami, p. 32)

Customer King McDonald agreed. "The 11.81 basic rate, when it all gets put together, and all the taxes and taxes and taxes, it comes to \$16.78. Nothing is being discussed about all those other things." (Sarasota, p. 81) Customer Monte Belote pointed out that rates for everything seem to be going up. "Now, non-basic services have grown dramatically in price. Whether that's the cost of adding a second phone line, Call Waiting, Star 69, or, in today's paper, GTE's effort to more-than-100% increase the cost for inside wire maintenance." (Sarasota, p. 62)

Not only have the added charges effected a rate increase for most customers, but they complain the bill has become virtually impossible to read. An analysis of a typical bill gives an indication of the reason for the concern. Twenty years ago, that bill might include the following

items:

Telephone service	\$14.65
Long Distance Service	.78
Taxes US	<u>.62</u>
Total	<u>\$16.05</u>

That "telephone service" in the case of this customer included local service with an unlisted number. For the price, the customer received all of the previously noted services: unlimited directory assistance, a phone, and maintenance of the inside wire without an extra charge all items carrying extra fees today. Should the customer have wished to make a long-distance call from Tallahassee, a 24-minute call to Cheyenne, Wyoming, would have been billed at \$3.71. A call to Crawfordville, Florida, would also have been a long-distance call from Tallahassee, rated at \$.22 for 3 minutes. A standard residential jack was installed for \$2.50, and installation of inside wiring was provided for \$5.50. The customer could pay the bill in person at a number of locations. If there was a problem with the bill, the customer could talk to a live person. And if the phone did not work, the phone company fixed it.

Times have changed. In the view of many customers they have not changed for the better.

Today, a bill for the same customer described above would include the items shown in Table V-1 on the next page. Many of the add-on charges included in the analysis are discussed below.

SLC, PICC, AND USF CHARGES

Per minute interstate long-distance rates have steadily declined. One of the reasons is the fact that cost recovery has been implemented through an up-front flat charge, the \$3.50 Subscriber Line Charge (SLC). This charge helps to defray part of the interstate portion of the "local loop," the line connecting the customer premises with the phone company equipment. It includes outside telephone wires, underground conduit, telephone poles, and other facilities that link each telephone customer to the telephone network. These costs are typically not affected by the number of calls the customer places or receives. Charges were formerly paid by IXC's through the access charges they pay to local exchange companies. Reduction in interstate access charges resulting from the shift of cost-recovery into the SLC played a major role in the 1980's in the reduction of interstate toll rates. Contrary to a common misconception, the money goes to the local telephone company, not to the FCC. However, the charge, which has been in existence for a number of years, is authorized by the FCC.

In addition, there is a new charge, which was implemented January 1, 1998. It is the Presubscribed Interexchange Carrier Charge, or PICC (pronounced "pixie"). It is a flat-rated, per-telephone line charge that is paid by long distance companies to many local telephone companies. The

TABLE V-1
ANALYSIS OF TELEPHONE BILL

COMPANY	CHARGES SHOWN ON BILL	ITEMIZATION	SUBTOTALS	TOTALS	PURPOSE	AUTHORITY
SPRINT	LOCAL SERVICE					
	Nonpublished Number	\$2.30				
	Tele/Access Act Charge	0.11			Telecom Access System for hearing/speech impaired	Sec. 427.701, F.S.
	Access Line (Local Service)	9.65				
	Caller ID with Name	8.00				
	Touch Tone	1.00	\$21.06			
	LONG DISTANCE CHARGES					
	IntraLATA Toll	0.25	0.25			
	NETWORK ACCESS CHARGES					
	FCC Access Charge	3.50	3.50		SLC--revenue goes to local exchange company	FCC requires
	TAXES					
	Federal Tax	0.77			Federal Excise Tax 3%	Internal Revenue Code
	Gross Receipts Tax - Other	0.64			Florida Gross Receipts Tax (to Dept. of Revenue)	Sec. 203.01, FS
	County 911 Service Charge	0.50			For enhanced 911 service;authorized by counties	Sec. 365.171 FS
	Franchise Tax	0.22			For utility use of public right-of-way	Sec. 337.401, FS
Local Tax	\$1.52	\$3.65	\$28.46	General revenue of municipalities	Sec. 166.231, FS	
AT&T	CHARGES AND CREDITS					
	Carrier Line Charge	\$0.85	\$0.85		PICC passsthrough	FCC permits
	LONG DISTANCE CHARGES					
	Intrastate Toll Call	0.28				
	Universal Connectivity Charge	0.93	1.21		Universal Service Assessment	FCC permits
	TAXES					
	Federal Tax @ 3%	0.06			Federal Excise Tax 3%	Internal Revenue Code
	Fla Gross Receipts Tax Surcharge	0.05			Florida Gross Receipts Tax (to Dept. of Revenue)	Sec. 203.01, FS
Fla Intrastate Gross Receipts Surcharge	\$0.01	\$0.12	\$2.18	Regulatory Assessment Fee (to PSC)	Sec. 364.336, FS	
TOTAL	BREAKDOWN OF CHARGES	TOTAL	% OF BILL			
	LOCAL SERVICE	\$20.95	\$0.68			
	TOLL CALLS	0.53	0.02			
	INTERSTATE SURCHARGES (SLC, USF, PICC)	5.28	0.17			
	OTHER SURCHARGES (TASA, 911)	0.61	0.02			
	TAXES - STATE AND LOCAL	2.44	0.08			
	FEDERAL	0.83	0.03			
	TOTAL	\$30.64	\$1.00			

PICC is designed to recover a portion of local loop costs not recovered through SLCs or the interstate CCL. Where a customer does not have a long-distance carrier, the PICC can be billed by the local company directly to the subscriber.

But customers who make no long-distance calls pay the charge, complaining that they receive no benefit. Customer Robert Kuehneisen described his frustration with the experience:

Today we have what is known as a national or interstate toll access of three dollars and fifty cents. We don't have a chance to say, well, we don't want that. I called BellSouth and said, "Look, I don't want long distance. I don't want MCI, I don't want any of that. Can I just opt out?" They said, "No," we have to pay that. I said, "Well, how about my long distance, which is a dollar seven with MCI? I don't want long distance." "Oh, yeah, you can opt out of that but you still have to pay it." (Miami, p. 22)

Customer Ralph Gonzalez agreed. "If I don't make any long distance phone call on a particular month, I still get assessed four ninety-five from AT&T or so much from each one. I think that is really not right. We're already paying the three fifty, the three dollars and fifty cents for the FCC interstate toll charges which is supposed to take care of that." (Miami, p. 81)

Still another charge which began to appear during early 1998 is an assessment for federal Universal Service Fund contributions. The FCC has a longstanding policy of promoting service to all households that desire telephone service. To accomplish this goal, support is provided for high-cost areas and low-income consumers. In the past, only long distance companies paid fees to support universal service. Now, virtually all carriers are required to contribute to the federal Universal Service Fund for both of the previous programs as well as the new plan which provides support for schools, libraries and rural health care providers. Companies are permitted, but not required, to pass these costs through on their customers' bills.

Customer G. Abrams complained about "the surcharge for the socially correct funds, to wire schools to computers. . . . That was an illegal taxation and I don't believe it was voted on in Congress and the Commission should disallow it, but I understand you're saying it's an FCC thing and there's nothing you can do about it to get around that." (Miami, p. 69)

It is clear from the many letters this Commission received that the recent addition of charges for the PICC and the federal universal fund, in addition to increasing the SLC charge for second lines, has incensed many customers, who must pay these charges even when their phone is on "vacation" service and therefore, according to them, unusable.

TAXES

The list of taxes on the bill led customer Denis Griffis to remark, "We have a hard time walking nowadays without stepping on a tax." (Miami, p. 7) Further, customers often have difficulty

discerning what the tax rate is. Customer Robert Halperin complained that the percentage of the tax is not shown, so "you won't know whether they're raising the taxes, if you can't even compare one tax to the other." (WPB-1, p. 114) The taxes are so confusing, customers tell us even the company employees do not seem to understand them. Customer Ralph Gonzalez points out that if you ask the companies for an explanation, "you're going to get about twenty different versions from twenty different reps." (Miami, p. 83)

INSIDE WIRE MAINTENANCE AND CONNECTION FEES

As previously noted, while inside wire maintenance was once included as part of the local service offering, now customers must pay an additional fee for the service. As reported by the customers, the rate for GTEFL has recently increased from \$1.00 to \$1.95. (Customer Clarence Brien, Sarasota, p. 30) Customer Arthur Hebert reported that from September [19]95 to October [19]98, the fee was increased 160 percent from 75 cents to \$1.95." (St. Petersburg, p. 114) Other companies charge even more, with rates as high as \$3.95. Customer Robert Kuehneisen provided his analysis of the situation.

I've been in my house for thirty-seven years. I've seen the phone company one time. They came to my house, installed the phone and that was it. I've never seen them since. And I was paying four bucks a month till I found out about that. And if I was paying four bucks a month now my bill would be twenty-two dollars a month. (Miami, p. 31)

Customer King McDonald advised that he called some of the advertisers in his local paper to compare their rates. He found that "[m]any of them, former GTE employees, would be more than happy to come out and fix your jack, and they will do it for \$10 an hour." (Sarasota, p. 81)

In addition to inside wire maintenance charges, connection fees have also risen astronomically. Customer Mary Quellen testified, "It is roughly 50-some-odd dollars to have a phone put in. Here in Sarasota, that's just basically, they go down to the exchange and do a switch. When you start adding that up, the installation, the initial fees, so forth, it becomes very costly. . . ." (Sarasota, pp. 69-70)

TOUCHTONE

In addition to new charges, certain charges continue. For example, some companies still have a separate fee for TouchTone, notably Sprint. Customer Ed Paschall complained "On my telephone bill I'm still receiving a one dollar charge for TouchTone service. It's ridiculous." He noted that the dollar is there to meet a revenue need of the company. (Quincy, pp. 49-50; also Tallahassee, p. 53)

DIRECTORY ASSISTANCE AND OPERATOR SURCHARGES

Directory assistance calls are another of the items that used to be free. Now, companies charge for calls above a specified minimum. Most companies will automatically connect the caller to their destination upon request for an added fee. Customer Geraldine Swormstedt commented that, although she looks in the phone book for numbers, she admits that her kids do not. "And now you have a charge for dialing [the number provided]." (Sarasota, p. 50)

While instate directory assistance charges are typically not more than \$.75, customers reported that out-of-state charges can be quite steep. Customer Bernard Gillberg complained that he made a directory assisted phone call to New York, and was charged \$2.25 for the directory assistance. The charge for the phone call was only \$0.45. (WPB-1, p. 84)

The experience with operator surcharges is much the same. Customer Arthur Hebert pointed out that "GTE increased [operator assisted] calls 50 percent from \$1 to 1.50 for station-to-station and from 2.50 to \$3.00 for person-to-person." (St. Petersburg, p. 113)

LONG DISTANCE RATES

While interstate long-distance charges have dropped dramatically, customers in-state rates are higher, largely due to the intrastate switched access charges paid by long-distance companies to the LECs. A number of customers wrote letters to say that access charges should be reduced. They do not think the disparity in the rates makes sense.

Customer Earl Blackburn complained "I have to pay more to call twenty miles across, the way the crow flies, than I pay to call Chicago." (Sarasota, p. 39)

Customer Rose Marie Gasser explained that "it costs more for me to call my friend within Florida, Altamonte Springs, than it does to talk to my son in Milwaukee, Wisconsin." (St. Petersburg, p. 115)

A new concern which has arisen is the \$3.00 minimum charge for AT&T customers. This issue drew considerable complaints. However, it appears that the charge will only apply to new customers. At this time, existing AT&T customers who move will not be charged the minimum rate. They can retain their current status.

EXTENDED AREA SERVICE

Today, many customers have larger local calling areas, as in the case of Tallahassee to Crawfordville, which is now a free call. But some customers are still limited in the areas they can call without incurring a long-distance charge. Customer Charles Conly complained, "I have gotten on my bill as many as three and four telephone calls billed at twenty-five cents a piece within the

same minute.” (Ft. Myers, p. 46) Some customers still report that it is a toll call for them to call their neighbors a few miles away, their childrens’ schools, or their doctor. Some say they cannot even call the county sheriff or local police without incurring a toll charge. (Charles Conly, Ft. Myers, p. 46)

Traditionally, several methods have been used to assist areas that demonstrate a need for local calling. Traditional Extended Area Service (EAS) was created to provide specific areas, which had an established community of interest with another area, with toll relief. EAS is a rate structure plan that provides local calling between exchanges that have demonstrated communities of interest for a monthly flat rate. Community of interest is generally determined by the calling volumes and distribution of this calling between the communities. Other qualitative information that would be considered would be a demonstration that there is a dependency upon the expanded area for its educational, health, economic or government services. The arrangement provides for nonoptional, flat rate, two-way, unlimited calling between two or more exchanges.

However, when the Legislature revised Chapter 364 in 1995, it essentially took away the Commission’s authority to order extended area service for companies that elected price regulation under the provisions of the law. Since most companies have elected that form of regulation, the Commission no longer has jurisdiction to require companies to implement new expanded local calling plans.

A number of customers expressed dissatisfaction over this situation. Two locations in particular were the subject of public testimony, petitions, and numerous letters. Those areas were the communities of Tangerine and Panacea, which are discussed below.

TANGERINE

Tangerine is located in Northwest Orange County. It is served from the Mt. Dora exchange, which is primarily located in Lake County and is separated from the rest of Orange County by a LATA (local access and transport area) boundary. Currently, subscribers in the Mt. Dora exchange can call the Astor, Clermont, Eustis, Groveland, Howey-in-the-Hills, Lady Lake, Leesburg, Montverde, Tavares, and Umatilla exchanges toll-free. These subscribers also have a \$.25 ECS plan to the Apopka and Winter Park exchanges. The \$.25 plan rates calls to those locations at \$.25 per call, regardless of duration.

At the public hearing in Altamonte Springs, Customer Stan Culler testified that Tangerine customers could not make calls within their own county without incurring a toll charge because they were provided service from a Lake County exchange. He requested help in resolving this problem. (Altamonte, p. 34) This area has been considered for toll relief in the past. Nevertheless, the Commission committed to continue to find a workable solution for the citizens of Tangerine.

Many efforts have been made to resolve this issue. For example, in 1990, the Orange County Board of County Commissioners filed a resolution requesting extended area service from Mt. Dora

to several exchanges in Orange County (Commission Docket No. 900039-TL). None of the routes involved met the requirements of the Commission's EAS rules. However, the Orange County portion of the Mt. Dora exchange had considerable calling volumes to Orlando. The Commission considered transferring the Orange County pocket of the Mt. Dora exchange into the Apopka exchange. The transfer would have given these customers exactly the same calling scope of all other customers in the Apopka exchange, which is primarily Orange County. To accomplish this would have required changing the customer's telephone number, and the residential local rate would have increased by \$2.30 a month. All of the Orange County customers being served out of the Mt. Dora exchange were balloted to determine if they were willing to move into the Apopka exchange to gain local calling to Orange County. The ballot failed (26% in favor - 45% opposed).

The matter remains unresolved at this time. However, efforts are continuing to reach a resolution.

PANACEA

Panacea is a small community located in Wakulla County to the south of Tallahassee. At the Tallahassee public hearing, customer Mary Ann Taylor testified that Panacea, is "the only little town in Wakulla County and Leon County that can't make [local] calls to Carrabelle [in adjacent Franklin County]." (Tallahassee, p. 8) In fact, Panacea is one of two small towns in Wakulla County that do not have local calling to Carrabelle. The other is the town of St. Marks.

At the hearing, a Sprint representative explained that "Essentially what we have been doing since the legislation changed is that when we get these requests, we look at those requests under the same rules that the Commission had established for providing EAS. And based on those rules, we make a determination as to what we can do." (Tallahassee, pp. 12-13) After the hearing, Sprint conducted an informal study from October 1 to October 21, 1998. The study showed that of combined residential and business customers 82% made no calls to Carrabelle. The breakdown of calling was as follows:

TABLE V-2
 Calling from Panacea to Carrabelle, Florida
 October 1 through October 21, 1998

Number of Customers	Number of Calls
768	0 calls
50	1 call
27	2 calls
20	> 10 calls

One business customer made 174 calls to Carrabelle, and one residential customer made 69 calls during that time period.

It would appear that the strong support evidenced in the public testimony portion of this study is not necessarily supported by the usage study. Nevertheless, it should be remembered that the testimony given is an indication of the customers' perception of the value of telephone service they receive.

CONCERN THAT BUSINESSES SUBSIDIZE RESIDENTIAL RATES

At a number of the public hearings, members of the local Chambers of Commerce testified that business rates "have been recognized as being subsidizers for residential rates." (Dennis Gray, WPB-1, p. 30) Customer Bob Marx commented that "we're subsidizing a lot of people, individuals, and we're not getting any appreciable return on that investment." (WPB-1, p. 59) The Chambers of Commerce support rebalancing business rates, asking for more equity in the rates they pay. (Miami, pp. 49-50)

Customer Terry Cuson complained of the high rate he pays for business service which is essentially the same service he has at home. When he asked BellSouth why there was a difference in the rate, he was told it was "Because you're a business." (Miami, pp. 44-45) According to Mr. Cuson's analysis, when the differential is multiplied by the number of businesses that pay the higher rate, millions of dollars are at stake. (Miami, p. 45)

Customer Charles Seitz pointed out that often business rates are paid "where each and every line is basically doing nothing but operating a credit card, like an authorization terminal." (Fort Lauderdale, p. 69)

Customer Jose Molina noted that "more and more of my competition every day is moving their offices to their homes. They're using the residential lines to run their businesses. That's impacting my business, my profitability. And I believe that the -- the rates need to be restructured to reflect this." (Miami, p. 50)

Customer Bobra Bush agreed. She argued, "why should my small business, my five, four-line business, continue to subsidize my employee's home telephone lines. I pay them good salaries. I know they can afford a rate increase." (Fort Lauderdale, pp. 40-41)

Customer Scott Sherman pointed out that even "churches and synagogues, social service agencies, are paying around 2 and-a-half times more just for basic services than the residential consumer." (WPB-1, p. 15) Customer Barbara Gaynor agreed that "there is no kind of delineation for a nonprofit organization." (Miami, p. 51)

Rebutting the notion of business subsidizing residential rates was customer Bernard Gillberg. He explained that if the "price of [a business] phone bill went down, it would go to the

bottom line. You would never drop the price of your merchandise unless competition forces you down." (WPB-1, p. 75) He added that this was based on his experience as a successful businessman. (WPB-1, p. 83)

Customer Mary Quellen asserted, "Business customers are being told that their rates could--could--be lower, except for that darn subsidy by residential customers. But you know, they have never proven that case." (Sarasota, p. 70)

Customer Milton Klienman added, "the business people are totally wrong in their attitude. Business people use the phone as a tool. . . . They should pay a little more." (Fort Lauderdale, p. 97)

ELDERLY CANNOT AFFORD ANOTHER INCREASE

While businesses complain about subsidizing residential rates, other citizens are concerned about how they would pay for a rate increase. Many elderly citizens who live on fixed incomes attended hearings and wrote letters. They expressed concerns that they would not be able to pay for a rate increase. Some customers reported that they live on budgets of \$500 to \$600 per month, of which \$50 to \$100 goes for medication. There is no money for extras. Many of these customers stated they subscribe to message-rate service, which includes thirty free calls per month, because it is the most economical rate for them.

Nevertheless, the elderly do not want a hand-out. AARP member Abe Asofsky told the Commission,

We don't want you to be patronizing. We don't want your sympathy. We want you to be fair and recognize the contributions we make to the growth of our community and our country. For us there are these self-evident truths. Communication by telephone is a basic necessity. Basic telephone service for a person in a lonely home, basic telephone service permits a quick and easy communication in an emergency. (Fort Lauderdale, p. 8)

Mr. Asofsky later added, "I don't want to have to demonstrate the need by showing my bankbook." (Fort Lauderdale, p. 12)

Customer David Frank explained that "people who are not on food stamps, even for people who are not on government assistance, a raise in their telephone rates of just a few dollars makes a tremendous difference. It is a difference that many times can't be appreciated by many of the people in this room." (Tallahassee, p. 44)

NO-FRILLS RATE

Customers expressed a need for some type of "no-frills" rate for customers who have only basic service and do not want, or cannot afford, any extras. Often, these were the elderly who depend on the phone as their link with the world.

As a solution to the problem, Ed Paschall testified at the Quincy hearing that "the one person who wants the single line telephone line coming to their house to use that should be the base of consideration. If you consider or consider it from the point of view of people who want to add on bells and whistles, whatever you want to call them, then you are getting into a different world." (Quincy, p. 47)

Customer David Goodwin testified that his mother doesn't have extra features on her phone that he has on his.

I find them necessary at my house. I have a second line. I have a 10-year-old son who needs use of the Internet for school. I may even have a third line for a fax machine and that sort of thing. I need caller ID and those other type of features just for the nature of the way that I have chosen to live. And I don't mind paying more for those features and those things that I find necessary in my life, but don't make by mother pay more for her basic phone rate in order to compensate for it. If I choose those things, allow me to pay for them rather than raising my [mother's] basic telephone rate. (St. Petersburg, p. 118)

Customer Bobra Bush testified,

I agree POTS is POTS. Let's make some exceptions if we need to keep a dial tone in every household so everyone can have a connection to their neighbor or to 911, but the minute that you've got call waiting, it is a luxury. The minute you want to get onto AOL or wherever you are talking on the Internet, it's a luxury and you should pay for that. (Ft. Lauderdale, pp. 53-54)

Thus, it is evident that customers do not mind paying for extra services. However, there is a perceived need to protect the elderly and others who cannot afford to pay. They want it to be available to all without the embarrassing proof of need.

CUSTOMER SKEPTICISM

Customers are skeptical regarding whether competition will occur. Complaining that the 1995 change in the law did not bring about competition, customer Rose Marie Gasser said of the situation, "Please make them do what they said they'd do in 1995, because I'm very tired of dragging my 88-year-old dad out here for these Public Service Commission hearings." (St. Petersburg, p. 117)

Not all customers believe the reasons for which a rate increase is proposed. Customer Alan Mulhall stated,

One of the reasons the phone companies are asking for a 70% increase is that they claim that the current rates are so low, that competition will not come into the area. But I ask, do they really want competition? When you read the mergers and million-dollar buy-outs in the telecommunications industry, I don't think so. It seems to me what they are attempting to do is to become so strong in certain marketplaces, that competition cannot come into the marketplace.

I have a question, and it's a stupid question, because I know the answer. If, in one, two, or five years down the road, there is no competition in the marketplace, will the telephone companies revert back to the old rates? I don't think so, and I think there's a lot of people who agree with me. (Sarasota, pp. 21-22)

CONCLUSION

Several things are important to remember from the customer's point of view. First, when discussing the current rates, one cannot consider the local rate alone. While the local rate has remained fairly stable over the last two decades, countless other charges have been added to the bill. Further, except for long distance charges and the basic local rate, virtually everything else has increased in price, often more than double. The result to the overall bill has been a definite rate increase, particularly when comparing the same basket of services, including such items as inside-wire maintenance, provision of a phone, and directory assistance.

Second, there are many customers in Florida who live on fixed incomes. As they pointed out, they no longer have earning power, and often must choose between food, medication, or the services they purchase. For them, it is not a matter of whether to drop Caller ID. The question is whether they can afford to continue phone service at all. Yet it is these very customers whose lives may depend on having a phone close at hand when a medical emergency arises. They are forced to make difficult decisions about how to spend a seemingly shrinking pot of dollars. Not only are the elderly fixed-income individuals at risk of being dropped off the system, but modest wage earners expressed concerns as well.

These are the customers who may not share in the benefits of competition. Customer Arnold Velazquez aptly summarized the situation when he said

So, my recommendation to you is to look hard at the whole issue. . . . My concern is, in the long run, we, the small homeowners, the blue collars from Hialeah, Liberty City, Carol City, all the unincorporated areas of the county, that work for a living, [we are] going to end up paying a lot higher rates if we allowed the outsider to come into Florida and hand pick those area that . . . they want to serve. So you got to look at a system that will be equitable. (Miami, p. 13)

CHAPTER VI: RATES FOR RESIDENTIAL BASIC LOCAL SERVICE IN OTHER STATES

In drawing its conclusions on the fair and reasonable Florida residential basic local service rate, the Commission is to consider "comparable residential basic local telecommunications service rates in other states." In the analysis, both current rates and recent rate actions in other states were reviewed. Traditionally, states have set local rates based on the same principles, value of service and residual pricing. The latter principle is a vestige of rate base/rate of return regulation, and refers to the practice of setting residential basic local rates as the last step in satisfying a local exchange company's revenue requirement.

For purposes of this study, the word "comparable" must be defined. Since basic local service is defined as flat rate per Section 364.02(2), Florida Statutes, the comparison presented herein is based on flat monthly rates in other states, to the extent service is available on that basis. Also, the statutory definition of basic local service includes dual tone multifrequency dialing (DTMF) or TouchTone; thus, any separate charges for DTMF have been added in before comparing rates. Finally, since customers often perceive the federal Subscriber Line Charge (SLC) to be a local charge, the SLC has been included in the rate comparison.

From a customer's standpoint, for a flat rate offering in another state to be comparable, one criterion should be that the local calling scope is similar in size. The local calling area is customarily measured in terms of the number of access lines which may be called, i.e., the rate group concept. While the geographic size of the local calling area (square miles, maximum miles) may also be relevant to the customer, local calling areas are not typically measured in that way, and such information is not readily attainable. Another criterion for defining "comparable" is that the economic circumstances of the customers in another state should be similar to those of Florida customers. For example, it may make sense to look at rates in other areas of the country where the average income is similar to areas in Florida. In this way, prices are not viewed in isolation, but rather in relation to ability to pay. Since the statute also requires that the Commission address value of service and affordability, this further supports the idea of considering calling scope, which is a measure of value, and economic circumstances, which affect affordability.

COMPARISON OF RATES WITH OTHER STATES

The approach used was to identify localities in other states that have similar calling scopes and economic circumstances as localities in Florida. Some sort of structured process using sampling was needed since it was not practical to inventory the universe of exchanges within the United States. Since per capita income was readily available by county from the Bureau of Economic Analysis, it was logical to categorize counties first by this factor, and then consider calling scope as a second dimension.

The 67 Florida counties were rank ordered by 1996 average per capita income and then divided into quartiles. A sample was drawn from the national data set of counties using the following procedures:

- 1) A national universe for each income quartile was established consisting of those counties which had an average per capita income within the upper and lower values of the Florida quartile.
- 2) The universe of national counties for each quartile was rank ordered by population.
- 3) A sample of 40 counties, per quartile, was drawn using a random starting point and a sampling interval.

This technique, known as systematic sampling, does not produce a random selection of counties for each quartile, but has the advantage of ensuring that the sample is representative. Systematic sampling was employed in an attempt to ensure that counties of varying populations would be selected. The size of the local calling area tends to be related to population since more populated areas generally have wider calling scopes.

For each Florida and sampled US county, the principle exchange was identified based on the principal city or town as determined using 1996 data from the Harden Political Infosystem. For each Florida exchange, the Commission maintains the number of access lines in the local calling area and the applicable residential basic local rate. For the sampled US counties, Commission staff contracted with Technologies Management, Inc. (TMI), who in turn relied on the National Exchange Carrier Association FCC tariffs and related databases to determine which exchange was dominant in the selected county. Once the exchange was identified, TMI determined the rate (including TouchTone and the SLC) and local calling scope. The LEC tariffs were used to determine both the rate and, where applicable, the rate group. The rate group provides an upper and lower limit on the number of access lines in the local calling area, albeit not a precise number for the actual size of each exchange's local calling area.

Where rates were not based on a grouping plan, Commission staff called the state commission or the serving LEC to try to determine the number of access lines in the local calling area of the sampled exchange. The Commission staff was not able, however, to obtain the number of access lines in the local calling area for all exchanges in the national sample. Where the needed data was lacking, these counties/exchanges had to be excluded from the analysis. In addition, for a handful of sampled United States counties, flat rate service was not available, and there was no close surrogate to use as a substitute. In these few situations, the sampled county had to be excluded from the analysis.

Spreadsheets were developed by quartile, and populated with the data for the 67 Florida counties and 119 sampled counties from around the country. (See Appendix VI-1, which list the US and FL data which was used in the analysis) Graphs were in turn produced for each income quartile, showing local calling scope and rate for Florida exchanges as compared to exchanges in other states.

For each income quartile, the patterns are quite similar (See Figures VI-1, 2, 3, and 4). Florida's rates are consistently at the low end compared to rates in other parts of the country. The average disparity calculated using standard linear regression techniques is \$3.64 for the 1st (highest) income quartile, \$7.34 for the 2nd quartile, \$8.36 for the 3rd quartile, and \$4.48 for the 4th quartile.¹²

In addition to looking at comparability from the customer's standpoint (value and affordability), we also tried to build upon the first analysis to assess comparability from the standpoint of the provider. A local telephone company would be concerned about the cost of providing basic service in one location versus another. In this provider-oriented analysis, the population density of the county was substituted for local calling scope on the basis that population density is a key determinant of the cost of providing service. The population density of Florida's 67 counties and the national sample of 155 was obtained from the US Census Bureau. This second analysis enabled us to discern how Florida's rates compare to the rest of the country, where the population density (and presumably cost of providing service) is similar. For purposes of this second analysis, the quartiles were collapsed to provide a composite representation. This composite approach was taken since providers would likely give little consideration to affordability when assessing the comparability of two locations.

This second analysis produces results that are similar to the first analysis in that Florida's rates are consistently at the low end compared to rates in other parts of the country. (See Figure VI-5 on the following page) The average disparity calculated using standard linear regression techniques is \$4.15.

Based on the two analyses, Florida's rates tend to be significantly lower than the rest of the country even after controlling for (1) differences in calling scopes and incomes and (2) differences in population density (presumably a key determinant of the cost of providing service). Taking the two analyses together, Florida's rates are typically lower than those in the rest of the country by four to five dollars per month.

¹²The average disparity is an estimate of the amount by which rates in other parts of the country are systematically higher than the rates in Florida, across the range of calling scopes. This estimate was calculated by regressing the rate variable against the calling scope variable and a dummy variable (where Florida = 0 and US = 1). The estimated coefficient for the dummy variable equates to the average disparity.

TABLE VI-1

**Flat Rates vs Calling Scope
1st Quartile**

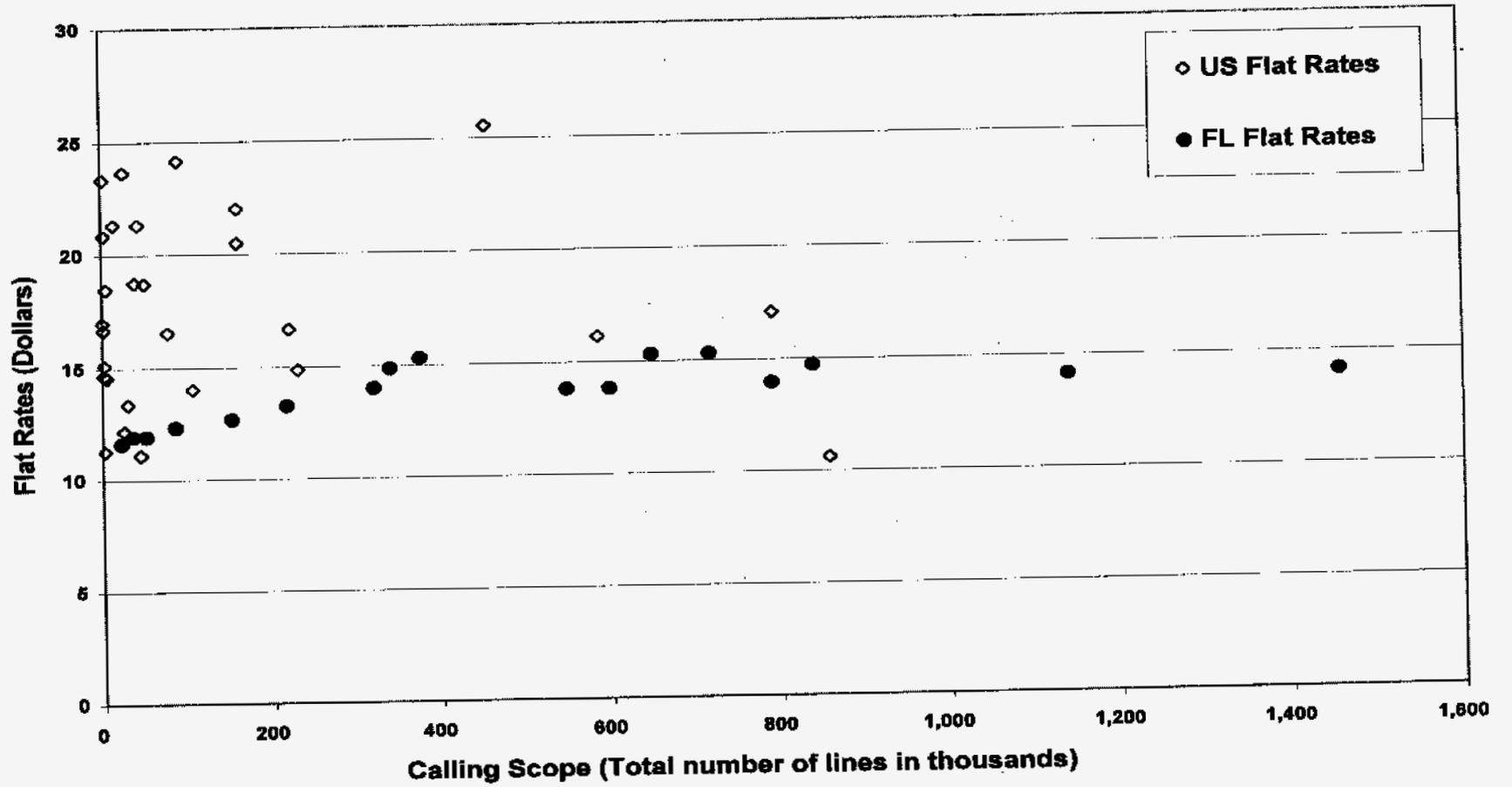


FIGURE VI-2

**Flat Rates vs Calling Scope
2nd Quartile**

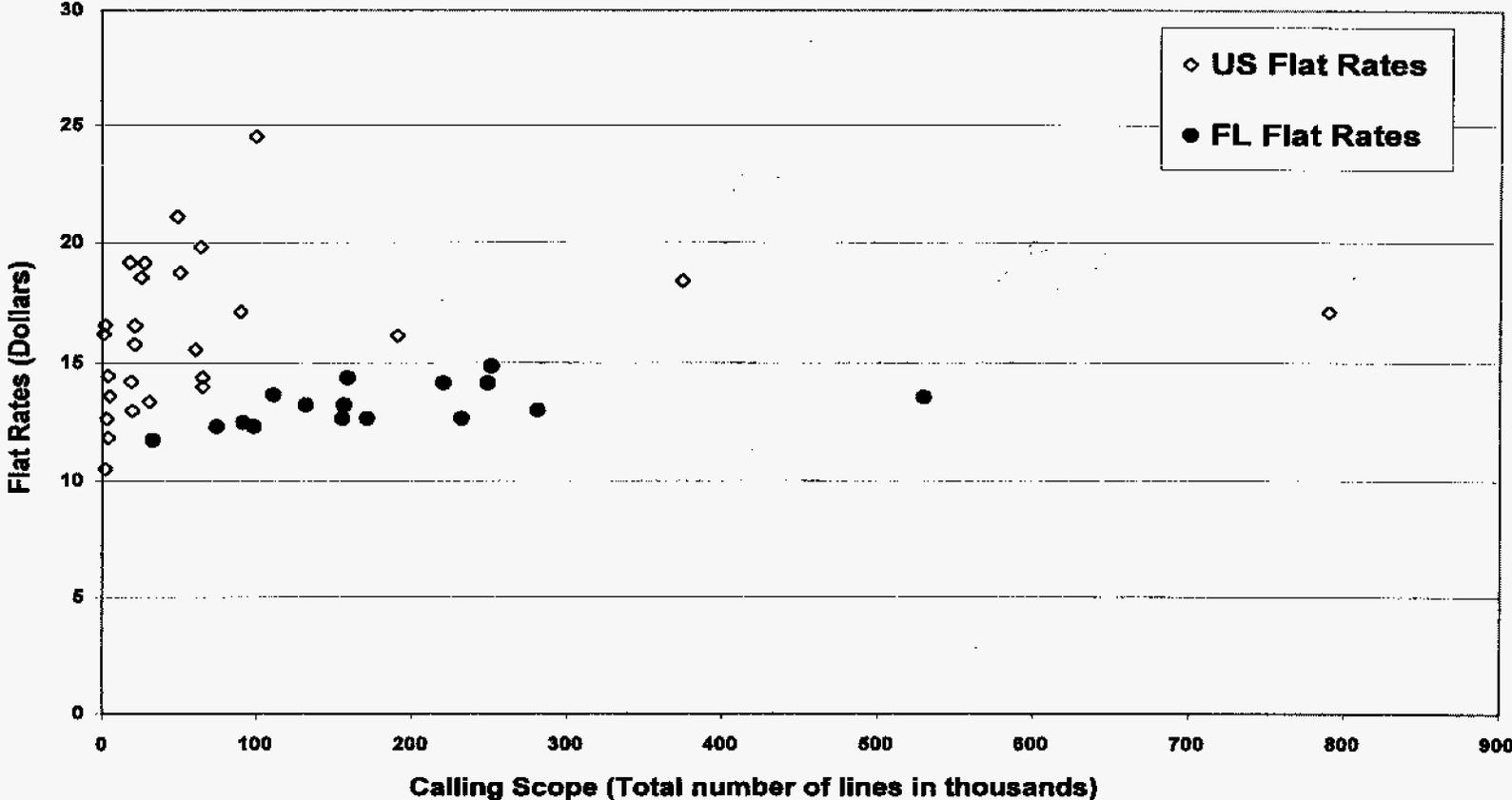


Figure VI-3

Flat Rates vs Calling Scope
3rd Quartile

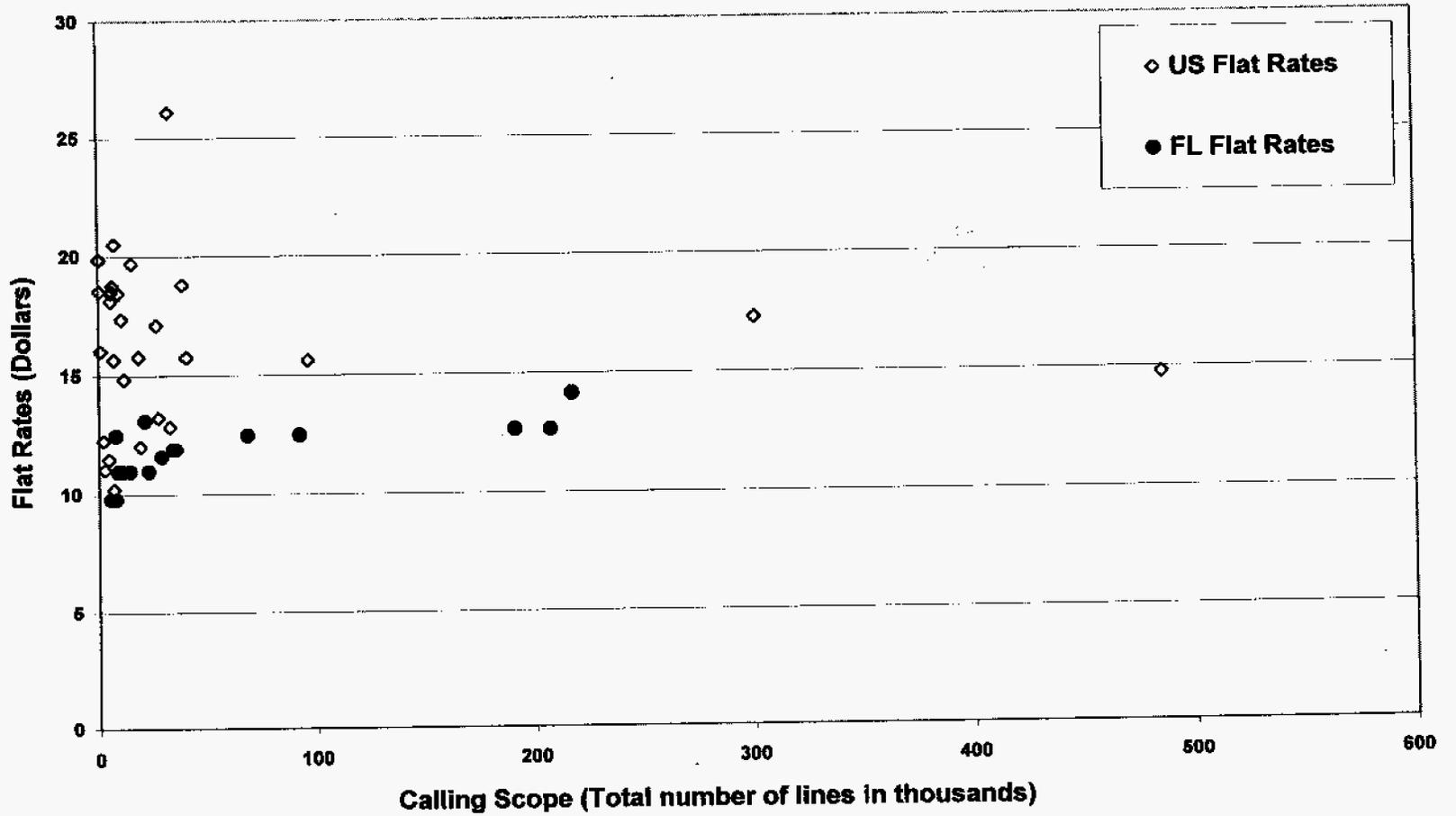


FIGURE VI-4

Flat Rates vs Calling Scope
4th Quartile

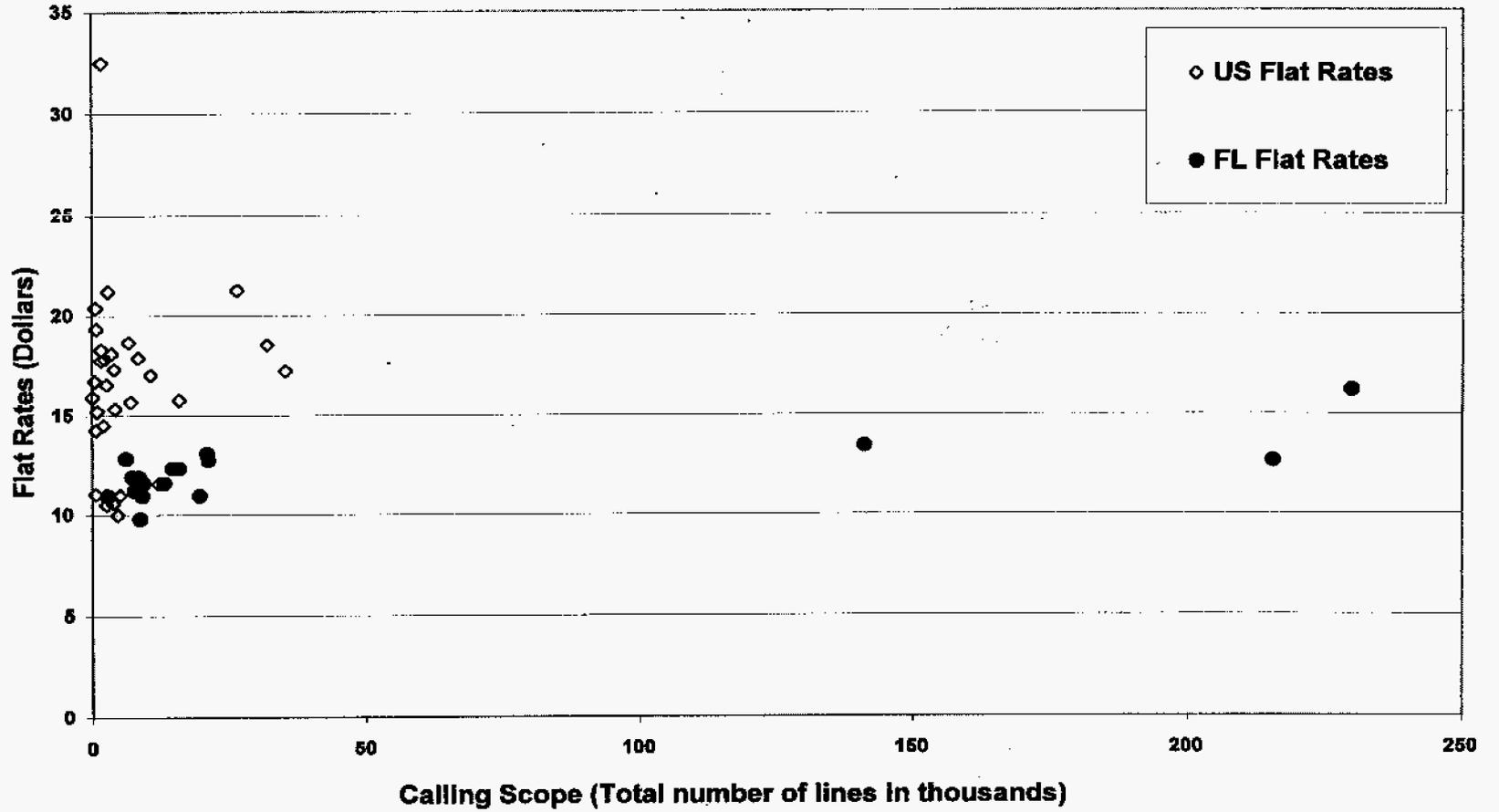
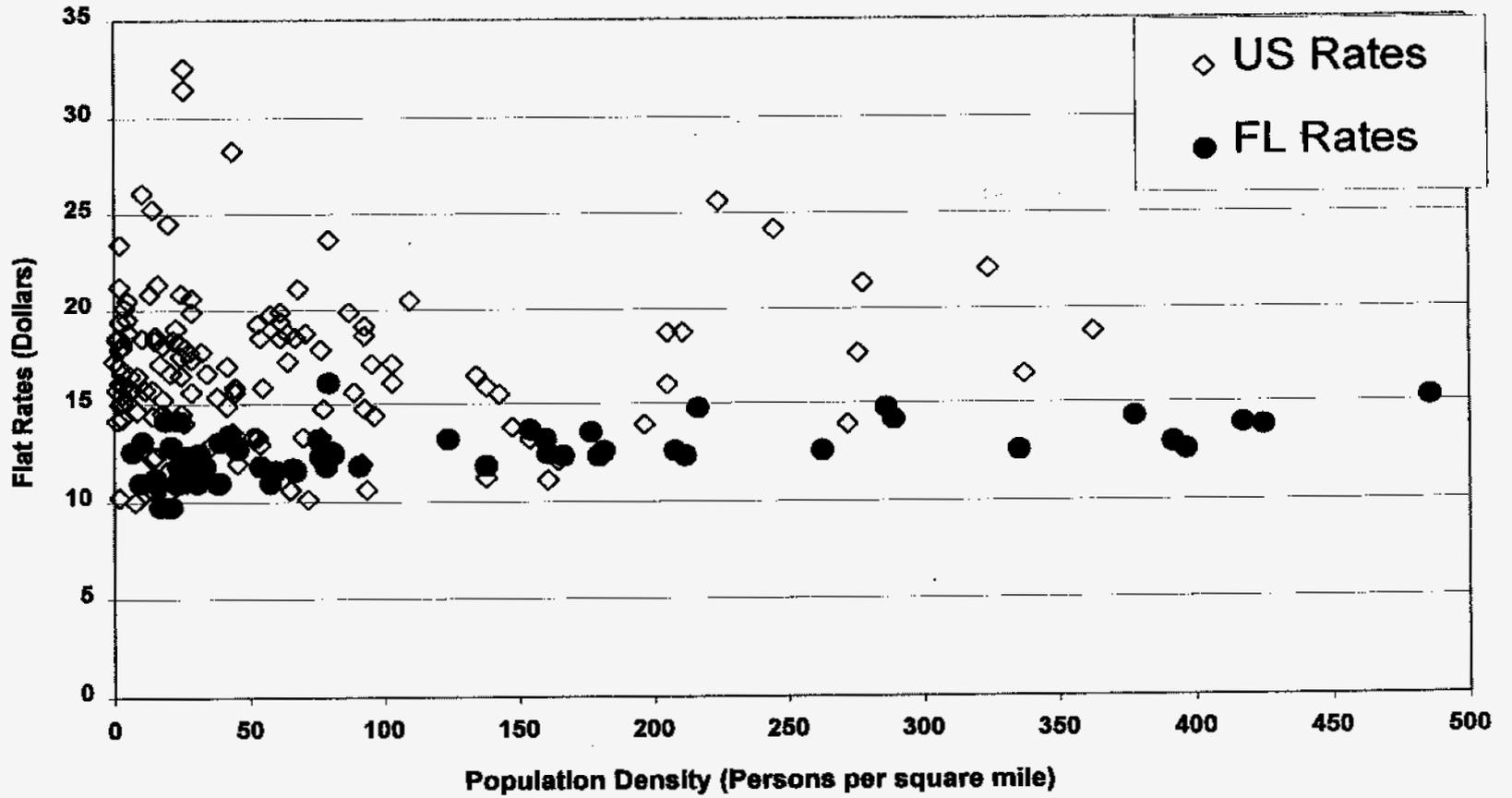


FIGURE VI-5

Flat Rates vs Population Density



RATE ACTIONS IN OTHER STATES

A look at rates in other states would not be complete without also reviewing some of the more recent rate actions that have taken place. While rates appear to be generally higher than those in Florida, some of that difference may result from recent rate proceedings. As part of the transition to limited regulation, such as the price regulation in effect for most companies in Florida, a number of states have allowed companies to rebalance rates. However, others have rejected bids from local companies to increase local rates or have even decreased local rates. One fairly common denominator throughout the country seems to be the reduction of intrastate switched access charges, often to parity with interstate rates. Many of the rate actions come under the umbrella of universal service. Appendix VI-2 contains a state-by-state list of recent rate activities.

Twenty-six states are either considering, or have recently concluded, universal service fund proceedings. Of those, eleven states have approved increases to basic local rates for one or more providers in the last several years. In many instances those increases have been tied to the previously mentioned access charge reductions. For example, Georgia permitted LECs to increase local rates to a certain benchmark level, which was set equal to one of BellSouth's rate groups. Any lost revenues from access charge reductions which were not recovered through rates are offset through the Universal Access Fund (UAF).

For many states, basic local rate adjustments typically have not been associated with extended area services, addition of enhanced calling features (with the exception of TouchTone), or increased consumer protection. Some states included implementation of intraLATA presubscription as part of their proceedings. Where local rate increases have occurred, they have generally ranged from \$1.00 to \$3.50 per month for residential rates.

Where a cost basis was used to establish rates for basic services, states sometimes have declined to increase rates to the full cost of providing service, citing affordability and other universal service goals. Permitted increases to rates may be based on an index, such as the Gross Domestic Product Price Index (GDP-PI), with various adjustments. Funding for high cost areas may be based on a proxy cost model, but may not necessarily provide full funding for the increment from the rate being charged to the benchmark level. In other words, where benchmark rates are set below cost, there may be a "gap" between the rate and the threshold for funding.

Of those states choosing to rebalance rates, few purposefully adjusted the relationship between business and residential local service rates. Some of the reasons cited for maintaining a higher business rate include: 1) the provision of a yellow page listing for business, 2) evidence that business customers make more toll calls than residential customers and will therefore benefit more from toll reductions, and 3) the fact that businesses can pass their telephone charges through to customers in the form of prices for the goods or services they provide. These and other reasons have been echoed in comments of participants in Florida's study.

Access charge reductions have totaled as much as 50 percent of the prior access charge level. It is interesting to note that some of the state commissions have no authority to require IXCs to pass

through savings to consumers. One state expressed concern that customers, especially low-volume users, may not get their fair share of the reductions in long-distance rates. Compare this to recent rounds of interstate access charge reductions which the FCC did not require to be flowed through. Like the states mentioned, the FCC expressed hope that companies would pass savings along to customers. IXC's were left to decide which customers should receive the benefit, if indeed, any were to receive it at all. Such inaction on the part of regulators may be to the detriment of low-volume long distance users, who find themselves paying PICC and universal service charges, with no rate reductions to offset the new fees. At the same time, AT&T announced a \$3.00 per month minimum charge. This situation was of major concern to customers, as discussed in Chapter V, Customer Testimony.

Provision of targeted subsidies for low-income subscribers is in the form of Lifeline service, which is funded in part through the FCC, as is Florida's program. The Lifeline rate may be one-half the rate for residential service. In some cases, the service takes the form of a measured service which includes from 30 to 60 free calls per month. Charges for additional calls may be capped at the full residential rate, as explained further below. Other social goals, such as the provision of services for hearing impaired customers, are often funded as part of universal service. This is in contrast to Florida, which funds 911 and TASA through separate line items on a customer's bill.

Some states permit, while others require, universal service charges to be stated as a separate line item on the bill. One state made a specific statement in its legislation that such charges do not constitute a tax, and thus are exempt from any requirements that apply to taxes in that state.

Increases to local rates have not been an across-the-board occurrence. At least five states have rejected increases sought by local telephone companies (Colorado, Illinois, Oregon, South Dakota, Washington). Cases are pending in five other states (Hawaii, Indiana, Pennsylvania, Tennessee, Wyoming). Twenty-eight states have not undertaken any recent local rate initiatives. Notably, some of those states have implemented rate freezes. For the most part, rate freezes or rate reductions were put in place as part of a transition from rate of return regulation to some form of alternative regulation, such as price cap regulation.

Six states have been selected for a closer examination of their proceedings. Those states are: Alabama, California, Georgia, Idaho, Michigan, and Utah. There is considerable variation among the programs that were implemented in these states. The discussion is intended to give a flavor of the range of proceedings taking place nationwide.

ALABAMA

On January 30, 1995, the Alabama Public Service Commission (APSC) opened generic Docket 24472 to consider issues pertaining to local competition. Subsequently, BellSouth Telecommunications, Inc. d/b/a South Central Bell Telephone Company (SCB) filed a proposal for implementation of price regulation, which was considered in Docket 24499 in conjunction with the local competition proceeding. The APSC also conducted a workshop to study various local calling

plans and Lifeline Service for the non-SCB LECs.

In its proceeding, the APSC defined basic services as "those basic local exchange services provided to business and residence customers which are generally necessary to make or receive a call within the local calling area, including area calling service." (APSC Order, p. 5) Those services include various multiline and trunking services, service connection charges, and services for provision of public telephones, in addition to basic access line services.

A plan was adopted that allowed for price regulation, which is optional for non-SCB LECs. However, all companies, regardless of the method of regulation, were required to rebalance rates. SCB was not permitted to increase rates to recover revenues lost as a result of access charge reductions. Rather, rates for a number of services were decreased. Over a period of 5 years SCB was required to eliminate TouchTone charges; consolidate certain rate groups; reduce Area Calling Service usage rates, Grouping Service rates, and Business Basic Service rates; reduce long distance charges and Residential Services rates included in the Basic Services category; and reduce Business Services rates included in the Basic Service category. Certain reductions occur in multiple years. The final rate reductions will become effective on July 1, 1999.

Non-SCB LECs are allowed to rebalance rates in a revenue-neutral manner to recover revenues lost from reductions in intrastate access charges. Rate increases are permitted for basic service rates which are below the rate for SCB Rate Group 6 (after the elimination of TouchTone charges). The benchmark rate is \$16.30, and is based on an Alabama staff analysis of the average long run incremental cost for SCB's access lines, less the SLC.

Rate reductions are required for basic services priced above SCB's Rate Group 6 level. Reductions are to take place each year for four years in increments of \$1 for residential and \$2 for business, including the elimination of TouchTone charges. For non-GTE LECs, business rates have a threshold of twice the residential rate. According to the APSC, the required rate reductions "are not part of the rate rebalancing plan but, instead [are] a "good faith" offering on the part of the non-SCB LECs." (APSC Order, ¶ 04.08) Thus, they are not included in the determination of revenue neutrality.

For the first five years of the plan, all prices within the basic category are capped, subject to the modifications discussed above. After that, prices of basic services will be allowed to increase based on annual changes in the GDP-PI, which is a measure of inflation in the market prices of output in the economy. The index is then reduced by an efficiency factor, and by any penalties for failure to meet specified service quality parameters. The efficiency factor was initially set at 3% for SCB and 1% for all non-SCB LECs.

Prices for non-basic services are capped for the first 12 months that a LEC is subject to price regulation. Subsequently, aggregate price increases for the total non-basic category may not exceed 10% per year.

Intrastate switched access charges for SCB are to be reduced by annual increments such that

they are at or below interstate rates for both ends of access by July 1, 1999. GTE reduced switched access charges in annual increments to 0.064 per minute for two ends of access, as of July 1, 1998. Thereafter, GTE's intrastate access rates are capped at the lower of 0.064 per minute or GTE's interstate rates. All other LECs also implemented annual reductions in switched access charges.

CALIFORNIA

California has five universal service fund programs: the California High Cost Funds (CHCF-A and CHCF-B), the California Teleconnect Fund, Deaf and Disabled Telecommunications Program, and Universal Lifeline Telephone Service (ULTS) Program. These programs are funded through surcharges on customer bills which total approximately 7 percent. The surcharge for each program is listed separately on the customer's bill.

CHCF-A provides high cost funding to small local phone companies. CHCF-B provides funding to larger companies that choose to service rural and other high-cost areas. A proxy model was used to establish a state-wide average cost of \$20.30. If the cost to serve an area exceeds the average, companies serving that area may receive support. The remaining funds are for various social programs, including Lifeline.

In 1996, California engaged in a major rate restructuring proceeding. The goal of the California Public Utilities Commission (CPUC) in setting prices was to "balance increases in local exchange monthly rates against substantial discounts in toll services, so that total bill impacts on customers are minimal and do not impede the goal of universal service." (CPUC Order, p. 7) The CPUC defined its universal service objective as 95 percent penetration for residential customers.

Basic service rates for both residential and business customers were increased to bring them closer to cost, and to compensate, in part, for other rate decreases. The resulting monthly rates for Pacific Bell are \$11.25 for residential flat rate service, \$6.00 for residential measured rate service, and \$10.32 for business measured rate service. GTEC's respective rates for these same offerings were increased to \$17.25, \$10.00, and \$19.22, respectively. Monthly basic exchange rates include TouchTone at no additional charge. For both companies, flat-rate residential service includes calls within a twelve-mile radius at no extra charge. Beyond the twelve-mile limit, a Zone Usage Measurement (ZUM) charge applies. For Pacific Bell, the charge was set at direct embedded cost (DEC), less 5%. For GTEC, ZUM charges were not changed as part of this proceeding. Small and mid-size LECs are permitted to implement increases in rates for basic services equal to 100% of their current rates or 150% of Pacific Bell's rates, whichever is lower.

Lifeline customers are offered service state-wide at one-half of Pacific Bell's rates. The rate is \$5.62 for flat and \$3.00 for measured rate service, which includes a call allowance of 60 untimeed calls. (CPUC Order, p. 38)

Residential rates were calculated based on one-half of the cost of providing basic exchange service. For example, Pacific Bell's cost is \$26.00. After deducting the \$3.50 SLC, the amount is

\$22.50. One-half of that amount is \$11.25, thus the rate for flat-rate service. GTEC's rate was determined in a similar manner, with some modification.

Business rates were set higher than residential rates for several reasons. First, the evidence considered by the CPUC indicated that businesses make more toll calls than residential users, and thus would benefit more from reductions in toll prices. Further, the CPUC believes businesses have an opportunity to recover the cost of telephone service through the price of their services.

Prices for local service were set at less than the cost of the local loop to mitigate the effect of increased total monthly bills for customers who make few or no long distance calls. (CPUC Order, p. 40) The CPUC included non-traffic sensitive (NTS) costs in the cost of basic exchange services, with an adjustment to account for the subscriber line charge to avoid double-counting. However, the CPUC noted that its "ability to follow this general principle and to recover NTS costs in the basic monthly rate for residential service is subject to a significant constraint: affordability to the customer. If the basic rate for telephone service is not affordable, customers will not subscribe, and we will fall short of our long-standing goal of universal telephone service." (CPUC Order, p. 45)

At the same time that local rates were increased, prices for toll and switched access services were reduced to near their direct embedded cost. Pacific Bell's switched access charge was reduced from \$0.03474 per minute (premium) each way to \$0.024676 for the first minute, and .010296 for each additional minute, for all minutes of use. Carrier Common Line (CCL) charges were eliminated. Access charge reductions were also implemented for California's remaining companies.

GEORGIA

On June 8, 1995, the Georgia Public Service Commission (GPSC) initiated a proceeding for creation of a Universal Access Fund (UAF), as required by Georgia Senate Bill 137 entitled "The Telecommunications Competition and Development Act of 1995." (O.C.G.A. Section 46-5-168) The GPSC was given authority to both establish and administer a fund. The provisions of the bill are being implemented in three phases. During the initial phase, the GPSC established an interim UAF.

Pursuant to statute, prior to July 1, 2000, all Tier 2 LECs were required to "adjust in equal annual increments [their] intrastate switched access charges to parity with [their] similar interstate access rates [to July 1, 1995 levels]." (Docket No. 5825-U, Order Concerning Universal Access Fund 2nd Year Phase-Down, June 30, 1997, p. 6) Companies were permitted to petition the GPSC to rebalance rates within specified limits. For alternatively regulated companies, rates for certain basic services were capped for 5 years, then indexed. Any additional funding needed to replace the revenue losses of Tier 2 LECs as a result of these mandated access charge reductions is provided through the interim UAF, based on the company's costs.

In establishing the interim UAF, the GPSC recognized that there are fundamental differences between rate base regulation and alternative regulation. Accordingly, it determined that it was appropriate to define cost differently for each type of regulation. On an interim basis, alternatively

regulated telecommunications companies seeking relief from the UAF must file a Total Service Long Run Incremental Cost (TSLRIC) study. Rate of return regulated companies are required to use the traditional revenue requirement model to determine the need for funding. Companies must request the specific dollar amount of funding based on the appropriate method, subject to review and adjustment by the Commission, including audits and true-ups. Any net new revenues, or any expense reductions, received by telecommunications companies as a result of this action must be passed through to customers dollar for dollar. (Docket 5825-U, Universal Access Fund, August 30, 1996, p. 12)

The Georgia Commission directed its Tier 2 LECs to implement a Lifeline Calling Plan to ensure that its most disadvantaged residential customers were not harmed as a result of the rebalancing. At a minimum, this group was to include low-income elderly residential customers. The plan provides for basic residential service at 50 percent of the LEC's flat residential rate. It must include a monthly calling allowance of at least 30 outgoing calls, with additional calls to be billed at not more than 12 cents per call. However, the total charges for the basic rate plus additional calls is capped at the flat residential rate; thus, at no time will the total charge for basic residential service for the Lifeline plan exceed the full rate paid by other customers. For example, if the flat residential rate is \$18, the Lifeline plan rate would be \$9. If a customer made 75 additional calls at 12 cents each, the \$18 cap would be reached, and there would be no charge for further calling that month. At no time will there be a charge for incoming calls. LECs are permitted to apply to the Commission either for reimbursements from the interim UAF, or for rate adjustments to compensate for any earnings loss resulting from the implementation of this plan. (Docket No. 5825-U, Order Concerning Universal Access Fund 2nd Year Phase-Down, June 30, 1997, p. 7)

The first assessments for Georgia's UAF were calculated from the quarter beginning April 1, 1996, and companies were required to pay 0.5% of total intrastate gross revenue into the fund. Payments and disbursements are made on a quarterly basis, and are subject to a true-up. (Docket 5825-U, Universal Access Fund, August 30, 1996, p. 12) Proceedings are currently under way to establish a permanent UAF mechanism.

IDAHO

In 1997, the Idaho Legislature amended the Idaho Telecommunications Code, directing the Idaho Public Utilities Commission (IPUC), to identify, quantify, and remove implicit subsidies from the rates of incumbent LECs, based on the Legislature's determination that access charges were subsidizing local service rates. As a result, GTE proposed changes to its access rate structure which would result in a decrease of nearly 50% from its composite rate of \$0.1133 per minute, to a composite access rate of \$0.059 per minute. To offset the loss in revenues, GTE proposed increases to its local rates for residential and business customers, while eliminating the \$1.00 per month Touchcall charge. Increases would be \$2.85 per month for residential customers, and \$1.35 per month for business customers. IPUC staff determined that the proposal would result in an average 17 percent local rate increase for residential customers, depending on the particular local calling plan subscribed to. Some customers could receive increases as high as 50 percent.

The IPUC approved rate rebalancing for GTE Northwest, in Case No. GTE-T-98-2, Order No. 27728, September 11, 1998. Of note is the fact that the IPUC has no authority to require pass-through of the access charge reductions to end-users. The IPUC stated that "the most we can do is hope that the toll carriers will pass through the rate reductions to their customers." (Order, p. 6)

MICHIGAN

In Michigan, numerous companies have filed for approval to restructure rates for basic local exchange service, pursuant to Section 304a of the Michigan Telecommunications Act MCL 484.2304a; MSA 22.1469(304a). (Opinion and Order, p. 3) Ameritech Michigan's rates have been restructured over the past several years. A number of cases have been filed for the independent LECs, including Case Nos. U-11641, U-11643, and U-11666.

Section 304a requires companies to restructure their rates for basic local exchange, toll, and access services such that, no later than January 1, 2000, those rates will be based on total service long run incremental cost (TSLRIC) for those services. Companies with fewer than 250,000 end-use customers may use their own TSLRIC or adopt that of a larger carrier. The Commission's "role is limited to determining that the proposed rates are not less than TSLRIC or that the restructuring moves rates closer to that standard." (Opinion and Order, p. 5)

As an example, two companies applied to increase rates for basic local exchange service, including TouchTone, to the current weighted average basic local exchange (urban) rate of Ameritech Michigan and GTE. This would result in a maximum residential rate of \$13.05 and of \$12.67 for business service. These rate increases would be offset by access charge reductions. Michigan's local rates are largely for measured service. (Opinion and Order, p. 4)

UTAH

While the proceeding discussed here is a rate case, it is unique in that the 1995 Utah legislature directed the removal of subsidies from rates by bringing them closer to the cost of service. This resulted in a Commission decision to increase rates for residential basic local service by \$2.80 per month, to reduce the rate for business basic local service by \$1.88 per month, to reduce the charge for call waiting service by \$1.50 per month, and to decrease rates for both intrastate toll and switched access services. In reducing switched access charges, the Commission decided upon a unified CCL rate. The originating rate was \$0.009 per minute, while the terminating rate was \$0.0252. Both rates were reduced to \$0.0088.

The Commission noted that "[t]he 1995 State Act gives special consideration to residential telephone service prices and allows them to be set below incremental cost." (Order, p. 69) While U.S. WEST filed an incremental cost study for residential services, the Commission declined to rely on it. Rather, the Commission determined that an embedded cost of service should be used to establish a ceiling for prices. Nevertheless, the incremental cost study was used as a rough guide to set a floor below which prices should not fall. (Order, p. 69)

In discussing this case, the Commission explained in its Order that

[t]he 1995 State Act directs the Commission to address any subsidies in USWC's pricing structure by moving prices toward costs before the price ceiling imposed by the statute takes effect. The 1996 Federal Act also calls for the same step. This is one of the most challenging tasks of the transition for monopoly regulation to competition and is the central pricing issue of the Docket. . . . Given the change in state and federal policy, the key lies in the definitions of "cost" and "subsidy."

Under terms of the 1995 State Act, this is the last USWC general rate case to be conducted according to traditional ratemaking principles. This Act allows competitive entry, however, and thereby alters a main aspect of traditional economic regulation. Rival firms can enter USWC's formerly protected service territory. We now face conflicting mandates. On the one hand, we are to set just and reasonable rates that give the Company the opportunity to recover all legitimate costs of providing utility service including a reasonable rate of return on investment. On the other hand, service prices we set must neither discourage efficient entry nor put the risk of competitive markets on customers who do not have competitive choice. This conflict of principles is clearest in the determination of a cost basis for service prices. (Docket No. 97-049-08, In the Matter of the Request of U.S. WEST Communications, Inc. for Approval of an Increase in its Rates and Charges, Report and Order, Issued December 4, 1997, p. 68)

CHAPTER VII: COMMENTS OF INTERESTED PERSONS

In addition to the cost issues discussed in Chapter III, a number of points were made by interested persons in the workshops and in final comments. Topics ranged from affordability to value of service. Considerable discussion centered around rate rebalancing and its impact on competition in the market, particularly for residential and small business customers.

The LECs believe that the current rate structure is neither fair nor reasonable. According to the LECs, some customers are unprofitable to serve and are subsidized by others. So long as this is the case, the LECs believe competition will not come to the local residential market. To their way of thinking, rate rebalancing is a necessary ingredient to spur the market forward.

Predictably, other participants did not buy the LECs' story. AARP, AG, FLS, and OPC believe intrastate switched access charges can be reduced for the large LECs without causing undue harm to the companies. Available information shows high rates of return for the companies, beyond what would be considered reasonable under a rate base regulated regime. Participants noted that the price cap regulation currently enjoyed by the LECs was intended to work in conjunction with competition that would keep excess profits in line. Instead, LECs increase many rates at will, while their competitors are barely able to get a toe hold, let alone have an impact on prices. Rounding off the opposition, FCCA believes that even if rates are rebalanced, competition will not be widespread in the residential market, due to barriers to entry.

Also discussed were affordability and value of service. Participants argued that affordability must consider the burden placed on subscribers, not just how much they are willing to pay. The LECs believe a total bill approach should be used to evaluate affordability. Affordability is also linked to value of service. While the LECs contend that customers receive more value than ever, other participants questioned the quality of that service.

SHOULD RATES BE REBALANCED?

The LECs contend that the current rate structure is harmful to consumers in several ways: 1) subsidized basic rates are anti-competitive; 2) prices set high to subsidize basic service force residential customers to use the phone less, causing real economic losses; 3) it is unfair to force some residential customers to subsidize others; and 4) bill analyses show that most customers subsidize themselves on the same bill to at least some extent. (BST, GTEFL, Sprint, p. 25) In essence, the LECs believe basic local residential rates should be increased, while switched access charges and rates for vertical services should be reduced.

In spite of their contention that most customers subsidize themselves, the LECs claimed that most residential customers are not profitable to serve. For example, Sprint stated that 71% of its "residential customers are not profitable--that is they do not generate revenues sufficient to cover the cost of providing their service." Sprint believes that "the profitability of a residential customer is a

direct function of that customer's use of vertical features and toll/access services." However, Sprint's analysis shows that while 29% of customers are profitable to serve, another 32% are marginal. Of the remaining 39%, only 13% provide a substantially negative contribution level. (Poag, Attachment 7, p. 4)

It is Sprint's conclusion that only a small number of residential customers would be attractive to a facilities-based competitor. (Poag, Attachment 7, p. 4) The large LECs agree with other commenters that "competition has been very slow to develop in the basic local service market today." (BST, GTEFL, Sprint, p. 28)

As a result, the LECs believe rates must be rebalanced. The small LECs added that any restructuring must be balanced with universal service funding to ensure "continuation of universal service and the deployment of an advanced telecommunications network as required by the Telecommunications Act of 1996 ." [hereafter referred to as the Act] (Small LECs, p. 2) As discussed below, LECs suggested that "a movement to more efficient pricing can be accomplished with little or no negative impact on consumer welfare (especially with appropriately implemented Lifeline and Link Up programs)." (Harris, Exec. Sum., p. 1)

On the other hand, participants pointed out that "The words rate rebalancing do not appear in the Act." Neither is there a hard and fast requirement that support mechanisms, such as the subsidization the LECs claim exists, be made explicit, rather than implicit. (AARP, p. 6) AARP argued that "there are no economic, legal, technological, competitive, social or public policy reasons to raise basic service rates." (AARP, p. 1)

In fact, AARP pointed out that rebalancing the rates could have a substantial negative impact on consumers, particularly low-income customers and the elderly.

We estimate that the rate rebalancing suggested by the telephone company "contribution" analysis would leave nine out of ten 65 & over households and eight out of ten low income households with higher bills. About two-thirds of all residential ratepayers would have higher bills. About one-third of residential customers would end up with lower bills. (AARP, p. 23)

Given Sprint's contention that 71% of residential customers are not profitable to serve, AARP's figures do not seem out of line.

Nevertheless, the LECs believe the benefits would outweigh the costs to consumers. They contended that, particularly for rural and higher cost areas, rebalanced rates could attract new entrants. (BST, GTEFL, Sprint, p. 29) The LECs characterized the opposition to rebalancing as "a misplaced effort to maximize consumer welfare by not raising residential basic local service rates." (BST, GTEFL, Sprint, p. 29) They reminded us that the Lifeline program is available for low-income consumers who require assistance to remain on the network. (BST, GTEFL, Sprint, p. 2) The LECs did recognize that "full cost-based rates for residential basic service, especially in high cost areas, could jeopardize the goal of universal service." Sprint recommended that, to counter this

effect, "the Commission determine a maximum affordable rate standard for basic residential service; to the extent that the cost of providing that service in a particular area exceeds that rate, the difference would be funded through an explicit, competitively neutral universal service fund." All revenues received from this plan would be used to reduce or eliminate implicit subsidies in other rates through dollar for dollar rate reductions. (Poag, p. 9)

EXCESSIVE EARNINGS OF LARGE LECs

The consumer advocates do not believe that no rate changes should occur. OPC and others argued that "[a]ll rate rebalancing can be accomplished through rate reductions without imposing significant harm on the telephone industry." (OPC, p. 8)

According to William Dunkel, representing AG, the current rates are producing approximately a 19% return on equity for all three major LECs. He pointed out that 12% was considered a reasonable return on equity under rate of return regulation. The earnings are produced in part by what he considered to be excessively high rates for certain services. This means that "in the less than three years of price cap regulation, the LECs have increased their return on equity from the previous 12% level to the current level of over 19% return on equity. The LECs over-earnings are rapidly growing." (Dunkel, p. 7) It should be noted these increases occurred while companies also reduced access charges. OPC pointed out that "intrastate toll rates in Florida for all but the shortest distance calls have been cut, in some instances, by over one-half." (OPC, p. 28)

Mr. Dunkel further explained that BellSouth's return on equity in 1997, even after \$123 million in refunds, was 15.11% as shown in their earnings surveillance report (ESR). If BellSouth were to reduce its rates such that revenues were reduced by \$250 million per year, it could still earn the 12% return on equity that Mr. Dunkel believes is reasonable. (Dunkel, p. 2) In fact, Mr. Dunkel believes that BellSouth could significantly reduce toll rates and intrastate switched access charges, with no rate increases whatsoever, and still earn a reasonable rate of return. (Dunkel, pp. 2-4)

The other price cap LECs are not required to file earnings surveillance reports, and BellSouth will not be required to file one in the future. As a result, GTEFL and Sprint's earnings had to be estimated. Mr. Dunkel believes GTEFL and Sprint are also earning a high rate of return, similar to BellSouth. (Dunkel, p. 5) Mr. Dunkel complained that "[i]n this very project, although GTE[FL] is asking for much higher residential rates, GTE[FL] argued that the Commission, the Florida Legislature, and the public had no right to know how much GTE[FL] was currently over-earning." (Dunkel, p. 6)

Mr. Dunkel suggested that these over-earnings should be shared under the price regulation regime. He explained that

[n]on-sharing price regulation was based on the theory that sufficient competition for telephone service exists to prevent the LECs from over-pricing their services. However, the 19% plus (and rapidly growing) returns on equity that the LECs are

achieving in Florida clearly indicate that competition or non-sharing price regulation has not resulted in reasonable LEC rates. (Dunkel, p. 7)

BUSINESS VS. RESIDENTIAL RATES

Another area of concern was the relationship between business and residential rates. The difference amounts to roughly \$200 per year per small business access line in Florida. It has been suggested, particularly at public hearings, that the business rate should be reduced. Several participants commented on the reasons for the difference between residential and business local rates. Those reasons are:

- The business rate includes a valuable yellow page listing, worth up to \$23.75 per month;
- BellSouth repairs business service an average of five hours faster than residential;
- businesses place, on average, more calls per month than residential customers;
- a higher percent of the business calls are made during peak hours (and therefore are more costly to provide) than are residential calls;
- additional income results from use of telecommunications service;
- businesses have access to a wide array of specialized telecommunications consulting services, and products; and
- businesses may deduct telephone expenses on their tax returns.

(Dunkel, pp. vii-viii; FLS, pp. 11-12)

Even with all the benefits businesses receive, Florida has among the lowest rates in the Southeast for basic business service. (FLS, pp. 11-12)

An additional note is that if rates were rebalanced such that the residential local service rate was increased and switched access charges were reduced, while the business local service rate remained the same, businesses could benefit at the expense of residential customers. Business customers would enjoy any pass through of access charge reductions in lower toll rates. Thus, business customers would receive even more value for their money.

WILL THERE BE COMPETITION?

There was general consensus that there is no significant competition in any residential telecommunications market in this country. One issue with regard to competition focused on what

it would take to encourage competitive entry, and what would be the result. Not all participants were convinced that local competition would become a reality for most consumers.

Dr. Robert G. Harris, representing the LECs, argued that "a competitor can combine its own switch with a leased loop to offer vertical features (such as voice mail or call waiting) at prices well below those that are required to subsidize basic service. Furthermore, [competitors] can cherry-pick high revenue, high margin customers because current usage prices are maintained artificially high to subsidize basic residential service." (Harris, pp. 24-25) This would leave the LECs with largely unprofitable customers to serve. Further, Dr. Harris argued that the current regulatory framework provides "artificial incentives which distort entry decisions by competitors." (Harris, p. 25)

In an effort to boost competitive entry, the LECs have suggested that business and residential rates should be restructured or rebalanced. But other participants responded that increasing the rates for basic local residential service may not have much effect on competition in the local exchange market. For example, Mr. Gillan, representing FCCA, stated that

[f]or competition to occur in the local residential market, it must be possible for a new entrant to mass market ubiquitous local service and provision that service inexpensively. The only way in which a new entrant can accomplish this now, and for the foreseeable future, is by ordering everything necessary to provide residential service from the network of the incumbent local exchange company. Presently, an expensive structural barrier exists that would prevent competition from flourishing in the local exchange market, even if the Commission were to increase local residential rates significantly. (FCCA, p. 3)

He pointed out that the non-recurring charge to an ALEC for establishing local service through resale is \$178, while he believes the cost is only \$1.45. (FCCA, p. 4) This in itself is a barrier to entry. He believes that "[e]ven if the Commission were to increase local residential rates by almost \$15.00 per month, the increase would not result in an increase in competition, because of the barrier to entry presented by the non-recurring charge." He suggested instead that efforts be made to remove these and other barriers. (FCCA, p. 4)

In support of its position, FCCA submitted a report titled "Broadening the Base: Combining Network Elements To Achieve Widespread Local Competition," sponsored by the Competitive Telecommunications Association (CompTel). One of the concepts discussed is cost-based access to the existing network. Some participants believe this is a fundamental condition which must be met for broad-scale entry and competition to occur. According to the report, "The incumbent ILEC's exchange network is simply too vast and complex to replicate on a ubiquitous scale. Equally valid has been the lesson that competitors must have a practical ability to combine network elements, as well as access network elements individually." (BTB report, p. 1) But access to the network alone is not enough. Entrants also need access to the same electronic systems that the ILECs use to manage and combine network elements. (BTB report, p. 1)

Other participants also believe that the focus should not be on rates, stating that the current rates "do not appear to impede the spread of competition in telecommunications services; nor do they impair the viability of the state's incumbent local exchange companies or their capacity to respond to competitive challenges." (FLS, p. 2) Further, there is suspicion as to why the LECs seem interested in helping competitors. "The LECs are local monopolists who would lose their monopolies, and their monopoly profits, if competition came to these markets, so why would they propose legitimate ways for this to occur?" (FLS, p. 16)

In support of retaining the current rate structure, FLS pointed out that it is common practice to make basic products available at a low price--the so-called "loss leader"--to obtain customers. Profits are made on additional services sold to those customers. For example, cellular phones are often sold for \$20, or even given away. Such promotions require the customer to sign up for one year of service with a particular service provider, so that the cost of the phone can be recouped. FLS believes that the current price structure fits well with this practice, and thus does not disadvantage the LECs as compared to competitors. (FLS, p. 17)

FLS warned

Competition, for competition sake's alone, is a hollow, empty mantra that deserves no credence from Floridians. Whether we have competition in local exchange networks in Florida should depend entirely upon whether the public overall will benefit. Florida should not give up its natural cost advantages for telecommunications services through higher phone rates, just so that non-incumbent LECs can duplicate services already provided, but at higher rates. (FLS, p. 19)

WHAT WOULD A RATE INCREASE ACCOMPLISH?

If a rate increase would do little to invite competition into the market, what would it accomplish?

FLS believes that the LECs would simply use additional revenues from rate increases to price more competitive services in a manner that would fend off competition. (FLS, pp. 16-17) Similarly, Mr. Dunkel, representing AG, believes according to his analysis that BellSouth has priced its most competitive services to produce a -26% return on investment. (Exhibit AG-3) He noted that the negative returns on these services are supported by higher rates for more monopolistic services. (Dunkel, p. ii) Mr. Dunkel added that "[t]he competitors know very well that the LECs would cut those high 'monopolistic' prices to low 'competitive' rates whenever competition entered the market." (Dunkel, p. ii)

Rate reductions could include some non-basic services. However, if that was done, the LECs could quickly raise the non-basic rates to their previous level or higher, so long as there is no competition. (Dunkel, p. i) As discussed in other chapters, LECs have no compunction about raising rates for non-basic and non-regulated services.

Participants also believe rate increases that focus on local service will be used to provide funding for infrastructure needed to supply premium service to the market. "By most estimates, the stakes are huge. In the next several decades hundreds of billions of dollars will be spent upgrading the network from a focus on voice uses to a focus on data and video uses." (Gabel, p.7)

SMALL LEC IMPACT

Should competition become widespread, the effect of competition on the LECs may be more dramatic for smaller companies than for the larger ones. According to the small LECs, the impact of competition on them is different from that of the large LECs. They pointed out that rural networks are typically high cost, whereas the service areas of the larger LECs may be high cost only in certain areas. (Small LECs, p. 6)

Although none of the small LECs in Florida has experienced significant and widespread local exchange service competition as provided for under the Telecommunications Act, small LECs have all encountered competition in one form or the another such as bypass, intraLATA presubscription, wireless, and competition from pay telephone service providers. In addition to competition, small LECs have seen revenue erosion from legislative mandates or Commission action, such as access reductions, elimination of interLATA and intraLATA subsidies, and expansion of Extended Area Service (EAS), with no provision to replace these lost revenues. (Small LECs, p. 2)

The small LECs support rate rebalancing as advocated by the large LECs, including the establishment of a Universal Service fund. (Small LECs, p. 2)

AFFORDABILITY

Not all participants focused their comments on costs, which were discussed in other chapters, and rate rebalancing. A number of participants addressed their remarks directly to the other criteria listed in Chapter 98-277, Laws of Florida. In the remainder of this chapter, affordability and value of service will be discussed.

Participants provided definitions of affordability and suggested factors to be considered in evaluating it. For example, the small LECS define affordability as

the financial means of a customer to purchase services. In the context of this proceeding, an affordable rate should be defined as a rate that is representative of value of service, provides access to the maximum number of customers willing and able to purchase basic local telecommunications service and is just and reasonable to encourage infrastructure investment. (Small LECs, p. 3)

AARP added that "affordability involves the burden that the cost of necessities imposes on people, not simply whether or not they will keep paying." AARP believes the elderly will retain their phones at a higher price, even though it may impose a burden on them, particularly in view of their limited income. However, AARP argued that "[p]ublic policy has dictated that we not impose a burden on them for this necessity, and obviously we think that is good public policy." (AARP, p. 16) FLS agreed, stating that increased rates could "make telephone service unaffordable for many Floridians, particularly low-income and elderly persons. . . ." (FLS, p. 2)

Nevertheless, the LECs and their representatives argued that local residential basic rates should not be set so low that every subscriber could afford service. (BST, GTEFL, Sprint, p. 7; Small LECs, p. 3) Instead,

. . . [T]he facts suggest that attention must properly be focused on the *marginal* subscribers, i.e., those households (not very many in number) whose entry and exit from the network--for whatever reasons--keep the subscribership percentage nationwide hovering in the vicinity of 94 percent. Therefore, the affordability issue--which may be relevant for all customers--is of particular significance to those at the margin. Contrary to Mr. Dunkel's claim that any increase in the price of residential service in Florida would sink the state's subscribership rate, there is no clear evidence that such a price increase for the vast majority of telephone customers in Florida balanced by targeted direct subsidies to subscribers at the margin will dramatically reduce network participation in Florida. (Taylor, p. 28)

The LECs believe the best regulatory policy is one under which the residential basic service rate is affordable to most households. For the low-income customers for whom the rate is unaffordable, subsidies should be targeted, as is the case with Lifeline. (BST, GTE, Sprint, p. 7) Mr. Poag of Sprint pointed out that Lifeline and other alternatives, such as message rate service at a reduced rate, already exist. (Poag, p. 7) According to the small LECs, it would be more appropriate "to find a balance between providing quality service at rates that are just, reasonable, and affordable." (Small LECs, p. 3)

Participants suggested that purchasing power, subscribership and household expenditures are indicators of affordability. "A service can become more affordable either because income increases and the purchase price remains the same, or because income stays the same and the purchase price decreases." (BST, GTE, Sprint, p. 6) The LECs point out that in 1983, the rate for basic local residential service equaled approximately 1% of median household income in Florida. By 1996, that figure had fallen to 0.55% of median household income. According to the LECs, "[t]hese figures suggest that today's prices could increase significantly and still be affordable. Maintaining the same relationship between basic rates and household income in 1996 as existed in 1983 equates to a monthly rate of about \$24.55 for basic residential in 1996." (BST, GTE, Sprint, p. 7) This analysis assumes that rates were affordable in 1983.

The LECs believe it is important to consider that most of them have not had a local rate increase in many years. If the rates are adjusted for inflation, it would show that they have declined

in real terms. Using an inflation index as a benchmark "the affordable level, adjusting for inflation, [would allow] companies greater flexibility for restructuring local rates while maintaining affordability. For instance, the purchasing power of \$1.00 in 1984 is equivalent to \$1.54 in 1997." (Small LECs, p. 3)

The large LECs performed a similar analysis, noting that prices for basic residential service have been nearly unchanged for the past 15 years. An example provided was that BellSouth's rate for basic local residential service was \$13.95 in 1983. Today, the price for the same service is \$14.15, including the \$3.50 SLC, which did not exist in 1983. Adjusted for inflation, the \$13.95 rate would equate to \$23.25 in 1998 dollars. (BST, GTE, Sprint, pp. 7-8)

Another indicator of affordability is a comparison of Florida's rates to those in other states. While an entire chapter is devoted to this topic, the participants also had comments on this aspect of affordability. The LECs pointed out that "[t]he current average monthly rates for three largest Florida [LECs] are from \$2.58 to \$4.36 lower than the national average." (BST, GTE, Sprint, p. 8) This is in line with the analysis performed by the Commission. They believe that an examination of penetration levels in other states indicates that higher rates do not adversely impact higher residential basic rates. The LECs claim that "Tennessee and North Carolina have higher subscribership levels than Florida, even though their average residential rates are higher and their income levels are lower." (BST, GTE, Sprint, p. 8)

[N]ationwide, the average residential basic local service rate is \$13.94, income is \$22,000, and the penetration level is 95 percent. Similarly, in the other southeastern states, the average rate is \$14.64, the average income is \$20,000, and the average penetration level is 94 percent. In comparison, ILECs in Florida rates are Sprint-Florida \$9.58, GTE, \$10.02, and BellSouth, \$11.36, Florida income is \$24,000, and the penetration level is 94 percent. (BST, GTE, Sprint, p. 17)

What other factors impact subscribership levels? The LECs claim that "studies have shown that most consumers who decline to subscribe to, or cancel their subscription to, residential basic local service do so because they cannot afford the long distance toll charges." (BST, GTE, Sprint, p. 26) Mr. Dunkel pointed out that BellSouth disconnects 236,000 residential customers per year for non-payment. (Dunkel, p. vii) "[D]isconnection studies find that the primary reason for involuntary disconnection of telephone service is the inability to pay long distance charges." (Harris, p. 31) The LECs added that

[f]or the average customer, the basic service charges are less than one-third of the total telecommunications bill. This suggests that the average customer will have a greater interest in the prices for the discretionary services that make up over two-thirds of his or her telecommunications bill, than in the price of the basic service. (BST, GTE, Sprint, p. 27)

Accordingly, the LECs believe a total bill approach is necessary in evaluating the impact of rate increases on consumers. (BST, GTE, Sprint, p. 26)

If the Commission is expected to fulfill [the Legislature's] expectation, it will advise the Legislature that the basic rate could increase significantly and still remain affordable for most households. Along with this finding, the Commission should emphasize that affordability must be considered from a total-bill perspective, and that the Lifeline program can best assure telephone service for those who might not be able to afford a higher basic monthly rate. (BST, GTE, Sprint, p. 6; Taylor, p. 2)

The LECs also believe affordability and value of service are linked. The small LECs defined an affordable rate as one that is representative of value of service. (Small LECs, p. 3) The large LECs expanded on that definition, adding that "customers receiving substantial value from a service are less likely to reduce spending for it in response to a price increase." (BST, GTE, Sprint, p. 14) If that is the case, a discussion of affordability necessarily leads to an examination of value of service.

VALUE OF SERVICE

The small LECs believe that, historically, "value of service" has been based on calling scope and on the general benefit the public receives; that is, "the number of subscribers a basic local exchange subscriber can call or be called by for a flat monthly rate and the societal benefit associated with public health and safety." (Small LECs, p. 5) Adding to the definition, FLS noted that "'Value of service' is a well-established term of art that refers to the traditional means of establishing rates for telecommunications services based upon allocating joint network costs according to customer value obtained from services." (FLS, p. 11)

FLS noted that today the telephone is

an indispensable link to the world for millions of subscribers, particularly for those who are elderly, disabled, or on limited incomes. The increase in mobility of American society over the past several decades, that has contributed dramatically to our current prosperity, has been integrally facilitated by the capacity of telephone service to continue relationships with geographically separated family members and friends. (FLS, p. 12)

Thus, the value of the telephone has grown over time. Additionally, the LECs believe that customers are provided more value in terms of the services they receive today. They believe that services are of higher quality and more versatile, while prices have declined in real terms. "Today, the residential subscriber continues to have a ubiquitous connection to every telephone in the world, but now receives much, much more in value [than in the past]." (BST, GTE, Sprint, p. 3)

According to the LECs, this is due to three main interrelated, mutually reinforcing factors:

- The underlying engineering and functionality of the technologies used to produce local telephone services have improved, leading to increases in the quality of basic local telephone service and facilitating the deployment of complementary enhanced services.
- The quantity, quality, and variety of goods and services that are complementary to local telephone service have increased while their prices have decreased.
- Changes in consumer tastes have increased the demand for local telephone service and complementary goods and services. (Harris, pp. 2-3)

The local telephone network provides access to

- the Internet;
- FAX and data transmission;
- toll-free numbers (800, 888);
- larger local calling area in terms of additional extended area service routes and growth in access lines within exchanges;
- complementary non-basic services, e.g. Caller ID; and
- wireless communications (cellular, PCS, paging).

(Harris, p. 2; Poag, pp. 5-6; BST, GTE, Sprint, p. 3)

The increased opportunities for usage provided by all of these services have the net effect of increasing the value of the service. For example,

[a]n estimated 89% of consumers in a recent survey used toll free telephone numbers for customer service needs, making reservations, and ordering or requesting information on products or services. Other common applications include making financial transactions, collect calling, and paying bills. (Harris, p. 8)

The ability to access various on-line services is particularly valuable to rural communities. "Through 'on-line' access, consumers have access to both educational and shopping services that otherwise may not be available in rural communities." (Small LECs, p. 6)

In spite of the added value the LECs claim to provide, other participants complained that quality of service has declined. According to FLS,

[t]he incumbent local exchange companies' service quality review scores, compiled by the Commission and released last year, showed that service quality had slipped alarmingly in the previous year. BellSouth barely received a passing score, and GTE and Sprint scored less than half of a passing score. Complaints about "slamming," the unauthorized switching of carriers; "cramming," placing unauthorized charges on bills; and other consumer complaints about telecommunications service have skyrocketed in recent years. (FLS, p. 13)

Although certainly not all problems can be laid at the LECs' doorstep, nevertheless, the quality of service from the customers' point of view must be considered in any evaluation of the value of service. As can be seen from the discussion in the chapter on customer testimony, many customers are anything but happy with the service they receive. They complained bitterly that they have more problems with service than they have ever had, and long wistfully for the good old days of monopoly service.

CHAPTER VIII: CONCLUSIONS

Each of the previous chapters provides a part of the picture of what constitutes a fair and reasonable Florida residential basic local telecommunications service rate. In this chapter, the information gathered in the study will be discussed in the context of the four elements listed in the law. Those elements are: affordability, the value of service, comparable residential basic local telecommunications rates in other states, and the cost of providing residential basic local telecommunication services in Florida, including the proportionate share of joint and common costs. Finally, overall conclusions as to the fair and reasonable Florida residential basic local telecommunications rate will be drawn.

AFFORDABILITY

Participants in this study provided definitions of affordability and suggested factors to be considered in evaluating it. One definition of affordability is

the financial means of a customer to purchase services. In the context of this proceeding, an affordable rate should be defined as a rate that is representative of value of service, provides access to the maximum number of customers willing and able to purchase basic local telecommunications service and is just and reasonable to encourage infrastructure investment. (Small LECs, p. 3)

To that definition, AARP added that “affordability involves the burden that the cost of necessities imposes on people, not simply whether or not they will keep paying.” (AARP, p. 16)

It is clear that the factors which affect the affordability of residential basic local exchange service are complex and varied. The definition of affordability goes beyond the purchase decision. If that were the only consideration, the study of local telephone service affordability could be limited to an econometric demand model for residential basic local exchange service. Telephone service demand would be shown to be a function of various factors which determine whether a purchase is made, including local telephone service price, the price of near substitutes, and household income.

Such studies have consistently shown that local telephone service is very price inelastic, which implies that the demand for local service varies little at different price levels. These models typically use historical data in estimating the price/demand relationship. This price/demand relationship can change over time as substitutes become more or less viable in terms of price, quality, and functionality. However, the issue in this study is affordability, which goes beyond the concept of price elasticity to also consider the impact on the household budget.

The survey conducted on the Commission’s behalf showed that the typical customer (70.0%) receives a consolidated bill for local and long-distance telephone service. They pay \$39.40 on average for local service, less than what they pay for long distance service, which averages \$45.47.

Thus, their average monthly bill is \$84.87 for both services combined. There is one other monthly service that usually costs more than these two services combined, however. Electric service during summer months is over \$100.

Although this is probably a small part of the monthly budget for some people, nevertheless, for many Florida customers, every dollar counts. When asked what reaction they might have to a \$2 increase in local telephone rates, 25.9% said they would reduce their spending on other goods or services, and another 7.1% said they would discontinue service. When asked what their reaction would be to a \$5 increase in local telephone rates, 31.0% said that they would reduce spending on other items and another 13.4% said they would discontinue local telephone service. When asked what they would do if prices increased to a level that was unacceptable, slightly over half of the respondents (52.4%) indicated that they would switch to cellular telephone service, but slightly under one-fourth of the respondents (23.0%) indicated that they would simply use payphones for their household communication needs.

For low-income consumers, there was an even stronger response that service would be discontinued if faced with an increased telephone bill. Their reaction to a \$2 increase in local telephone rates was that 37.0% said they would reduce their spending on other goods or services and another 9.5% said they would discontinue service. When asked what their reaction would be to a \$5 increase in local telephone rates, 41.7% answered that they would reduce spending on other items and another 20.5% indicated that they would discontinue local telephone service. When asked what they would do if prices increased to a level that was unacceptable, slightly more than one-third (37.0%) indicated that they would use payphones for their household communication needs. Nevertheless, a large number said that they would never discontinue service (20.5%).

Similar sentiments were expressed in customer testimony. Affordability was a major concern to the elderly, many of whom wrote letters to the Commission pleading their case. The testimony made several things clear. When discussing the current rates, one cannot consider the local rate alone. While the local rate has remained fairly stable over the last two decades, countless other charges have been added to the bill. Except for long distance charges and the basic local rate, virtually everything else has increased in price, often more than double. The result to the overall bill has been a definite rate increase, particularly when comparing the same basket of services, including such items as inside-wire maintenance, provision of a phone, and directory assistance. All of these factors are a part of the affordability picture for Floridians.

Additionally, there are many customers in Florida who live on fixed incomes, to a greater extent than in many other states for which rates may appear comparable. As the customers frequently pointed out, they no longer have earning power, and often must choose between food, medication, or the services they purchase. For someone whose total income is \$500-\$600 per month, the question is not whether to eliminate an extra service, but whether they can afford to continue phone service at all. Not only are many elderly fixed-income individuals at risk of being dropped off the system, but modest wage earners have concerns as well.

Nevertheless, some participants believe that local residential basic rates should not be set so low that every subscriber could afford service. Rather, the rate should be set so that the residential basic service rate is affordable to most households. For the low-income customers for whom the rate is unaffordable, subsidies should be targeted, as is the case with Lifeline. Further discussion is included under Lifeline and the No-frills rate sections below.

VALUE OF SERVICE

As shown in the definition at the beginning of the affordability section, affordability and value of service are linked. An affordable rate is one that is representative of the value of service.

What value do Floridians receive for their local service dollar? The local telephone network provides access to a growing number of services, including:

- the Internet;
- FAX and data transmission;
- toll-free numbers, e.g., 800, 888;
- larger local calling area in terms of additional extended area service routes and growth in access lines within exchanges;
- complementary non-basic services, e.g. Caller ID; and
- landline connection to wireless communications (cellular, PCS, paging).

Value of service is greater than it ever has been in the past. In addition to the services customers can avail themselves of, the telephone provides

an indispensable link to the world for millions of subscribers, particularly for those who are elderly, disabled, or on limited incomes. The increase in mobility of American society over the past several decades, that has contributed dramatically to our current prosperity, has been integrally facilitated by the capacity of telephone service to continue relationships with geographically separated family members and friends. (FLS, p. 12)

What value do the customers themselves believe they receive? Based on the results of the survey, the typical Florida household has an average of 1.3 telephone lines. Households reported that they use the telephone for a number of purposes, such as social calling (97.0% of households), business calling (57.2% of households), and to a lesser extent for Internet access (31.0% of households), shopping (29.8% of households), or faxing (19.7% of households). Few households have to pay an extra charge to reach essential services, such as local schools (3.2% households) or the

family physician (8.7% of households). Florida households use their telephone frequently, about 13.5 times a day, on average. Nearly 90% of the homes in this profile can call anyone they like, because everyone they want to call has local telephone service.

When asked to rate the importance of telephone service compared to other household services, they said that telephone service was more important to them than any other. In fact, the average rating was 4.6 on a scale of 1 to 5, with 5 being the most important. They believe local telephone service is a good deal, considering the value they get for what they pay for the service, especially compared to some other household services, such as cellular telephone or cable TV service; other services, though, such as pager/beeper service and alarm service, may have an economic value to them as high as that of telephone service.

It is clear that customers receive tremendous value for their telephone dollars. That is not to say that telephone service is not without its problems. Customers had many complaints about the service they receive, from difficulty in reaching a live person at the phone company, to slamming and cramming. While the *services* a company provides are an important part of value of service to the customer, the company that provides *service* will no doubt have a valuable edge over its competitors. In determining what is fair and reasonable for Floridians, it is important to ensure that customers continue to receive a high quality of service.

COMPARABLE RATES

In drawing its conclusions on the fair and reasonable Florida residential basic local service rate, the Commission considered comparable rates in other states, including both current rates and recent rate actions. For purposes of the study, a comparable rate was defined as including flat rate service and dual tone multifrequency dialing (DTMF), or TouchTone, per Section 364.02(2), Florida Statutes. In addition, the federal Subscriber Line Charge (SLC) was included, since customers often perceive it to be a local charge.

Florida rates were compared to rates in other states after controlling for differences in local calling scope and average per capita income. From a customer's standpoint, for a flat rate offering in another state to be comparable, one criterion should be that the local calling scope is similar in size. Another criterion for defining "comparable" should be that the economic circumstances of customers in another state should be similar to those of Florida customers.

Florida's rates are consistently at the low end compared to rates in other parts of the country. The average disparity calculated using standard linear regression techniques is \$3.64 for the 1st (highest) income quartile, \$7.34 for the 2nd quartile, \$8.36 for the 3rd quartile, and \$4.48 for the 4th quartile.

In addition to looking at comparability from the customer's standpoint (value and affordability), we also tried to assess comparability from the standpoint of the provider. A local telephone company would be concerned about the cost of providing basic service in one location

versus another. Florida rates were compared to rates in other states after controlling for differences in population density (a key determinant in the cost of providing service). The results are similar to the first analysis in that Florida's rates are consistently at the low end compared to rates in other parts of the country. The average disparity calculated using standard linear regression techniques is \$4.15.

Based on these two analyses, Florida's rates tend to be significantly lower than the rest of the country even after controlling for (1) differences in calling scopes and incomes and (2) differences in population density (presumably a key determinant of the cost of providing service). Taking the two analyses together, Florida's rates are typically lower than those in the rest of the country by four to five dollars per month.

Some of the disparity arises from recent rate actions in other states. A number of states have conducted rate rebalancing and have held other proceedings which have impacted local rates during the last few years.

Twenty-six states are either considering, or have recently concluded, universal service fund proceedings. Of those, eleven states have approved increases to basic local rates for one or more providers in the last several years. In many instances those increases have been tied to access charge reductions. Access charge reductions have totaled as much as 50 percent of the prior access charge level. Where local rate increases have occurred, they have generally ranged from \$1.00 to \$3.50 per month for residential rates. Provision of targeted subsidies for low-income subscribers is in the form of Lifeline service, which is funded in part through the FCC, as is Florida's program. The Lifeline rate is often set at one-half the standard rate for residential service.

Of those states choosing to rebalance rates, few purposefully adjusted the relationship between business and residential local service rates. Some of the reasons cited for maintaining a higher business rate include: 1) the provision of a yellow page listing for business, 2) evidence that businesses make more toll calls than residential customers and will therefore benefit more from toll reductions, and 3) the fact that businesses can pass their telephone charges through to customers in the form of prices for the goods or services they provide. These and other reasons were echoed in comments of participants in Florida's study.

Increases to local rates have not been an across-the-board occurrence. At least five states have rejected increases sought by local telephone companies. Cases are pending in five other states. Twenty-eight states have not undertaken any recent local rate initiatives.

COST OF PROVIDING SERVICE

One of the most contentious issues debated by the participants was how and whether to allocate the cost of the local loop. It is the Commission's position that the cost of local loop facilities is properly attributable to the provision of basic local telecommunications service by definition. Section 364.02(2), Florida Statutes, defines "basic local telecommunications service" as

voice-grade, flat-rate residential and flat-rate single-line business local exchange services which provide dial tone, local usage necessary to place unlimited calls within a local exchange area, dual tone multi-frequency dialing, and access to the following: emergency services such as "911," all locally available interexchange companies, directory assistance, operator services, relay services, and an alphabetical directory listing.

Given such an identification of the cost object to be studied, the principle of cost causation leads one to the unavoidable conclusion that the decision to have local service leads to the incurrence of loop costs.

However, it may be appropriate to analyze a different cost object, especially if the goal is to ensure that all rates equal or exceed their costs. Instead of comparing the rate and TSLRIC of just basic local service, one could also factor into the analysis the associated rates and costs of those adjunct-to-basic services whose revenue streams are virtually guaranteed. For example, whichever local exchange provider provides local service to an end user, is essentially guaranteed to receive the switched access revenues associated with the toll calls that customer either makes or receives. In addition to including subscriber line charges in the rate/cost comparison, it may be warranted also to add in the presubscribed interexchange carrier charges (PICCs) which the LECs receive from IXC's and those end users who elect not to presubscribe. Further, it may be appropriate to count revenues for those vertical services that have achieved extremely high subscription levels.

It must not be forgotten that cost is only one variable in the equation that ultimately leads to the prices established for services. Although all firms must recover all of their costs, this does not necessarily require that the price of each and every rate element must be set to track an associated unit cost. Moreover, the most economically efficient pricing structure is worthless if customer dissatisfaction is high.

Keeping these things in mind, an examination of the contribution analyses submitted by the companies shows a shortfall when revenues for local service are compared to the costs. To generate comparable results for all three companies, the rate being analyzed includes the tariffed rate, the subscriber line charge, and the charge for TouchTone (for Sprint). (BellSouth and GTEFL do not charge separately for TouchTone.) The results for BellSouth indicate that the costs exceed the revenues generated, with the shortfall ranging from \$7.25 to \$47.27, depending upon the rate group. The results for Sprint and GTEFL show a similar pattern, with Sprint's shortfall ranging from \$3.12 to \$45.49, while GTEFL's is \$12.42 to \$51.94. This is based on the inclusion of all local loop costs in the associated cost study.

For BellSouth the aggregate contribution from voice-grade flat-rate residential service, measured as the difference between total revenues and total costs, shows that revenues are below costs by \$581,706,890 or (60)%. Sprint's study reflects that revenues are below costs by \$13,791,153, or (43)%. This data is not shown for GTEFL due to its claim of confidentiality.

A similar comparison for business service yields results for BellSouth that indicate that the costs exceed the revenues generated in the lower rate groups, with the shortfall as much as \$22.03 in rate group 2, but rates exceed costs in the higher rate groups. The results for Sprint and GTEFL show a similar pattern. Sprint's contribution ranges from \$(10.28) in rate group 2 to \$13.75 in rate group 6, while GTEFL's contribution ranges from \$(23.50) in rate group 1 to \$6.56 in rate group 5.

For BellSouth, the aggregate contribution from voice-grade flat-rate single-line business service, measured as the difference between total revenues and total costs, indicates that revenues exceed costs by \$5,305,369 or 18%. Sprint's study reflects that in the aggregate revenues exceed costs by \$3,304,577 or 72%. This data is not shown for GTEFL due to its claim of confidentiality.

Analyses were also provided for a number of other services, including ESSX/Centrex; PBX trunks; other multi-line circuit-switched services; intrastate switched access charges; intraLATA toll; and 10 features that can be purchased as adjuncts to local service (e.g., Call Waiting, Caller ID, etc.). With rare exception, services' revenues exceeded costs. Contribution levels for residential features were as high as 48680% for BellSouth's Call Waiting service; the highest level for business service was 154662% for BellSouth's Call Forwarding Busy Line service. Corresponding dollar amounts for these services were modest, \$3.99 and \$3.25, respectively. Sprint and GTEFL reported similarly high levels of contribution.

WHAT ARE THE IMPLICATIONS FOR FLORIDA?

While studies in the past showed that the demand for local service varies little at different price levels, this price/demand relationship can change over time as substitutes become more or less viable in terms of price, quality, and functionality. In fact, the results of the Commission's survey suggest that the situation may be changing. Although one would expect customers to be more tolerant of price increases than their survey responses suggest, the survey results are nonetheless instructive in that they signal a possible change for the future. The percentage of respondents who said they would discontinue local telephone service at various price increases is significant. Given that 36.7% of the surveyed households already subscribe to cellular service, the idea of using cellular service as a substitute for wireline service is plausible. Some 52.4% of respondents indicated that if the price of local telephone service rose to a level they found unacceptable, they would switch to cellular service.

Although the minimum monthly charge for wireless service has traditionally been significantly higher than the price of basic service, wireless service provides a much wider calling scope before any roaming charges apply. In addition, many of the same optional features available through the LEC are included with wireless service. Wireless providers also offer incentives such as a free phone and free weekends. One drawback with wireless is that all or a portion of the incoming and outgoing usage is chargeable. Wireless providers are attempting to address this drawback by offering plans which include a usage allowance in the fixed monthly rate. As the rates for cellular and wireline service come closer together, more customers may view cellular and other wireless services as a reasonable substitute for traditional telephone service.

There was general consensus that there is no significant landline competition in any residential telecommunications market in this country, in spite of the fact that other states have higher rates. Participants in the study raised doubts as to whether there would ever be meaningful landline competition for most residential customers in Florida, due to barriers to entry and other factors. Additionally, supply conditions may dictate the industry structure. Instead of facilities-based services, landline competition may be in services provided over facilities of a few providers. Thus, competition may come, not from facilities-based landline providers, but from wireless providers.

If one of the goals in setting a fair and reasonable rate is to encourage competition in whatever form it may take, a modest increase in local rates might have that effect. The task then could be to determine what would be an affordable rate. While the current rates for local service appear to be affordable, a modest increase could also be considered affordable when all factors are taken into consideration. For example, the survey of rates in other states showed that Florida's rates are lower than many other states by about \$4 to \$5 per month. Combined with Florida's statewide average rate of \$10.16, excluding the SLC, such an increase would bring the rate to about \$15, or a total including the SLC of \$18.50. However, one must keep in mind that there are numerous other charges added to the customer's bill, including federal universal service assessments, PICC charges, 911 fees, and a number of other fees and taxes. Thus, a \$5 rate increase could effectively bring the bill for local service to more than \$23.00. Given that many customers have low toll usage, any reductions in toll charges stemming from lower switched access charge rates would not be sufficient to offset a basic local rate increase. These customers would bear the brunt of any rate rebalancing, while high toll users would benefit, at the expense of low toll users.

Should rebalancing be considered as a boost to competition, there is no evidence that an increase in rates greater than \$5 would have much additional effect. As noted by study participants, rate increases may simply not be sufficient to lure landline competitors, due to other barriers to entry, including the high cost of providing facilities. Additionally, the downside of reducing access charges is that such reductions also reduce revenues available to competitors. Thus the market may be less attractive for landline providers. However, as previously discussed, as rates grow closer to those of wireless service, customers may find that to be a reasonable substitute. Moreover, given the significant percentage of customers who already subscribe to wireless service, this substitution effect could become pronounced even in the near future.

The consumer advocates believe that rate rebalancing for the large LECs can be accomplished through rate reductions without imposing significant harm on the telephone industry. The embedded cost analysis discussed in Chapter II shows that the three large LECs all earned above a 12.5% return on equity in 1997. BellSouth earned 20.3%, GTEFL earned 18.8% and Sprint earned 13.4%. These levels were achieved even while substantial cuts in switched access charges were implemented. The figures were adjusted to include the effects of the 1998 access charge reductions. The actual earnings for 1997 for the GTEFL and Sprint were higher than shown.

However, impacts on the smaller LECs of rebalancing without funding could be more deleterious. The same analysis shows the small LECs earned from 8.6% (Quincy) to 22.8% (Vista-United) in 1997. According to the small LECs, the impact of competition on them is different from

that of the large LECs. They pointed out that rural networks are typically high cost, whereas the service areas of the larger LECs may be high cost only in certain areas.

Is it necessary for basic local rates to be set above cost? Not necessarily. When compared to the cost of providing service, the rates for nearly all rate groups for residential local service would fall short of the cost, even with a modest increase. The LECs contend that a large portion of their residential customers are unprofitable to serve, even when factoring in revenues from vertical services and toll. Even a \$10 increase in the local rate would not fully mitigate the lack of sufficient contribution. But greater increases could remove local rates from the realm of affordability, making telephone service less of a value for the dollar.

Several factors are important to consider from the customer's point of view. For one thing, customers expressed considerable confusion about the services available and about their bills. They need help in dealing with the competitive arena, which many seem to think brought them more headaches than benefits. Consumer education is an important part of any rate rebalancing package.

One must also remember that rebalancing local rates could have a substantial negative impact on consumers, particularly low-income customers, the elderly who live on fixed incomes, and certain ethnic groups who currently have lower telephone penetration rates than other groups of citizens. The FCC's *Telephone Subscribership Report* indicates the penetration level in Florida was 92.2% as of July 1998. Although Florida-specific information was not included on penetration levels by income or by ethnic group, the statistics for the nation show that these are significant factors. At income levels of \$35,000 and above, subscription rates were high with only slight differences between racial groups. However, at lower income levels, blacks had subscription levels considerably below that of whites, and levels among Hispanics were lower still. These at-risk groups run the greatest risk of being dropped off the system as a result of any rate increase. Thus, upward pressure on rates may have a more significant impact on them than on the general population.

If one is targeting the average consumer in setting an affordable rate, certainly there are those who would be lost if such an increase were implemented. The at-risk citizens of the state must be assured the same access to telephone service as all others. The Lifeline Assistance Plan and a no-frills rate could help to mitigate the negative impact of a rate increase.

LIFELINE

The current Lifeline Assistance Plan provides a \$10.50 credit towards the customer's local service bill, including the SLC. Of that amount, \$7.00 is reimbursed to the LEC through the federal universal service fund. The remaining \$3.50 is provided by the LEC, without reimbursement.

Although Lifeline could help soften the effects of a rate increase on certain at-risk groups, the current take rate is very low. As of July 31, 1998, fewer than 130,000 customers subscribed to Lifeline out of over 7 million residential access lines in Florida. For these customers, a \$5 rate increase will be just that. Lifeline will provide no added relief. If basic local rates are increased,

the \$3.50 in-state level of support should be reviewed for adequacy. Many other customers are currently eligible, but for whatever reason, do not subscribe.

Automatic enrollment may be an option to help boost enrollment in Lifeline. A program could be developed whereby any customer receiving qualifying benefits would be automatically enrolled. A positive aspect is that customers do not have to actively seek out the benefit; thus, they will not be left out simply because they were unaware of the program. However, it is not a perfect solution. To begin with, it would take time to implement. Coordination between the carriers and the agencies involved would be necessary, and would likely require a statutory mandate to accomplish. Further, the Florida Legislature has no authority over the federal agencies involved. Another shortcoming is that customers who do not have telephone service, or for whom the name on the service is not an exact match with the name of the person receiving qualifying benefits, may be missed by the process. These problems could be addressed by other means, such as an application form that would be available to all.

Additionally, it could be argued that the Florida program is not equitable and non-discriminatory. In Florida, Lifeline has been implemented under Section 364.10(2), Florida Statutes. The statute states that ". . . a telecommunications company serving as carrier of last resort shall provide a Lifeline Assistance Plan to qualified residential subscribers, as defined in a commission-approved tariff. . . ." However, there is no state funding for the program. Instead, the LECs provide a rate reduction of \$3.50 per month to Lifeline consumers. ALECs are not required to provide a Lifeline program, nor do other carriers contribute to the funding of the intrastate portion.

The Commission previously addressed the Lifeline issue in its report on "Universal Service in Florida" which was provided to the Governor and the Legislature in December 1996. In it, the Commission stated:

At present, no universal service funding at the state level is provided for Lifeline... assistance. While this lack of funding may have been appropriate under rate of return regulation, under which a LEC could apply for rate increases if needed, we believe it is less appropriate in a competitive climate. Those companies with qualifying customers could provide a disproportionate share of the funding for those customers, while companies with no customers would not contribute anything. This would be a disadvantage to the company serving the most low-income customers. Therefore, we believe provisions should be made to allow future funding of these programs through the state universal service fund, to the extent not funded through federal programs. (Universal Service Report, p. 47)

Various mechanisms could be used to fund the Lifeline program. For example, a Lifeline fund could be established as part of a permanent state Universal Service mechanism. Another approach would be to use a surcharge on customers bills, such as those used to fund 911 and the Telecommunications Relay System. While simple to assess, such a charge would be yet another add-on to the bill. If a fund is established, all carriers, as well as wireless providers, should contribute to the fund. A de minimis rule would be appropriate to avoid imposing an administrative burden

on carriers with low levels of revenues.

It is important to recognize that the fund has the potential to become quite large, as discussed in a companion report to this study, the Report on Universal Service and Lifeline Funding. This would particularly be the case if any type of self-certification or automatic enrollment plan were to be adopted.

If no other universal service fund is established, the issue of an administrator would need to be addressed. Potential administrators could include NECA or the Commission. A further possibility would be to simply maintain the status quo until a high cost fund is established. Unless such a fund is to be established in the near future, this would be a less than ideal alternative, for reasons discussed above.

NO-FRILLS RATE

While Lifeline may provide assistance to qualified low-income subscribers, some means may also be appropriate to target the elderly, the disabled, and those living on limited or fixed incomes. This could be accomplished through the establishment by the Legislature of a no-frills rate. Two possible options for a no-frills rate are presented below, including a measured-rate service and a flat-rate service. Alternatively, the Legislature could direct the Commission to conduct an evidentiary proceeding to evaluate possible approaches and determine if and when a no-frills rate should be established.

One option is that, for customers who do not subscribe to ancillary services, a low monthly service rate would be offered. This would provide an affordable alternative for those customers who want only plain old telephone service. A limited use service could be provided that includes 60 free calls per month. Calls beyond 60 would incur a charge of \$.10 per call. However, at no time would the monthly charge exceed the prevailing charge for flat-rate residential service. This would ensure that those customers who cannot afford high rates retain affordable phone service.

However, some customers might consider any type of measured service to be an inferior service. Although measured service is common in other states, it has never been popular in Florida. It may be viewed as a subpar service. To the extent that customers view a measured no-frills service in such a way, it may not serve their best interests. It may send the signal that if customers cannot afford a rate increase, they will be placed in a lower class of customers.

A second option to consider, that may avoid the effect of being viewed as a lesser class of service, would be to establish a flat-rate no-frills service. This no-frills service would be differentiated from the current statutorily defined basic local telecommunications service in that it would be limited to customers who do not subscribe to any ancillary services. Except for the prohibition against ancillary services, this service could be the same as the basic local telecommunications service customers subscribe to today.

With either option, to prevent the line from being used simply as an Internet connection, or for some other second-line purpose, it would necessarily be restricted to being the only telephone line at the residence. If a second line is added at the residence, then the existing no-frills service rate would automatically revert to the standard rate. Other provisions for consideration would include setting the rate for no-frills service at the rate for basic local telecommunications service currently in existence or at some lower rate. Additionally, restrictions on resale may be appropriate. For example, the no-frills service could be resold only under the following conditions: (1) it must be provided as no-frills service with the same restrictions described above, and (2) it must be the only telecommunications land-line service at the residence. The no-frills rate should be available to all who want it, subject to the aforementioned restrictions. No proof of income should be required.

There may be several negative aspects to any type of no-frills service. First, to the extent that the no-frills rate is lower than the standard rate, less funds may be available for potential rebalancing. Second, if the service is funded as part of an explicit universal service fund, the fund could become so large that it could die under its own weight. However, if this is viewed as just another rate, rather than as part of universal service, funding would not be needed. Third, if the rate for a service that allowed subscription to ancillary services was higher than the rate for a service that precluded subscription to these extras, it serves as a buy-in. In other words, if a no-frills customer decided to take Caller ID at a price of \$8 per month, the effective price could actually be as high as \$13 per month--\$8 plus a \$5 rate increase, if one is implemented. This may give the wrong price signal to customers.

The Legislature may wish to evaluate any potential untoward effects before a no-frills rate is established. In that case, the Legislature could direct the Commission to further investigate the concept to determine if and when such a rate should be established and the appropriate level for and restrictions on the rate. A proceeding involving interested parties would allow the Commission to develop a full record to weigh the pros and cons of any type of no-frills service. The effects discussed above, and others, could be more fully addressed.

CONCLUSIONS

The analysis supports two views regarding the fair and reasonable rate for residential basic local telecommunications service in Florida. The two views are seemingly contradictory in many respects, but in reality, the differences are more a function of timing. The key timing issue is how soon local competition, whether it be wireline or wireless, will be sufficiently established to constrain prices.

If adequate competition is in fact more imminent (most likely from wireless), more reliance can be placed on allowing market forces to control pricing. Under this scenario, only the more vulnerable types of customers, low income customers and minimalist users who would not likely benefit from competition, need to be protected. Lifeline and a no-frills rate could fulfill this need. The rates for other forms of basic service could float with the market. While portions of the analysis support this view, we believe further study would be needed to evaluate how likely and how soon wireless could be considered a viable substitute for wireline service.

Alternatively, if adequate competition is not imminent, regulatory controls are needed since wireline competition is developing very slowly in residential markets. While it is difficult to say whether price increases for residential basic local service would stimulate wireline competition, modest price increases would make wireless service a more viable option for a greater number of people. In addition, we do not believe this action would compromise the affordability of residential basic local service for the vast majority of customers.

Where competition is not adequate, more controls may be needed to protect the consumer. In addition to Lifeline and the no-frills rate, the Legislature may wish to revisit the rate caps on basic local telecommunications service which will expire soon. When the rate caps expire, an index will take effect which would allow for modest increases in local rates. An untoward effect of this is that, as the statute is currently written, companies could index rates on top of any rebalancing that might be contemplated. In addition, consideration should be given to a Commission-established index for non-basic services. Currently, companies may increase rates for non-basic services by up to 6 percent per year. It is important to note that the percentage applies to broad categories of services. So long as the increase for a category does not exceed 6 percent, there is virtually no limit on an individual service. With only the most limited competition to provide checks and balances, this system may need revisiting to ensure that the best interests of the customers are met.

Regardless of the view one takes, it is important to recognize that the conclusions regarding what would constitute a fair and reasonable rate in Florida, as contained in this report, are drawn solely from the four criteria set forth in the law: affordability, value of service, rates in other states, and cost of service. Based on the four criteria enumerated in the statute, we conclude that a rate increase falling in a range from \$0 to \$5 per month would yield a fair and reasonable rate for most citizens in Florida. However, one should recognize that the greater the rate increase, the greater the impact on affordability. Other policy considerations may also impact a determination as to where to set the rate along this continuum. If the Legislature determines that residential basic local rates should be increased, we believe that up to a \$5 increase in the rates in Florida may be construed as meeting the four elements we were charged with considering. However, we also believe that it is in the best interests of Florida's consumers to consider other actions in conjunction with any rate increase that is considered. If an increase in basic local telecommunications rates is implemented, we believe the following recommendations would yield the greatest overall benefit to consumers:

- Price regulated companies should be allowed to increase residential and single line business basic local rates by an amount not to exceed \$5 per month, as part of a Commission-verified revenue-neutral rate rebalancing plan. Any such monthly rate increase should be phased in over a three to five year period at not more than \$2 per year.
- As part of any rate rebalancing plan, TouchTone charges should be eliminated. Reductions in intrastate switched access charges to parity with interstate rates as of 1/1/99 (or to the extent rebalancing revenues are available) should be required to be implemented over a three to five year period. For purposes of this provision, interstate rates should include both the traffic sensitive and non-traffic sensitive portions. However, no flat rate element analogous to the federal presubscribed interexchange carrier charge (PICC) should be established. Any

remaining revenues generated by a rate increase should be offset by reductions in rates for other services, subject to a Commission-approved rate rebalancing plan.

- All carriers receiving the benefit of switched access charge reductions must pass through those benefits to consumers, subject to Commission verification.
- It should be noted that the rates for basic local telecommunications service are currently capped, as set forth in Section 364.051(2)(a), Florida Statutes. Those caps are scheduled to terminate by January 1, 2000, or January 1, 2001, depending upon the number of access lines served by a local exchange company, after which increases tied to inflation are permitted. Absent a change to the statute, the price-cap mechanism contained in that statute would thus become effective during the pendency of any rate rebalancing plan that may be contemplated, resulting in additional rate increases. It may, therefore, be advisable to revisit the price-cap mechanism set forth in Section 364.051(2), Florida Statutes, to determine if further policy considerations necessitate a change in those provisions. Further policy considerations should include the status of competition in the local telecommunications market.
- Rate increases for small business and residential non-basic services should be limited by a Commission-established index until meaningful competition is shown to exist. The index amount should be adjusted downward for any company that does not achieve a Commission-established service quality performance level.
- The Legislature should consider a "no-frills" rate. Several options for such a rate are discussed in the body of this report.