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
TALLAHASSEE, FLORIDA
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VOLUME II

UAF	Universal Access Fund
USF	Universal Service Fund
USWC	U.S. WEST Communications, Inc.
WPB	West Palm Beach
ZUM	Zone Usage Measurement

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.

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

- 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

- 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.

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).

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

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

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.

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%

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-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%

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.[illegible]	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-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-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 .4	$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%

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-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-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				

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 Inter-LATA	Total Intrastate
BellSouth						
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	198.4	(3.1)	(10.9)	(.9)	43.5	227.0
Return on Equity	20.4%	10.0%	-3.9%	6.5%	31.1%	20.3%
GTEFL						
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	14.9	7.0	(2.3)	(3.7)	66.7	82.6
Return on Equity	13.9%	35.3%	9.1%	-23.7%	88.3%	18.8%
Sprint						
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	(18.3)	(4.9)	(25.6)	(9.5)	68.6	10.3
Return on Equity	10.5%	-5.2%	-26.8%	-43.0%	64.3%	13.4%

TABLE II-31

1997 REVENUES AND COSTS
($ Thousands)

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

THE LOOP IS A DIREC', 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

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.

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)

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,

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.

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 Principals 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

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

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

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

[7]The 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

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

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

[9]Telephone 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.

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, 1,585[11] 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).

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[10]Source: 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.

[11]Staff 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.

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

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

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 haves 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).

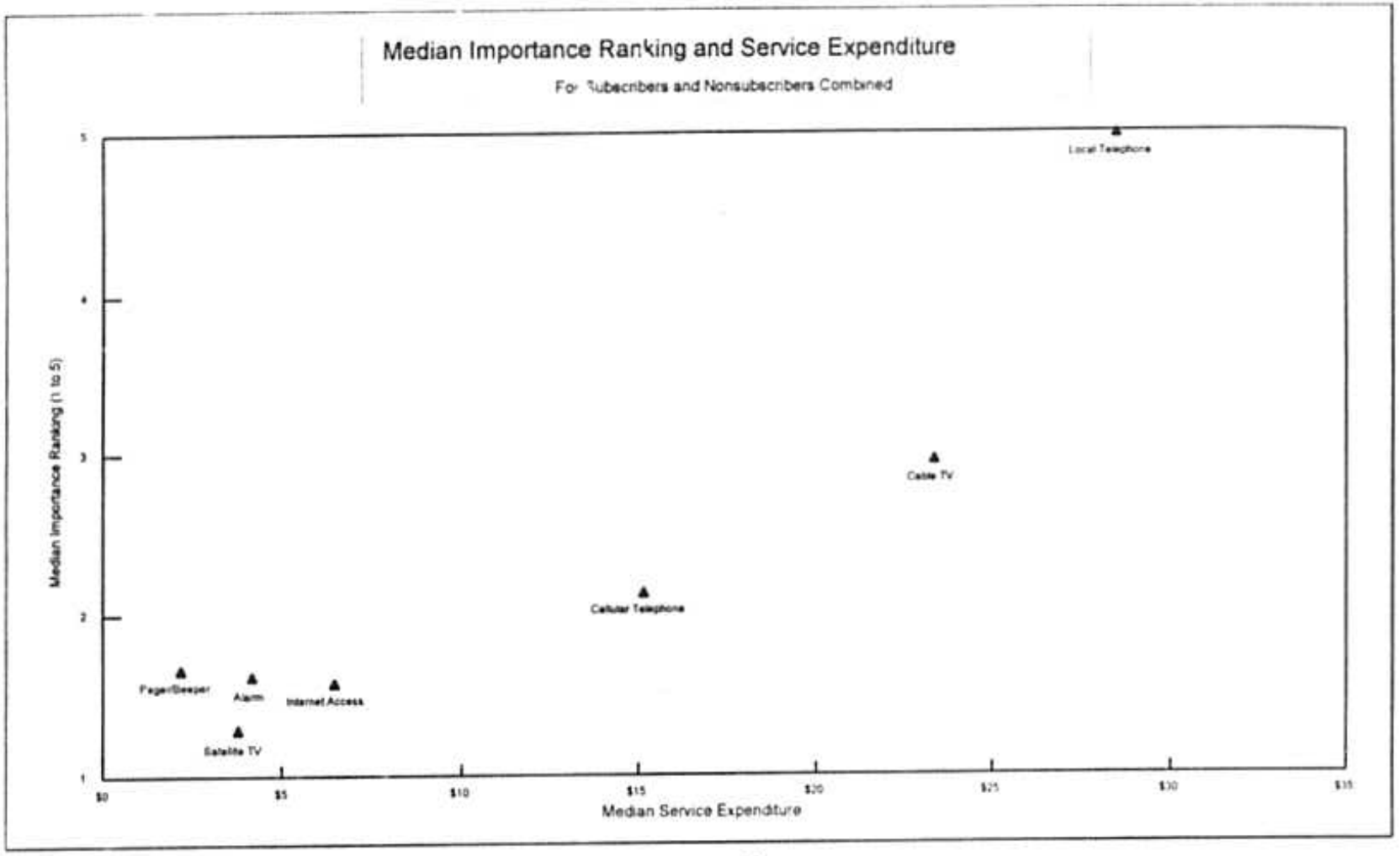
EXPENDITURES vs. IMPORTANCE

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.

FIGURE IV-1


Median Importance Ranking and Service Expenditure
For Subscribers and Nonsubscribers Combined
Median Importance Ranking (1 to 5)
5
4
3
2
1
Local Telephone
Cable TV
Cellular Telephone
Pager/Beeper
Alarm
Internet Access
Satellite TV
$0
$5
$10
$15
$20
$25
$30
$35
Median Service Expenditure

- 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

> 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

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 passthrough	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			

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)

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 sherifi 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

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

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)

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.

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.

---

[12]The 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.

FIGURE VI-2

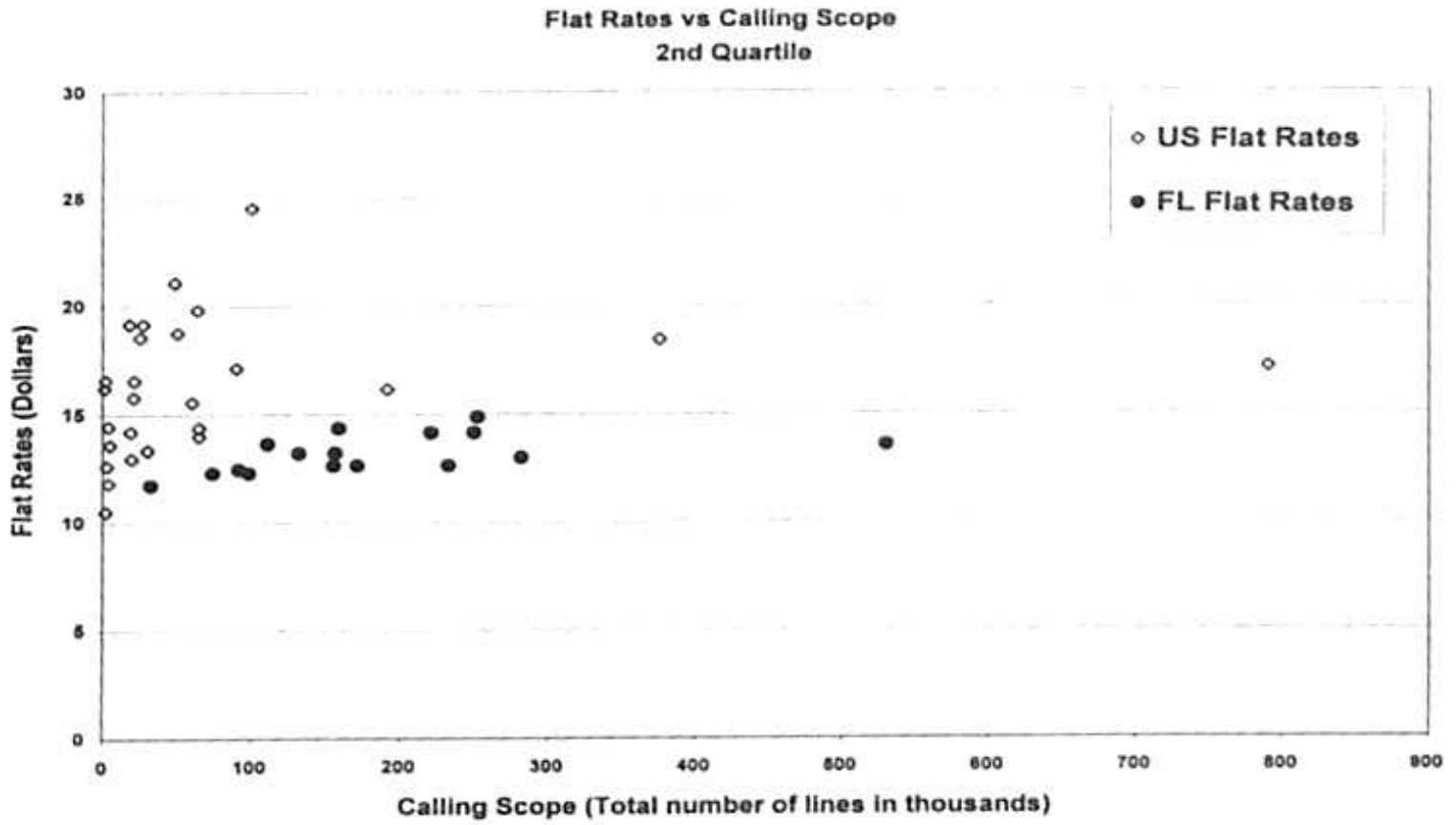
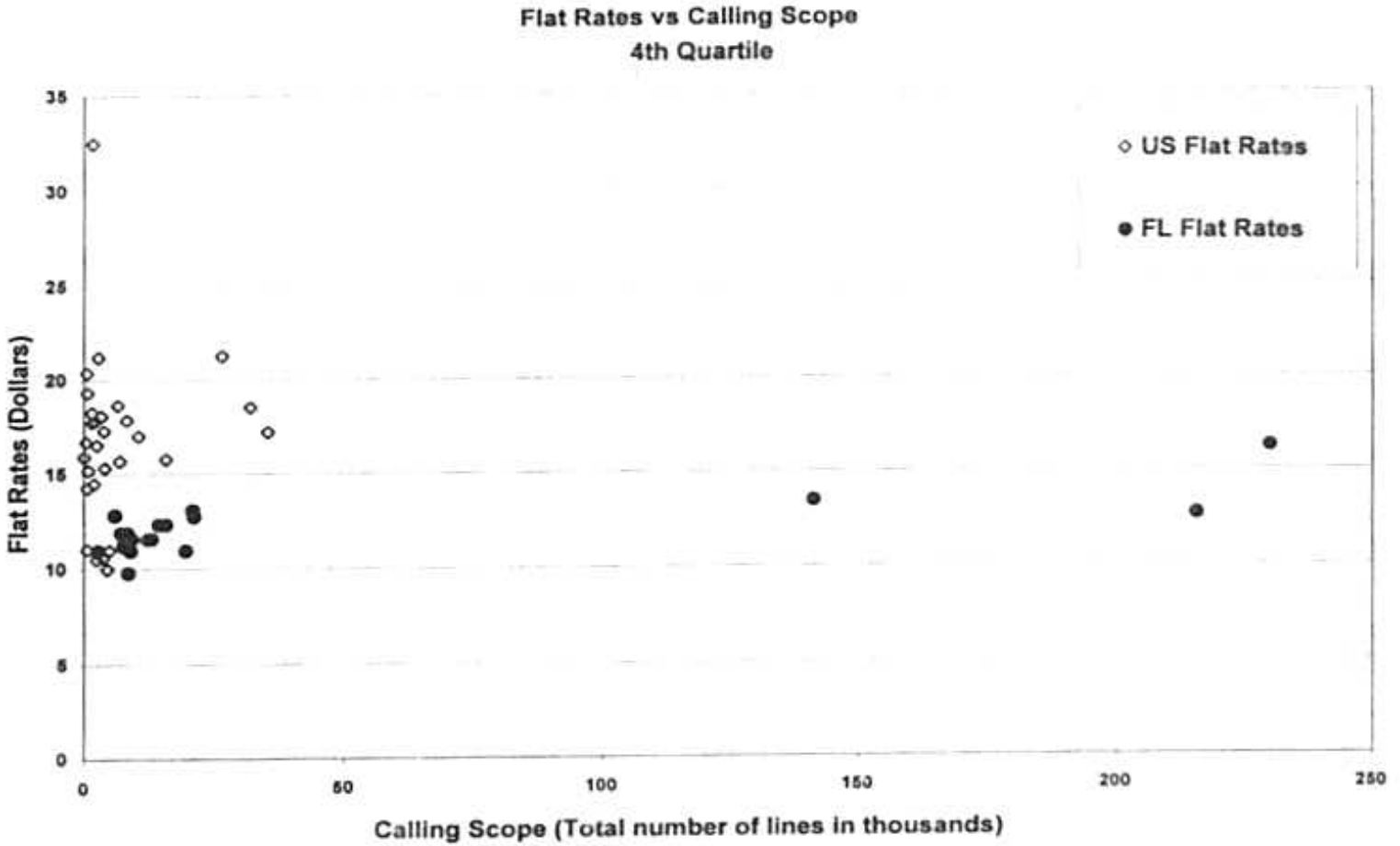

Flat Rates vs Calling Scope
2nd Quartile
US Flat Rates
FL Flat Rates
Flat Rates (Dollars)
0
5
10
15
20
25
30
0
100
200
300
400
500
600
700
800
900
Calling Scope (Total number of lines in thousands)

FIGURE VI-4


Flat Rates vs Calling Scope
4th Quartile
US Flat Rates
FL Flat Rates
Flat Rates (Dollars)
35
30
25
20
15
10
5
0
0
50
100
150
200
250
Calling Scope (Total number of lines in thousands)

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

plans and Lifeline Service for th 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

$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

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)

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

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 though 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

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)

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)

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)

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)

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.

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

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 tha 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, Flo.da'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

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.

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,

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.

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