The Florida Public Service Commission

COMPETITION IN TELECOMMUNICATIONS MARKETS

IN FLORIDA

DECEMBER 1996

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LIST OF EXHIBITS

LIST OF ACRONYMS

AAV . . . . . Alternative Access Vendor
ALEC . . . . . Alternative Local Exchange Company
AOS . . . . . Alternative Operator Services
AT&T . . . . . American Telephone & Telegraph Company
B1 . . . . . Business Access Line
BOC . . . . . Bell Operating Company
CATV . . . . . Cable Television Service
CO . . . . . Central Office
COLR . . . . . Carrier of Last Resort
CPE . . . . . Customer Premises Equipment
EAS . . . . . Extended Area Service
FCC . . . . . Federal Communications Commission
FCTA . . . . . Florida Cable Telecommunications Association
FPSC . . . . . Florida Public Service Commission
FTS . . . . . Florida Telecommunications Services, Inc.
GTEFL . . . . . GTE Florida, Inc.
ICC . . . . . Interstate Commerce Commission
ICI . . . . . Intermedia Communications of Florida, Inc.
IXC . . . . . Interexchange Carrier
LATA . . . . . Local Access And Transport Area
LEC . . . . . Incumbent Local Exchange Company
MFJ . . . . . Modification of Final Judgment
MFS . . . . . Metropolitan Fiber Systems of Florida, Inc.
MFS-FL . . . . . Metropolitan Fiber Systems - Florida
MTS . . . . . Message Toll Service
MTSO . . . . . Mobile Telephone Switching Office
NPAT . . . . . Non-LEC Pay Telephone Service Provider
NPRM . . . . . Notice of Proposed Rulemaking
NXX . . . . . End Office Code

OSP	Operator Service Provider
PATS	Pay Telephone Service Provider
PBX	Private Branch Exchange
PCI	Payphone Consultants, Inc.
PCS	Personal Communications Systems
PSC	Florida Public Service Commission
R1	Residential Access Line
RBOC	Regional Bell Operating Company
RCF	Remote Call Forwarding
ROR	Rate of Return
SMNI	Sprint Metropolitan Networks, Inc.
STS	Shared Tenant Services
TA 96	Telecommunications Act of 1996
TCCF	Telephone Company of Central Florida, Inc.
TCG	TCG South Florida
TW	Time Warner Communications and Digital Media Partners (Collectively known as Time Warner)
US	Universal Service

EXECUTIVE SUMMARY

- This report on the status of competition in Florida's telecommunications markets is being submitted in compliance with Section 364.386(1), Florida Statutes. In addition, on June 30, 1995, Governor Chiles wrote the Commission asking that it review the impact on competition and consumers of selected provisions in the law and submit a report to his office addressing his concerns by December 1, 1996. Responses to Governor Chiles' requests are incorporated into this report.
- Two events have occurred which significantly impact the role of the Florida Public Service Commission in overseeing the telecommunications industry: 1) the passage of the 1995 amendments to Chapter 364, Florida Statutes, and 2) the federal Telecommunications Act of 1996 (TA 96).
- Immediately following passage of the amendments to Chapter 364, Florida Statutes, in 1995, the Commission began proceedings to enact the changes. TA 96 was signed into law February 8, 1996, and contained many of the same provisions as the amendments to Chapter 364. Consequently, through its efforts to meet the requirements of Chapter 364, the Florida Commission has been proactive in meeting the goals of TA 96.
- Alternative local exchange companies (ALECs) are now allowed to compete with the incumbent local exchange company (LEC) to provide basic local telephone service within a territory. The LEC may remain under traditional rate-of-return regulation or elect to be price-regulated. ALECs are allowed to compete only in the territory of LECs which have elected price regulation.
- In order for local competition to occur, certain prerequisites must be in place. They are 1) number portability, 2) interconnection, and 3) resale and unbundling. Both Chapter 364 and TA 96, although somewhat differently, include provisions for negotiating various aspects of each prerequisite and, if the negotiations fail, a provision for the state commission to resolve the conflict.
- There are numerous Federal Communications Commission (FCC) rulemakings ongoing to implement TA 96. Of particular importance, the FCC released its First Report and Order (Interconnection Order) in CC Docket 96-98 dealing with interconnection, resale, and unbundling.

- After the FCC issued its Interconnection Order, numerous parties, including the FPSC, filed appeals and requested that the provisions of the order be stayed pending judicial review. On October 15, 1996 the Eighth Circuit Court of Appeals released an order which stayed certain provisions of the Interconnection Order until a final decision on the merits of the various appeals. Most significantly, the Court stayed the pricing provisions in the order, including the FCC's proxy rates and costing methodologies. Contrary to the public statements made by the FCC's Chairman that Florida's appeal was based on the FPSC's desire to limit competition and to adopt a pro-monopoly, anticompetitive, pro-regulatory regime, our appeal was based on our belief that the FCC has encroached on states' rights by essentially prescribing how rates are to be set for intrastate services.
- As of October 9, 1996, the Commission has approved 20 agreements negotiated by parties under either Chapter 364 or Section 252 of TA 96 involving interconnection, unbundling and resale. The Commission has established rates, terms, and conditions under Chapter 364 for four ALECs (with various LECs) when negotiations were not successful. In addition, the Commission has been involved in several arbitration proceedings initiated by ALECs under Section 252 of TA 96 to obtain reasonable rates, terms, and conditions.
- Both the state and federal laws have provisions in place for small local exchange companies and universal service. Each of the laws includes provisions to protect the small or rural LEC from possible adverse impacts brought about by competition. The federal universal service provisions are more extensive than those in the Florida statute; however, both are designed to assure the availability of a specific set of services to consumers at affordable rates.
- Although there are thirteen LECs, four dominate Florida's local exchange market. Since 1992, revenues, total access lines, and minutes of use have increased for all thirteen providers. There are also dominant providers in Florida's interexchange, alternative access vendor, and pay telephone markets.
- As of October 1, 1996, there were 39 ALECs certificated in Florida. Currently, only 6 ALECs are providing local service, to approximately 600 business and residential customers. While 8 companies stated that they intend to provide service either by year-end 1996 or the first quarter of 1997, the remaining companies have not indicated firm dates for initiating service.

- It is not known with certainty who the future providers of local exchange services will be or how services will be provided. However, judging by the current companies certificated, it will be a diverse group. Competitors will likely bundle telecommunications services with other services such as cable. In addition, companies will take advantage of the experience gained while competing in other markets, as well as taking advantage of their name recognition. What role cellular providers and personal communications service (PCS) providers will play is also unclear.
- There is no indication that service reliability for telecommunication service provided by price-regulated LECs has deteriorated, or that local exchange competition has had any adverse effects on universal service. In addition, there is no evidence that capped access rates have had any impact on wireline competition, nor is there any expected impact on wireless technologies such as PCS.
- The passage of state and federal legislation allows essentially unfettered entry; however, due to internal and external problems experienced by the entrants, there have been some delays in providing local service. The Commission and the parties are working to create an environment where competition can readily take place.

CHAPTER I: OVERVIEW

The most significant events of the 1990's to affect the Florida Public Service Commission's regulation of the telecommunications industry were passage of the 1995 amendments to Chapter 364, Florida Statutes, and the federal Telecommunications Act of 1996 (TA 96) signed into law on February 8, 1996. For the most part, both the Florida Statute and TA 96 contain very similar provisions. These amendments are designed to encourage competitors to enter the telecommunications markets and, in particular, the local services market. Prior to passage of these laws, the Commission's efforts were directed at ensuring the LECs were able to provide quality services, and that end users were able to obtain these services at just and reasonable rates. In this way, the Commission acted as a surrogate for competition. Following passage of the laws, the Commission's role changed. The Commission now focuses on ensuring that regulation encourages the growth of competition, particularly in the local services markets.

Prior to the revisions to Chapter 364, Florida Statutes, becoming effective, the incumbent local exchange company (LEC) was the single entity allowed to provide basic local telephone service within a territory. Under a regime where service is available from only a single provider, the potential exists for overpricing of services or service quality deteriorating. To address this concern, the Commission took preventive action wherever possible and identified and corrected any abuses which occurred. Chapter 364, Florida Statutes, directed the Commission perform this function.

The law traditionally enabled the Commission to control the prices charged by providers as a way of ensuring just and reasonable rates. The regulatory scheme for governing the activities of the monopolists (such as existed in the local service market prior to passage of the 1995 amendments) was rate base/rate-of-return regulation (ROR). Under ROR, rates were set by determining the revenue requirements of a company and subsequently pricing its services, based on the cost of service, value of service, and other considerations, to meet the revenue requirements. The provider did not simply charge any rate; he charged only the Commission-approved rate.

Under the previous Chapter 364, Florida Statutes, the Commission also had greater control over what services were offered. Tariffs for services were subject to stringent review. If a service was determined to be detrimental, the Commission could prevent it from being offered. The Commission could and did take a proactive approach to regulation. The Commission could, on its

own motion, open a docket to review any currently offered service, or potential service, prior to any party asking for review of the service. The "old" Chapter 364, Florida Statutes, provided that the Commission could encourage competition if doing so was "in the public interest."

The 1995 revisions to Chapter 364, Florida Statutes, reflect the legislative view that the competitive provision of all telecommunications services is in the public interest and that the industry should be subject to less stringent regulation. These revisions significantly affect the way the Commission will regulate the industry, and in particular, the future regulation of the local services markets. The Commission's role is to facilitate the competitive transition via such means as establishing wholesale arrangements where negotiations fail, reviewing LEC tariff filings for statutory compliance, establishing and eliminating rules as market conditions change, and generally ensuring that anti-competitive behavior is not tolerated. The Commission is also to continue its role as a surrogate for competition where the LEC provides monopoly services, especially those bottleneck services and functions required by the LEC's competitors. In playing this dual role, the Commission's regulatory tasks are especially complex. The Commission must ensure that providers are in compliance with the law and Commission rules, while at the same time recognizing that the providers are allowed substantial latitude in competing. Disputes over factors for competitive entry into the local market are commonplace, with the Commission often being called upon to arbitrate the differences.

There are 3 remaining chapters. Chapter II provides a review of the key provisions of amended Chapter 364, Florida Statutes, and TA 96. Chapter III reviews the current status of competition in both the local market and the non-local markets, and discusses where and how we believe competition will tend to evolve. It concludes with a section analyzing the impact of price cap regulation on rates and the availability of services. The final chapter, Chapter IV, provides some overall observations on the evolution of local market competition in light of current circumstances.

CHAPTER II: LEGISLATIVE PROVISIONS

II.A. The State and Federal Laws

The telecommunications industry is in the midst of a transformation. Recent revisions to Chapter 364, Florida Statutes, and the signing of the Telecommunications Act of 1996 signal a major shift in direction for regulation of the local market, a shift from a model which required that regulation act as a surrogate for competition to a model that promotes competition. In making this conversion, both items of legislation have opened up to competition the previously monopolized local telecommunications markets. While the laws differ as to specifics, each explicitly encourages local exchange competition and provides guidelines for its implementation, while removing regulatory obstacles. These provisions are in place to allow the market to dictate what services are offered at what prices.

A.1. 1995 Revisions to Chapter 364, Florida Statutes

The passage of Senate Bill 1554 during the 1995 legislative session resulted in substantial revisions to Chapter 364, Florida Statutes. The most significant changes relate to the Legislative finding that "...the competitive provision of telecommunications services, including local exchange service, is in the public interest...." (Section 364.01(3))

Prior to the revision of Chapter 364, the local exchange company (LEC) was the single provider of basic local telephone services in its territory. (Non-LEC pay telephone providers and shared tenant service providers were also allowed to provide basic local service, although they did so by reselling the LEC's service.) The provisions introduced into the law remove this restriction. The law now encourages competitive entry into the local telecommunications market by allowing a transitional period during which entrants are subject to a lesser degree of regulatory oversight than incumbent local exchange telecommunications companies (LECs). However, the law preserves regulatory oversight to protect consumers and provide for development of fair and effective competition during the transition. Further, while the legislature concluded that the competitive provision of telecommunications services is in the public interest, it made it equally clear that universal service (US) must be preserved. The law provides specific guidelines for the maintenance of US objectives with the introduction of competition in the local market.

A.2. Telecommunications Act of 1996

On February 8, 1996 the President signed the Telecommunications Act of 1996 (TA 96, or the Act) into law. Prior to passage of TA 96, regulation of the telecommunications industry at the national level was dictated by the provisions in the Communications Act of 1934. The provisions in the 1934 Act also reflected the monopoly status of the industry. Consequently, regulation under the 1934 Act was designed to protect the consumer from potential abuses by the monopoly providers. The 1934 Act created the Federal Communications Commission (FCC) to enforce and administer the provisions of the 1934 Act.

A new paradigm, TA 96, requires that regulation serve to promote the development of competition in the provision of telecommunications services. The theory underlying the legislation is that competition will drive prices down towards cost, cause the quality of services to increase, and encourage a rapid introduction of new services. On this point, the FCC is explicitly directed to pursue a procompetitive course, by seeking "...to promote the policies and purposes of this Act favoring diversity of media voices, vigorous economic competition, technological advancement, and promotion of public interest, convenience, and necessity." (Section 257(b)) Rather than being protected by regulation, consumers will be protected by competition in the marketplace, where providers not satisfying consumers' demands, either by overcharging or offering poor quality products, will not survive, leaving behind providers of low cost, high quality services.

TA 96 eliminated the restrictions imposed by the GTE and McCaw Consent Decrees, and the Modified Final Judgement (MFJ). Instead, AT&T, GTE, and McCaw are subject only to restrictions and obligations in the Act.

The MFJ was issued in 1984, and placed numerous restrictions on the BOCs. Section 271 of the Act includes provisions for removal of these restrictions. Among the MFJ prohibitions was the provision that the BOCs were not allowed to provide interLATA toll service. Under TA 96, a BOC can now request the FCC approve its entry into the in-region interLATA long distance market once it has met a series of conditions. (It should be noted that TA 96 allows a BOC to enter the interLATA long distance market out of its operating region, subject to meeting less stringent conditions.)

A.3. Structure of Chapter

The primary purpose underlying the amendments to Chapter 364, Florida Statutes, and TA

96 is to open up the local service market to competition. Several conditions must be in place for this goal to be achieved. Section B. focuses on three of the primary prerequisites: 1) number portability, 2) local interconnection, and 3) resale and unbundling.

Section C. addresses other regulatory provisions that relate to increased competition. These provisions include price regulation for LEC intrastate services, treatment of small local exchange companies, and universal service. Section D. discusses the removal of existing conditions that inhibit competitive entry by GTE and the RBOCs into the interLATA toll market, conditions under which RBOCs can enter other markets they were prohibited from entering under the terms of the MFJ (e.g., manufacturing), and LEC entry into video programming. Section E. provides a summary and closing comments.

II.B. Prerequisites for Competitive Local Entry

Several prerequisites must be in place before widespread local competitive entry can occur. These include number portability, interconnection, unbundling, and resale.

B.1. Number Portability

Service provider number portability refers to an end user being able to change local service providers without changing his local number. The number is portable in the sense that the end user can retain his number should he want to change carriers.

In Docket Number 950737-TP the Commission specified parameters, costs, and standards for number portability. Of the various options considered, such as remote call forwarding (RCF) and flexible direct inward dialing, it was determined that both the LECs and the ALECs should provide each other with RCF as the primary temporary mechanism to provide number portability.

RCF routes a subscriber's incoming calls to a specific number designated for receiving the calls. For example, a business that has moved across town may not want customers to have to dial a new number to reach it. The business could use RCF to have calls that were previously routed to its old address now routed to its new address. The caller who dialed the business's phone number has no idea that the call is actually being routed to a new location having a different phone number.

The Commission determined that the cost for developing and implementing temporary

number portability should be the responsibility of the entrants. Therefore, the company receiving the forwarded number would pay the company providing the forwarded number. However, LECs and ALECs are allowed to assess rates and terms different from the standard tariff rate as part of negotiated agreements.

TA 96 states that it is the obligation of each LEC to "...provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission [the FCC]" (Section 251(b)(2)). On July 2, 1996, the FCC issued an order in CC Docket No. 95-116 that approved the use of RCF as a temporary solution for number portability, and required all LECs to provide a permanent number portability solution for the 100 largest metropolitan statistical areas no later than October 1, 1997.

There is a conflict between the FCC's decision that all recipients of number portability pay the costs for it and the Florida Commission's decision that only entrants would pay the costs for number portability. The Commission staff is reviewing the need for the Commission to modify its Order No. PSC-95-1604-FOF-TP to reflect the FCC's decision that the cost for number portability be borne by all telecommunications carriers.

B.2. Interconnection

To introduce competition into the local market, it is necessary for the LECs and ALECs to exchange traffic so that their respective customers can call each other. Stated differently, each carrier must be able to interconnect with one another. This interconnection must ensure that the exchange of traffic between the carriers is transparent to the end user in much the same way traffic is exchanged today between a LEC and an IXC, or between two LECs.

Section 364.16, F.S., requires each LEC to provide access to, and interconnection with, its facilities and any other local exchange service provider requesting such interconnection. (This provision also applies to ALECs.) While the state law does not designate specific rates or conditions for interconnection, it does specify procedures to resolve these issues. The parties are required to negotiate and strive to reach agreement on rates, terms, and conditions; negotiations are discussed later in this chapter.

TA 96 requires all telecommunications carriers to interconnect with one another where technically feasible. To facilitate interconnection, the LECs are required to allow competitors to

collocate their equipment with the LECs'. This can be accomplished in either of two ways: physical collocation or virtual collocation.

On August 8, 1996 in CC Docket No. 96-98, the FCC issued its First Report and Order (Interconnection Order) concerning the rules for interconnection. The FCC defined interconnection as the "physical linking of two networks for the mutual exchange of traffic." It specified a minimum of 5 points in the incumbent LEC's network where interconnection is practical. These points include : (1) the line side of a local switch, (2) the trunk side of a local switch, (3) the trunk interconnection points for a tandem switch, (4) central office cross-connect points, and (5) out-of-band signaling transfer points.

After the FCC issued its Interconnection Order, numerous parties, including the FPSC, filed appeals and requested that the provisions of the order be stayed pending judicial review. On September 27, 1996 the 8th District Court issued a temporary stay of the FCC's order and heard oral argument on October 3, 1996. On October 15, 1996 the court released an order which stayed certain provisions of the Interconnection Order until a final decision on the merits of the various appeals. Most significantly, the Court stayed the pricing provisions in the order, including the FCC's proxy rates and costing methodologies.

On October 24, 1996, the Federal Communications Commission filed with the U.S. Supreme Court an application to vacate the stay. An application was also filed by some of the competitors to vacate the stay. Meanwhile, the National Association of Regulatory Utility Commissioners, the original four states that sought the stay, and GTE are all opposing those applications. A Supreme Court decision is expected very soon.

B.3. Unbundling and Resale

Unbundling portions of the LEC's network and making them available for purchase is one way of enabling a potential competitor to enter the local market. Such provisions are particularly important to those competitors lacking certain facilities. A LEC is required to unbundle all requested features, functions, and capabilities of its local exchange network and make them available for resale.

Entry can also be enhanced by the ability to purchase and resell the incumbent's services. For potential providers having few or no facilities, resale enables them to enter the local market

without having to make a large investment.

Certain restrictions apply to unbundling and resale. Under state law, in no event is the LEC to price a service below cost, nor is the LEC required to make a network element available for resale at rates below cost. In addition, under Chapter 364 the LECs are not required to resell currently tariffed, flat-rated, switched residential and business services until the LEC is permitted to provide interLATA services and video-programming, but in no event before July 1, 1997. An ALEC could obtain from the LEC at wholesale rates the individual components necessary for the ALEC to offer residential local exchange service. However, the ALEC currently cannot purchase the LEC's retail residential local exchange service and resell it, unless the LEC agrees to such an arrangement. An ALEC is not required to unbundle or offer its services for resale unless it has been designated a carrier of last resort (COLR).

The FCC addressed itself to provisions for unbundling and resale in its First Report and Order in Docket No. 96-98 (issued August 8, 1996). The FCC defined unbundled elements as the physical facilities of the network, together with the features, functions, and capabilities associated with those facilities. The FCC required LECs to provide the following on an unbundled basis: local loops, local tandem switches, interoffice transmission facilities, network interface devices, signalling and call-related database facilities, operations support systems functions, and operator and directory assistance facilities. These elements are to be made available at the same quality level as the LEC provides to itself.

The FCC also required that the states set rates for unbundled elements based on Total Element Long Run Incremental Cost (TELRIC) plus a reasonable share of forward-looking joint and common costs. For certain unbundled elements, the FCC also established proxy rates; if TELRIC studies have not yet been completed, the state can adopt FCC-specified proxy rates on an interim basis.

To ensure a consistent interpretation of the Act when setting rates for resold services, the FCC adopted minimum requirements the states are to use. States are to consider the avoidable costs from providing a service at wholesale instead of retail, including the shared and indirect costs, expenses and general overheads such as marketing, billing, collection and other costs. Non-cost based factors are to be excluded in the states' evaluations. As noted above, these specific pricing provisions in the FCC's Order have been stayed.

A major difference between the State and the federal legislation in terms of the provisions for unbundling and resale lies in specifying what is to be unbundled and resold. Florida law places two restrictions on the services that can be resold. First, Section 364.161(2), F.S., states that the LEC's

> currently tariffed, flat-rated, switched residential and business service shall not be required to be resold until the local exchange telecommunications company is permitted to provide inter-LATA services and video programming, but in no event before July 1, 1997.

Second, Section 364.162(3), F.S., expressly prohibits the resale of any service at rates below its cost. However, it appears that TA 96 imposes no restrictions on what LEC services provided to end users must be made available for resale.

B.4. Implementation: Negotiation v. Regulatory Intervention

In today's regulatory environment, the regulator does not necessarily dictate the terms and conditions of interconnection (and related issues) between rival providers. Rather, the parties are free to negotiate between themselves mutually agreeable and beneficial terms, with the Commission's role reduced to reviewing and approving such agreements as long as they are not unduly discriminatory.

Under state law, alternative local exchange companies are afforded 60 days to negotiate mutually acceptable prices, terms, and conditions for interconnection, resale, and unbundling with the local exchange telecommunications provider. If the parties cannot reach agreement, either party may petition the Commission to establish non-discriminatory rates, terms, and conditions. While some parties have successfully negotiated, others have petitioned the Commission to resolve the matter. The Commission has 120 days following the filing of a petition to set the rates, terms, and conditions for interconnection, unbundling, and resale.

Like Chapter 364, Florida Statues, TA 96 contains a provision for negotiation by the parties. For interconnection and network elements, a LEC and a competitor must enter into negotiations. If they voluntarily reach agreement, the parties are to submit the agreement to the state commission for review. If they are unsuccessful in reaching agreement, either party may request the state commission resolve the differences between the parties. Between the 135th day and the 160th day

following the date the LEC receives a request for negotiation, either party may request the state commission to arbitrate any open issues. The state commission must complete the arbitration process no later than nine months following the date the LEC received the initial request. If the state commission does not act, the FCC assumes responsibility for the proceeding 90 days following notification of the state's failure to act.

TA 96 provides for preemption by the FCC if a state commission fails to undertake the responsibility of resolving any open issues. The main difference between the two laws is the time frames. The state statute requires the Commission to vote within 120 days following the filing of the petition. Under TA 96, depending upon when a petition for arbitration is filed, a state commission has between 110 and 135 days to render a decision.

II.C. Other Legislative Provisions

Other provisions included in the state and federal laws will influence the development of competition in the local exchange market. These include price regulation, provisions for treatment of small LECs, and universal service.

C.1. LEC Price Regulation for Intrastate Service

Chapter 364, Florida Statutes, now provides that a local exchange telecommunications company may file with the Commission a notice of election to be under price regulation. Services for price-regulated LECs fall into four broad categories: basic service, non-basic service, network access, and interconnection and resale. Pricing flexibility and notice periods vary according to the service category. Initially, basic and network access rates are capped, while most non-basic rates may be adjusted up or down subject to some aggregate constraints.

Currently, eight of the thirteen local exchange companies have elected price regulation. They are: BellSouth Telecommunications, Inc., Central Telephone Company of Florida, United Telephone Company of Florida, GTE Florida Incorporated, Vista-United Telecommunications, The Florala Telephone Company, Inc., Gulf Telephone Company, and St. Joseph Telephone & Telegraph Company.

C.2. Provisions for Small LECS

A small local exchange company is defined in Chapter 364 as a local exchange

telecommunications company certificated prior to July 1, 1995, which has fewer than 100,000 access lines in service on that date. The small LEC can remain under traditional rate base, rate of return regulation until January 1, 2001 or when it elects to become price regulated, whichever comes first. If the small LEC has not elected price regulation by January 1, 2001, the company can remain under rate base, rate of return regulation until an ALEC provides basic local exchange service in its territory.

In Docket Number 951283-TL, the Commission adopted rules for small LECs to streamline procedures for regulation. (Order Number PSC-96-0250-FOF-TL) These rules minimize the burdens of regulation with regard to audits, investigations, service standards, cost studies, and reports. Those procedures that are cost-justified and that are in the public interest remain in place so that universal service may be promoted.

While TA 96's main function is to bring competition to all telecommunications markets, it recognizes that customers of LECs operating exclusively in rural territories may be adversely impacted by competition. Rural companies do not have to unbundle, resell, or interconnect with another carrier until they receive a bona fide request for interconnection services or network elements, provided that such a request is not unduly economically burdensome, and is consistent with TA 96's provision for universal service. However, it is up to the state commission to determine if a request meets the requirements.

Additionally, a rural carrier having fewer than 2 percent of the nation's total installed subscriber lines can also petition its state commission for suspension of the requirements to interconnect or resell. The state commission can grant the petition if it finds that the rural LEC or its customers would be adversely affected by having to meet the interconnection or resale requirements. Specifically, a petition can be granted if it is not technically feasible for the rural LEC to meet the requirements, or if meeting the requirements is not in the public interest.

C.3. Universal Service

Chapter 364.025, Florida Statutes, provides specific guidelines for the maintenance of universal service (US) objectives with the introduction of competition in the local market. Fundamentally, US concerns the provision of a specified set of services to customers at affordable rates. The Commission determined, after hearing, that US should be construed as the provision of

"basic local telecommunications service" at just, reasonable, and affordable rates.

Each incumbent local exchange company (LEC) is required to be the carrier of last resort (COLR) and furnish basic local exchange telecommunications service to any person requesting such service within the company's service territory until January 1, 2000. After January 1, 2000, an ALEC may petition the Commission to become the COLR.

As required by Section 364.025, F.S., an interim mechanism for satisfying universal service objectives and funding carrier-of-last-resort obligations was established by the Commission. The Commission conducted a formal hearing and issued Order No. PSC-95-1592-FOF-TP that describes the interim US mechanism. Given that it was not demonstrated that the LECs' ability to sustain their US and COLR responsibilities would be immediately impaired with the advent of local exchange competition, a two-part mechanism was ordered. First, the LECs should continue to fund their US/COLR obligations as they currently do; that is, through markups on various services they offer. Second, if a LEC finds it is unable to sustain its US/COLR obligations due to competitive pressures, it may file a petition for company-specific US relief. Such petitions will be handled on an expedited basis, and the burden is on the LEC to demonstrate that any identified contribution loss is due to competitive entry.

Any interim mechanism can remain in force only until January 1, 2000. Prior to that time a permanent US mechanism is to be implemented by the Legislature. The Commission is currently conducting research and will submit a recommendation to the Legislature and the Governor by January 1, 1997 on how universal service goals should be maintained.

Section 364.10 (2), F.S., requires a telecommunications company serving as carrier of last resort to provide a Lifeline Assistance Plan (Lifeline). The purpose of Lifeline is to make telephone service more accessible to customers who might otherwise not be able to afford service. Qualified residential subscribers receive a credit on their monthly phone bill equal to the federal interstate subscriber line charge and a matching company provided credit.

Like the Florida statute, the Telecommunications Act of 1996 reflects lawmakers' concerns that universal service needs to be preserved when telecommunications markets are opened to competition. Section 254 of the Act directed the FCC to institute a Joint Board to provide recommendations as to what services should be supported by federal universal service mechanisms, any required changes to FCC regulations and procedures, and a timetable for implementation.

The federal universal service provisions are more expansive than those in Florida's statute. Section 254 of TA 96 contains several aspects for which federal support will be required. First, consumers in rural, high-cost and insular areas must be assured access to a to-be-designated set of services at rates that are just, reasonable and affordable. Second, low-income consumers must be assured access to universal services. Third, the Act provides for schools, libraries, and rural health care providers to receive preferential rates for telecommunications services. TA 96 requires that any mechanisms established in meeting these goals should be specific, predictable and sufficient, and must be nondiscriminatory.

The FCC and the Joint Board are currently addressing themselves to these complex issues in CC Docket 96-46. The Joint Board issued its recommendation on November 8, 1996, and the FCC must issue implementation rules by May 1997.

II.D. Additional Markets Opened Up by TA 96

The general thrust of the Telecommunications Act of 1996 is to open all telecommunications markets to entry. The Act eliminates restrictions previously imposed on some local exchange companies that barred their entry into certain markets -- notably, interLATA toll and video services. The following section focuses on the federal Act.

D.1. LEC Entry Into the InterLATA Market

InterLATA Out-of-Region Services

Out-of-region service refers to the provision of interLATA toll service by a LEC outside of its present service territory. (In-region service refers to a LEC offering interLATA toll service within a state and within its present service territory.) Prior to passage of TA 96, with two exceptions, any telecommunications carrier could provide out-of-region interLATA toll service. The exceptions were the BOCs and GTE. TA 96 removed the barriers for these two entities.

Section 601 of TA 96 completely revokes the restrictions and obligations contained in the Consent Decree entered into by GTE. The effect of this section is to allow GTE to immediately enter the interLATA services market. For the BOCs, Section 271(b)(2) allows them to provide interLATA out-of-region services.

InterLATA In-Region Services

As was the case with out-of-region interLATA services, prior to the passage of TA 96 all local telecommunications companies, other than the BOCs and GTE, were allowed to offer in-region interLATA services. Section 601's removal of the restriction of GTE's consent decree now allows GTE to enter the in-region interLATA market.

For the BOCs, however, several provisions of the Act must be met before they can enter the in-region interLATA market. Under TA 96, a BOC can request the FCC approve its entry into the in-region interLATA long distance market once it has met a series of conditions contained in a "competitive checklist." (Section 271(c)(2)(B)) The checklist requires that the BOCs provide interconnection and access to unbundled network elements including unbundled local loops, unbundled transport, and unbundled switching. They must also make available dialing parity, reciprocal compensation, resale, access to rights-of-ways, conduit and poles, access to 911 and E911, directory assistance, operator call completion services, white pages directory listings, access to data bases and signaling, and interim number portability.

D.2. RBOC Entry into Other Markets

The MFJ did not allow the BOCs to enter the telecommunications equipment manufacturing business or the electronic publishing business. With some restrictions, TA 96 removes these prohibitions.

There are several sections dealing with the BOCs' entry into other lines of business including manufacturing customer premises equipment (Section 273), providing alarm monitoring service (Section 275), providing telemessaging service (Section 260), and entering the electronic publishing business (Section 274). Although it is not entirely clear in all instances, it appears that the primary condition for BOC entry into these markets is by means of a separate affiliate operated independently of the BOC.

D.3. Video Services

Along with allowing cable TV companies to enter and compete in the local services market, the Act also potentially increases competition in the provision of video services by eliminating the

previous ban on LEC entry into the cable TV market (Section 651).

With passage of the Telecommunications Act of 1996, the cable cross-ownership restriction has been repealed. Today, a LEC can provide video service to end users as a common carrier; as a radio-based multichannel video programming distributor, not subject to the Cable Act; as a cable operator, fully subject to the Cable Act; or through an "open video system" certified by the FCC to be offering nondiscriminatory capacity for unaffiliated programmers. A local telephone company providing cable service through an open video system is not required to obtain a cable franchise. The variety of methods for entry were included in the Act to promote competition by encouraging the development of various technologies for the provision of video service.

Although the Act allows the LECs to enter the cable business, it limits LEC/cable company relationships where the two companies' territories overlap. As a general case, buy-outs by common carriers in the larger markets are prohibited, although companies can own an interest in one another. In this case, neither entity can own more than 10% of the other (Section 652). By limiting cross-ownership in this way, it is believed that competition will be encouraged with the two entities competing with each other in both markets.

II.E. Summary and Closing Comments

The amendments to Chapter 364, Florida Statutes, and TA 96 are both designed to encourage competitive entry into the telecommunications markets, and especially into the local exchange market. Both have established conditions to foster competition by establishing the preconditions for market entry. These preconditions include requiring number portability so an end user can change carriers without having to change his phone number, ensuring a seamless network by requiring all carriers to interconnect with each other, and enabling potential entrants to acquire the portions of the network they need to offer service by requiring unbundling and resale by incumbents. Recognizing the potential for the parties to be unable to reach agreement on the rates and conditions for entry, both laws provide for the resolution by regulatory bodies of contested issues. The Act also deals with the elimination of the legal barriers preventing the largest LECs, the BOCs and GTE, from entering the interLATA market. In addition, the Act includes a section devoted to entry into the cable programming market by the LECs.

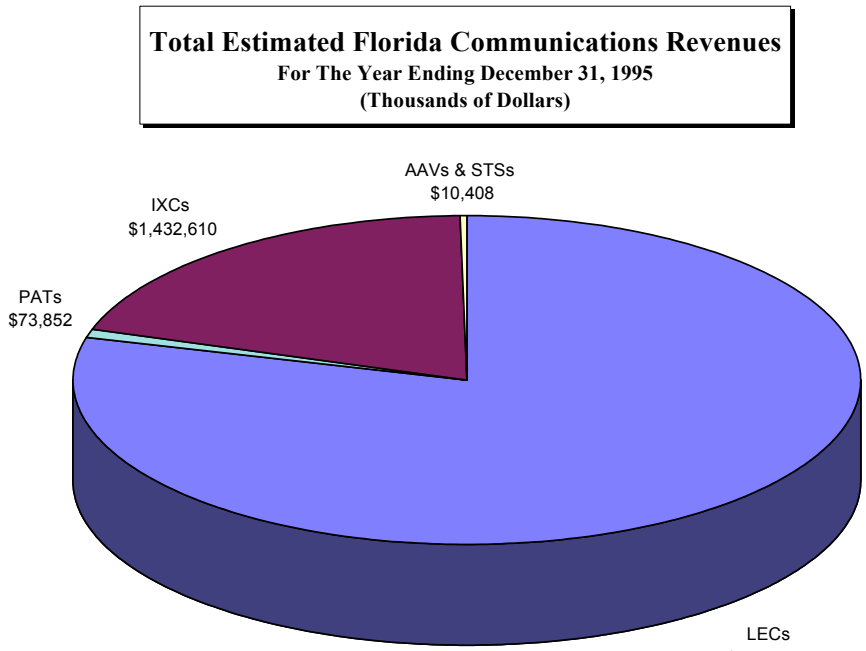
TA 96 emphasizes that the states are not to erect barriers to entry into the local market.

However, state and local governments are allowed to "...impose, on a competitively neutral basis..., requirements necessary to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of telecommunications services, and safeguard the rights of consumers." (Section 253(b)) Achieving an appropriate balance between fostering competitive entry, while preserving universal service, is a daunting task being faced by both the state and federal regulators.

CHAPTER III: STATUS OF COMPETITION IN FLORIDA'S TELECOMMUNICATION MARKETS

The various classes of companies which make up Florida's intrastate telecommunications market (excluding cellular and personal communication systems) generated estimated revenues in excess of $7.3 billion in 1995. The interexchange carriers account for 20% of this revenue, and competition is flourishing in that arena. With local exchange companies' revenues accounting for 75% of the $7.3 billion, there is reason to believe that local exchange competition will also prosper. Total revenues, shown by class of company, are summarized in Figure 3-1. Section A

Figure 3-1



Source: 1995 Regulatory Assessment Fee Reports and 1995 Annual Reports of Local Exchange Telephone Companies to the Florida Public Service Commission.

addresses the status of competition for the numerous non-local exchange service providers, including cellular and PCS carriers. This section provides the number of certificated providers, revenues, growth within each market segment, and highlights significant regulatory developments.

Section B examines the incumbent local exchange companies' revenues, total access lines,

minute of use, and their respective growth rates. The status of competition for local exchange service is also reviewed in this Section. Section C. continues our review of the local exchange market and describes what role we believe ALECs may play in Florida's telecommunications future. For those not familiar with the local market, please refer to Appendix A which describes the structure of the local network and the various local service providers.

Chapter III concludes with Section D, which deals with 1) the impact price regulation has had on high-quality telecommunications services, 2) how basic telecommunications services should be defined, and 3) how capped network access rates are affecting local exchange competition. This section is in response to certain specific questions in Chapter 364.386, and to a request made by the Governor in his letter to Chairman Clark dated June 30, 1995.

III.A. Non-Local Exchange Service Providers

This section furnishes facts and figures that are indicative of the degree of competition in the various non-local exchange telecommunications sectors within the state. It includes the number of certificated providers, revenues, and an explanation of any significant regulatory developments which impact that segment of the industry.

A.1. Interexchange Carriers

The number of certificated interexchange carriers (IXCs) has quadrupled since January 1991, at which time there were only 106 certificated companies. At this writing there are over 450 certificated interexchange carriers, of which the overwhelming majority are resellers with only 27 (according to information provided on their application) being facilities-based carriers.

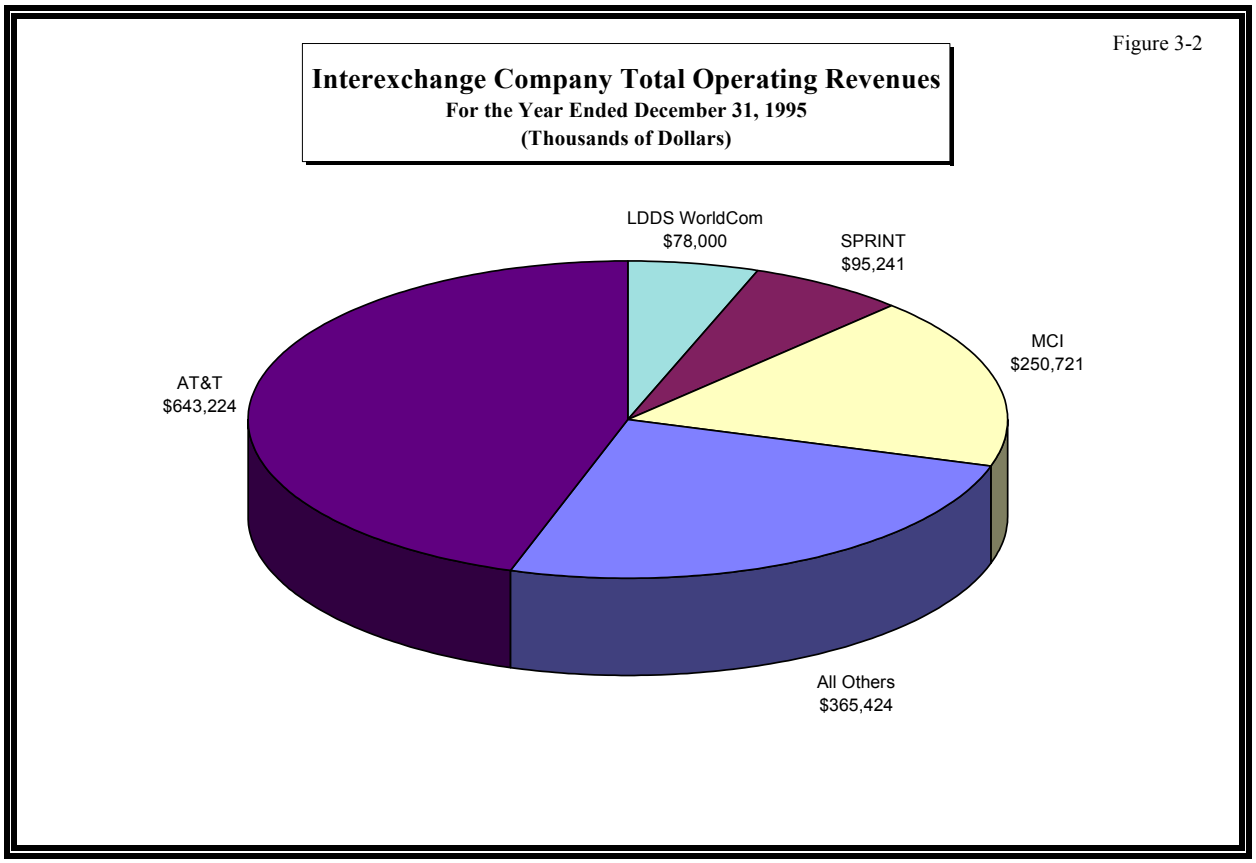
Resellers purchase large volumes of minutes from facility-based carriers at a substantial discount. They then resell the minutes usually at a rate less than the interexchange company's prevailing retail rate. Reselling of facilities-based services allows a competitor to enter the IXC market without making substantial capital investments in facilities.

The 1995 intrastate gross revenues for the interexchange carriers in Florida are estimated to be $1.4 billion. The majority of this revenue is generated by four firms: AT&T, MCI, Sprint, and LDDS WorldCom. These four carriers account for approximately 75% of the total revenues, or approximately $1.1 billion. As illustrated by Figure 3-2, AT&T alone accounts for roughly 45% of

the total intrastate gross revenues. It should be noted that nationally, AT&T's market share is approximately 54% (based on toll revenues), which is significantly greater than its Florida market share. Therefore, it appears that interexchange competitors have done particularly well in Florida. This may work to encourage entry in the local exchange market.

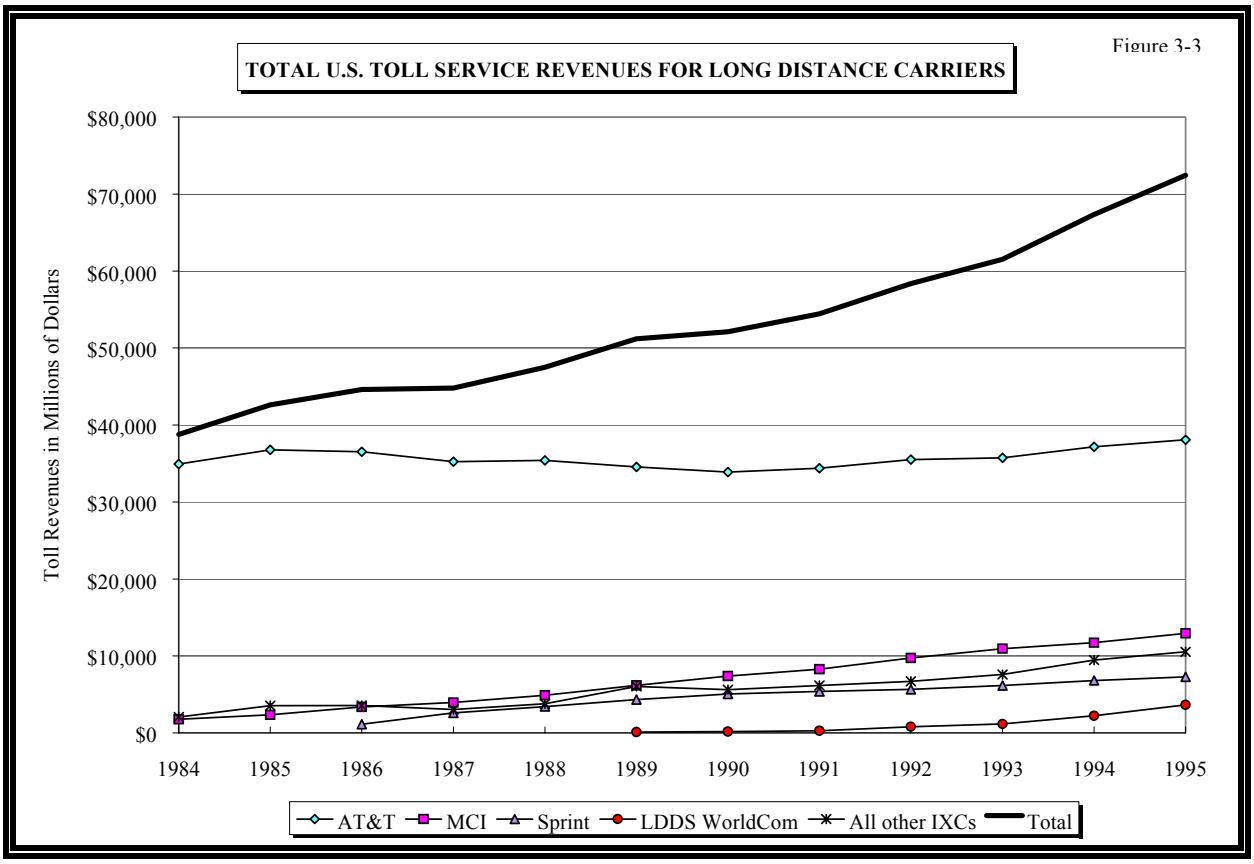
Florida's interexchange revenues appear to follow the national trend. AT&T dominates the

Figure 3-2



Source: 1995 Regulatory Assessment Fee Reports.

national market as well, with 1995 national revenues reported in excess of $38 billion. MCI was the next largest interexchange carrier with national revenues close to $13 billion for 1995. Figure 3-3 illustrates the total national toll revenues for long distance carriers (approximately 72.5 billion) and the dominance of the four carriers mentioned above.



Source: 1995 Preliminary Statistics of Communications Common Carriers.

A.2. Alternative Access Vendors

The Commission began certificating Alternative Access Vendors (AAVs), also known as Competitive Access Providers (CAPs), in 1992. Currently, there are 32 AAVs certificated to provide service. The estimated gross intrastate revenue for the AAV market for 1995 is $7.7 million. This market is dominated by Intermedia Communications of Florida, Inc. (ICI) who reported gross revenues of $6 million for 1995. ICI's revenues account for approximately 78% of all AAV revenues reported in 1995.

In 1995, the number of certificated AAVs almost doubled (from 17 to 30). We believe this increase was due to the statutory provision that allowed an AAV, who was certificated as of July 1, 1995, simply to notify the Commission by 1/1/96 of its intent to provide ALEC services and forego the more lengthy ALEC certification process. It is expected that future competition within this segment of the industry will be limited, as firms will seek the additional flexibility of an ALEC certificate. Current growth in AAV certificates supports this hypothesis. From December 1995 to

August 1996, the number of certified AAVs has only grown by 6.7%.

A.3. Private Pay Telephones

The private pay telephone (NPATs) market in Florida currently has close to 1,000 certificated companies. Many of these companies are "mom and pop" operations. For example, a remote fishing camp would like a pay telephone for its customers; however, there is not enough traffic at the camp to entice an already certificated provider. The camp owner may choose to become certificated by the Commission and be his/her own pay telephone provider operating only one instrument.

There is a constant churning of NPATs certificates as providers easily enter and exit the market. For example, in 1994, 286 NPATs certificates were granted, while 219 certificates were cancelled. NPATs certificates have shown an 11.8% compound annual growth rate from 1991 to 1995. According to the data provided by the LECs, access line growth for NPATs has shown a compound annual growth rate of 10.9% for the period of 1991 (29,337) to 1995 (44,389). In contrast, LEC pay telephones have shown a decline in compound annual growth rate of 3.2% for the same period. However, in 1995, LEC pay telephones accounted for 60.2% of all pay telephone access lines.

The total gross intrastate revenues generated by this industry in 1995 is estimated at $74 million. Peoples Telephone Company reported $20 million in revenues for 1995 (with 8,510 instruments in place), making it by far Florida's largest company in the private pay telephone market.

The Commission has not found NPATs service to be competitive to the end user. Many times an end user does not have a choice of which pay telephone to use; this is often dictated by circumstance. For example, if your car breaks down in front of the Zippy Mart and there is an ABC pay telephone in place, chances are you will use that provider's instrument.

The true customer for which the NPATs must compete is the location provider, not the end user. NPATs providers vie for locations with significant probable end-user traffic, locations such as a mall or airport. Many NPATs have carved out a niche in the market and only provide service to correctional facilities. Bidding for the opportunity to serve correctional facilities is highly competitive and for the successful bidder appears to be very profitable.

There have been two significant regulatory developments that directly affect the NPATs providers. The first was the amendment to Chapter 364.3375, Florida Statutes, effective July 1, 1995. This amendment now allows the pay telephone service provider to subscribe to flat-rate, single-line business local exchange services (B-1 access line). Prior to this amendment NPATs were required to purchase NPATs access lines. The NPATs access line and the B-1 access line technically perform the same. However, they differ in their interconnection rates. The NPATs access line is a measured service offering with per-minute usage charges for all local calls (approximately $.02 for the initial minute and $.01 for each additional minute), and the B-1 access line is a flat rate service. This means that a pay telephone provider in Miami purchasing service from BellSouth would have paid $23.28 for his NPATs access line plus local usage of $.0275 for the initial minute and $.0125 for each additional minute that an end user is using the instrument. With the amendment to Chapter 364 that same pay telephone provider now has the option of purchasing a B-1 line at $29.10 without paying local usage charges (except for ECS calling).

The second significant regulatory development is that NPATs (in certain areas) may now route 1+/0+ intraLATA toll traffic from their payphones to the intraLATA carrier of their choice. In Docket No. 960492-TP, Order PSC-96-0884-FOF-TP, it was determined that NPATs providers located in GTE Florida Incorporated, Sprint-United, and Sprint-Centel territories are permitted to route 1+/0+ intraLATA toll traffic from their phones or systems to the intraLATA carrier of their choice immediately. NPATs providers may route intraLATA toll calls in BellSouth's territory as that company's central offices are converted to handle intraLATA presubscription. NPATs providers located in the 9 small LECs' territories may begin call routing January 1, 1997.

Prior to this decision NPATs were required to route 1+/0+ intraLATA toll calls to the LEC. In many cases the NPATs provider may be his own intraLATA toll carrier (using store and forward technology) thereby getting those revenues from the intraLATA toll traffic which at one time was reserved for the LEC.

On the federal side TA 96 appears very preemptive on what the states may do regarding pay telephones. The FCC has issued a rulemaking that provides that pay telephones will no longer be subject to rate regulation after one year; instead, the marketplace would dictate the prices. The FCC does offer states a mechanism to seek a waiver of the marketplace prices when there is a showing of market failure. Since numerous motions for reconsideration are pending at the FCC, it is unclear

what the final outcome will be.

A.4. Shared Tenant Services

There are currently 38 shared tenant service (STS) providers certificated to operate in Florida. The number of certificated providers has remained fairly constant over the past five years, fluctuating by only 1 over a three-year period (1/1/92-12/31/94). The total estimated gross revenues for STS providers in 1995 was approximately $3 million.

Providers of shared tenant services (STS) constitute a market niche within the local exchange market by reselling local telephone services. A STS provider may have his own PBX and lease a group of telephone or trunk lines to provide local service to a number of end users in a building. With passage of the amendments to Section 364.339, Florida Statutes, STS providers can now provide service to residential customers and business customers, whether located in multiple buildings (campus environment) or single buildings. As in the past, the commercial customer has the option of choosing the provider of local exchange services or the STS provider. However, Section 364.339(5), Florida Statutes, addresses only commercial customers. Therefore, it is unclear whether a residential tenant can select the provider of local exchange services for service or if he is restricted to obtaining service only from the STS provider. While the Commission has tentatively concluded (see Order PSC-96-0884-FOF-TP) that residential tenants would have a choice, a rulemaking proceeding on STS service has been opened (Docket No. 951522-TS) which will address this issue.

As with NPATs providers the Commission determined that STS providers located in GTE Florida Incorporated, Sprint-United, and Sprint-Centel territories were permitted to route 1+/0+ intraLATA toll traffic from their phones or systems to the intraLATA carrier of their choice immediately. STS providers may route intraLATA toll calls in BellSouth's territory as that company's central offices are converted to handle intraLATA presubscription. STS providers located in the 9 small LECs' territories may begin call routing January 1, 1997.

A.5. Alternative Operator Services

Alternative operator services (AOS) providers are companies that furnish alternative operator service for IXCs or toll operator service to call aggregator locations such as hotels, payphones,

prisons and universities. They are certificated under the application procedures designed for IXCs and are required to meet certain service standards that are unique to the services that they provide. In October 1991, there were 48 certificated AOS firms. As of August 1996, there were 93 AOS providers. Revenue data is very difficult to estimate for AOS providers because they are certificated as IXCs. Those firms that also provide more traditional IXC services do not disaggregate their revenue from AOS services.

A.6. Cellular/Personal Communication Services

Although the Florida Public Service Commission does not have jurisdiction over wireless providers, they are a significant revenue generating sector of the total telecommunications marketplace. While Florida specific data is not available, Table 3-4 provides national statistics which illustrates the tremendous growth the cellular providers have experienced.

TABLE 3-4

NATIONAL CELLULAR STATISTICS

	CUSTOMERS	REVENUES
1991	7,557,148	$5,708,522,000
1992	11,032,753	7,822,726,000
1993	16,009,461	10,892,165,000
1994	24,134,421	14,229,921,264
1995	33,785,661	$19,081,239,000
CAGR[1]	45.41%	35.21%

[1] CAGR: Compound Annual Growth Rate. Source: Cellular Telecommunications Industry Association, 3/25/95.

The PCS (personal communications services) market was created as a result of a government decision to allow the FCC to auction radio spectrum for commercial purposes. The total range of the frequencies is 160 MHZ, more than three times the bandwidth now devoted to cellular telephone service. The spectrum is divided into three broad categories: broadband, narrowband, and unlicensed. Broadband PCS is defined by the FCC as ". . . radio communications that encompass mobile and ancillary fixed communication services that provide services to individuals and

businesses and can be integrated with a variety of competing networks." Narrowband PCS is defined by the FCC ". . . as a family of mobile portable radio services that may be used to provide wireless telephony, data, advanced paging, and other services to individuals and businesses, and which may integrated with a variety of competing networks." Broadband PCS will be used to provide wireless mobile services, with end users able to communicate with other telephone networks, transmitting and receiving voice, data, and video. Because narrowband PCS will likely be used for voice message paging, two-way acknowledgment paging, and other text-based services, it uses less spectrum than broadband PCS. Therefore, the FCC allocated fewer narrowband frequencies to PCS. Even with this seemingly small amount of spectrum, there will be 3,500 narrowband PCS licenses issued.

The auctions for space on the spectrum have only recently been completed; therefore, revenue figures for the industry are not yet available. However, it can be assumed by the significant dollars spent by such notable players as Sprint and AT&T to purchase PCS licenses from the FCC, that this market is expected to generate large revenues. For example, Sprint Spectrum, a company formed by Sprint Corporation, TeleCommunications Inc., Comcast Corporation, and Cox Enterprises Inc., bid $2.1 billion for licenses in twenty-nine metropolitan trading areas (MTAs) with approximately 150 million people. According to Dimensions of the PCS/Wireless Marketplace, a publication by Deloitte & Touche Consulting Group, AT&T bid $1.7 billion for twenty-one markets that cover 107 million people. PCSPrimeCo, a joint venture formed by NYNEX, Bell Atlantic, US West (all three companies are RBOCs) and AirTouch bid $1.1 billion for eleven markets that cover 57 million people.

III.B Local Exchange Service Providers

B.1. Incumbent Local Exchange Companies

There are thirteen incumbent local exchange companies (LECs) in Florida. Total LEC intrastate revenues for 1995 were reported at $5.7 billion. Table 3-5 shows total revenues by LEC for 1992-1995. Four of the thirteen LECs - - BellSouth, GTE Florida, Sprint-United and Sprint-Centel - - dominate this market.

TABLE 3-5

TOTAL INTRASTATE LEC REVENUES

(Thousands of Dollars)

LEC	1992	1993	1994	1995
ALLTEL	$45,170	$45,990	$44,299	$44,951
BELLSOUTH[1]	3,086,849	3,212,187	3,259,546	3,323,426
FLORALA[1]	781	1,240	1,302	1,464
FRONTIER	1,863	1,895	1,801	1,816
GTEFL[1]	1,153,542	1,119,180	1,210,068	1,312,433
GULF[1]	4,536	5,189	5,240	5,667
INDIANTOWN	3,561	4,459	4,168	4,175
NORTHEAST	5,810	5,659	6,451	6,273
QUINCY	7,072	7,430	8,073	7,096
SPRINT/CENTEL[1]	172,726	187,457	199,292	212,174
SPRINT/UNITED[1]	691,121	712,849	750,264	780,979
ST. JOSEPH[1]	18,356	19,846	20,707	22,178
VISTA-UNITED[1]	12,900	13,668	15,694	17,977
TOTAL[2]:	**$5,204,288**	**$5,337,049**	**$5,526,903**	**$5,740,611**

[1] Company has elected price regulation. [2] Note: Does not add to total due to rounding. Source: 1992-1995 Annual Reports of Local Exchange Telephone Companies to The Florida Public Service Commission.

As shown in Figure 3-6, the four dominant LECs' 1995 revenues total $5.6 billion, and account for approximately 98% of all LEC revenues. Total LEC revenues have risen at a compound annual growth rate of 3.3% since 1992, with the largest increase of 3.9% occurring in 1995.

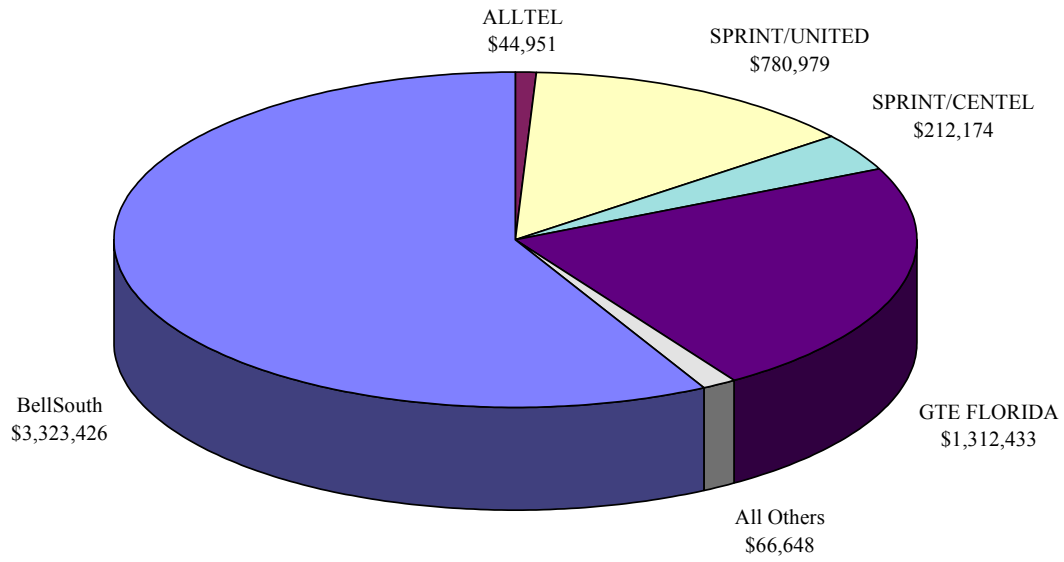
According to a recent FCC report entitled "Reference Book: Rates, Price Indexes, and Household Expenditures for Telephone Service, November, 1995, the national average total monthly phone bill per household was $58.20 in 1993. This compares to $61.10 for the southern census region (which includes Florida).

LEC revenues are reported in four major categories: local network services, network access, long distance network, and miscellaneous. Local network services include: basic and extended area service, mobile services, public telephone, CPE, local private line and other local exchange settlements. As illustrated in Figure 3-7, local network service revenues accounted for 47% of all LEC revenues reported in 1995 and are a dominant source of income, accounting for approximately

45% of total revenues in the years reviewed (1992-1995).

Figure 3-6

Local Exchange Company Total Operating Revenues By Company
For The Year Ending December 31, 1995
(Thousands of Dollars)



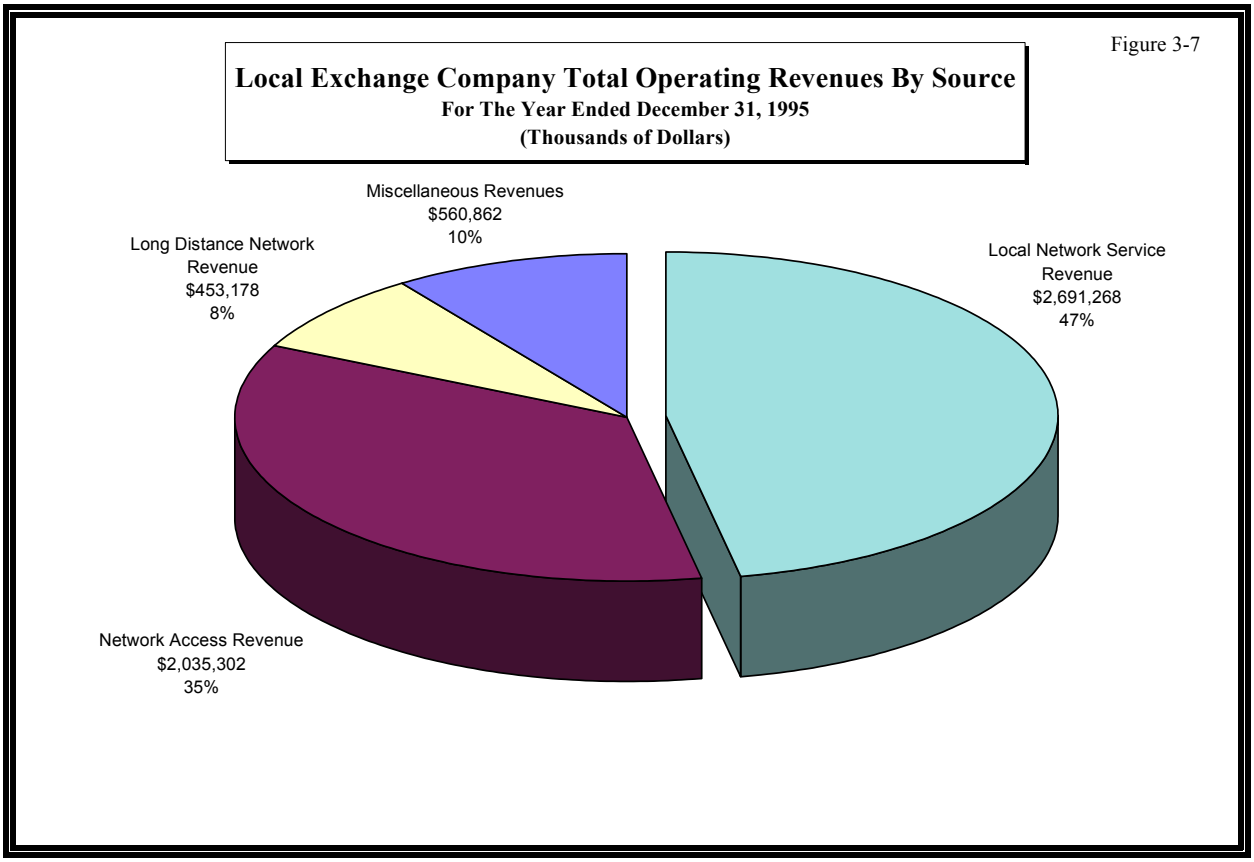
All Others Includes: St. Joseph Telecommunications, Quincy Telephone, Vista-United Telecommunications, Gulf Telecommunications, Northeast Florida Telephone, Frontier Communications, Indiantown Telephone System and Florala Telecommunications

Source: 1995 Annual Report of Local Exchange Telephone Companies to the Florida Public Service Commission.

Table 3-8 provides total industry LEC revenues by category. Local network service revenues were $2.7 billion for 1995. Since 1992 local network service revenues have increased, on average, 6.4% per year.

The second largest revenue category for the LECs is network access revenues. These revenues are derived from switched and special access charges and account for approximately 35% or $2 billion of all LEC revenues reported in 1995. Network access revenues have increased approximately 2% per year over the past four years.

Figure 3-7



Source: 1995 Annual Reports of Local Exchange Telephone Companies to the Florida Public Service Commission.

The final two categories, long distance network and miscellaneous, together account for 18% of LEC revenues, or $1 billion for 1995. Long distance network includes a variety of items, but primarily intraLATA toll; it generated $453 million in revenues for the LECs in 1995. Total miscellaneous generated $560 million and includes such items as directories and rents.

LEC REVENUES BY CATEGORY **TABLE 3-8**
(Thousands of Dollars)

CATEGORY	1992	1993	1994	1995
LOCAL NETWORK SERVICE	$2,237,371	$2,419,655	$2,536,320	$2,691,268
NETWORK ACCESS	1,917,671	1,911,484	1,986,337	2,035,302
LONG DISTANCE	542,803	518,712	530,774	453,178
MISCELLANEOUS	506,443	487,197	473,473	560,862
TOTAL[1]:	**$5,204,288**	**$5,337,049**	**$5,526,903**	**$5,740,611**

[1] Note: Does not add to total due to rounding. Source: 1992-1995 Annual Reports of Local Exchange Telephone Companies to The Florida Public Service Commission.

While total LEC revenues have increased an average of 3.3% per year since 1992, access lines have experienced a compound annual growth of 5.3% over this same period. BellSouth, the largest Florida LEC, reported 5,874,804 access lines in service in 1995, while Florala, the LEC with the fewest lines, reported 2,079 in service in 1995. Table 3-9 illustrates the number of access lines per LEC for 1991-1995 and the compound annual growth rates over this five-year period. According to the FCC's report entitled "1995 Preliminary Statistics of Communications Common Carriers", Florida is the fourth largest market in the nation in terms of access lines in service, exceeded only by California, New York, and Texas. Furthermore, the FCC has reported that total national access lines have grown, on average, 5.6% per year since 1993. By way of comparison, Florida has experienced an average annual growth rate of 7.3% for the same period, based on data submitted by the LECs. Florida's large market size and higher than average rate of growth make Florida extremely attractive for entry.

TABLE 3-9

TOTAL NUMBER OF ACCESS LINES PER LEC

LEC	1991	1992	1993	1994	1995	CAGR[1]
ALLTEL	57,576	61,554	64,936	70,217	72,228	5.83%
BELLSOUTH	4,901,867	5,017,055	5,098,495	5,535,986	5,874,804	4.63%
FLORALA	1,752	1,864	1,920	2,027	2,079	4.37%
FRONTIER	3,134	3,329	3,451	3,626	3,721	4.39%
GTE	1,782,849	1,821,641	1,810,591	1,896,201	2,161,945	4.94%
GULF	7,786	7,916	8,048	8,492	8,654	2.68%
INDIANTOWN	2,676	2,838	3,027	3,139	3,265	5.10%
NORTHEAST	5,866	6,248	6,502	6,787	7,144	5.05%
QUINCY	9,666	10,211	10,736	11,457	12,464	6.56%
SPRINT/CENTRAL	316,829	355,679	331,623	339,044	357,058	3.03%
SPRINT/UNITED	1,111,887	1,160,896	1,222,775	1,290,788	1,354,351	5.06%
ST. JOSEPH	23,181	24,813	24,812	26,031	27,024	3.91%
VISTA-UNITED	6,391	6,490	8,347	10,137	11,846	16.68%
TOTAL	**8,231,460**	**8,480,534**	**8,595,263**	**9,203,932**	**9,896,583**	**4.71%**

[1] CAGR: Compound Annual Growth Rate. Source: 1991-1995 Annual Reports of Local Exchange Telephone Companies to the Florida Public Service Commission.

With increases in total revenues and access lines, one would assume that traffic volumes

have also increased; this has been the case. Total local calls increased from 25,043,329,231 in 1991 to 31,373,097,559 in 1995, approximately a 25% increase. Completed originating interLATA toll calls (intrastate and interstate) have almost doubled in the last five years. Total originating and terminating interLATA (interstate and intrastate) access minutes have also increased significantly, from 26,944,165,468 in 1991 to 38,512,021,865 in 1995. Table 3-10 provides a summary of the traffic volume data for the LECs. With traffic volumes increasing at a faster rate than access lines, Florida is even more appealing to the new entrant. Stated a bit differently, the usage per access line is increasing; therefore, if the number of access lines were to decrease or remain constant for a period of time a company would still see increased revenues due to the increased usage.

TABLE 3-10

LEC TRAFFIC VOLUME DATA

	Local Calls	InterLATA Toll Calls Completed	InterLATA Billed Access Minutes
1991	25,043,329,231	2,528,127,373	26,944,165,468
1992	27,123,630,642	3,057,670,022	28,696,243,605
1993	28,718,137,122	3,326,795,903	32,831,266,392
1994	29,992,719,106	3,782,434,006	36,252,652,004
1995	31,373,097,559	4,719,168,982	38,512,021,865
CAGR[1]	5.80%	16.89%	9.34%

[1]CAGR: Compound Annual Growth Rate Source: 1991-1995 Annual Reports of Local Exchange Telephone Companies to The Florida Public Service Commission.

B.2. Alternative Local Exchange Companies

Many of Florida's certificated ALECs are better known as interexchange carriers, entertainment conglomerates, or cable television providers. For instance, AT&T Communications of the Southern States, Inc. d/b/a AT&T, MCI Telecommunications Corporation, Sprint Communications Company, L.P., and LDDS Worldcom are all known interexchange carriers and each company is a certificated ALEC (although there may be some variation in its ALEC name). In addition, Time Warner, a media and entertainment company, and Continental Cablevision, a cable television provider, are also certificated ALECs.

Although the ALEC certificate provides statewide authority, an ALEC may only compete in the territory of an incumbent local exchange company that has elected price-cap regulation.

Currently, as indicated in Table 3-5, eight of the thirteen incumbent local exchange companies have elected price regulation. These eight companies account for approximately 99% of all Florida access lines.

B.3. ALECs Providing Service as of September 30, 1996

While many of the 39 ALECs shown on Table 3-11 are operating as some other type of telecommunications provider (e.g., long distance service or pay telephone service), few are providing local exchange service.

TABLE 3-11

CERTIFICATED ALECs AS OF OCTOBER 1, 1996

!nterprise America, Inc.	MCI Metro Access Transmission Services, Inc.[1]
AlterNet[1]	MCI Telecommunications Corporation[1]
Arrow Communications, Inc.	Metropolitan Fiber Systems of Florida, Inc.[1]
AT&T Communications of the Southeast States, Inc. d/b/a AT&T[1]	NationalTel
BellSouth Telecommunications, Inc.	Orlando Business Telephone Systems, Inc.
Cable & Wireless, Inc.	Payphone Consultants, Inc.
City of Lakeland[1]	Preferred Carrier Services, Inc.
Continental Florida Telecommunications, Inc.	Sprint Metropolitan Networks, Inc.
Dial & Save of Florida, Inc.	Strategic Technologies, Inc.
Data and Electronic Services, Inc.	T-Netix, Inc.
Digital Media Partners[1]	Tallahassee Memorial Telephone Company
Excel telecommunications, Inc.	TCG South Florida[1]
Florida Public Telecommunications Association, Inc.	Teleco Communications, Ltd.
Florida Telecommunications Services, Inc.[1]	Telecommunications Service Center, Inc.
Global Tel*Link Corporation	Telenet of South Florida, Inc.
Intermedia Communications of Florida, Inc.[1]	Telephone Company of Central Florida, Inc.
Interprise-Continental Fiber Technologies Alternet Data Co[1]	The Phone Company
Intetech, L.C.	Time Warner Communications[1]
LCI International Telecom Corp.	WinStar Wireless of Florida, Inc.[1]
LDDS Worldcom[1]	

[1] Indicates an AAV that became an ALEC by filing written notice with the Commission per Chapter 364.337(6)(b), Florida Statutes. Source: Master Commission Directory Database.

When the Commission surveyed the ALECs to obtain baseline data, we found that 6 ALECs were

providing local service as of September 1, 1996. They are:

1) Intermedia Communications of Florida, Inc.

2) Payphone Consultants, Inc.

3) Sprint Metropolitan Networks Inc.

4) TCG South Florida

5) Telephone Company of Central Florida, Inc.

6) Time Warner Communications and Digital Media Partners (collectively known as Time Warner).

1. Intermedia Communications of Florida, Inc. (ICI) provides dedicated voice, data and video services; local and long-distance switched services, and advanced access services; and enhanced data services, including internet access services, for business, government and telecommunications industry customers. Specifically, ICI is providing internet access via ISDN service, PBX trunk service, and local business exchange line service. These services are currently offered in the Miami, Orlando, and Tampa exchanges; ICI plans to offer these services in the Jacksonville exchange in November 1996. As of October 1, 1996, ICI has approximately 20 customers. The company does not plan to offer residential local exchange services. The company expects to be predominantly a facilities-based provider; however, in order to expand ICI will use resale to increase market share.

2. Payphone Consultants, Inc. (PCI) is currently providing flat rate business and residential services, caller ID, rotary service (hunting) and other custom calling services. These services are being provided in Orange and Broward County.

While PCI is offering services to both business and residential customers, it is on a very limited basis. The company is testing its system with live customers; as of September 1, 1996, six residential customers and seven business customers were involved. Local billing and service is being provided on a resale basis through BellSouth. The company expects to start marketing to its first customer by October 1, 1996. PCI is a reseller and is striving to become facilities-based as quickly as possible.

Since PCI is offering basic telecommunications service, it is required to file a price list with the Commission. (A price list is similar to a tariff in that it contains rates, terms, and conditions for service.) An ALEC is not required to file a price list until it provides basic local telecommunications services; however, it may file a price list any time prior to then at its own discretion. According to PCI's price list it is offering basic business service to customers in Orlando for $27.17 and Miami for $27.64. Residential customers in these same cities pay $9.93 and $10.12 respectively. Table 3-14, on page 53, provides a comparison of rates charged by PCI and BellSouth for basic business and residential service.

3. Sprint Metropolitan Networks Inc.(SMNI) is currently providing local exchange services to both residential and business customers in Florida. They are providing: PBX trunks, rotary lines, B-1 lines, direct inward dialing, direct trunk interface, hunt groups, and dial tone services via DS-1 transport to business customers. These services are being provided in Orlando (407-206) and Lake Mary (407-531).

SMNI is currently providing residential customers with local dial tone. This service is being provided in Lake Mary. Since they too are providing basic local telecommunications services, they were required to file a price list with the Commission. According to its price list, basic local telecommunications service (R-1 and B-1) is priced at $24.00. (SMNI advised that the number of customers they have at this time is proprietary information; therefore, this data is unknown.)

SMNI will be both a facilities-based provider and a reseller. Customers within the geographic area of its core network will be served through company facilities entirely, while those outside of that area will be served through a leased facility from another provider.

4. TCG South Florida, (TCG) is currently providing private line, centrex services and TeleXpress to business customers in Florida. (TeleXpress provides business customers who have PBX or PBX-like equipment with access to TCG's switching center and switch-resident calling services.) The company is providing service to approximately 120 business customers in the South Florida market area (Miami, Ft. Lauderdale, West Palm Beach, and surrounding areas). Presently, the company is not providing basic telecommunications services and has no plans to offer service

to residential customers. TCG intends to be predominantly a facilities-based carrier.

5. Telephone Company of Central Florida, Inc. (TCCF) is strictly a reseller, reselling services provided by BellSouth and Sprint-United. All business and residential services tariffed by BellSouth and Sprint-United are resold by TCCF. According to TCCF's price list they will provide service in the following exchanges in the 407 area code: 321, 322, 323, 324, 328, 330, 333, 440, 444, 930, and 942. These exchanges are primarily in the Sanford and Lake Mary areas. As of September 13, 1996, TCCF has converted nearly 500 local BellSouth and Sprint lines for their customers. The company's rate is $9.50 for basic residential service and $25.75 for basic business service.

6. Time Warner Communications and Digital Media Partners (collectively known as Time Warner (TW)) currently provides local private line services to business customers in Orange, Osceola, and Seminole Counties. The company does intend to provide local service to residential customers in Orlando and Tampa; however, the company noted, that with the low unbundled element prices and deep proxy discounts on incumbent LEC services contained in the FCC's interconnection order, and the confusion resulting from the stay of that order, TW is reassessing its market strategy at this time. TW is a facilities-based provider.

B.4. ALECs Who Plan to Offer Service in the Near Future

While the six companies noted above are currently providing some form of local service, several other companies indicated they intend to provide service in the near future and have provided the Commission with a projected date of service. Listed below are those companies which provided a projected date of service and their intended locations and method for providing service.

- Cable & Wireless, Inc. expects to begin providing local exchange service to business customers in the Miami metropolitan area in the fall of 1996 as a reseller. The company has no current plans to provide local exchange services to residential customers.
- Intetech, L.C., plans to offer both residential and business service to

customers in Gainesville, Jacksonville, and Tallahassee in the fourth quarter of 1996. The company appears to be focusing its efforts on providing services, as a reseller, to its sister companies, which operate multi-unit dwellings.

- LCI International Telecom Corp., intends to offer both business and residential local exchange services statewide, by the first quarter of 1997. Initially, the company expects to provide local exchange services solely on a resale basis.

- MCI Telecommunications Corporation and MCImetro Access Transmission Services, Inc. plan to install switches by year-end 1996 in Miami and Orlando. Both companies plan to offer local exchange service through a variety of methods. Initial efforts will focus on resale and repackaging other providers' services. MCI envisions moving toward providing local exchange service as a facilities-based carrier.

- Preferred Carrier Services, Inc. expects to offer services by November 1, 1996 to both business and residential customers in Miami, Tampa, Orlando, and Tallahassee. It will provide bundled local exchange service through switchless resale.

- Strategic Technologies, Inc., plans to offer both business and residential local exchange services in Dade County. The company plans to offer residential service in October 1996 and business services in January 1997. The company intends to be primarily a facilities-based provider and is installing fiber in the service territory in which it intends to focus its marketing efforts. The company may resell the LEC's service until its infrastructure is complete. The company is also exploring sharing certain facilities with other ALECs.

- Telecommunications Services Center, Inc. plans to begin offering

business local exchange services in the Tampa LATA (952) in January 1997. The company is predominantly a facilities-based carrier.

B.5 ALECs With No Firm Dates For Providing Service

Some of the certificated ALECs surveyed could not or did not provide a projected date to offer service. However, they were able to provide some information as to where and how they were going to provide local exchange services. For example:

- Continental Fiber Technologies, Inc. d/b/a AlterNet expects to operate in the northeast region of Florida; they do not intend to offer service to residential customers, and expect to be facilities-based. However, the company cannot provide a projected date to offer service until final agreements are entered into with BellSouth relating to interconnection and resale. This is also the case for AT&T, whose pending arbitration petition with BellSouth will determine its future plans.
- Continental Florida Telecommunications, Inc., which expects to operate in the northeast, southwest, and southeast regions of Florida, cannot provide a projected date of service until it enters into final agreements with BellSouth and Sprint-United. The company did advise it plans to offer both business and residential services and expects to be predominantly facilities-based.
- Data and Electronic Services, Inc. advised that it plans to begin offering services in the 904 area code with the Destin 837 & 654 prefixes being first. In addition, the company anticipates being a facilities-based provider of local exchange services.
- Metropolitan Fiber Systems of Florida, Inc. advised they would begin operating in the metropolitan areas of Miami, Tampa, and Orlando. The company will focus on providing facilities-based services but will resell services where it has no existing network, in order to develop a market for facilities-based services in the future.

While the companies noted above did provide some insight into their current and future plans, other companies could not provide such detailed information. For example:

- Florida Telecommunications Services, Inc. advised that they were presently investigating multiple areas to determine where to provide services. In addition, they are exploring both facilities-based and resale provision of local services.
- The City of Lakeland explained that they were in the preliminary stages of determining the market potential of various telecommunications services in an effort to make a determination of what services should be provided and when.

Accordingly, many of their responses to our data request questions were "not applicable" or "unknown". Similar responses were received from: Arrow Communications, Inc., The Florida Public Telecommunications Association, Inc., LDDS Worldcom, and US West Interprise America, Inc.

It appears that the companies noted above may be taking a "wait and see" approach before they begin providing services. They may be awaiting the outcome of other parties' negotiations, still attempting to formulate and finalize business plans, or waiting for final decisions from regulatory bodies on issues such as interconnection. For example, Arrow Communications, Inc. stated "We feel restraint in our application of services until the state and federal regulatory bodies have issued final orders on the important issues contained in the recently passed legislation." Similarly, the Florida Public Telecommunications Association, Inc. noted that it has not been able to secure an acceptable resale agreement and the few they have seen filed thus far at the Commission would not be acceptable.

Finally, two pay telephone providers, Global Tel*Link Corporation and T-Netix, Inc., became ALECs for a specific reason. Each wanted to carry the local and intraLATA traffic from the confinement facilities where they provide pay telephone service. In the past, local and intraLATA traffic was reserved for the local exchange provider. Therefore, in order to carry this traffic each pay telephone provider became certificated as an ALEC. However, the Commission has since modified its policy regarding the handling of this traffic. This was discussed in greater detail in Section A. of this Chapter.

The Commission also inquired as to what factors the ALECs believe have impeded, or are impeding, their ability to operate as a local exchange service provider. We received a wide variety of responses. Some responses were very short and straightforward, such as "The process of

obtaining service is lengthy. Too many documents." Others provided very lengthy and detailed responses, while still others did not answer the question at all.

B.6. Obstacles to Providing Service: Agreements for Interconnection and Unbundling/Resale

After reviewing the responses received from the ALECs, the majority of respondents cited the inability to finalize satisfactory interconnection, unbundling and resale agreements with the LECs as impeding their ability to offer local exchange services. Interconnection, resale, and unbundling are each very complicated issues that have many elements. Since some ALECs only provided a one or two sentence response to this question, it is difficult to ascertain specifically what aspects of the process are impeding their progress. For example, Metropolitan Fiber Systems of Florida, Inc. stated, "Primarily, there have been delays in finalizing acceptable local interconnection agreements, agreements for unbundled network elements, and resale agreement." From this response it is impossible to determine if this company's delays are due to pricing issues, technical issues or one of the many other piece parts.

Time Warner pointed out that in areas with multiple LECs (such as Orlando) there need to be multiple negotiations. The absence of an agreement with any one holds up the entire process. With multiple agreements in a single area there must also be multiple infrastructures, differing pricing, differing terms, and billing structure.

MCImetro Access Transmission Services, Inc. and MCI Telecommunications Corporation identified a number of factors which they believe impede or will impede their ability to offer local exchange service in Florida. Many of the factors they noted relate to interconnection, unbundling and resale. The factors noted are:

- what unbundled elements must the LEC make available to MCI;
- whether MCI can use unbundled elements in any manner that it chooses to provide service to its customers;
- how should unbundled elements be priced;
- what is the appropriate wholesale price for services provided for resale;

- what services must the LEC make available to MCI for resale;
- to what extent must the LEC provide "branding" of services provided to end users on behalf of MCI;
- what are the appropriate technical arrangements for the interconnection of MCI's local network with that of the LEC, including appropriate provisions for collocation; and
- what is the appropriate compensation arrangement for the transportation and termination of local traffic interchanged between the LEC and MCI.

Many of these same remarks were echoed in AT&T's response. Both companies have arbitration petitions pending before the Commission.

It appears that some delays and disagreements have been caused in part by the interconnection provisions addressed both in Chapter 364 and the Telecommunications Act of 1996. The amendments to Chapter 364, Florida Statutes, were enacted during the 1995 legislative session, and went into effect July 1, 1995. Petitions were filed with the Commission under the state law by some parties and proceedings were initiated to resolve disputed issues involving interconnection, unbundling and resale. TA 96 was passed into law February 8, 1996, 7 months after the Florida legislature's amendments to Chapter 364, Florida Statutes, took effect. TA 96 also contains provisions for interconnection, unbundling and resale and includes a subsection addressing negotiated agreements by the parties on rates. Apparently, some parties have seen the enactment of TA 96 as an opportunity to begin new proceedings to negotiate interconnection rates that they hope will be more favorable than those to which they have already agreed. For example, both Continental Florida Telecommunications, Inc. and Continental Fiber Technologies, Inc. d/b/a Alternet stated they wish to enter into an agreement with BellSouth for implementing interconnection and resale under federal law as a replacement to the agreement reached in December 1995 pursuant to Florida law. Sprint Metropolitan Networks, Inc. (SMNI) noted that as incumbent LECs with whom they currently have interconnection agreements reach agreements with other ALECs which SMNI believes are more favorable for SMNI than their current agreements, they will renegotiate. As a result, the comparable provisions of the respective laws have allowed for multiple proceedings concerning virtually the same issues, thereby causing some delays and disagreements.

As of October 9, 1996, the Commission has approved 20 agreements negotiated by parties under either Chapter 364 or Section 252 of TA 96 involving interconnection, unbundling and resale. The Commission has established rates, terms, and conditions under Chapter 364 for four ALECs (with various LECs) when negotiations were not successful. In addition, the Commission has been involved in several arbitration proceedings initiated by ALECs under Section 252 of TA 96 to obtain reasonable rates, terms, and conditions.

B.7. Obstacles to Providing Services: Operational Issues

Two impediments were noted by the ALECs that are distinct but nevertheless are interrelated. They are the ALECs' belief that the LECs are not technically prepared for local competition, and that appropriate processes and procedures are not in place for ordering services. Many of the ALECs believe that the LECs have minimal infrastructure in place to address the issues of local interconnection and are not technically prepared for competition. According to these ALECs, they are struggling to overcome obstacles presented by the historically developed processes and procedures established by the LECs and the IXCs for integrating switches into the public switched network. For example, Florida Telecommunications Services, Inc. (FTS) stated that: "The Company is cooperating in the process and procedures, yet struggling to overcome, through negotiation, the obstacles presented by the incumbent LECs for integrating switches into the Public Switch Network. Integration issues include charges based on an inefficient design of incumbent networks . . ."

Several ALECs also believe that the appropriate processes and procedures are not in place for ordering services. For example TCCF, who is currently providing service on a resale basis, notes that several times TCCF's customers were disconnected for long periods of time, when service was being transferred from the LEC to the ALEC, due to poor order processing procedures. In addition, TCCF believes that many telephone company employees are poorly trained about procedures to handle resale situations and lead the TCCF customer to believe that the underlying carrier is no longer in the picture. SMNI states: "The process for ordering unbundled loops are written and being put into effect, but because they are so new, they require additional time and effort for all parties to

learn them."

While it is probably true that the LEC might not yet have all the specific procedures in place to facilitate competition, it is also true that many of the ALECs are relatively unaware of the existing industry procedures and systems. For instance, Continental Fiber Technologies, Inc. d/b/a AlterNet noted the obstacles it has encountered when trying to obtain a central office code (NXX). They noted:

> "The vast staff of the incumbent LECs are well aware of the process, having been through it often. They know what is required and can anticipate the questions before they arise, unlike the ALEC staff member who is frequently stymied by the circularity of those questions. The ALEC staff member draws the inference that the delays being experienced are an intended part of the process."

Needless to say, the local telephone industry's systems and procedures that are in place were not designed for a multi-vendor local service market. It will take time for entrants to become knowledgeable of the existing industry practices. Similarly, it will require cooperative efforts by ALECs and LECs to develop the new ordering processes and operational procedures necessitated by the new competitive environment.

Another comment repeated frequently in the responses is the need for a commitment to quality of service standards from the LECs. FTS states that LECs are reluctant to agree to performance standards in contracts with ALECs. In its Petition for Arbitration, Docket No. 960833-TP, AT&T is requesting the Commission order BellSouth to commit to quality standards for products sold to AT&T, and to agree to compensate AT&T if BellSouth violates these standards. At the time of this writing this docket is still pending resolution.

B.8. Ability to Provide Functionally Equivalent Services

Since most ALECs are not yet providing local service, and those few that are do not yet have any significant numbers of end users, it is too early to tell if the competitors will offer services that are comparable to those provided by the incumbent. However, it is believed that in order to compete, the ALECs will need to provide similar services to that of the LEC to attract customers,

and superior customer service to keep them.

Further, it is premature to determine if consumers can get services from the ALECs that are equivalent in terms, rates, and conditions as the services they can get from the LEC. As of September 30, 1996, the Commission had five price lists for ALECs on file: Data and Electronics Services, MCI Telecommunications Services, Payphone Consultants, Telephone Company of Central Florida and Sprint Metropolitan Network, Inc. The price list submitted by MCI Telecommunications Services does not include basic residential and basic business rates (these rates are not required to be filed until the company actually provides these services).

A comparison of basic residential and basic business rates for the ALECs (whose price lists contain rates), for the regions in which they currently operate or intend to operate, is shown in Tables 3-12 through 3-15.

TABLE 3-12

LOCAL RATES FOR DATA & ELECTRONIC SERVICE AND CENTEL

	DATA & ELECTRONIC SERVICES[1]		CENTEL	
	BUSINESS	RESIDENTIAL	BUSINESS	RESIDENTIAL
DESTIN	$19.75	$9.25	$20.60	$9.15

[1] Note: Although the company does not provide an exchange service list within its price filing, it did indicate in its response to our data request that it will begin providing services in the 904 area code with the 837 & 654 exchanges being first.

TABLE 3-13

LOCAL RATES FOR TCCF AND BELLSOUTH

	TELEPHONE COMPANY OF CENTRAL FLORIDA, INC.		BELLSOUTH	
	BUSINESS	RESIDENTIAL	BUSINESS	RESIDENTIAL
SANFORD	$25.75	$9.50	$26.60	$9.80
LAKE MARY	$25.75	$9.50	$26.60	$9.80

TABLE 3-14

LOCAL RATES FOR PAYPHONE CONSULTANTS, INC. AND BELLSOUTH

	PAYPHONE CONSULTANTS, INC.		BELLSOUTH	
	BUSINESS	RESIDENTIAL	BUSINESS	RESIDENTIAL
MIAMI	$27.64	$10.12	$29.10	$10.65
ORLANDO	$27.17	$9.93	$28.60	$10.45
FT. LAUDERDALE	$27.64	$10.12	$29.10	$10.65

TABLE 3-15

LOCAL RATES FOR SPRINT AND BELLSOUTH

	SPRINT METROPOLITAN NETWORKS, INC		BELLSOUTH	
	BUSINESS	RESIDENTIAL	BUSINESS	RESIDENTIAL
ORLANDO	$24.00	$24.00	$28.60	$10.45
LAKE MARY	$24.00	$24.00	$26.60	$9.80

It appears that the ALECs are pricing their services very closely to those of the LECs (with the exception of SMNI's residential rate) and to many end users this is a negligible savings. The companies appear to be selling these services at or near the discounted rates they receive from the LECs. Although SMNI is offering service to residential customers, it is apparent from the rate disclosed in its price list that it is more interested in the business customer at this time.

B.9. Impact on Universal Service; Extent of Local Service Competition

It can be concluded, however, that with only 6 ALECs actually providing services, there has been no adverse impact on universal service due to local service competition. Chapter 364.025(1), Florida Statutes, requires that the LEC be the provider of universal service for a period of 4 years following January 1, 1996. Even for those LECs selecting price cap regulation (and who are therefore open to competition for local services), they are not free to withdraw service for at least 3 more years.

It is clear that competition in the local services market is currently negligible. To compete successfully, competitors are likely to make as many services available as is profitable for them to do so, and they will likely make them available at similar quality levels and at competitive rates. The incumbent LEC still retains the vast majority of the market, with competitors having so small a portion as to be virtually uncountable. Although entry is undoubtedly forthcoming, the market is still in its infancy. In addition to ALECs obtaining satisfactory agreements with the LECs, numerous operational issues (both internal to the ALECs' operations, and involving the industry at

large) still must be resolved. The provision of telecommunications services, especially where multiple providers are involved, is extremely complex; overcoming existing obstacles and developing new procedures and systems will take time. Although local exchange competition is inevitable, how rapid it occurs depends on crafting successful solutions to many problems.

III.C. What Does The Future Hold?

In what way will competition for local service eventually evolve? The competition that has occurred is so minimal that it offers no real insight into what future trends will be. However, some clues to the direction it may take are provided by examining the participants: who they are, their strengths and weaknesses, and their professed strategies for competing.

In preparation for this report several sources of information were consulted. These included the FPSC's ALEC certification records, responses to data requests, and review of companies' annual reports, company-provided public information such as 10-K forms filed with the Securities and Exchange Commission, industry publications, and articles from an assortment of sources.

If the current list of entrants is any indication, the local market will be one characterized by variety. Based on ALEC certifications, the list of entrants includes the expected players such as LECs, IXCs, AAVs, and cable TV operators, as well as the unexpected, such as the Florida Pay Telecommunications Association, Tallahassee Memorial Hospital, and the City of Lakeland. Potentially, any one of these could compete in the local market although some appear to be better positioned to offer service sooner than others, especially those with existing facilities. Some will go it alone. However, assuming the materials reviewed for this report are accurate, the strategy for many of the parties is to join with other providers where possible, such as an IXC joining with an AAV, to gain a competitive advantage over rivals.

C.1. What the Near Future May Bring - Resale

From the information reviewed for this report, resale will be the principal method of entry. Resale is the economically least cumbersome method of entry because the entrant does not have to undergo the cost of building any portion of the network. Atlantic*ACM, a Boston based consulting

firm, has compiled data on entry into the local market. Their results indicate most long distance companies surveyed will enter the local market via resale to avoid the costs of building a local network. (Exchange May/June, 1996, p. 26)

Resale also appears to be the most likely route for entry, at least in part because the entrant does not have to delay offering service while its own network is being constructed. The Commission sent a data request to the 33 companies certificated as ALECs as of July 15, 1996. 30 companies responded. The data request included a question asking what method the company would employ to enter the local market. Of the 30 responses, 13 stated they would use resale. Of these 13 responses, 6 have indicated they expect to evolve into full facilities-based carriers over time and will use resale while they are installing facilities. For example, AT&T, MCI, LDDS, and Sprint plan to build local facilities and will need to use resale until their local networks are completed.

C.2. The LEC As a Competitor

In appraising potential entrants, one cannot forget that the incumbent itself will be a competitor. Within its operating territory the LEC will not be easily deposed as the primary carrier. It enjoys ready name recognition coupled with demand inertia in a manner similar to that of AT&T at divestiture. It took almost twelve years for AT&T's market share to erode from approximately 90% to 54%. This could also be the case for the LEC. In addition, if the RBOC cash flow position is indicative of the LECs as a whole, the LECs have substantial financial power to effectively compete as well.

The LEC is the primary source for a great variety of services. Due in part to its previous position as the only provider of switched local service, as well as being the dominant provider of private line services, the LEC is connected to more homes and businesses throughout its territory than any other type of communications provider. Additionally, the LEC offers a long list of local service add-ons (such as call waiting, remote call forwarding, selective call ringing, call forward busy/no answer and call trace), many of which may only be available from the LEC.

While the LEC is in a comparatively strong position in meeting competition, it has been suggested that the LEC may harbor some significant disadvantages -- notably, potentially declining customer satisfaction and substantial quantities of technologically outdated equipment (discussed

in the following section). Studies finding potential customer defections from LECs to ALECs suggest customer satisfaction with the LEC may be eroding. A study conducted by Deloitte & Touche found that 40% of business customers, the most lucrative customers in comparison to residential customers, would consider taking phone service from an alternative provider. Another study conducted by Morgan Stanley & Co. found that 65% of residential customers would consider taking service from an ALEC. (Business Week, April 8, 1996, p. 68)

In fairness to the LECs, dissatisfaction may not be the real issue here. Customers' interest in changing carriers may be driven by either curiosity or the desire to change for change's sake rather than bad experiences or the anticipation of price cuts that may not come. ALECs have been operating a fairly short time, allowing customers little time to gain experience with them and to be able to make an educated comparison. In addition, consumers may be assuming the level of service will be better than that provided by the LECs. The LECs have had years of experience in the telecommunications business. An entrant may not have such experience, and providing service is no simple matter. This was brought up in a recent article in Exchange magazine concerning the difficulties of starting a local company as a reseller. The article points out that in constructing and operating a local company, one must consider what to offer, where to offer it, and at what price. This requires skillful negotiations and clever marketing. The provision of service has to be done quickly and, from both the company's and the customer's standpoint, easily and conveniently. In order to retain customers, the ALEC will need to provide exceptional customer service. This is especially important in that the ALEC will need word-of-mouth referrals, at least in the early stages, to gain market share. Any glitch in service will be magnified to a greater extent than would be the case with an established carrier. In a similar vein, the company will need an experienced maintenance and repair staff when equipment problems do occur. ("Building a Local Service Resale Company: An Operational Model," Exchange, May/June 1996, pp. 22-26)

As well as being a competitor in its own territory, an LEC can also become an ALEC, and compete in another local company's territory. Currently in Florida, two of the largest LECs, BellSouth and Sprint-United, through its affiliate Sprint Metropolitan Networks, are preparing to enter into competition with each other. Competition between these two carriers will not likely be for low volume residential customers, but rather for high volume business customers. Both are preparing to enter the other's territory and compete for the other's customers. Both BellSouth's and

Sprint-United's territory include portions of the high growth Orlando region which is the site of a large number of national and international firms. BellSouth provides service to the city itself, while Sprint-United serves the surrounding territory and, in particular, the suburbs located in proximity to Disney World. Because both networks are already interconnected, many technical and engineering problems associated with interconnection may not be a factor delaying the start of competition.

To complicate matters, GTEFL's territorial boundary is adjacent to Sprint-United's territory just to the west of Disney World. Although GTEFL has not filed for an ALEC certificate at the time of this writing, it is likely that they too will consider competing with BellSouth and Sprint-United in this market.

In addition to the in-state rivalry, at least one BOC operating outside the southeastern region is targeting the Florida market. US West, via its merger with Continental Cable, a certificated ALEC, plans on competing in selected portions of the Jacksonville area within the next year.

C.3. Technology's Effect On the Evolution of Competition

In its response to the Commission's data request, Florida Telecommunications Services, Inc., (Comcast Cablevision) argues that the LECs' networks are not compatible with entrants' networks, such as Comcast's network. Comcast believes this incompatibility is reflective of the "state of the art" nature of the entrant's network and the legacy status of LEC networks.

The majority of LEC facilities were designed to provide basic telephony services. These are not always the facilities needed to make technologically advanced services available. Most basic services do not require large bandwidth such as that needed for video or high speed data transport. To install and retain technologically outdated equipment has occurred partly because the LEC was uncertain whether, under rate of return regulation, it could justify spending money on facilities that exceeded the needs of the then current market.

Competitors deciding to compete in the local market by means of their own facilities will be installing technologically advanced high capacity, high speed equipment. This equipment will be able to provide the services desired by high volume, high revenue-producing customers. The

LEC will either have to revamp its network, or not offer some of the more advanced and potentially more profitable services. This leads to a further dilemma. If it elects the former, it will be faced with a substantial investment which could place upward pressure on rates. If it elects the latter, it will be subject to losing high revenue customers to a competitor and it will be faced with the loss of revenue, resulting in upward pressure on rates.

The notion that the LEC networks are antiquated may be more perception than reality. The larger LECs have been installing technologically advanced equipment. For example, GTEFL has installed a video dialtone network in Clearwater where it plans to offer cable TV service. In addition, the Company offers MetroLan service, which uses synchronous optical network (SONET) rings, to offer high speed digital services. The service was tariffed effective October 1994. BellSouth tariffed Smart Ring service (effective July 1996), a service similar to GTEFL's MetroLan. It too uses SONET and offers high capacity transmission capabilities. These services provide from 84 DS1s up to 364 DS1s. To gain some idea of the volume of traffic accommodated by these rings, a DS1 is the equivalent of 24 voice grade channels. A SONET ring can provide from 2016 to 8736 voice grade channels. In addition, these rings are self-healing. Should a break occur, traffic is routed in the opposite direction. This eliminates any interruption of service for the customer.

Digital technology, such as that used in SONET, is in wide use today. Analog technology is no longer used for modern switches; these switches are 100% digital. In Florida, the LECs, with the exception of BellSouth, have replaced all their switches with digital switches. Of BellSouth's 212 total switches, only 27 are analog, with four of those to be replaced with digital switches by the end of this year. Although copper continues to make up a good portion of the network, interoffice facilities are now virtually 100% digital as well.

C.4. Large Customers Likely to be Early Targets

New entrants will likely focus on large customers and large markets. For example, Atlantic*ACM, a Boston based consulting firm, has compiled data on entry into the local market. Their research shows that IXCs will concentrate on business customers rather than residential, at least for the next two years. (Exchange, May/June 1996, p. 22)

As stated above, US West and Continental Cable are entering the Jacksonville area.

Initially, Continental will provide service to residential customers. However, indications are that Continental is planning to compete for business customers as well. Continental has entered into a joint venture with Teleport Communications Group (TCG), which is certificated as an AAV and an ALEC. TCG has been providing competitive access to long distance providers' business customers.

Large potentially lucrative markets will be the target of competitive entry. As noted above, BellSouth and United are planning to compete vigorously in the Orlando area, a fast growing market comprised of many multi-national firms. Time Warner is providing private line service in Orange, Osceola, and Seminole counties, three of the counties making up the Orlando LATA. ICI is also offering private line service and switched service, in exchanges in Orlando, Tampa, and Miami, three of the largest markets in Florida.

In the previous less competitive world, if the LEC were faced with losing a large source of revenue from such "cream skimming," it could, with Commission approval, adjust rates for other services to compensate. In the current more competitive world, the LEC can adjust rates to some extent, but currently is restricted by law from raising rates more than a certain amount. Such a loss of revenue could result in the firm, LEC or ALEC, wanting to increase basic and non-basic rates, but two factors will come into play. First, the Florida law currently caps basic rates for 3 years for price regulated LECs (5 years for BellSouth), and limits increases to non-basic rates. Second, if competition works, the firm will be reluctant to raise rates for fear of losing customers.

C.5. IXCs May Be the Early Entrants

Many IXCs are going to enter the local markets sooner than other types of providers, and they are well positioned to do so. For one thing they have substantial financial strength. In 1995 MCI's income before income taxes and extraordinary items was approximately $897 million. For this same period, excluding restructuring charges the "new" AT&T (after the spinoff of Lucent Technologies, NCR and AT&T Capital) reported income before income taxes of slightly over $8.3 billion. In comparison, other potential entrants such as the cable TV providers often do not have such earnings. As an example, TCI's income before income taxes and extraordinary items for 1995 was $(291) million and Time Warner's was $2 million. This may delay these providers entry, or at

least limit the number of territories they decide to enter initially.

The IXCs are seasoned competitors. The IXCs have had over 10 years of experience competing vigorously with each other, something the LECs have not been confronted with due to their protected status under past regulation. In the competitive process, the carriers have had to cut costs substantially. AT&T's memorable announcement to eliminate 40,000 positions is one example of the draconian steps carriers have taken to become more cost-efficient. As a result of its reorganization, MCI dismissed 2,400 employees by the end of 1995, and expected 400 more to leave by the end of 1996.

And the competitors have been successful. As stated above, during this period, based on revenues, AT&T's market share has eroded to 45% in Florida. Again based on revenues, at the national level AT&T's market share has fallen to approximately 54%. It may have taken almost 12 years, but the 55% decrease in market share in Florida and the 46% decrease in market share nationally is significant. At the same time, in either the Florida market or the national market, AT&T's ability to retain the substantial portion of the market that it has is indicative of its ability to compete as well.

While most of the 400 plus IXCs operating in Florida are resellers, the large IXCs such as AT&T, MCI, and Sprint are facilities-based carriers, having facilities for transport and switching of long distance traffic. Operating as an ALEC, a facilities-based interexchange carrier could resell local service purchased from the LEC along with its long distance service. A marketing ploy that an IXC certificated as an ALEC might use is to offer "local" service over a wider geographical area through the use of its own facilities. By combining local service along with a reduced measured rate or flat-rated long distance service, its "local" service territory could be far more extensive than the LEC's.

The large IXCs have name recognition and they will try to use it to capture market share. AT&T's 1995 Annual Report notes that in a recent Harris poll, those queried placed AT&T at the top of a list containing 20 firms in terms of being the most "identifiable." (Annual Report, 1995, p. 9) It is also notable that after separating into three stand-alone companies, AT&T retained the AT&T logo and name for its long distance company. Sprint has indicated in its 1995 Annual Report that they consider Sprint to be one of only three nationally recognized telecom brands (a position

that others might argue with), and that they will aggressively use their name recognition in competing, especially in competing with the BOCs. Sprint also plans to accelerate replacement of the Centel and United monikers used for Sprint's LEC carriers with the Sprint name. (Sprint Annual Report, 1995, p. 6) Finally, the successful IXCs have dealt with the myriad problems that can arise in the telephone service business and have established processes for solving the problems. In short, they are experienced in providing telephone service.

Despite the advantages the IXCs have, they still lack one important factor: direct access to the customer location (a local loop). Prior to passage of the 1995 law, carriers such as the IXCs were not allowed to duplicate the LEC switched network. However, duplication of the LEC private line facilities has been allowed by AAVs. A certificated AAV is limited to offering only private line and special access services. Certificated as an ALEC, however, this limitation is removed. Several AAVs have already been granted ALEC certificates in Florida, including Intermedia Communications (ICI), Metropolitan Fiber Systems (MFS), and Teleport Communications Group (TCG); ICI is already providing local switched service. The IXCs recognize the advantages of combining their efforts with a provider that already has a local presence, such as an AAV. Consequently, many IXCs have elected to join forces with the AAVs, either through acquisition or by means of mutual agreements.

Metropolitan Fiber Systems (MFS), the largest AAV in the nation, has recently been acquired by LDDS Worldcom, an IXC. MFS has installed fiber-optic networks in 50 cities throughout the US and, through its acquisition of UUNET Technologies, it is also one of the largest providers of internet access service. The combination of LDDS and MFS puts both parties in an especially good position to compete with the LEC. First, LDDS can use MFS to bypass the LEC and thus avoid paying access charges (either originating, terminating, or both, depending on MFS' service territory) to the LEC. Second, a significant expense for MFS is paying long distance charges for calls it sends between the cities in which it operates. It can now avoid those costs by using LDDS for those calls. Third, MFS, through its UUNET internet facility, will also be able to decrease costs by using LDDS' network for its internet calls. Fourth, LDDS Worldcom's purchase of MFS enables the IXC to enter the local market without the delay of installing a local system. (The Economist, August 31, 1996, p. 56)

The forming of relationships with AAVs by AT&T is another example of the interest entrants have taken in the AAVs' position in the local market. AT&T has entered into an agreement with Teleport Communications Group for TCG to provide switched access service to business customers in 9 cities throughout the US. AT&T has made similar deals with 5 other AAVs/ALECs including American Communications Services, Inc., Brooks Fiber Properties, Hyperion Telecommunications, ICG Communications and Time Warner. (Local Competition Report, September 2, 1996, p. 7)

A further advantage for an IXC entering into a relationship with an AAV is that the IXC gains access to possibly profitable new customers. Because AAVs have concentrated their efforts on high revenue producing customers, IXCs taking this approach to entry have an added benefit. The customers of the AAV now may also be interested in combining the services they have purchased from the AAV with the services of the IXC.

MCImetro is installing its own network which will be equipped with the most advanced technology. MCImetro will deploy SONET-based local networks that will be combined with MCI's long distance SONET rings. Although installing its own network is more costly than reselling an existing network, it eliminates the company having to rely on another provider. Like the combination of an IXC and an AAV, MCI's use of its own network to originate and terminate calls has the added advantage of allowing MCI to avoid access charges (either terminating, originating, or both, depending on the locations of MCImetro's networks). Terminating and originating access charges are a substantial expense which MCI estimates currently accounts for 46% of its costs. (Annual Report, 1995, p. 2)

C.6. Combinations of Service - The Cable Carriers and Wireless Carriers

Bundling of services is an approach entrants (and incumbents) will undoubtedly use to compete. Most new entrants wanting to offer local service will do so by offering it in conjunction with other services. Such a strategy is manifested above in the discussion concerning the IXCs' entry into the local market. There, the players are directly involved in providing wired telephone service in one form or another. However, other potential entrants are already in a wired line of business, notably cable TV.

There is evidence that customers would be interested in some combination of telecommunications services and cable TV service. In a Report by the Washington D.C. based consulting firm MTA-EMCI titled Branding and Building Telecommunications Services: Telephony, Video, and Internet, the firm presented data on the potential demand for bundled services. The services included local, long distance, cable TV, cellular, internet, and paging. Local service bundled with long distance service was the most desired combination, followed closely by the bundled offerings of local and cable TV, cable and long distance, and local, long distance and cable. The least important bundled services were services that included paging in the package. (Local Competition Report, September 2, 1996, p. 6)

Continental Cablevision in Jacksonville has installed a telecommunications switch and is intending to offer residential telephone service in selected communities this year. Cox Cable, another company providing cable service in Florida, plans to offer multiple telecommunications services, including local service, along with its cable television service. Tele-Communications Inc., nationally the largest provider of cable service, intends to offer both local and long distance service. Comcast has entered into agreements with Sprint with the intention of Comcast being able to market local and long distance service along with its cable service. Time Warner has been preparing to offer telephone service in Orlando. If its experiments are successful, the phone service will be packaged with numerous cable delivered services.

Jones Intercable's activities offer convincing evidence that bundling of services will be the way competitors will compete with the incumbent and others. Jones is offering telephone service in conjunction with its cable service in Alexandria, Virginia. The Company's basic telephone service includes several services that the LEC sells as non-basic add-ons to local service. For example, Jones' basic local service includes an unlisted number, call waiting, and inside wire maintenance at no additional charge, three services for which the LEC has traditionally charged extra.

However, there is evidence that customers may be reluctant to purchase local telephone service from a cable provider. In Spring 1995, Deloitte & Touche conducted a survey of communications industry executives and securities analysts involved with the industry. The respondents included executives with traditional telecommunications providers such as LECs and

IXCs, cable TV providers, and AAVs. The survey indicated that 49% of the respondents would not buy local service from a cable TV provider, as opposed to only 1% being unwilling to buy local service from an IXC. The reason for such reluctance may be that the respondents perceive that cable TV providers do not provide quality service. The survey found that network quality was the respondents' number one concern, well above price. If the respondents do believe cable TV service is not high quality, and high quality is their number one concern, it would make sense that they would be unlikely to use a cable TV company for local service.

As noted, the respondents to the survey were not from the population at large, but were involved with the communications industry. Their sophisticated knowledge of the issues may not be shared by the general population, which may be more concerned with price as the driving force in their choice of local carriers. In addition, the view of the future by the respondents may not be representative of the typical consumer of communications services. The executives were asked what service they believed would be the most important in the near future. Leading the list was communications and networking with 83% of the respondents deeming it the most important. Ninth on the list was multimedia with 5% believing it to be the most important. The internet was not included in the top 9 services. Growth of the internet has been increasing dramatically. For example, Alta Vista, a popular internet search device, states on the internet that Alta Vista provides access to 30 million pages found on 256,600 servers and four million articles per day. Intervid, a British internet consulting firm, estimates in its report "The Internet in 1996: An Investment Perspective" that web sites have grown from 22,000 in May 1995 to over 100,000 in November 1995. The internet is, in fact, an important technology. Further, in virtually every annual report reviewed, the intent to provide internet services was a primary market strategy.

Many providers and potential providers of local service already include wireless services in their lists of offerings. A large number of LECs and IXCs already have cellular affiliates. BellSouth Mobility and GTE Mobilnet are examples of Florida's LEC cellular operations. The premier example of the IXCs' entry into the cellular market was AT&T's acquisition of McCaw cellular in 1994, creating the largest wireless operation in the country.

The cellular providers are currently competing for local service business. However, because of the pricing structure in their industry, it has not been generally perceived as providing local

service. Cellular service is usually not flat-rate priced, but is priced based on usage, similar to the way long distance service is priced. Additionally, the "local" service area is considerably larger for a cellular provider than the local service area of a LEC. This further confuses the notion of "local" service.

A possible outcome of packaging cellular service with other services is that cellular rates could decrease. Should the cellular provider choose to mimic the flat-rate pricing of a LEC and still offer local service over a wider territory, it would probably be able to compete with the LEC. However, the costs of providing cellular service are high, demanding that customers be charged higher rates. Therefore, it could be beneficial for the cellular provider to join forces with providers of other services. In this way, costs could be distributed over several services, effectively lowering the rates for services that have been characterized as more expensive.

With the advent of PCS, the costs of providing wireless may not be as significant as they are today. The spectrum allocated for PCS has only recently been auctioned; consequently, PCS is just now being installed and is available only on a limited basis. This means companies that were successful bidders for PCS spectrum, such as AT&T, BellSouth, and GTE, likely will have to combine their products initially with existing cellular services until PCS becomes more readily available.

The most ambitious PCS undertaking is Sprint's Sprint Spectrum Limited Partnership. Sprint was a large purchaser of PCS spectrum during the recent auctions, and intends to combine PCS with local, long distance and cable TV. Three of the largest cable TV providers, TCI, Comcast, and Cox Cable, are attempting to work out an arrangement with Sprint to combine their efforts. (It should be noted that the companies have not been able to reach agreement at this time.) Initially, PCS will be used in conjunction with current local service. These companies may be betting that it will eventually replace local service; they may be right.

The idea of wireless becoming the standard for local service seems to be at odds with the responses given in the data requests sent to providers by the Commission. But the responses may be somewhat misleading. Several respondents indicated they had plans to install local facilities. Installing local facilities does not necessarily mean installing "wire" facilities. In fact, it is very likely that the facilities will be designed and constructed at least in part for wireless services. Not

all parties are so convinced. MCI, via MCImetro, has already installed local networks in several cities which employ "hard wire" transmission equipment.

C.7. Telco to Cable

So far we have concentrated on other providers' entry into the local telephone market. The combining of services can take a different direction, though, as witnessed by GTEFL's entry into the cable TV business. Ameritech was the first regional BOC to enter the cable TV business. Its system is not going to be devoted entirely to delivering cable programming but is being tested for two-way service. According to a June 1996 article in the Tampa Tribune, in Clearwater, GTEFL is now offering both telephone service (long distance and local) and cable TV service in competition with the largest incumbent cable company, Time Warner. GTEFL is also pursuing cable TV franchises in the St. Petersburg area and hopes to garner up to 95,000 customers in the Tampa Bay area by the end of this year.

C.8. Competition in Long Distance

Most of the prognostications on the direction of competition has been devoted to predicting changes in the local market. This has been the case primarily due to the changes brought about by the amendments to the Florida law and TA 96. The long distance market may undergo some competitive changes as well, driven in part by legislation and in part by technology.

Prior to passage of TA 96, GTE and the BOCs were not allowed into the interLATA market. With passage of TA 96, GTEFL is no longer restricted from entering the interLATA long distance services market. GTE has entered into an agreement with LDDS Worldcom for LDDS to provide long distance service for GTE. The service will be made available through GTE Long Distance, not to be confused with GTEFL. Through the agreement with LDDS Worldcom, GTEFL will be able to offer the end user both local and long distance service under the GTE brand.

While the restriction on the BOCs' offering interLATA services still exists for now, it is modified in TA 96. The BOC is specifically prohibited from providing **in-region** interLATA services. ("In-region" service is the provision of service by a BOC within its own operating region.)

However, once a BOC meets a list of requirements specified in Section 271 of TA 96, it can begin offering in-region interLATA services. Being able to provide this service is particularly important to the BOCs because they will be able to compete directly with the IXCs within their operating territory. The BOCs' interest in entering this market is fueled by the potential revenues generated by it. Judging from the IXC revenues in Florida in 1995, the intrastate interLATA market is worth in excess of $1.4 billion. It is likely to be worth more in the future if the population growth in the state continues its current upward trend.

On the other hand, technology could create a different way of making a long distance call other than through a telephone, a scenario which may be happening. Anyone who has utilized the phenomenon known as the internet realizes its potential as a device for long distance communications. The drawback currently is that this communication occurs primarily via the written word as opposed to the spoken word. That's soon to change!

Audio applications for personal computers are in the process of being created. The stumbling block up until recently has been the development of a mutually agreed upon protocol. Microsoft and Intel have now developed software that is supported by over 100 PC makers excluding IBM and Apple. To gain some idea of the importance of this software, prior to MS-DOS, the large companies that built PCS installed their own version of DOS. This meant that the software developed for an IBM PC might not be compatible with a DEC PC. For example, IBM's word processor DisplayWrite would run only on an IBM MS-DOS machine. Once MS-DOS was made available to any and all manufacturers, it became the standard and software could be carried from one machine to another.

Overcoming the mutually agreed upon software problem does not make a PC coupled with internet access a replacement for telephone service. First, there is the problem of an internet user trying to contact a non-internet user. (Although software has been recently introduced that supposedly will alleviate this problem.) Even with the new audio software, the voice quality is not yet as good as that over the phone. Second, computers don't have "ringers" - both parties must be "on" for communication to take place. Nonetheless, what does this mean to the long distance market? Considering the cost saving involved, the internet could have a substantial impact on long distance revenues. A 10 minute call between New York and Tel Aviv would cost between $10.00

and $15.00 using the switched network. The same call over the internet would cost between $.10 and $.30. (Exchange, May/June 1996, p. 42)

Use of the internet may also be affected by the cable TV industry's entrance into this niche. If the cable TV providers are able to provide local service by means of their current coaxial facilities, they will be in a particularly strong position to compete with the LEC for internet services. The cable industry is developing cable modems that offer superior service to telecom modems. Modems designed for data transfer over cable are reported to be able to download pages from the internet at speeds 1000 times faster than the typical modems in use today. (Business Week, April 8, 1996, p. 75) One difficulty is that the cable modems are high priced, averaging approximately $500 each. Despite the cost, cable companies have ordered 500,000 modems and intend to make them initially available to internet "surfers." (Business Week, April 8, 1996, p. 75)

A recent test of a system using these modems at Boston College suggests that the strategy of marketing high speed service has promise. Continental Cablevision installed a broadband telecommunications network consisting of over 8,000 nodes throughout the campus. Participants, including students, professors, and administrators, have found the system to be superior, primarily due to the increase in the speed of access and the ability to download large volumes of information quickly.

This section has been devoted to examining the variety of players and the potential service offerings that may be found in tomorrow's telecommunications markets. It is admittedly short on projecting in what way competition will evolve. If one could limit the potential providers to offering a single service, a forecast of the future would likely show a highly complicated market. However, when one considers the actual number of providers and the actual potential combinations of services these providers could offer, a geometric increase in the complexity of the competitive structure of the telecommunications market results. The analysis to this point makes one thing clear: predicting the direction of local services competition requires an extensive stretch of the imagination.

III.D. Other Requests

This section addresses the concerns raised by the Governor in his letter dated June 30, 1995 to Susan F. Clark, Chairman of the FPSC. Other concerns of the legislature stated in Chapter

364.386(1)(d) and (e) are also addressed in this section.

D.1 Affordability and Reliability of Local Telecommunications Services

Local exchange telecommunications companies (LECs) which had traditionally been under rate-of-return regulation could, under the new law, elect to be price cap regulated. This form of earnings regulation provides greater pricing flexibility than rate-of-return regulation. The pricing flexibility provided by the new law will allow price cap LECs the ability to compete with new entrants, while maintaining affordable rates on services for end users. Of the 13 incumbent local exchange telecommunications companies providing service in Florida, eight, thus far, have elected price cap regulation.

Section 364.051 (6)(a), Florida Statutes, provides that a LEC which has elected price cap regulation may set or change the rate for each of its non-basic services, but cannot exceed certain limits (discussed below) for a non-basic service category. There are four major service categories for local telecommunications services. They are: basic service, non-basic service, network access, and interconnection and resale. Initially, basic and network access rates are capped, while most non-basic rates may be adjusted upward subject to aggregate constraints. The Commission has established ten non-basic service categories for the many different types of non-basic services. Examples of non-basic services include: toll service, operator service, optional services (e.g., call waiting, call forwarding), public telephone service and directory assistance, to name a few. The allowed price increases for non-basic services are to be applied on an aggregate basis for each non-basic service category, as opposed to each individual service. In those exchanges where a LEC does not have another company providing local telecommunications services, the aggregate prices for all non-basic services in a given category cannot be increased more than 6% in a 12 month period. In those exchanges where another local service provider is present, the aggregate price increase can be up to 20%.

As of August 1996, there has been a total of 151 non-basic service related tariff filings by price regulated LEC. Only seven tariffs were filed by price cap LECs to increase rates for non-basic services. During the same time, there were 20 tariff filings to reduce prices for non-basic services. In the aggregate, no price cap LEC has exceeded the 6% cap in any non-basic services category.

Thus, to date, the affordability of telecommunications services does not appear to have been adversely affected by the introduction of price regulation.

The Commission monitors the service quality provided by the LECs by (1) evaluating a company's performance in meeting certain service standards and rules set by the Commission; (2) evaluating the company's control systems to determine the extent to which they verify the service results they report to the Commission on a periodic basis; (3) determining if a company has corrected, or is correcting, all deficiencies found in previous evaluations; and (4) receipt and handling of consumer complaints. Based on the results of the service testing and evaluation of consumer complaints through August of 1996, there is no indication that the service reliability for telecommunications services provided by price cap regulated LECs has deteriorated.

D.2 Defining Basic Local Telecommunications Services

Section 364.01(4)(a), Florida Statutes, states that the Commission is to "protect the public health, safety, and welfare by ensuring that basic local telecommunications services are available to all consumers in the state at reasonable and affordable prices." Basic local telecommunications service is defined by Florida statute as voice-grade, flat-rate residential and flat-rate single-line business local exchange services with access to "911," all locally available interexchange companies, directory assistance, operator services, relay services, and an alphabetical directory listing. We have been asked to review this definition to determine if, taking into account advances in technology, additional services should be added to this definition.

In Docket No. 950696-TP, after hearing, the Commission determined that universal service (US) should be construed as the provision of "basic local telecommunications service" as defined above. Therefore, US and basic local telecommunications service are presently synonymous. The services which comprise universal service will evolve over time. Nothing has occurred since the US docket was concluded that would warrant a change in the definition. (We would also note that the Commission will be submitting a separate report by January 1, 1997 to the legislature and the Governor concerning universal service.)

Furthermore, in CC Docket 96-45 the FCC is to define the services that are to be included within universal service and thus to be funded by the interstate jurisdiction, based upon

recommendations from a federal-state Joint Board. (It should be noted that FPSC Commissioner Julia Johnson is a member of the Joint Board.) The FCC's definition is designed to evolve and be updated periodically in light of advances in technologies and services. The Joint Board made its recommendation in November 1996 and it will be about six months before the FCC puts rules into place. Therefore, we believe that the definition of basic local telecommunications services should not be amended at this time.

D.3 Capped Network Access Rates

Network access is defined in Chapter 364 as any service provided by a local exchange telecommunications company to a telecommunications company certificated or licensed to access the local exchange network, excluding local interconnection and unbundling/resale services. For price regulated LECs, the rates for network access services are capped at the rates in effect on July 1, 1995, and remain capped until January 1, 1999. Also, if a price cap regulated or rate-of-return regulated LEC's current intrastate switched access rates are higher than its interstate switched access rates in effect on December 31, 1994, the LEC must reduce its intrastate switched access rates by 5 percent annually beginning October 1, 1996, until parity with interstate rates is reached. Any telecommunications company whose intrastate switched access rate is reduced by this subsection, must return the benefit of the reduction to its customers by reducing customers long distance rates. After this period and after the LEC's intrastate rates reach parity with interstate switched access rates, a company may, on 30 days' notice, annually increase any specific network access service rate in an amount not to exceed the cumulative change in inflation. However, the adjustment cannot exceed 3 percent annually.

On June 30, 1995, Governor Chiles wrote requesting that "the Florida Public Service Commission review whether the prices or application of these capped access rates inhibit local exchange competition, with particular emphasis on any adverse effects imposed upon access based new entrants." In addition, the Commission was asked to explore if these network access provisions would stifle or impede the expansion or growth of wireless technologies, including Personal Communications Services (PCS) within the state.

At present, there is no evidence that the capped access rates have had any impact on

competition. The presence of over 400 IXCs certificated in Florida indicates that there is little evidence capped access rates have deterred competition in the long distance market. In addition, as noted in Chapter III, as of October 1, 1996 there were 39 certificated ALECs. Also, when the Commission staff asked these certificated ALECs in a data request to discuss what factors they believe have impeded, or are impeding, their ability to offer local exchange service in Florida, only one provider touched on access charges. Moreover, it appears that ALECs will be assessing the same access rates as the incumbent LECs with whom they will compete.

Capped access rates should have no impact on wireless technologies, such as PCS. Currently, there is no linkage between access rate levels and the interconnection rates charged by LECs to cellular providers; in fact, cellular interconnection rates are lower than access rates. Moreover, it appears that recent actions regarding reciprocal compensation between the LECs and CMRS providers (see FCC 96-325, ¶ 1041) will tend to decrease cellular interconnection rates further. Therefore, the Commission does not believe that capped access rates have inhibited local exchange competition.

CHAPTER IV: CONCLUSIONS

The amendments to Chapter 364 codify the legislature's belief that consumers of local telecommunications services are best served by competition rather than regulation. The amendments direct the Commission to focus its attention on encouraging competition and give the Commission broad authority in carrying out its new directive. Is the legislation working? Although it's early to say for sure, indications are that the amendments are producing the intended results. For example, the presence of 39 certificated ALECs indicates that there are parties willing and able to enter the local markets. However, sufficient time has not passed for competitors actually to begin offering service in any meaningful quantities.

Despite the passage of legislation that essentially allows unfettered entry, there have been delays. The delays that have come about can be separated into two categories: delays internal to the entrant's operation, and delays due to external forces.

Internally, starting and operating a telephone company is a complex undertaking. A new entrant faces several hurdles in providing local service. The entrant must determine its territory, enter into contracts with existing local carriers, establish an effective marketing program, install an effective customer services department, install and operate an error-free billing system, and have a capable maintenance and repair department. The entrant that has its own facilities must be able to interconnect with the incumbent's facilities where both can exchange traffic without service interruption. This can mean delays for entrants using different technologies. Those entrants planning on waiting until their own facilities are constructed before they offer service will be delayed even further. Simply put, building a telephone company takes time.

Externally, there are several regulatory issues that must be resolved. The ALECs and LECs are to negotiate the rates and conditions for interconnection, unbundling and resale. If the negotiations fail, the Commission must intervene and set the rates and conditions. In addition, a permanent number portability mechanism ultimately will need to be established.

With the passage of TA 96, local competition in Florida is now governed by state and federal law which complicates the ground rules for ALEC entry. The amendments to Chapter 364 were passed during the 1995 legislative session. Following its enactment, the Commission began

proceedings to implement these amendments. On February 8, 1996, President Clinton signed TA 96 into law. While the two pieces of legislation are similar in many regards, TA 96 supersedes the states in some areas, and the law and the subsequent FCC implementation rules have caused confusion. As a result, the Commission has had to reconsider (or is in the process of reconsidering) previous decisions to bring its regulation into compliance with the provisions of TA 96.

Passage of TA 96 has afforded certain parties the ability to relitigate previously resolved issues. For example, in Docket No. 950984-TL, prior to passage of TA 96, the Commission established the appropriate rates, terms and conditions for unbundled loops for MFS pursuant to the state statute. Following passage of TA 96, in Docket No. 960757-TL, the FPSC dealt with the same issues for MFS pursuant to the requirements of TA 96.

How conflicts between the state and federal law will ultimately be resolved likely has caused some parties to take a "wait and see" attitude. Prospective entrants are awaiting settlement of these issues before they commit resources to enter the local market. They will only act once they have a clear idea of what the "rules" for operating in the Florida and national market are. While the Commission has the latitude to adjust its rules and regulations to accommodate some of the variations between TA 96 and Chapter 364, statutory changes to the Florida law eventually may be needed once there exists a better understanding of the federal law and its implementing rules. Specifically, the limitations on resale in Chapter 364 are in conflict with the resale provision in TA 96.

Further, on August 8, 1996, the FCC issued its First Report and Order on interconnection, resale and unbundling. The Order reflects the FCC's interpretation of Sections 251 and 252 of TA 96. The Commission is not in total agreement with the Order, and filed a motion to stay the FCC's First Report and Order.

The grounds for the Commission's motion is that the FCC has exceeded the authority granted to it by Congress, given the way the FCC has interpreted TA 96. The Commission believes that the FCC apparently views TA 96 as removing the interstate/intrastate distinction, thereby expanding its jurisdiction to include intrastate regulation. In contrast, the Commission believes the FCC should issue broad guidelines for enacting the provisions of TA 96, and not be so specific as to intrude into areas of state authority.

The Motion for Stay of the FCC's Interconnection Order has been granted by the Eighth Circuit Court of Appeals.

APPENDIX A: THE LOCAL NETWORK

Contained within the appendix is a brief discussion of the structure of the local network as it exists today. The typical network in place at the time of this writing is reviewed, as well as, a description of the various service providers and how they interconnect with this network.

Today's Local Network

When telephones first came into use, each pair of phones was a single dedicated system. For example, one telephone might be located at a bank and be connected with another instrument located in the bank president's home. At the same time, another telephone might be located at the post office and directly connected to another phone at the train station. Each system operated independently of one another. The bank president could not call the post office and the train station could not call the bank. Eventually, people recognized the value of interconnecting these private systems. This interconnectivity was made possible by development of a system to "switch" calls between parties.

Initially, the switching was done manually by a local operator utilizing a switchboard. As the number of telephone calls increased, the number of operators also increased. However, the volume of calls soon exceeded the capabilities of the operators. This growing demand led to the development of non-manual switching equipment. Mechanical switches, such as the step-by-step and the cross-bar, were created to meet the expanding need. These switching systems evolved from mechanical switches to the electronic digital systems used today.

With advances in technology, the number and quality of telecommunications services has increased. As stated above, local service began as a private line service. Each instrument was hard-wired to another instrument. The advent of the switch allowed several instruments to communicate with one another through mutual connection at a central point. End users soon desired to talk with inhabitants in areas outside their local area. This required more sophisticated equipment and larger capacity switches to enable "long distance" calling.

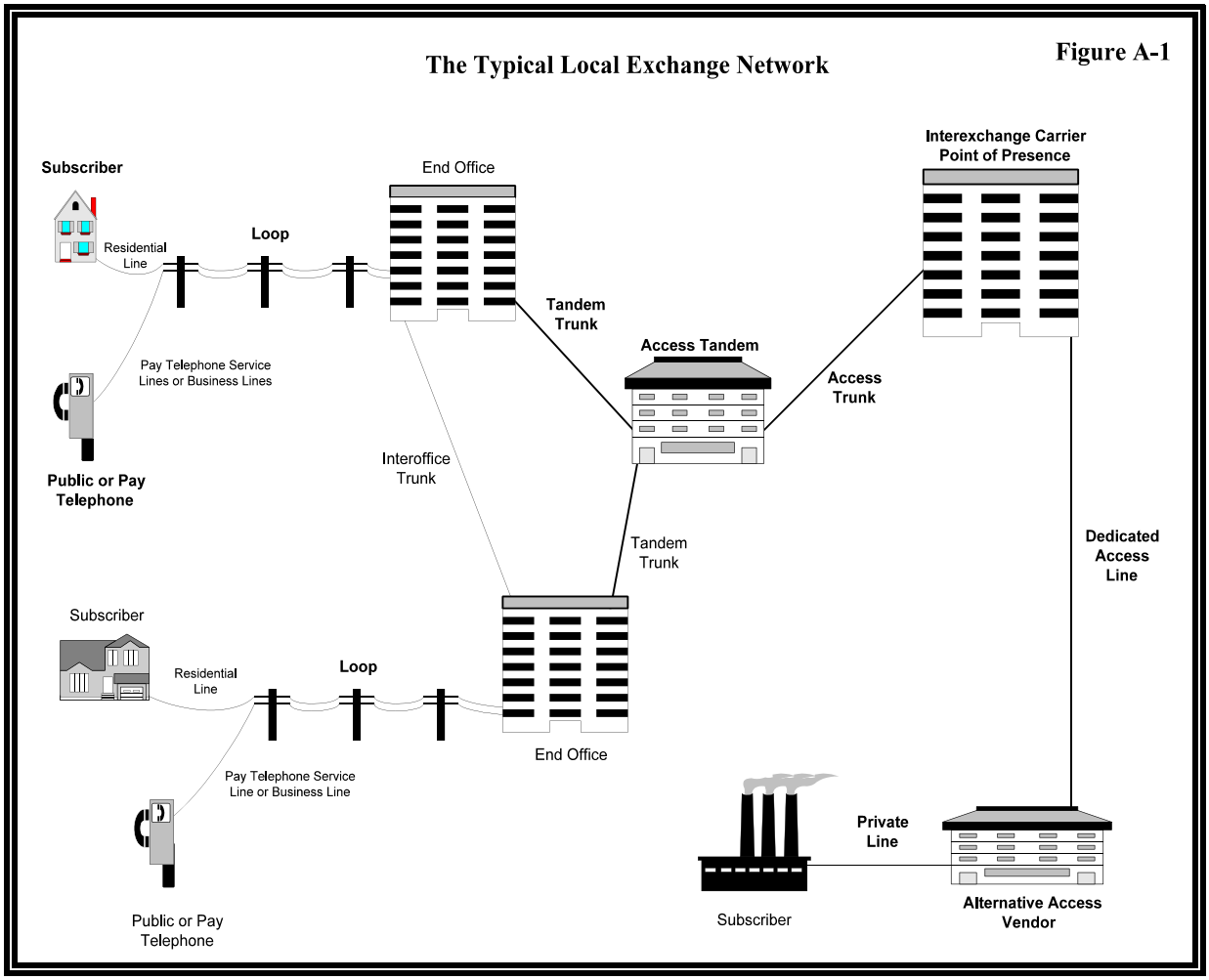
Typically, the term "network" refers to the local network. Obviously, each type of provider has his own network. For example, AT&T has its own long distance network, as do MCI and Sprint. However, the local exchange company is the final link to the end user. Stated differently, the LEC

furnishes its customers and other service providers with access to the end users served by the LEC's network.

Figure A-1 illustrates typical local network facilities. Subscribers are connected to end offices by a loop. The most common form of loop, a pair of wires, is also called a line. Loops serve as a channel between a customers' terminal and an end office. In a small community, there may be only a single end office. However, in larger communities, there will be several end offices. These end offices must be connected for a subscriber to be able to complete a local call that transcends one or more central offices. This is accomplished via interoffice trunking.

Figure A-1

The Typical Local Exchange Network



Access tandems are LEC switching systems that provide a traffic connection and distribution

function for interLATA traffic that originates of terminates within a LATA. They provide a point of connection with IXCs through an access trunk. The access tandems are, in turn, connected to the end office by a tandem trunk. Trunks function to connect two switching systems used in the establishment of an end-to-end connection. The type of trunk describes the type of switches it is connecting.

Subscribers can also gain access to their interexchange carrier through the use of an alternative access vendor (AAV). AAVs typically connect to the IXC by a dedicated access line. These networks permit a company to offer carriers and end users (both business and government) an alternative to the local exchange company in connecting to their long distance interexchange carrier. The subscriber is connected to the AAV by a private line (a facility dedicated to his use). Subscribers use AAVs for access to such services as dedicated WATS, voice grade private lines, analog data, digital data, video, and other services requiring high bandwidth capacity.

Description of Providers

Incumbent Local Exchange Company (LEC):

At the time of this writing, the LEC is the primary provider of local services. The term "incumbent" is used in reference to the traditional LEC, certificated to provide local exchange telecommunications service before June 30, 1995, such as Southern Bell and GTEFL. Table A-2 shows the incumbent Florida LECs and the number of access lines served by each.

The LEC offers a variety of services, including limited long distance calling. Prior to the passage of the Telecommunications Act of 1996 (TA 96) the Bell Operating Companies (BOCs) and GTEFL were prohibited from carrying traffic that crossed a LATA boundary. TA 96 removed prior restrictions on GTE, thus allowing it to enter the interLATA market immediately. TA 96 also sets forth certain criteria that, once met, allow the BOCs to provide interLATA service.

TABLE A-2

FLORIDA INCUMBENT LOCAL EXCHANGE TELEPHONE COMPANIES

LEC	NUMBER OF ACCESS LINES	PERCENTAGE OF TOTAL ACCESS LINES
ALLTEL	72,228	0.73%
BELLSOUTH	5,874,804	59.36
FLORALA	2,079	0.02
FRONTIER	3,721	0.04
GTEFL	2,161,945	21.85
GULF	8,654	0.09
INDIANTOWN	3,265	0.03
NORTHEAST	7,144	0.07
QUINCY	12,464	0.13
SPRINT/CENTEL	357,058	3.61
SPRINT/UNITED	1,354,351	13.69
ST. JOSEPH	27,024	0.27
VISTA-UNITED	11,846	0.12
TOTAL:	**9,896,583**	**100.00%**[1]

[1] Does not add to 100 percent due to rounding. Source: 1995 Annual Reports of Local Exchange Telephone Companies to The Florida Public Service Commission.

Interexchange Carriers (IXCs):

As the value of the telephone increased, the desire for service that connected communities evolved. For communities lying in close proximity to one another, connection was fairly easy. However, demand created the need for interconnection between communities many miles apart. Because of the expense involved in establishing such links, calls carried over these distances could not be treated as local calls but were designated as long distance calls. Connection began between centers of commerce and industry. Eventually, a long distance network was created which interconnected local community telephone systems throughout the country. Today there are over 400 IXCs certificated in Florida.

Historically, IXCs were not permitted to operate in the local market. Consequently, they could not connect directly to the end user because they did not own local facilities and thus needed to use the LEC's facilities to originate and terminate calls. Figure A-1 also shows how an IXC

connects with the end user. This can be accomplished in two ways: the IXC can reach a subscriber through the LEC's switched network, or the IXC can connect to the end user by means of a dedicated access arrangement.

Under the switched network scenario, the IXC hands off a long distance call to the LEC for termination at the LEC's end user's location. (For simplicity, this discussion will concentrate on terminating calls. For originating toll calls, the interconnection process between the LEC and the IXC is essentially the same.) For providing this service, the LEC levies a per-minute charge on the IXC.

Under the dedicated access scenario, the end user is directly connected to the IXC using a dedicated facility, and LEC-provided switching is not involved. Dedicated access is priced on a flat-rated basis and, for most customers, would be considerably higher than rates charged for switched access. The exception occurs when calling volumes are large enough that the switched access charges that would accrue would exceed the charges for dedicated access. Consequently, dedicated access is used by large volume users.

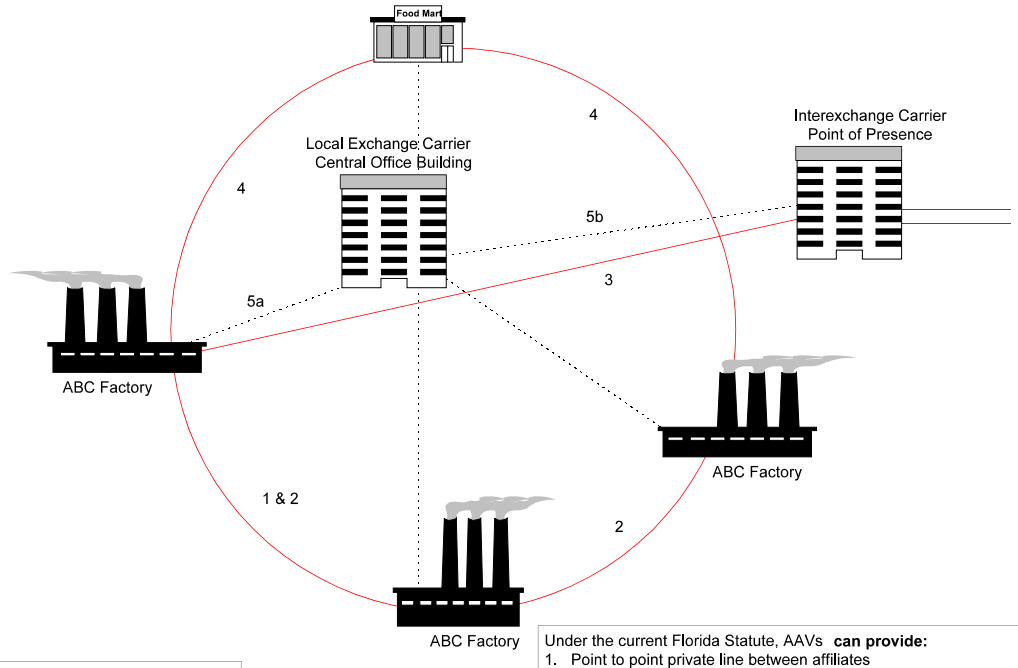
Dedicated access may also be used where security is a concern, or higher quality service is needed to ensure against corruption of information such as in the case of data transmission. Although the IXC can provide dedicated access arrangements for this connection to the end user, the service is usually provided to the end user by the LEC (or an alternative access vendor as discussed below).

Alternative Access Vendor (AAV):

Beginning in 1992, AAVs were allowed to compete on a limited basis in the local private line arena. AAVs typically install fiber rings around, or within, major cities, and provide either an alternative to, or a back-up for, dedicated services offered by the LECs. Prior to July 1, 1995, AAVs were restricted to offering three types of service: point-to-point private line service between affiliated entities, point-to-multi-point private line service between affiliated entities, and dedicated access between an end user and an IXC. Thus, they were not allowed to offer any private line services between unaffiliated entities, any part of switched local service, or any packet switching. However, many of these restrictions were removed by the 1995 amendments to Chapter 364, Florida Statutes.

Figure A-3 illustrates the various components of an AAV network, and how service has been provided. Most AAVs provide their services by way of fiber optic facilities in ring or loop configured systems around major metropolitan areas. The major selling point for AAVs is that their dedicated high speed, high capacity fiber rings offer great security from loss of service. This is accomplished by means of reverse routing on its ring. Should a cable cut occur, the direction of the traffic is immediately reversed, enabling calls to continue to be completed. There are approximately 32 certificated AAVs in Florida.

Alternative Access Vendor Service in Florida **Figure A-3**



Pay Telephone Providers (PATs):

In 1985, pay telephone providers (PATs) other than the LECs were allowed to enter the local and toll markets. NPATs providers in effect "resell" local telephone service by purchasing PATs

lines or business lines from the LEC to connect their pay phones with the local network. Each time an end user makes a call from a pay phone, the NPATs provider is reselling the line to the end user for the duration of the call. Today there are over 850 certificated private pay telephone providers.

Alternative Operator Service (AOS):

AOS companies provide operator services to hotels, motels, hospitals, airports, PATS, universities, and other entities with high volumes of operator-assisted calls. The AOS company pays a commission to the institution for the right to handle its operator-assisted calls, and arranges for the local exchange carriers to provide billing and collection services. The AOS company may also bill the end-user via a bank card to attract customers who do not have a telephone credit card account.

Shared Tenant Service (STS):

STS is an arrangement whereby a provider often uses a private branch exchange (PBX - which is a small switch) to provide telephone service to tenants in a structure such as an office building or apartment house. To connect with the local network, the STS provider leases PBX trunks from the LEC. An STS system is attractive to customers such as large businesses who would like to have some control over their internal communications. STS service is somewhat similar to pay telephone service in the sense that it also "resells" local service. Because the tenant does not purchase phone service directly from the LEC, an STS provider is acting as the local exchange company to its tenants -- essentially reselling basic local service. There are approximately 35 certificated STS providers in Florida.

Cellular/Mobile Carriers:

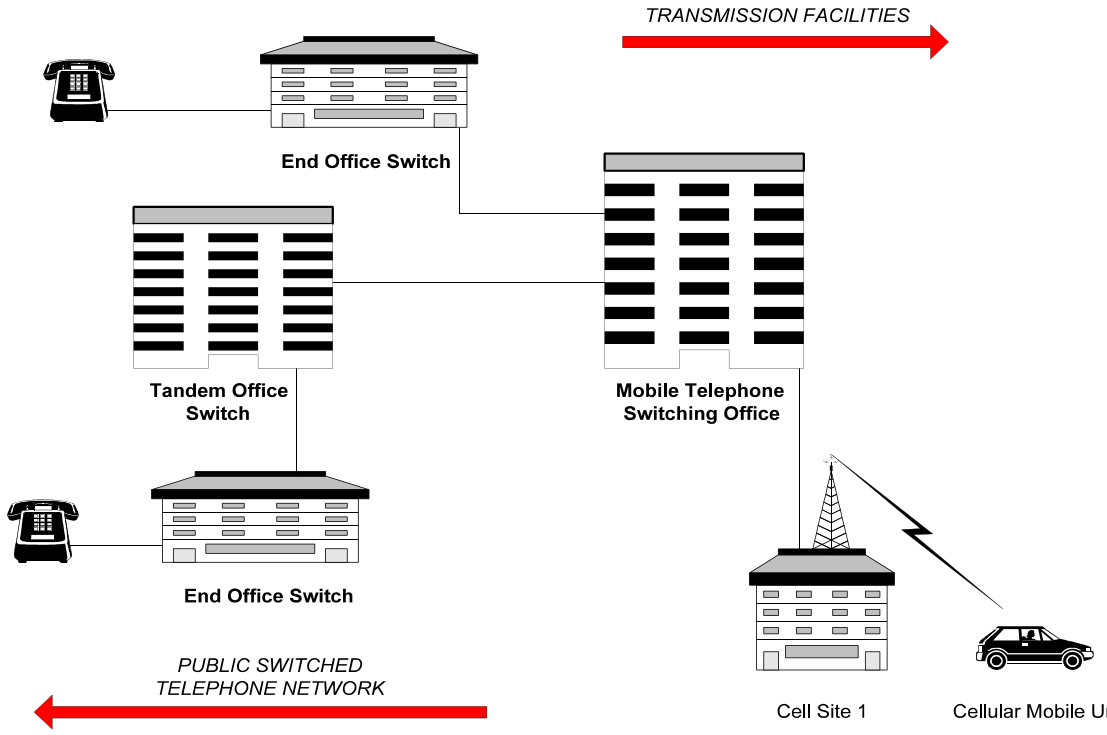
The types of mobile carriers operating in Florida include cellular carriers, radio common carriers (both two-way mobile and paging), and private land mobile radio systems, including specialized mobile radio systems which operate in the 800 MHZ range. In order to provide their customers with access to LEC customers, mobile carriers must purchase interconnection from the LEC. The Cellular Telecommunications Industry Association reports that the total number of cellular customers in the United States at the end of 1995 was approximately 33.8 million -

a 40% increase since December 1994.

A cellular system operates by dividing a large geographical area into "cells" and assigning the same channel to multiple, nonadjacent cells. This allows channels to be reused, increasing spectrum efficiency. As a subscriber travels across the service area the call is handed-off from one cell to another. Figure A-4 illustrates the various elements of a cellular system. Each cell is served by its own radio telephone and control equipment. All the cells in a cellular system are connected to a mobile telephone switching office (MTSO) by landline or microwave links. In order to assure nationwide compatible service, all cellular systems must operate in accordance with the technical specifications outlined by the FCC.

Figure A-4

Elements of a Cellular System



Cellular service differs from previous mobile communications technology in that the radio system operates at low power, thereby confining the range of a given transmitter to a smaller geographic area. By operating at low power, the same frequency can be reused at several transmitter locations within a given area, thereby using that frequency for multiple simultaneous conversations.

Paging services began about 1960, and were originally provided via a dispatch operator. Today, paging is a one-way service whereby a land-line caller can dial a number and the pager assigned that number will signal the paged customer that he has a call or message.