

*Report on the Status of*

# Competition in the Telecommunications Industry



AS OF DECEMBER 31, 2015





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Office of Telecommunications



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## List of Acronyms

CDC	Centers for Disease Control and Prevention
CLEC	Competitive Local Exchange Company
FCC	Federal Communications Commission
FiOS	Verizon's trademark name for its fiber-to-the-home package of services
FPSC	Florida Public Service Commission, the Commission
FTRI	Florida Telecommunications Relay, Inc.
F.S.	Florida Statutes
ILEC	Incumbent Local Exchange Company
IP	Internet Protocol
kbps	kilobits per second
Mbps	Megabits per second
NLAD	National Lifeline Accountability Database
TASA	Telecommunications Access System Act of 1991
TDM	Time Division Multiplexing
USF	Universal Service Fund
USAC	Universal Service Administrative Company
VoIP	Voice over Internet Protocol

## Executive Summary

Section 364.386, Florida Statutes, requires the Florida Public Service Commission (FPSC or Commission) to report on the status of competition in the telecommunications industry to the Legislature by August 1 of each year. On February 17, 2016, information requests were sent to the 10 incumbent local exchange companies and 248 competitive local exchange companies certificated by the Commission to operate in Florida, as of December 31, 2015.

In 2015, several national telecommunications issues remained at the forefront. AT&T continued its trial in West Delray Beach, converting a central office from traditional services to next-generation Internet Protocol technology. The Federal Communications Commission's Open Internet rules were upheld in federal court, while the appeal of its preemption of state authority in two significant cases is still pending. Also, several bills were introduced in Congress in attempts to address some of the issues brought about by the appeals.

The national economy continued to improve at about the same rate it did in the previous year, and Florida showed economic growth for the fifth consecutive year. AT&T, CenturyLink and Verizon continued their access line losses in the national wireline market.<sup>1</sup> The market continued to consolidate with several mergers and acquisitions. Several intrastate issues were resolved or initiated in 2015, including a major arbitration request and the implementation of an additional area code in the Keys. The Lifeline subscription rate in Florida decreased measurably, from 49.6 percent of eligible households in 2014 to 41.1 percent in 2015.

Consumers in Florida continue to migrate from traditional wireline service to wireless and cable/Voice over Internet Protocol services. The data indicate that residential migration may be slowing down slightly. Business customers continue to migrate to Internet Protocol technology in large numbers. Carriers reported approximately 3.3 million total wireline access lines in Florida for 2015, about 14 percent fewer than the previous year.

For the fifth year in a row, total wireline business access lines exceeded total residential lines. For the second year, wireline business access lines continued the drop that residential lines have been experiencing for the past several years. While residential lines declined an additional 14 percent in 2015, business line declines were 15 percent. Much of this decline can continue to be attributed to the transition to Voice over Internet Protocol and wireless-only services. For the first time, CenturyLink became Florida's largest wireline residential provider by surpassing AT&T in the number of residential wireline access lines provided. This may be a result of CenturyLink's ability to mitigate its decline in residential access lines or because it serves rural areas with less competition. Over the past four years, CenturyLink has experienced an average six percent decline per year in residential access lines, while AT&T and Verizon have both averaged a 22 percent decline per year for the same period.

The wireline competitors experienced a decline in their market share in 2015, from 39 percent to 35 percent. Some of this decline may be attributed to intensified competition from the incumbents in this area, or may just be one result from the general shift to IP-based services.

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<sup>1</sup> On April 1, 2016, Verizon Florida LLC's certificate and territory in Florida were transferred to Frontier Florida LLC. For the period covered in this report (calendar year 2015), Verizon remained the entity of record.

Competitors continued to largely ignore the wireline residential market, although their market share there did double to two percent. AT&T's and Verizon's mix of residential and business lines continued their slow shift towards business lines, which now make up about 47 percent of their access lines. Competitors continue to have over 95 percent of their accounts in the business sector.

As reported for the past several years, intermodal competition from wireless, Voice over Internet Protocol, and broadband continued to drive the telecommunications markets in 2015. There are an estimated 19.9 million wireless handsets in Florida, and an additional 3.7 million cable Voice over Internet Protocol subscribers. Over 67 percent of Florida households have a broadband connection with download speeds of at least 3 megabits per second.

Analysis of the data produced the following conclusions:

- Many competitive local exchange companies reported offering a variety of services and packages comparable to those offered by incumbents. Subscribers to cable, wireless, and business Voice over Internet Protocol services continued to increase. These factors contribute to the conclusion that competitive providers are able to offer functionally equivalent services to both business and residential customers.
- The continued decrease in both business and residential incumbent local exchange carrier wireline access lines demonstrates customers are finding reasonable pricing packages and functionality with competitive local exchange companies, cable providers, and wireless providers, as well as Voice over Internet Protocol services from the incumbent local exchange carriers.
- Based on the continued growth of interconnected Voice over Internet Protocol services and wireless-only households, network reliability of non-incumbent providers is sufficient to satisfy customers. The Federal Communications Commission-reported telephone penetration rate of 94.8 percent for Florida suggests that the overwhelming majority of Florida residents are able to afford telephone service. The number and variety of competitive choices among all types of service providers suggest that competition is having a positive impact on the telecommunications market in Florida.

## Chapter I. Introduction and Background

In 2011, the Florida Legislature amended Chapter 364, Florida Statutes (F.S.), to accommodate the continuing development of competition in the state's local telecommunications markets. The Legislature found that "the competitive provision of telecommunications services, including local exchange telecommunications service, is in the public interest and has provided customers with freedom of choice, encouraged the introduction of new telecommunications services, encouraged technological innovation, and encouraged investment in telecommunications infrastructure."

Chapter 364, F.S., requires the Florida Public Service Commission (the Commission or FPSC) to prepare and deliver a report on the status of competition in the telecommunications industry to the President of the Senate, the Speaker of the House of Representatives, and the majority and minority leaders of the Senate and the House of Representatives on August 1 of each year. Section 364.386, F.S., requires that the report address the following four issues:

1. The ability of competitive providers to make functionally equivalent local exchange services available to both residential and business customers at competitive rates, terms, and conditions.
2. The ability of customers to obtain functionally equivalent services at comparable rates, terms, and conditions.
3. The overall impact of competition on the maintenance of reasonably affordable and reliable high-quality telecommunications services.
4. A list and short description of any carrier disputes filed under Section 364.16, F.S.

The Commission is required to make an annual request to local exchange telecommunications providers each year for the data required to complete the report. The data request was mailed on February 17, 2016, and responses were due April 15, 2016. Data requests were mailed to 10 incumbent local exchange companies (ILECs) and 248 competitive local exchange companies (CLECs). The Commission continues its efforts to increase efficiency while gathering the data and information to produce this report. Commission staff is confident that the data presented and the analyses that follow accurately reflect the information provided by the ILECs and the reporting CLECs.

The report also summarizes key events that may have a short term or long term effect on the Florida telecommunications market. National and state telecommunications issues, economic factors, mergers, universal service developments, Federal Communications Commission (FCC) enforcement actions, and state actions are presented to provide a more comprehensive picture of the market in 2015.

## Chapter II. Industry Hot Topics

### A. Introduction

External events affect how the Florida telecommunications markets react and develop. These effects can occur in a relatively short period of time or take years to filter through the market channels. The significant national issues for policymakers outlined in last year's report continued to shape the telecommunications market in 2015. Fundamental technology transitions, open Internet policies, and the beginnings of a complete overhaul of federal telecommunications regulation remained in the forefront in 2015.

### B. Internet Protocol

The technology transition from Time Division Multiplexing (TDM) to Internet Protocol (IP) continues, as do the regulatory issues surrounding it. While the FCC contemplates the regulatory future of IP interconnection, action has begun to occur in the states.

As previously reported, AT&T is currently conducting a trial of IP-based services in a single exchange in Florida in West Delray Beach. This trial will introduce IP-based services to the area, and eventually replace all traditional TDM-based services with IP-based services by the end of the trial.

AT&T has filed six quarterly reports with the FCC regarding these trials, encompassing the fourth quarter of 2014 through the first quarter of 2016.<sup>2,3,4,5,6</sup> While much of the data was filed confidentially, the reports show that customers are voluntarily migrating to IP-based services in the trial areas. However, the data also indicate that AT&T continues to lose more customers outright in the trial areas than it converts to IP-based offerings.<sup>7</sup>

AT&T also reported that it conducted significant outreach for both general consumers and special needs groups in the trial. Its work in the West Delray office concentrated on meetings and activities with customers and the general public as well as targeted engagement with seniors and the disability community. AT&T also focused on identifying and connecting with community-based organizations to gain an understanding of the disability community within the trial area. AT&T's reported outreach efforts for 2015 included additional senior technology trainings,

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<sup>2</sup>AT&T, "AT&T Wire Center Trials: Data Collection and Reporting for 4th Quarter, 2014 - Redacted," filed April 3, 2015, <http://apps.fcc.gov/ecfs/document/view?id=60001045089>, accessed June 1, 2016.

<sup>3</sup>AT&T, "AT&T Wire Center Trials: Data Collection and Reporting for 1st Quarter, 2015 - Redacted," filed July 14, 2015, <http://apps.fcc.gov/ecfs/document/view:NEWECFSSSESSION=GzQhVvVY5JzDC7dwdMtt1sThdKbSgZGhBjYgRJbg51fYnTBQlvLw!1736751079!-973180750?id=60001116203>, accessed June 1, 2016.

<sup>4</sup>AT&T, "AT&T Wire Center Trials: Data Collection and Reporting for 2nd Quarter, 2015 - Redacted," filed September 30, 2015, <http://apps.fcc.gov/ecfs/document/view?id=60001326676>, accessed June 1, 2016.

<sup>5</sup>AT&T, "AT&T Wire Center Trials: Data Collection and Reporting for 3rd (sic) Quarter, 2015 - Redacted," filed January 15, 2015, <http://apps.fcc.gov/ecfs/document/view:ECFSSSESSION=7R56XS2MyMMdXIKxJndgYpNcY1SQg6Ht2mnrhvh2vysJbsFNq58!634993814!2129651121?id=60001408225>, accessed June 1, 2016.

<sup>6</sup>AT&T, "AT&T Wire Center Trials: Data Collection and Reporting for 4th Quarter, 2015 - Redacted" and "AT&T Wire Center Trials: Data Collection and Reporting for 1st Quarter, 2016 - Redacted," filed July 1, 2016, <https://prodnet.www.neca.org/publicationsdocs/wwpdf/0705att.pdf>, accessed July 14, 2016.

<sup>7</sup>Ibid.

additional homeowners' association meetings, a vendor fair, and outreach to the public schools. Additionally, AT&T reported that it is proactively working on the challenges presented by the trial and is tracking and responding to each concern.<sup>8</sup>

On November 4, 2015, and November 5, 2015, AT&T filed applications with the FCC to phase out certain rarely-used services in the trial areas.<sup>9,10,11</sup> AT&T indicated that its initial plans were to “grandfather” the affected services, continuing service to existing customers and offering only next generation wireless and wireline IP-based alternatives for new orders. Subsequently, AT&T would “sunset” (discontinue) the services altogether. AT&T’s application was approved by the FCC and AT&T grandfathered the services on February 16, 2016.<sup>12</sup> AT&T has since provided notice that some of the services will be discontinued on October 14, 2016, and the remainder will be discontinued on September 17, 2017.<sup>13,14</sup>

As a result from a request by Florida Senator Bill Nelson and New Jersey Congressman Frank Pallone, The Government Accountability Office (GAO) filed a report on December 16, 2015, regarding the FCC’s data collection methods for AT&T’s IP trial.<sup>15</sup> The GAO concluded that AT&T’s trial:

- Lacks geographic dispersion and has a small number of experiments
- Lacks diversity and includes very limited population densities, demographics, and climates
- Does not include consumer services in any high-density urban areas or areas that have diverse populations

The GAO recommended that the FCC should strengthen its data collection efforts to assess the IP transition's effects. The FCC did not agree or disagree with the recommendation and stated it has a strategy in place to oversee the IP transition.

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<sup>8</sup> Ibid.

<sup>9</sup> AT&T, “Section 63.71 Application of Bellsouth Telecommunications, LLC d/b/a AT&T Southeast”, FCC GN Docket No. 13-5, filed November 4, 2015, <https://ecfsapi.fcc.gov/file/60001332987.pdf>, accessed June 10, 2016.

<sup>10</sup> AT&T, “Section 63.71 Application of Bellsouth Telecommunications, LLC d/b/a AT&T Southeast”, FCC GN Docket No. 13-5, filed November 4, 2015, <https://ecfsapi.fcc.gov/file/60001333050.pdf>, accessed June 10, 2016.

<sup>11</sup> AT&T, “Section 63.71 Application of Bellsouth Telecommunications, LLC d/b/a AT&T Southeast”, FCC GN Docket No. 13-5, filed November 4, 2015, <https://ecfsapi.fcc.gov/file/60001333332.pdf>, accessed June 10, 2016.

<sup>12</sup> AT&T, “CLEC Accessible Letter CLECSE15-071,” issued December 31, 2015, accessed through [https://clec.att.com/clec/access\\_letters/search.cfm](https://clec.att.com/clec/access_letters/search.cfm), accessed June 10, 2016.

<sup>13</sup> AT&T, “CLEC Accessible Letter CLECSE16-055”, issued June 30, 2016, accessed through [https://clec.att.com/clec/access\\_letters/search.cfm](https://clec.att.com/clec/access_letters/search.cfm), accessed July 14, 2016.

<sup>14</sup> AT&T, “CLEC Accessible Letter CLECSE16-059”, issued July 12, 2016, accessed through [https://clec.att.com/clec/access\\_letters/search.cfm](https://clec.att.com/clec/access_letters/search.cfm), accessed July 14, 2016.

<sup>15</sup> GAO 16-167, Report to Congressional Requesters, Internet Protocol Transition: FCC Should Strengthen Its Data Collection Efforts to Assess the Transition’s Effects, released December 16, 2015, <http://www.gao.gov/assets/680/674231.pdf>, accessed May 31, 2016.

Regarding other technology transitions, the FCC released two orders on August 7, 2015. The first order established requirements for the retirement of copper facilities and services when deploying IP-based services.<sup>16</sup> The order includes the following:

- Requires that incumbent carriers must provide copper network retirement notifications directly to retail customers no less than three months, and to interconnecting carriers at least six months, prior to facility deactivations
- Clarifies that a carrier must obtain FCC approval before discontinuing, reducing or impairing a service when used as a wholesale input if affecting end user services
- Requires that ILECs must commit to provide competitive carriers with wholesale access at rates, terms and conditions that are reasonably comparable to those of the legacy services no longer available in network retirement areas as an interim measure until final rules are adopted

The United States Telecom Association (USTelecom) appealed the ruling. Briefs are due by September 2016.

The second FCC order establishes carrier emergency backup power requirements to promote continued 911 access during commercial power outages.<sup>17</sup> This order requires providers to:

- Offer consumers of modern home voice services information on backup power so they can use their phone service during electrical outages and that consumers have the option to buy emergency power units
- Ensure a technical solution for fixed residential voice service to enable eight hours of standby backup power
- Offer an option for 24 hours of standby backup power within three years

### **C. Open Internet/Net Neutrality**

As previously reported, the United States Court of Appeals for the District of Columbia (D.C. Circuit) struck down portions of the FCC's 2010 Open Internet Order. The D.C. Circuit upheld the FCC's authority to regulate broadband Internet access providers' network management under Section 706 (advanced telecommunications incentives) of the Communications Act of 1934, as amended (the Act). However, it found that the anti-discrimination and anti-blocking rules that the FCC adopted were too similar to the "common carrier" (Title II) obligations, and since the FCC did not classify the services as Title II services, vacated them. Under Title II of the Act, traditional telecommunications carriers must treat all customers equally and cannot block, slow, or discriminate among services.

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<sup>16</sup> FCC 15-97, GN Docket No. 13-5, Technology Transitions, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, released August 7, 2015, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-97A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-97A1.pdf), accessed June 1, 2016.

<sup>17</sup> FCC 15-98, PS Docket No. 14-174, Ensuring Continuity of 911 Communications, Report and Order, released August 7, 2015, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-98A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-98A1.pdf), accessed June 2, 2016.

On February 26, 2015, the FCC adopted further rules addressing Open Internet (or Network Neutrality).<sup>18</sup> These new rules were in response to the court decision that struck down the FCC's previous Open Internet rules. The 2015 Open Internet Order (Order) established the FCC's legal authority by reclassification of broadband Internet access as a telecommunications service under Title II of the Act.

Subsequently, USTelecom appealed the Order and requested that implementation of the rules be stayed. On June 11, 2015, the D.C. Circuit denied USTelecom's request for stay but agreed to expedite the proceeding.<sup>19</sup> The rules became effective on June 12, 2015. Parties filed briefs in July and August, 2015. Oral arguments were held December 4, 2015. On June 14, 2016, the D.C. Circuit upheld the FCC's order.

## **D. Federal Preemption**

Two recent FCC cases have brought federal preemption and the balance of state vs. federal jurisdiction to the forefront. The FCC made clear its intent to limit states' ability to set the parameters for local municipal broadband networks and intrastate inmate calling rates.

### **1. Municipal Broadband**

As previously reported, in February 2015, the FCC issued an order preempting state laws in Tennessee and North Carolina that prevented two community broadband providers from providing broadband service.<sup>20</sup> The FCC found that provisions of the laws in North Carolina and Tennessee are barriers to broadband deployment, investment, and competition, and conflict with the FCC's mandate to promote these goals.

Both North Carolina and Tennessee filed petitions for review challenging the FCC's authority to preempt their state restrictions. The petitions were consolidated in the U.S. Court of Appeals, 6th Circuit and oral arguments were held on March 17, 2016.

At the oral arguments, the central issue was whether the FCC had the authority to preempt state laws. The FCC argued that Section 706 of the Act gives the FCC statutory authority to preempt the state laws at issue in this matter because it directs the FCC to deploy broadband to all Americans by promoting competition and removing barriers to investment. Therefore, preemption is necessary to accomplish this mandate where states are interfering with broadband deployment.

Both North Carolina and Tennessee argued that the FCC's actions violate core tenets of state sovereignty, which "forbids the federal government from displacing a state's ability to structure

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<sup>18</sup> FCC 15-24, GN Docket No. 14-28, "Protecting and Promoting the Open Internet," Report and Order on Remand, Declaratory Ruling, and Order, released March 12, 2015, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-24A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-24A1.pdf), accessed June 2, 2016.

<sup>19</sup> Order, U.S. Telecom Ass'n v. FCC (D.C. Cir. Jun. 11, 2015), <https://www.fcc.gov/document/court-order-denying-stay-usta-v-fcc-usa-dc-cir>, accessed June 2, 2016.

<sup>20</sup> FCC 15-25, WC Docket Nos. 14-115 and 14-116, City of Wilson, North Carolina Petition for Preemption of North Carolina General Statute Sections 160A-340 et seq., The Electric Power Board of Chattanooga, Tennessee Petition for Preemption of a Portion of Tennessee Code Annotated Section 7-52-601, Memorandum Opinion and Order, released March 12, 2015, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-25A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-25A1.pdf), accessed June 1, 2016.



its own subdivisions.” The states further argued that Section 706 is not a congressional grant of authority to promote the expansion of broadband. Even if the FCC can rely on Section 706, the states contended that preemption is limited and should not apply in this instance.

North Carolina and Tennessee also argued that Supreme Court precedent allows preemption only where Congress’ intention was “unmistakably clear in the language of the statute,” and noted that Section 706 contains no express preemption. Furthermore, this is the first time that the FCC has used Section 706 to preempt state law. The FCC countered that the presumption against preemption does not apply to areas with a “history of significant federal presence,” such as telecommunications. A decision on this appeal is expected by the end of 2016.

During this time, Congress introduced two bills to address municipal broadband. The Community Broadband Act of 2015 seeks to remove state barriers for constructing municipal broadband networks and encourages public-private partnerships.<sup>21</sup> The States’ Rights Municipal Broadband Act of 2015 would prevent the FCC from preempting states with municipal broadband laws already in place, or any other states that subsequently adopt such municipal broadband laws.<sup>22</sup> This bill would essentially amend the Act to provide that Section 706 does not authorize the FCC to preempt the laws of certain states relating to the regulation of municipal broadband. Neither bill has yet passed.

## **2. Inmate Calling Services**

On August 9, 2013, the FCC approved an order to reduce the cost of interstate long distance calls from inmate facilities.<sup>23</sup> The order concluded that some interstate inmate calling service rates (ICS) are not just and fair. The order required interstate rates to be cost-based. The rates may include security costs and a reasonable return. While the FCC encouraged states to make similar changes to intrastate rates, the FCC also sought comments for legal bases to compel reform of intrastate ICS rates. Other reforms implemented in the order included:

- Setting interim rate caps based on data submitted by providers
- Adopting a debit/pre-paid calling cap of \$0.21 per minute
- Presumption of cost-based rates (rebuttable/challengeable) for debit/prepaid card calls at or below \$0.12/min and for collect calls at or below \$0.14/min

The D.C. Circuit issued an order on January 13, 2014 that stays portions of the FCC’s inmate calling rule.<sup>24</sup> The rules that were stayed included rules that required cost-based rates,

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<sup>21</sup> S. 240, 114<sup>th</sup> Congress, The Community Broadband Act of 2015, introduced January 22, 2015, <https://www.congress.gov/bill/114th-congress/senate-bill/240>, accessed May 25, 2015.

<sup>22</sup> S. 597 and H.R. 1106, 114<sup>th</sup> Congress, States’ Rights Municipal Broadband Act of 2015, introduced February 26, 2015, <https://www.congress.gov/bill/114th-congress/senate-bill/597> and <https://www.congress.gov/bill/114th-congress/house-bill/1106>, both accessed May 25, 2016.

<sup>23</sup> FCC 13-113, WC Docket No. 12-375, Rates for Interstate Inmate Calling Services, Report and Order and Further Notice of Proposed Rulemaking, released September 26, 2013, [http://fjallfoss.fcc.gov/edocs\\_public/attachmatch/FCC-13-113A1.pdf](http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-13-113A1.pdf), accessed June 2, 2016.

<sup>24</sup> Order, Securus Technologies, Inc. v. FCC (D.C. Cir. Jan. 13, 2014), <https://www.fcc.gov/document/securus-stay-order>, accessed June 2, 2016.

established an interim safe harbor, and required annual reporting and certification. This case is still pending.

On November 5, 2015, the FCC released its Second Report and Order and Third Further Notice of Proposed Rulemaking on inmate service. The FCC's order establishes caps on all (interstate and intrastate) ICS rates, caps or bans on burdensome and needless ancillary service charges, and discourages site commission payments to institutions. In addition, the order bans flat-rate calling and ensures access for people with disabilities. The FCC will continue to monitor the provision of ICS to ensure compliance.

On December 18, 2015, Global Tel\*Link petitioned the D.C. Circuit to vacate, enjoin, and set aside the FCC's order. Global Tel\*Link sought review on the grounds that the order:

- Exceeds the FCC's jurisdiction or authority
- Violates the Act and the notice and comment requirements of the Administrative Procedure Act
- Is arbitrary, capricious, an abuse of discretion, or otherwise contrary to law

Global Tel\*Link followed its petition on January 27, 2016, with a motion for partial stay of the FCC's order. Global Tel\*Link argued that it will likely prevail on the merits because:

- The rate caps do not allow ICS providers to recover the cost of the site commissions they are required to pay
- The order's rate caps are unlawful because they set rates below the documented costs of many ICS providers
- The order is unlawful because the FCC lacks authority to set rate caps for intrastate ICS calls

On March 7, 2016, the D.C. Circuit ordered that the motion for stay be granted in part and denied in part. The D.C. Circuit stayed the implementation of the lower rate caps and a rule limiting fees, but declined to stay the rules for caps and restrictions on ancillary fees.

On March 17, 2016, Global Tel\*Link filed another motion with the D.C. Circuit, asking the D.C. Circuit "to enforce its prior order by clarifying that none of the FCC's rate caps may be applied to intrastate calls pending judicial review." Global Tel\*Link argued that "(t)he apparent purpose of the court's order was to preserve, pending review, the status quo with respect to rate caps and thus to prevent the caps on intrastate rates from going into effect."

The D.C. Circuit agreed. On March 23, 2016, the D.C. Circuit clarified the stay also applied to intrastate calling rates. On March 29, 2016, the FCC issued a public notice reflecting the latest court ruling and setting forth the amended rates and effective dates, noting that the ICS rate caps were applicable to interstate calls.

These two decisions could have an impact on Florida policymakers. Florida has a municipal broadband statute which some may interpret as restrictive and possibly seek FCC preemption. Also, while Florida's current state-level contracts for inmate calling services include rates below the FCC's proposed caps, several local confinement facilities (such as some county jails) do not. FCC preemption in this area may affect confinement facilities' ability to set their own inmate calling rates.

### ***E. Communications Act Rewrite***

While all of these issues have been flowing through the states and the FCC at differing paces, there has been renewed interest in Congressional intervention. On December 3, 2013, House Energy and Commerce Committee Chairman Fred Upton (R-MI) and Communications and Technology Subcommittee Chairman Greg Walden (R-OR) announced plans for the Committee to examine and update the Act.<sup>25</sup> The plan was to begin the multi-year process through a series of white papers that would solicit public input. These papers would be followed with a bill sometime in 2015.

While the white papers have collectively generated nearly 600 responses from industry, academia, and other interested parties, no bill has yet been introduced. It is not anticipated that a comprehensive bill will be considered before the end of the current Congress. With the comprehensive rewrite at an impasse, many other bills have been introduced to address telecommunications issues and the structure of the FCC. The bills cover a number of topics such as taxation of the Internet and process reform. The bills show the significant activity currently surrounding the telecommunications market.

The proceedings described in this chapter will likely have a continuing impact on Florida. As predicted in our previous report, none of these issues have reached finality, and they are still expected to take several years to complete and litigate. However, the core issues discussed here will form the basis of the telecommunications markets for the next generation.

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<sup>25</sup> "Upton and Walden Announce Plans to Update the Communications Act," United States House of Representatives, Energy & Commerce Committee Press Release, December 3, 2013, <http://energycommerce.house.gov/press-release/upton-and-walden-announce-plans-update-communications-act>, accessed June 3, 2016.

## Chapter III. Wireline Market Overview

### A. Economy

According to the U.S. Commerce Department, the national economy continued to recover at roughly the same pace in 2015 compared to 2014. Gross Domestic Product, which many consider the best measure of overall economic activity, grew by 2.4 percent in 2015, equal to the increase of 2.4 percent in 2014.<sup>26</sup> Corporate profits were down 5.1 percent, compared to a 0.6 percent decrease the previous year. Profits of both domestic financial and nonfinancial corporations decreased in 2015.<sup>27</sup> Unemployment figures continued their slow and steady drop in 2015, starting at 5.7 percent in January and finishing the year at 5.0 percent.<sup>28</sup> The Consumer Price Index rose only 0.1 percent in 2015, compared to a 1.6 percent increase in 2014.<sup>29</sup>

In 2015, Florida's economic growth remained positive for the fifth consecutive year. The state's gross domestic product ranked Florida seventh in the nation in real growth with a gain of 3.1 percent.<sup>30</sup> Florida's personal income grew 5.2 percent in 2015 over 2014, ranking Florida sixth in the country with respect to state personal income growth. The national average was 4.4 percent.<sup>31</sup>

The unemployment rate in Florida closely tracked the national average throughout 2015. Florida's unemployment rate continued to show consistent improvement during each month, falling from a high of 5.7 percent in January to a low of 5.1 percent in December.<sup>32</sup>

With the unemployment picture continuing to improve, but still above the period immediately preceding 2008, along with continued moderate economic growth during 2015, it is likely that Florida consumers are easing slightly on their discretionary expenditures. Increased competition from CLECs and the continued mass migration from wireline to wireless and cable/Voice over Internet Protocol (VoIP) services are likely the primary contributing factors to Florida ILECs losing approximately 369,000 access lines. This represents about a 12 percent decline of the ILEC wireline market in 2015.<sup>33</sup> By comparison, CLECs lost approximately 184,000 access lines in 2015, a decline of 21 percent.

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<sup>26</sup> U.S. Department of Commerce, Bureau of Economic Analysis, "Gross Domestic Product, Fourth Quarter and Annual 2015 (Third Estimate), Corporate Profits, Fourth Quarter and Annual 2015," released March 25, 2016, [http://www.bea.gov/newsreleases/national/gdp/2016/pdf/gdp4q15\\_3rd.pdf](http://www.bea.gov/newsreleases/national/gdp/2016/pdf/gdp4q15_3rd.pdf), accessed June 2, 2016, Table 7.

<sup>27</sup> Ibid., Table 11.

<sup>28</sup> U.S. Department of Labor, Bureau of Labor Statistics, "Labor Force Statistics from the Current Population Survey," <http://data.bls.gov/timeseries/LNS14000000>, accessed June 2, 2016.

<sup>29</sup> U.S. Department of Labor, Bureau of Labor Statistics, "CPI Detailed Report: Data for December 2015," <http://www.bls.gov/cpi/cpid1512.pdf>, accessed June 1, 2016, Table 24.

<sup>30</sup> U.S. Department of Commerce, Bureau of Economic Analysis, "News Release: Gross Domestic Product by State, 4th quarter 2015," released June 14, 2015, [https://www.bea.gov/newsreleases/regional/gdp\\_state/2016/pdf/qgsp0616.pdf](https://www.bea.gov/newsreleases/regional/gdp_state/2016/pdf/qgsp0616.pdf), accessed June 14, 2015, Table 1.

<sup>31</sup> U.S. Department of Commerce, Bureau of Economic Analysis, "News Release: State Personal Income," released March 25, 2016, <http://www.bea.gov/newsreleases/regional/spi/2016/pdf/spi0316.pdf>, accessed June 3, 2016.

<sup>32</sup> U.S. Department of Labor, Bureau of Labor Statistics, "Local Area Unemployment Statistics," [http://data.bls.gov/timeseries/LASST120000000000003?data\\_tool=XGtable](http://data.bls.gov/timeseries/LASST120000000000003?data_tool=XGtable), accessed June 3, 2016.

<sup>33</sup> Responses to FPSC Local Competition Data Request for 2015 and 2016.

## **B. Incumbent Carriers**

Florida is served by 10 ILECs providing wireline services. Of these carriers, AT&T, CenturyLink, and Verizon are the three largest ILECs in Florida.<sup>34</sup> These providers continued to face access line losses in the national wireline market in 2015. While their traditional wireline access line counts fell, both AT&T and Verizon experienced increased wireless subscriptions as well as subscriptions to digital voice services provided over VoIP as consumers transitioned from traditional circuit switched services. This year marks the first time that CenturyLink has more traditional wireline customers than AT&T in Florida (as shown in Figure 4-3).

AT&T reported losses of 3.2 million switched access lines nationwide (or 16.2 percent) in 2015.<sup>35</sup> While AT&T's access lines continued to contract, the number of lines lost in 2015 was less than the number of lines lost in 2014 by about 1.5 million lines. These access line declines were attributed to economic pressures and increased competition. Traditional landline services have been disconnected by customers, or switched to alternative technologies, such as wireless and VoIP. AT&T's strategy continues to be to offset these line losses by marketing its wireless products as well as increasing revenues from customer connections for data and video.<sup>36</sup> For 2015, AT&T's total operating revenues increased by \$14.3 billion despite their wireline access line losses.<sup>37</sup> The increase in operating revenue was primarily the result AT&T's acquisition of DirecTV, its new wireless operations in Mexico, fixed strategic business services and U-verse services. In Florida, AT&T's wireline residential access lines decreased by 22 percent and business access lines decreased 11 percent in 2015.<sup>38</sup>

Verizon also lost switched access lines nationally while experiencing an increase in operating revenue of \$4.5 billion.<sup>39</sup> Verizon reported a decline of 1.4 million in total voice connections (or 7.1 percent) in 2015. Total voice connections include traditional wireline access lines as well as FiOS digital voice connections. This represents a faster rate of loss than in 2014 when Verizon lost 6.1 percent of its total voice connections. By comparison, Verizon reported growth of 6.3 percent and 3.2 percent in its FiOS Internet and video services from last year, respectively.<sup>40</sup> In Florida, Verizon experienced wireline reductions of 17 percent in residential access lines and 9 percent in business access lines in 2015.<sup>41</sup> On February 5, 2015, Verizon announced that it had entered into a definitive agreement with Frontier Communications Corporation (Frontier) to sell its local exchange business in California, Florida and Texas. The transaction did not involve any assets or liabilities of Verizon Wireless. While this acquisition was completed in 2016, this report will include Verizon's market status at the end of 2015.

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<sup>34</sup> AT&T and Verizon are also the largest wireless carriers nationwide and increased subscribership by 8.1 million and 8.3 million, respectively; according to their 2015 Form 10-K reports (Exhibit 13).

<sup>35</sup> AT&T, "Form 10-K," December 31, 2015, <http://www.sec.gov/Archives/edgar/data/732717/000073271716000147/ex13.htm>, accessed May 29, 2016, Exhibit 13, p. 1.

<sup>36</sup> *Ibid.*, pp. 16-18.

<sup>37</sup> *Ibid.*, p. 1.

<sup>38</sup> Responses to Local Competition Data Request for 2015 and 2016.

<sup>39</sup> Verizon, "Form 10-K," December 31, 2015, <http://www.sec.gov/Archives/edgar/data/732712/000119312516473367/d35513dex13.htm>, accessed May 28, 2016, Exhibit 13.

<sup>40</sup> *Ibid.*

<sup>41</sup> Responses to Local Competition Data Request for 2015 and 2016.

CenturyLink, the third largest wireline telecommunications company in the U.S., continued to experience declines in its traditional wireline access lines from 2014 (from 12.4 million in 2014 to 11.7 million in 2015).<sup>42</sup> This represents an approximately 5.2 percent loss of CenturyLink’s access lines nationwide. At the same time, CenturyLink experienced a less than 1 percent decrease in broadband subscribers. By the end of 2015, CenturyLink’s operating revenues decreased \$131 million, or 0.7 percent from 2014. CenturyLink’s wireline access line loss in Florida was 4 percent and 8 percent for the residential and business sectors, respectively, for 2015.<sup>43</sup>

The seven remaining smaller Florida carriers also experienced contraction in the number of switched access lines in their respective wireline service areas. In 2015, rural carriers in Florida saw their total access lines fall by approximately 11 percent.<sup>44</sup> Windstream is the largest of the “rural” ILECs and operates in northeast Florida and has 1.6 million consumer voice lines in service nationally.<sup>45</sup> In the first quarter of 2015, Windstream completed the spin-off of copper and fiber network assets into a separate real estate investment trust.<sup>46</sup> The trust will lease use of the assets to Windstream through an exclusive long-term lease. The tax-free spin-off is intended to provide financial flexibility by lowering long-term debt and potentially allowing Windstream to accelerate broadband investments, transition more quickly to an IP network, or pursue additional growth opportunities. Windstream has committed to the FCC to make 10 Mbps Internet available to at least 80 percent of its customer base by 2018.<sup>47</sup>

Even with the decline in wireline access lines, wireline telecommunications carriers continue to play a role in an evolving telecommunications market. For example, wireless carriers continue to be dependent on the wireline network. The majority of wireless call transport occurs over the wireline network, not over wireless facilities, a function commonly referred to as “backhaul.” While the economic sustainability of the wireline network appears to be tenuous as retail access lines continue to decline, it remains a crucial element in the mix of communications technologies.

### **C. Mergers/Acquisitions**

Telecommunications carriers seeking to transfer assets or corporate control in mergers and acquisitions must first receive approval from the FCC, which examines the public interest impact of a proposed merger or acquisition. Peak activity for telecommunications mergers and acquisitions activity occurred in 2006 when more than 90 communications companies consolidated their operations.<sup>48</sup> By comparison, 41 mergers and acquisitions occurred in 2015.<sup>49</sup>

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<sup>42</sup> CenturyLink, “Form 10-K,” December 31, 2015, <http://www.sec.gov/Archives/edgar/data/18926/000001892616000047/ctl-2015123110k.htm>, accessed May 28, 2016, p. 4.

<sup>43</sup> Responses to FPSC Local Competition Data Request for 2015 and 2016.

<sup>44</sup> Ibid.

<sup>45</sup> Windstream, “10-K,” December 31, 2015, <http://www.sec.gov/Archives/edgar/data/1282266/000128226616000059/a201510k.htm>, accessed May 29, 2016, p. F-16.

<sup>46</sup> “Windstream Completes Tax-Free Spinoff of CS&L,” Windstream News Release, April 24, 2015, <http://abea-43pvyw.client.shareholder.com/investors/releasedetail.cfm?ReleaseID=908571>, accessed May 29, 2016.

<sup>47</sup> Windstream, “8-K,” July 29, 2014, <http://investor.windstream.com/investors/secfiling.cfm?filingid=1282266-14-39&cik=1282266>, accessed May 29, 2016.

<sup>48</sup> FCC, “2006 Completed Domestic Section 214 Transfer of Control Transactions,” <http://www.fcc.gov/wcb/cpd/214Transfer/214completed2006.html>, accessed May 5, 2015.

This represents a decrease of 24 percent from the previous year. Recent transactions of interest to Florida are described below.

### **1. Frontier/Verizon**

Frontier Communications and Verizon Communications filed a series of applications with the FCC seeking approval for the transfer of control of Verizon's landline licenses and authorizations in California, Florida, and Texas to Frontier.<sup>50</sup> Frontier provides telecommunications and broadband services to approximately 4 million customers in 28 states in predominantly rural areas and small and medium sized cities. Verizon, a nationwide telecommunications company, has approximately 3.7 million voice connections, 2.2 million broadband (Digital Subscriber Line and FiOS) connections, and 1.2 million FiOS video connections in California, Florida, and Texas. The transaction was completed on April 1, 2016.<sup>51</sup> Prior to its acquisition, Frontier's ILEC service territory in Florida was in the northwest panhandle serving part of Escambia County. In Florida, Frontier will continue to serve this area as Frontier Communications of the South, LLC. In the newly acquired service territory servicing the Tampa market area, Frontier will be known as Frontier Florida, LLC.

### **2. Verizon/XO Communications**

Verizon Communications announced it has agreed to purchase XO Communications' fiber-optic network for approximately \$1.8 billion.<sup>52</sup> The acquisition, according to Verizon, will help better service enterprise and wholesale customers. The transaction is subject to regulatory approvals and is expected to close in the first half of 2017. Separately, Verizon will lease available XO wireless spectrum, with an option to buy XO's entity that holds its spectrum by the end of 2018.

### **3. Charter Communications/Time Warner Cable/Bright House Networks**

On May 26, 2015, Charter Communications and Time Warner Cable announced that they had entered into an agreement for Charter to merge with Time Warner Cable.<sup>53</sup> In addition, Charter and Bright House Networks announced that the two companies had amended the agreement which the parties announced on March 31, 2015. The amendment addressed that the New Charter will own approximately 86 to 87 percent of the consolidated companies. The combined companies will provide video, broadband, and voice services to 23.9 million customers in 41

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<sup>49</sup> FCC, "2015 Completed Domestic Section 214 Transfer of Control Transactions," <https://www.fcc.gov/general/2015-completed-domestic-section-214-transfer-control-transactions#block-menu-block-4>, accessed May 29, 2016.

<sup>50</sup> "Application for Consent to Partially Assign and Transfer Control of Domestic and International Authorizations Pursuant to Section 214 of the Communications Act of 1934, As Amended by Verizon Communications and Frontier Communications," Frontier Communications Corporation, filed February 24, 2015, <http://apps.fcc.gov/ecfs/document/view?id=60001034031>, accessed May 5, 2015.

<sup>51</sup> "Frontier Communications Completes Acquisition of Verizon Wireline Operations in California, Florida and Texas," Frontier Communications Press Release, released April 1, 2016, <http://investor.frontier.com/releasedetail.cfm?ReleaseID=963141>, accessed May 30, 2016.

<sup>52</sup> "Verizon Continues focus on network superiority with agreement to purchase XO Communications' fiber business," Verizon News Release, released February 22, 2016, <http://www.verizon.com/about/news/verizon-continues-focus-network-superiority-agreement-purchase-xo-communications-fiber>, accessed May 30, 2016.

<sup>53</sup> "Charter Communications to Merge with Time Warner Cable and Acquire Bright House Networks," Charter Communications Press Release, released May 26, 2015, <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9Mjg4NDc2fENoaWxkSUQ9LTF8VHlwZT0z&t=1>, accessed June 16, 2015.

states, including Florida.<sup>54</sup> The combined New Charter's size would continue to be smaller than Comcast. By way of comparison, in 2014, Comcast had 22 million broadband consumers, while the New Charter would have approximately 19.4 million broadband customers. The three companies completed their transactions on May 18, 2016.<sup>55</sup> The FCC included conditions on the transaction.<sup>56</sup> Specifically, Charter will be prohibited from putting data caps in place or charging customers based on usage. Additionally, the company will not be allowed to charge internet content providers fees for connecting them to customers. The conditions will apply for seven years.

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<sup>54</sup> Charter Communications, Charter Merger Presentation, released May 26, 2015, <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9Mjg4NDc3fENoaWxkSUQ9LTF8VHlwZT0z&t=1>, accessed June 16, 2015.

<sup>55</sup> "Charter Communications, Time Warner Cable and Bright House Networks Complete Transactions," Charter Press Release, released May 18, 2016, <http://ir.charter.com/phoenix.zhtml?c=112298&p=irol-newsArticle&ID=2169294>, accessed May 30, 2016.

<sup>56</sup> FCC, Memorandum Opinion and Order, MB Docket No. 15-149, FCC 16-59, released May 10, 2016, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-16-59A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-59A1.pdf), accessed May 30, 2016.



## Chapter IV. Status of Wireline Competition in Florida

### A. Wireline Trends in Florida

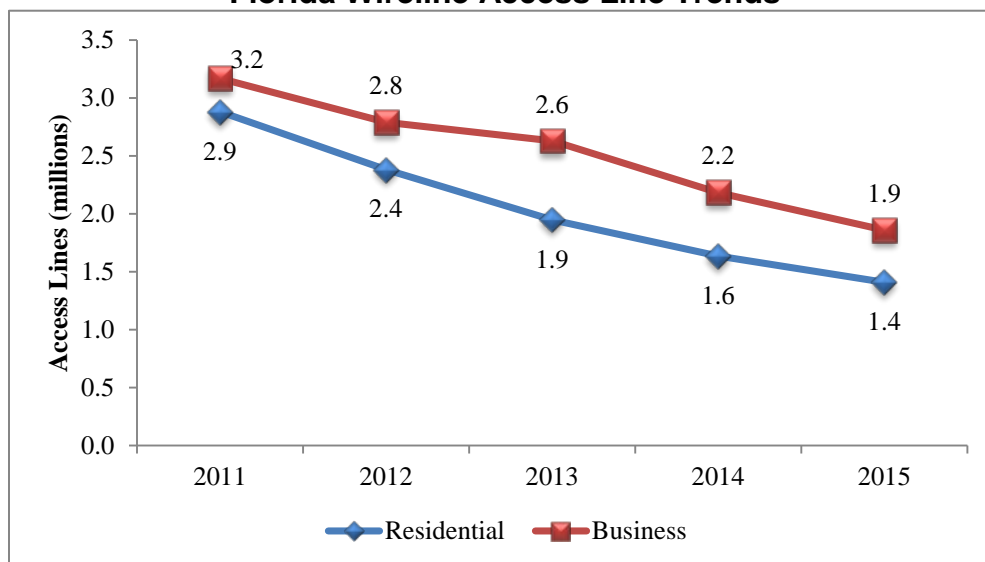
Total traditional wirelines for ILECs and CLECs combined declined 14 percent, to 3.3 million as of December 2015, from 3.8 million in December 2014. Most of the lost access lines resulted from lower demand by business customers. VoIP lines reported by CLECs and cable companies are not included in wireline CLEC market share analyses.

Residential access lines, which totaled 1.4 million as of 2015, also fell by 14 percent from the previous year. From 2005 through 2015, wireline residential access lines have declined by about 5.8 million access lines. However, the data indicate that the residential declines may be decelerating slightly. Florida CLECs, while representing relatively few residential access lines, reported an increase in the number of residential customers served of about six thousand lines, or 28 percent in 2015 over the prior year.

The number of wireline business connections declined by a similar amount. The total business access lines for ILECs and CLECs were 1.9 million, a decrease of 15 percent from 2014 to 2015. The decline consisted of a decrease of 135,000 ILEC business access lines and 190,000 CLEC business access lines. Of the incumbent carriers, AT&T and CenturyLink experienced the largest business access line losses of about 88,000 and 24,000 business lines from last year, respectively.

Historical data from 2014 was corrected for one rural ILEC's misreported access line data to the FCC and FPSC. Figure 4-1 illustrates the overall trend in Florida for both residential and business lines (and does not include VoIP connections). Based on the revised data, both residential and business lines appear to be declining at a similar rate.

**Figure 4-1**  
**Florida Wireline Access Line Trends**



Source: Responses to FPSC data requests (2012-2016)

**B. Wireline Market Mix, Market Share, and Access Lines**

**1. Market Mix**

The composition of customers served by ILECs and CLECs has shifted over time. In general, both ILECs and CLECs have seen increased concentration of business customers as residential customers migrate to wireless and VoIP services. The business-to-residential customer mix for ILECs was about 30 percent business and 70 percent residential in 2004. By 2015, the mix for ILECs was 47 percent business and 53 percent residential.

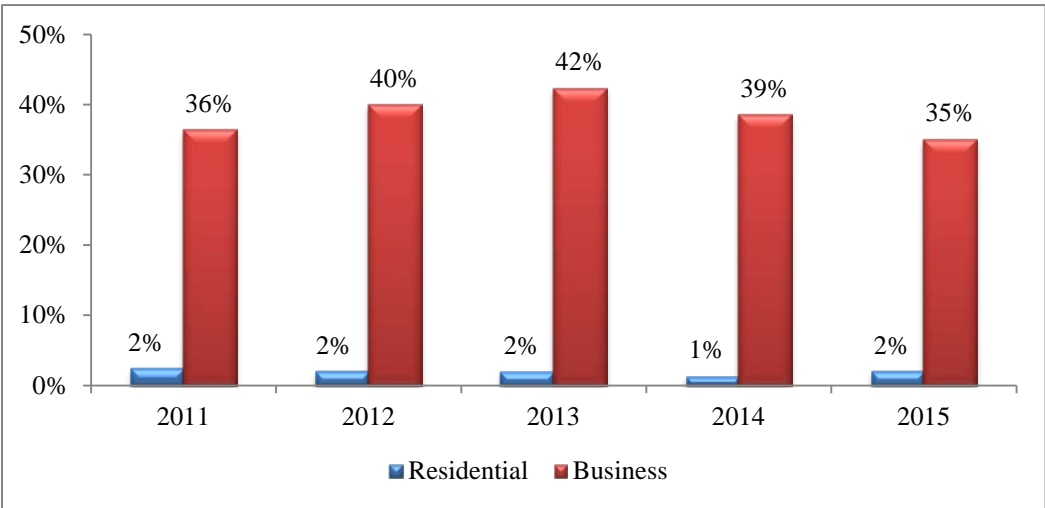
The shift in mix has been even more pronounced in the CLEC market. In 2004, the business to residential customer mix for CLECs was about 63 percent business and 37 percent residential. By 2015, the CLEC business-to-residential customer mix had shifted to 96 percent business and four percent residential. These changes, however, do not reflect gains or losses of residential or business customers served by VoIP technology.

**2. Market Share**

CLECs have traditionally focused on business customers. Figure 4-2 illustrates the CLEC market share by business and residential customer classes. The inverse of this percentage would be market share for the ILECs in Florida. Overall, the CLEC residential market share has remained at about two percent over the last five years, while ILECs retain about 98 percent of the residential wireline market.

The CLEC business market share has declined over the past two years from 42 percent to 35 percent. This percentage excludes VoIP services, which cable companies, and more recently ILECs and CLECs, have deployed. Some of this decline in market share may be attributed to intensified competition from the incumbents in this area, or may just be one result from the general shift to IP-based services.

**Figure 4-2  
Florida Residential & Business CLEC Market Share**



Source: Responses to FPSC data requests (2012-2016)

The FCC also reports CLEC market share by state and for residential and business lines. For December 2014, the FCC reported Florida CLECs have one percent of the total residential market share and 33 percent of the business market share.<sup>57</sup> This compares favorably with the data based on the FPSC’s data collection in Figure 4-2.

### 3. Access Lines

Local exchange companies were serving approximately 3.3 million lines in Florida as of December 31, 2015, a decline of 14 percent from 2014 as illustrated in Table 4-1. The first time that total ILEC and CLEC business access lines exceeded total ILEC and CLEC residential access lines was in 2011.

In 2015, residential access lines provided by ILECs decreased by 14 percent, while ILEC business lines declined by 10 percent. Most of the business line losses were experienced by AT&T, with declines of 11 percent from last year. Other ILECs experienced business line losses of around eight percent. CLEC business access lines, however, saw a decrease of approximately 23 percent from 2014 to 2015.

**Table 4-1  
Florida Wireline Access Line Comparison**

		ILECs	CLECs	Both
2012	Res	2,334,184	46,667	2,380,851
	Bus	1,675,328	1,378,547	3,053,875
	Total	4,009,512	1,425,214	5,434,726
2013	Res	1,909,401	38,711	1,948,112
	Bus	1,515,261	1,113,762	2,629,023
	Total	3,424,662	1,152,473	4,577,135
2014	Res	1,614,926	21,651	1,636,577
	Bus	1,340,699	841,880	2,182,579
	Total	2,955,625	863,531	3,819,156
2015	Res	1,381,124	27,813	1,408,937
	Bus	1,205,777	652,214	1,857,991
	Total	2,586,901	680,027	3,266,928
Percent Change from 2014 to 2015	Res	-14%	28%	-14%
	Bus	-10%	-23%	-15%
	Total	-12%	-21%	-14%

Source: Responses to FPSC data requests (2014-2016)

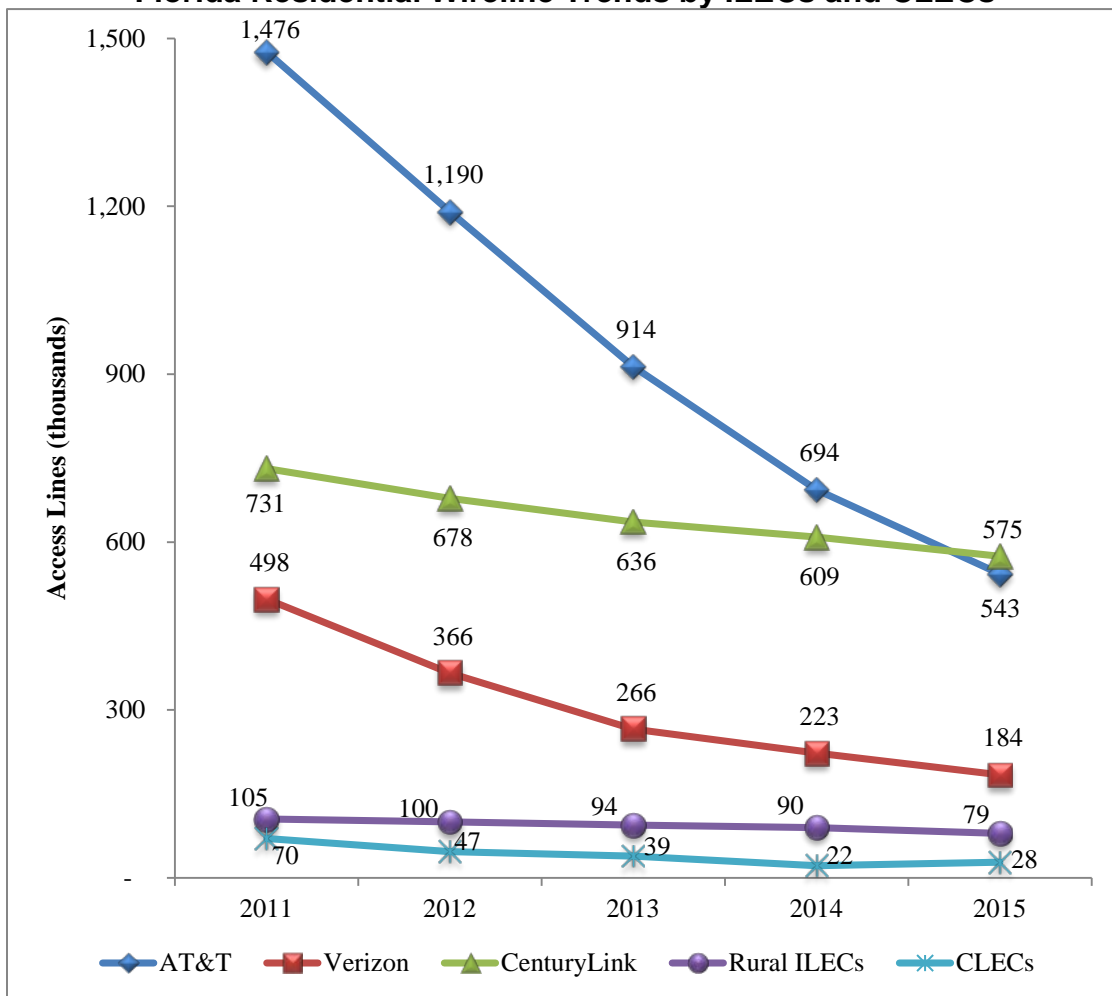
<sup>57</sup> FCC, “Voice Telephone Services Report as of December 31, 2014,” released March 2016, <https://www.fcc.gov/voice-telephone-services-report>, accessed May 29, 2016, State-Level Subscriptions (Excel).

## C. Competitive Market Trends

### 1. Residential Wireline Access Line Trends

Figure 4-3 displays the wireline residential access line trends separately for AT&T, Verizon, CenturyLink, rural aggregate ILECs, and aggregate CLECs. All but one ILEC reported a decline in residential access lines from December 2014 to December 2015. The one rural ILEC that did report an actual residential access line gain experienced a gain of less than 1 percent. This reporting year is the first time that CenturyLink has more residential switched access lines than AT&T. CenturyLink has either been able to mitigate its decline in residential access lines or may be subject to less competition because it serves more rural areas. Over the past four years, CenturyLink has experienced an average six percent decline per year in residential access lines, while AT&T and Verizon have both averaged a 22 percent decline per year for the same period.

**Figure 4-3**  
**Florida Residential Wireline Trends by ILECs and CLECs**



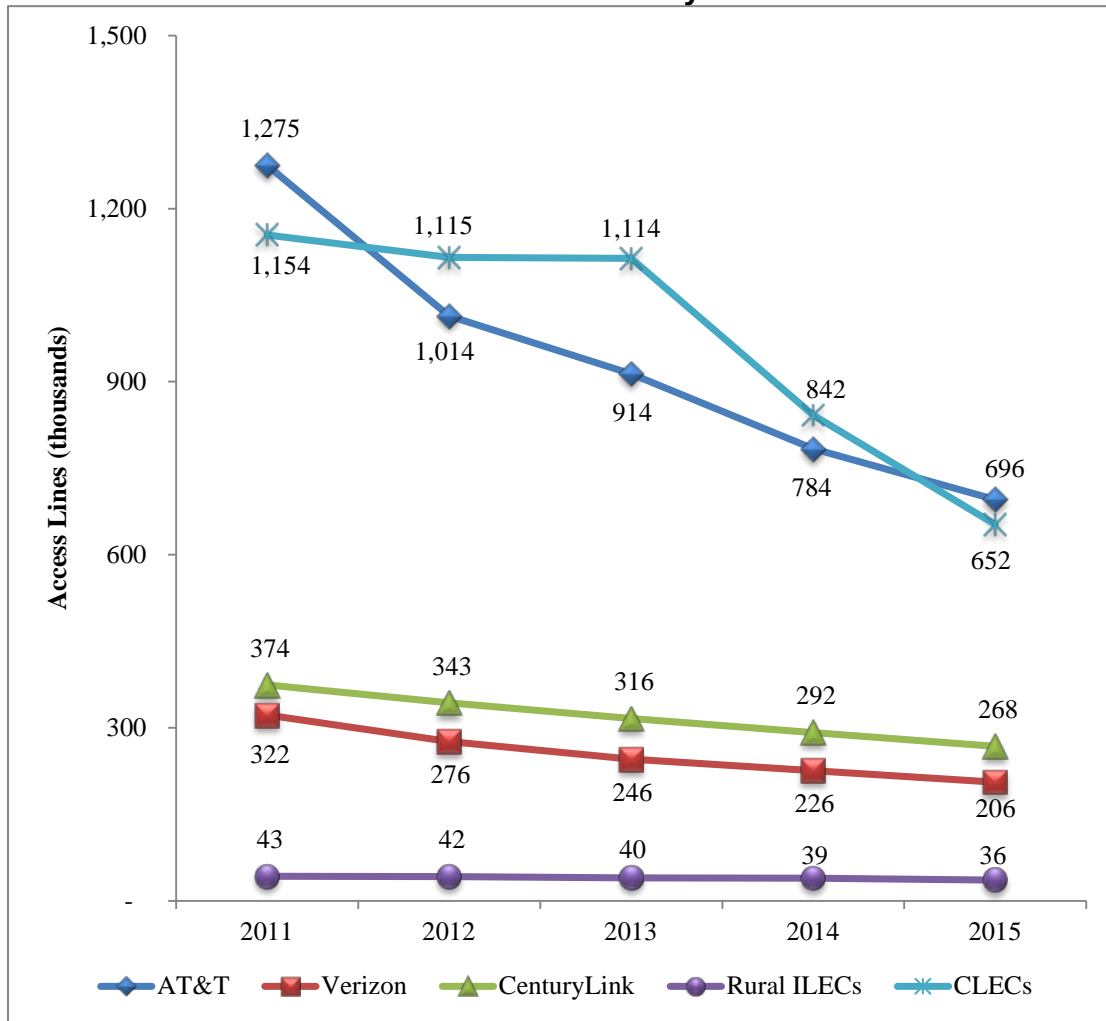
Source: Responses to FPSC data requests (2012-2016)

AT&T, Verizon, and CenturyLink each lost about the same percentage of residential wirelines between 2014 and 2015 as they did the previous year. By comparison, CLECs reported a 28 percent increase in residential access lines in 2015.

## 2. Business Wireline Access Line Trends

Figure 4-4 displays the business wireline trends for AT&T, Verizon, CenturyLink, aggregate rural ILECs, and aggregate CLECs. Both ILECs' and CLECs' business access lines continue to trend downward. Rural ILEC business access lines have been revised from last year's report for 2014 as a result of reporting errors from one rural ILEC. In 2013 and 2014, AT&T and Verizon each had about a 50 percent split between residential lines and business lines. For 2015, both companies began to have slightly more business customers than residential wireline customers.

**Figure 4-4**  
**Florida Business Wireline Trends by ILECs and CLECs**



Source: Responses to FPSC data requests (2012-2016)

## Chapter V. Wireless, VoIP, and Broadband

### A. Wireless

Many wireless subscribers have embraced their devices as the preferred method of communications. Pew Research Center reported that twenty percent of Americans report going online “almost constantly” as a result of the widespread adoption of smart phones.<sup>58</sup>

A substantial number of Americans now use their mobile device for all of their communication needs: from making a “regular old telephone call” to accessing tools to complete schoolwork or access e-mail, planning and coordinating cultural or social events, communicating with friends and family through social media, or streaming music from any number of internet music sites. In ComScore’s February 2016 report on smartphone subscribers, the top five smartphone applications are comprised of social media applications Facebook and Facebook Messenger, entertainment portals such as YouTube and Google Play, and an Internet mapping service, Google Maps.<sup>59</sup>

Wireless subscriber connections have grown from 270.3 million in 2008, to an estimated 377.9 million subscriber connections by year-end 2015.<sup>60</sup> Pew Research Center reports that 92 percent of U.S. adults own mobile phones.<sup>61</sup> As consumers continue to migrate from wireline service to mobile devices, the reduction in wireline subscribership does not necessarily spell doom or the end for the need for the wireline industry. As fourth generation (4G) technology leads to the development of the next generation of technology, 5G, wireline infrastructure will continue to be a crucial element to provide transport or “backhaul” services.

#### 1. Wireless Substitution

By the end of 2015, wireless-only households continued to increase while the number of households with both wireline and wireless service decreased.<sup>62</sup> The number of wireline-only households decreased 1.2 percent to 7.2 percent. Nationwide, 48.3 percent of Americans lived in wireless-only homes, up 2.9 percent from 45.4 percent in 2014.<sup>63</sup> At the same time, the percentage of households with both wireline and wireless service fell 1.5 percent, to 41.2 percent.<sup>64</sup>

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<sup>58</sup> Andrew Perrin, “One-fifth of Americans report going online ‘almost constantly,’” Pew Research Center, December 8, 2015, <http://www.pewresearch.org/fact-tank/2015/12/08/one-fifth-of-americans-report-going-online-almost-constantly/>, accessed May 2, 2016.

<sup>59</sup> ComScore, “February 2016 U.S. Smartphone Subscriber Market Share,” released April 6, 2016, <http://www.comscore.com/Insights/Rankings/comScore-Reports-February-2016-US-Smartphone-Subscriber-Market-Share>, accessed April 28, 2016.

<sup>60</sup> CTIA Annual Wireless Industry Survey, <http://www.ctia.org/your-wireless-life/how-wireless-works/annual-wireless-industry-survey>, accessed July 19, 2016.

<sup>61</sup> Monica Anderson, “Technology Device Ownership: 2015.” Pew Research Center, October 29, 2015, <http://www.pewinternet.org/2015/10/29/technology-device-ownership-2015>, accessed April 26, 2016.

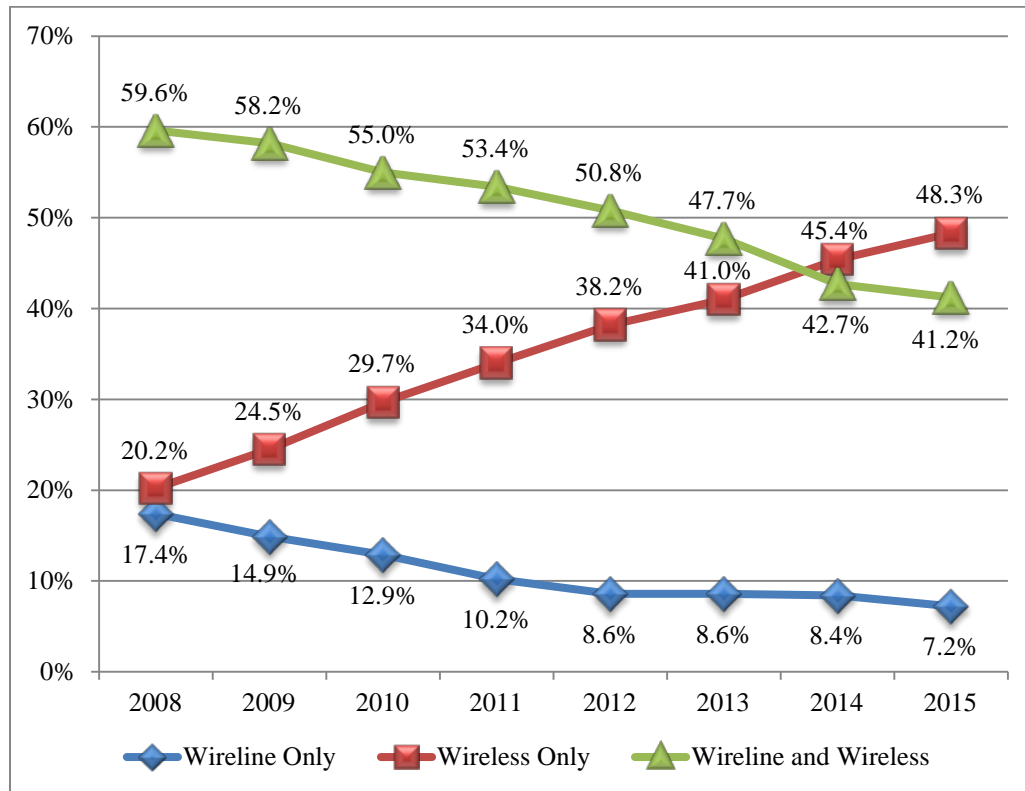
<sup>62</sup> Ibid.

<sup>63</sup> Stephen J. Blumberg, Ph.D., Julian V. Luke, “Wireless substitution: Early release of estimates from the National Health Interview Survey, July–December 2015,” National Center for Health Statistics, Centers for Disease Control and Prevention, released May 11, 2016, <http://www.cdc.gov/nchs/nhis/releases.htm>, accessed May 28, 2016.

<sup>64</sup> Ibid.

Figure 5-1 shows national trends in the percentage of households with wireless only, wireline only, and dual household usage. The wireless substitution trends seen nationwide are also occurring in Florida. Though recent data is scant, Florida’s rate of wireless substitution has closely followed national trends.

**Figure 5-1  
U.S. Wireless Substitution Rates**



Source: United States Centers for Disease Control and Prevention

In 2015, the Centers for Disease Control and Prevention reported an average increase of 2.9 percent in the number of American households with only wireless service. The most significant increase, 10.7 percent, was reported in households with unrelated adults. Also notable is the 3.4 percent increase in wireless subscribership for those 65 and over. The percentage of wireless-only households decreases as age increases.<sup>65</sup>

## 2. Devices, Networks, and Usage

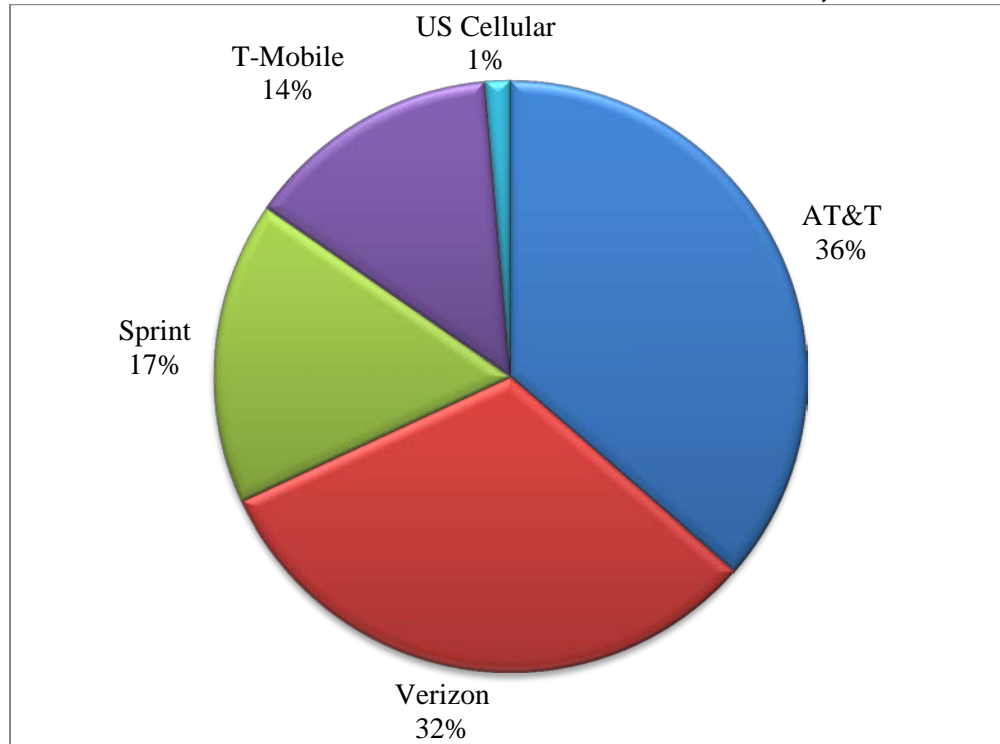
Among equipment manufacturers, Apple and Samsung remain the leaders, maintaining 43.9 percent and 28.4 percent of the market share, respectively.<sup>66</sup> Of the operating systems tracked, Android and Apple significantly outpace the others at 52.7 percent and 43.9 percent of the

<sup>65</sup> Ibid.

<sup>66</sup> ComScore, “February 2016 U.S. Smartphone Subscriber Market Share,” released April 6, 2016, <http://www.comscore.com/Insights/Rankings/comScore-Reports-February-2016-US-Smartphone-Subscriber-Market-Share>, accessed April 28, 2016.

market, respectively.<sup>67</sup> Figure 5-2 reflects current subscriber market share among U.S. wireless providers.

**Figure 5-2**  
**U.S. Wireless Market Share as of December 31, 2015**



Source: Individual Company Quarterly/Annual Reports

### 3. Florida Trends

The United States Census Bureau estimated Florida’s population to be 20,271,272 on July 1, 2015, up from 19,893,297 in 2014.<sup>68</sup> Between 2011 and 2014, Florida’s wireless substitution rate grew an average of 4.4 percent per year.<sup>69</sup> During the same period, the national wireless substitution rate grew an average of 4.1 percent.

There is no reason to believe the substitution rate changed appreciably from 2014 to 2015. Figure 5-3 illustrates that Florida ILECs continued to lose wireline subscribers to competitors and affiliated wireless companies.<sup>70</sup> The wireline data below includes both traditional circuit switched access lines and interconnected VoIP lines. While 2015 wireless substitution data for Florida is not available, a comparison of Figure 5-3 (Florida wireless substitution) and Figure 5-1

<sup>67</sup> Ibid.

<sup>68</sup> United States Census Bureau, UNITED STATES QuickFacts from the US Census Bureau, Population estimates, July 1, 2015, <https://www.census.gov/quickfacts/table/PST045215/12>, accessed April 27, 2016.

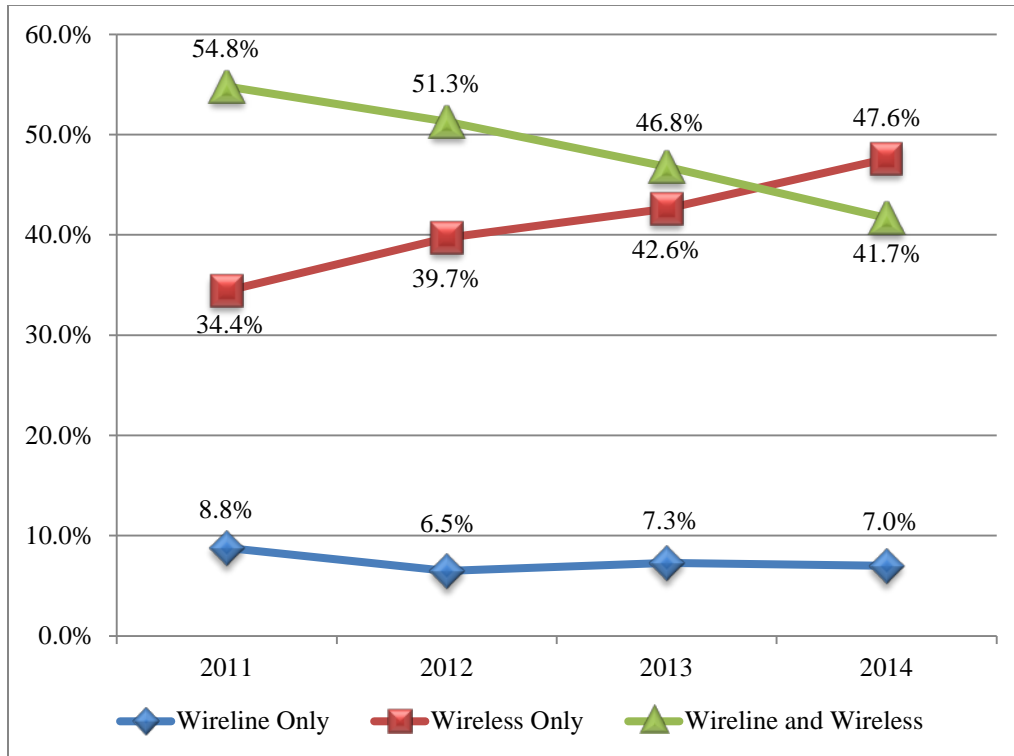
<sup>69</sup> National Center for Health Statistics, Centers for Disease Control and Prevention, “Wireless Substitution State-Level Estimates from the National Health Interview Survey,” released February 2016, [http://www.cdc.gov/nchs/nhis/new\\_nhis.htm](http://www.cdc.gov/nchs/nhis/new_nhis.htm), accessed June 2, 2016.

<sup>70</sup> Ibid.



(national wireless substitution) shows that consumers in Florida are moving to wireless-only households at a slightly faster rate than the national average.

**Figure 5-3  
Florida Wireless Substitution Rates**



Source: United States Centers for Disease Control and Prevention

#### 4. New Technology

The next generation of mobile technology is expected to be rolled out after 2020, and it is envisioned to be faster and it will carry more data than 4G. In AT&T’s “roadmap” to 5G, the company envisions delivering speeds “10-100 times faster than today’s average 4G LTE connections. . . . speeds measured in gigabits per second, not megabits.”<sup>71</sup> Verizon and its partners “are committed to beginning technology field trials in 2016.”<sup>72</sup> As with AT&T’s roadmap, Verizon expects one of the benefits of 5G to include “about 50 times the throughput of current 4G LTE.”

Residential wireline loss due to wireless substitution will help facilitate the transition to 5G technology. The backhaul facilities necessary for 5G adoption are partially in place as a result of wireless substitution. Combined with the commitments made by industry leaders, the roll-out of 5G technology and networks by 2020 appears possible.

<sup>71</sup> AT&T Unveils 5G Roadmap Including Trials In 2016, April 12, 2016, [http://about.att.com/story/unveils\\_5g\\_roadmap\\_including\\_trials.html](http://about.att.com/story/unveils_5g_roadmap_including_trials.html), accessed May 3, 2016.

<sup>72</sup> Verizon sets roadmap to 5G technology in U.S.; Field trials to start in 2016, September 8, 2015, <http://www.verizon.com/about/news/verizon-sets-roadmap-5g-technology-us-field-trials-start-2016>, accessed May 3, 2016.

The most logical place for 5G technology, at least initially, is for fixed wireless situations. If fixed wireless 5G turns out to be an adequate replacement for home or business broadband, that alone may justify its deployment.<sup>73</sup>

## **B. Voice over Internet Protocol (VoIP)**

Interconnected VoIP services continue to be a rapidly growing sector of the voice services market. Nationally, the number of customers who subscribe to interconnected VoIP services increases each year while subscribership rates to traditional wired telephone services continue to decline.<sup>74</sup> Florida has also experienced increases in VoIP subscribership rates similar to the national trend. Increases in the VoIP services market are expected to continue in the coming years due to cost effectiveness and improving network infrastructure.<sup>75</sup>

According to the FCC's latest data, between 2011 and 2014 interconnected VoIP subscriptions increased at a compound annual growth rate of 14 percent while subscribership to traditional wired lines decreased by 12 percent each year.<sup>76</sup> As of December 2014, the FCC reported that there are approximately 54 million interconnected VoIP subscribers in the U.S. This total includes roughly 5.2 million "over-the-top" or "bring your own broadband" VoIP subscribers.<sup>77</sup>

Residential VoIP subscribers account for 38 million of the total subscribers nationwide while business subscribers account for about 16 million.<sup>78</sup> The FCC has not released any data regarding subscribership of interconnected VoIP services for 2015. However, data collected by the FPSC shows an estimated 2.8 million interconnected residential subscribers in Florida as of December 2015.<sup>79</sup>

### **1. National Market Analysis**

Over half of all residential wireline customers in the U.S. use VoIP services.<sup>80</sup> However, 75 percent of residential VoIP subscribers do not purchase VoIP services from an ILEC.<sup>81</sup> Instead, most VoIP customers typically purchase services through their cable provider as part of a bundled service package. As a result, cable companies are the largest providers of residential

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<sup>73</sup> Bernie Arnason, "Will 5G Enable Wireless Replacement of Home Broadband and disrupt FTTH?," Telecompetitor, May 26, 2016, <http://www.telecompetitor.com/will-5g-enable-wireless-replacement-home-broadband-disrupt-ftth/>, accessed June 10, 2016.

<sup>74</sup> FCC, Voice Telephone Services: Status as of December 31, 2014, released March 2016, [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0330/DOC-338629A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0330/DOC-338629A1.pdf), accessed April 22, 2016.

<sup>75</sup> Reportlinker, "VoIP Services Market (Corporate Consumers and Individual Consumers) - Global Industry Analysis, Size, Share, Growth, Trends and Forecast, 2014 – 2020," PR Newswire, December 15, 2014, <http://www.prnewswire.com/news-releases/voip-services-market-corporate-consumers-and-individual-consumers---global-industry-analysis-size-share-growth-trends-and-forecast-2014--2020-300009809.html>, accessed April 29, 2016.

<sup>76</sup> Ibid.

<sup>77</sup> In 2014, the FCC modified Form 477 to distinguish over-the-top interconnected VoIP subscriptions from other interconnected VoIP subscriptions. The phrase "over-the-top VoIP" refers to a VoIP service that requires a consumer to obtain broadband access from another company.

<sup>78</sup> Ibid, Table 1 and Figure 3.

<sup>79</sup> Responses to the FPSC Local Competition Data Request 2016.

<sup>80</sup> FCC, Voice Telephone Services: Status as of December 31, 2014, released March 2016, [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0330/DOC-338629A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0330/DOC-338629A1.pdf), accessed April 22, 2016.

<sup>81</sup> Ibid, Table 1.

VoIP services. Over the years, traditional wireline carriers that offer fiber-based services such as AT&T and Verizon have been able to increase their VoIP subscribership as consumers take advantage of their services. Other ILECs and CLECs have also experienced increased VoIP subscribership. However, despite the others' gains, cable companies have continued to maintain a dominant presence in the market.

### **a. Facilities-Based VoIP Providers**

ILECs, CLECs, and cable companies all provide interconnected VoIP services. However, in the facilities-based residential interconnected VoIP market, cable companies accounted for 28.7 million VoIP subscribers as of December 2014, compared to roughly 9.5 million ILEC VoIP subscribers.<sup>82</sup> More recent data is available from publicly traded carriers.

Comcast, the country's largest cable provider, had an estimated 11.5 million VoIP subscribers at year-end in 2015.<sup>83</sup> This presents a 2.5 percent increase from year-end 2014. Time Warner Cable, the nation's second largest cable provider, reported an estimated 6.7 million subscribers for 2015, an increase of roughly 20 percent from the previous year.<sup>84</sup>

Although the cable companies have continued to experience growth in VoIP subscribership, it appears the rate of growth is declining. For instance, between 2007 and 2009, the number of residential VoIP subscribers more than doubled. However, in 2010, cable VoIP providers began reporting slower yearly subscriber growth rates.<sup>85</sup> These slower subscribership growth rates can be partially attributed to the cable companies' loss of market share concentration.

For years the largest cable VoIP providers led the market and earned the vast majority of the revenues within the industry. However, in recent years their market share concentration has weakened due to increased competition from low cost and free VoIP providers entering the market. The rising demand for mobility has also prompted many users to abandon their interconnected residential VoIP services for wireless phone services.<sup>86</sup> As a result, residential VoIP services have experienced a slight decrease in subscribership. However, this decrease has mostly been offset by an increase in business VoIP subscribers.<sup>87</sup>

Although telephone companies continue to show losses in traditional voice access lines, many of these companies have been able to offset some of their losses by deploying facilities-based VoIP services over fiber-based facilities. For instance, despite reporting losses in traditional voice

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<sup>82</sup> Ibid, Table 1.

<sup>83</sup> Comcast Corporation, Comcast Reports 4th Quarter and Year End 2014 Results, February 3, 2016, [http://files.shareholder.com/downloads/CMCSA/1994147526x0x873083/0A00FF97-8AAC-4118-83FF-4B32BF77DD84/CMCSA\\_News\\_2016\\_2\\_3\\_General\\_Releases.pdf](http://files.shareholder.com/downloads/CMCSA/1994147526x0x873083/0A00FF97-8AAC-4118-83FF-4B32BF77DD84/CMCSA_News_2016_2_3_General_Releases.pdf), accessed May 2, 2016.

<sup>84</sup> Time Warner Cable Reports 2014 Fourth-Quarter and Full-Year Results, January 28, 2016, <http://s1.q4cdn.com/730563363/files/2015/4Q15/Q4-2015-TWC-Earnings-Release-FINAL.pdf>, accessed May 2, 2016.

<sup>85</sup> PRWeb.com, "VoIP in the US Industry Market Research Report from IBISWorld," December 24, 2012, <http://www.prweb.com/pdfdownload/10267567.pdf>, accessed, May 2, 2016.

<sup>86</sup> Tracy Watson, 2015: The Year of VoIP, Business 2 Community, January 13, 2015, <http://www.business2community.com/tech-gadgets/2015-year-voip-01122398#BY2WcEbEuK3Eh8MU.97>, accessed May 2, 2016.

<sup>87</sup> Infonetics Research, "In VoIP Services Market, Business Segment Offsets Residential Slowdown," May 8, 2015, <http://www.infonetics.com/pr/2015/VoIP-UC-Services-Subs-Market-Highlights.asp>, accessed May 3, 2016.

services, both AT&T and Verizon have reported gains with their other service offerings. AT&T reported approximately 5.2 million U-verse voice subscribers at year-end 2015. This represents a 9.5 percent increase from the previous year. Verizon reported roughly 4.8 million FiOS Digital Voice subscribers as of December 2015, an increase of approximately 3.3 percent from year-end 2014.

### ***b. Over-the-Top VoIP Providers***

According to the FCC, there were roughly 5.2 million over-the-top interconnected VoIP subscribers in the U.S. as of December 2014. This total includes 2.9 million residential subscribers and approximately 2.3 million business subscribers nationwide.<sup>88</sup> Over-the-top providers offer low-priced stand-alone interconnected VoIP service. The service quality of these VoIP Providers varies because calls are transmitted over the public Internet rather than private managed IP-based networks.

The price advantage over the bundled services offered by facilities-based VoIP providers has allowed the over-the-top VoIP providers to attract customers. As a result, consumer use of over-the-top VoIP is expected to grow at a compound rate of 20 percent between 2012 and 2018.<sup>89</sup> The expected increase in demand for over-the-top VoIP is driven by improvements in the availability of and speed of broadband networks, the growing capability and affordability of wireless devices such as smartphones and tablets, and the continued dominance of social media.<sup>90</sup>

Vonage, 8x8, Inc., MagicJack, Skype, and Google are a few of the leading over-the-top VoIP providers. Since many customers have mobile broadband connections, some of these companies have even begun offering mobile VoIP services. Reliable data on subscribership is not widely available for over-the-top providers. The available data suggests that certain market segments, such as mobile VoIP, may be doing better than others. Mobile VoIP is expected to grow 14.7 percent between 2014 and 2020.<sup>91</sup>

It appears that some over-the-top providers are experiencing slower growth rates which may be an indication that the market is maturing. For instance, prior to 2008 Vonage reported yearly increases in subscriber lines. However, each year between 2008 and 2012 Vonage reported a decline in subscribership. The company had a slight increase in subscribers in 2013. However, subscriber lines decreased roughly three percent in 2014.<sup>92</sup> Vonage reported 2.5 million

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<sup>88</sup> Ibid, Table 1.

<sup>89</sup> Erik Heinrich, "Telecom Companies Count \$386 Billion in Lost Revenue to Skype, WhatsApp, Others," Fortune.com, June 23, 2014, <http://fortune.com/2014/06/23/telecom-companies-count-386-billion-in-lost-revenue-to-skype-whatsapp-others/>, accessed April 26, 2016.

<sup>90</sup> Ibid.

<sup>91</sup> PRNewswire, VoIP Services Market to Expand at 9.7percent CAGR Till 2020, Thanks to Increasing Adoption in Residential and Corporate Sectors: Transparency Market Research, August 18, 2015, <http://www.prnewswire.com/news-releases/voip-services-market-to-expand-at-97-cagr-till-2020-thanks-to-increasing-adoption-in-residential-and-corporate-sectors-transparency-market-research-522169791.html>, accessed May 3, 2016.

<sup>92</sup> Vonage Holdings Corp. Form 10-K Annual Report 2014, <http://files.shareholder.com/downloads/VAGE/206468775x0xS1272830-15-25/1272830/filing.pdf>, accessed May 3, 2016.

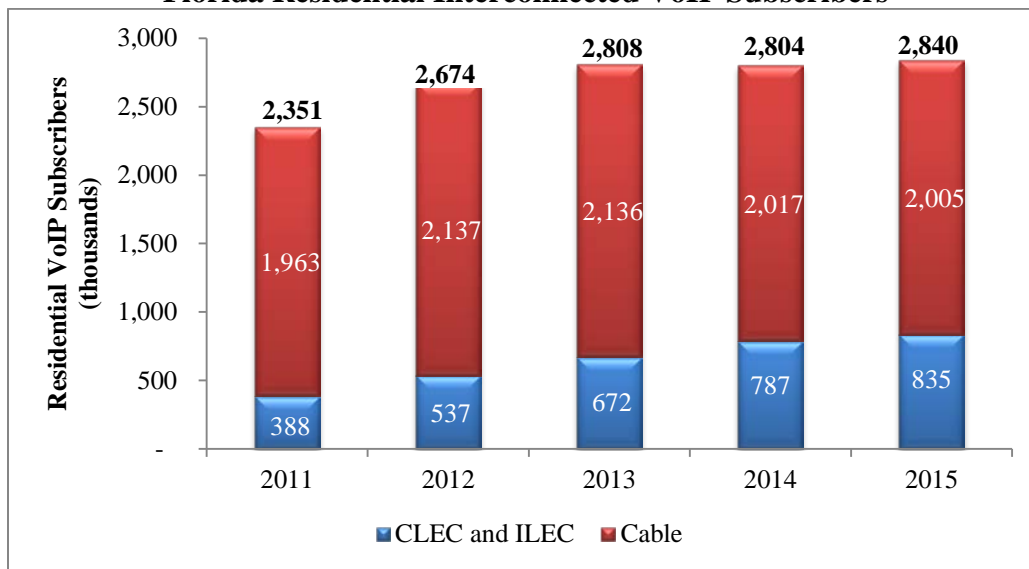
subscriber lines at year-end for 2014 and 2015.<sup>93</sup> 8X8, Inc., which almost exclusively caters to the business markets, reported an increase of roughly 10 percent from the previous year in 2015 compared to an 18 percent increase in 2014 and a 14 percent increase in 2013.<sup>94</sup>

## 2. Florida Market

The FPSC does not have jurisdiction over VoIP services. As a result, the ability to determine an accurate estimate of the total number of VoIP subscribers in Florida is limited. However, several ILECs and CLECs in Florida voluntarily responded to the Commission’s data request and provided information on the number of residential VoIP subscribers. The Florida Cable Telecommunications Association also reported residential VoIP line data for its six largest member providers.

Based on the analysis of the available data, there are an estimated 2.8 million residential interconnected VoIP subscribers in Florida. Figure 5-4 shows the number of residential interconnected VoIP subscribers in Florida by provider type. While data for the last three years indicates very modest growth in the residential VoIP market, additional growth may occur as network facilities transition to an IP-centric infrastructure.

**Figure 5-4**  
**Florida Residential Interconnected VoIP Subscribers**



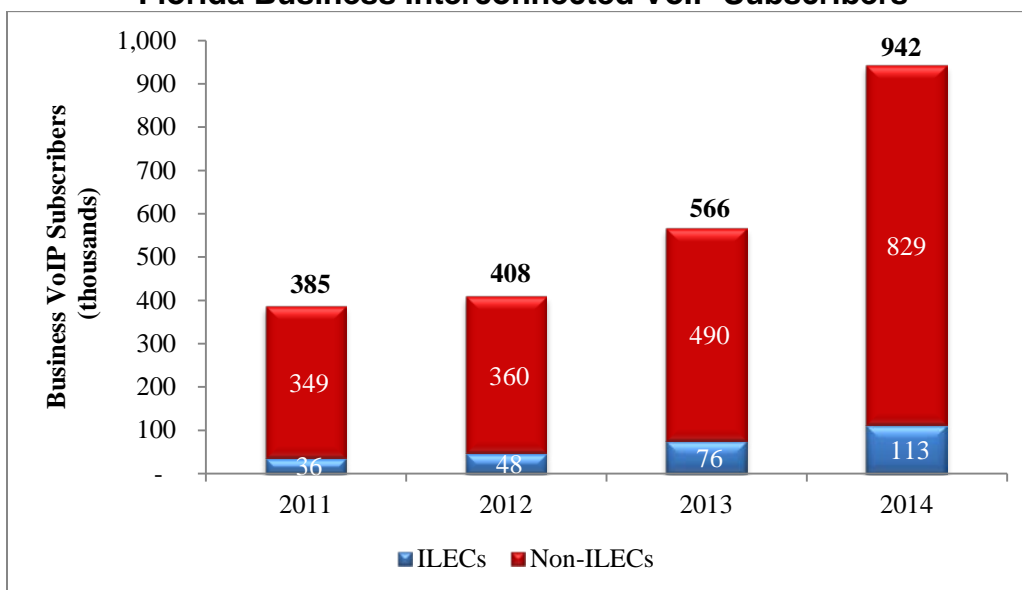
Source: Responses to FPSC data requests (2012-2016)

<sup>93</sup> While Vonage reported 2.5 million subscriber lines in 2015, this represents a 2.3 percent decrease in residential lines and a 1.2 percent increase in business lines from the previous year. Vonage Holdings Corp. Form 10-K Annual Report 2015, [http://files.shareholder.com/downloads/VAGE/1999128012x0x887583/A7D23138-8CC3-4ACE-A66E-D9B25BD92285/VG\\_10-K.pdf](http://files.shareholder.com/downloads/VAGE/1999128012x0x887583/A7D23138-8CC3-4ACE-A66E-D9B25BD92285/VG_10-K.pdf), accessed May 3, 2016.

<sup>94</sup> 8X8, Inc. /DE/ Form 10-K Annual Report 2015, <https://www.sec.gov/Archives/edgar/data/1005699/000117891316004718/zk1618191.htm>, accessed May 3, 2016.

While the Commission received business VoIP data from telecommunications carriers, corresponding data was not made available from most cable companies as requested. Data is, however, available from the FCC that provides VoIP business lines through 2014. Figure 5-5 identifies the number of interconnected VoIP business subscribers by ILEC and non-ILEC carriers. Such non-ILEC carriers would include cable companies. From 2013 to 2014, non-ILECs experienced a 69 percent increase in their number of interconnected business VoIP subscribers. By comparison, ILECs experienced a 49 percent increase in the number of interconnected business VoIP subscribers for the same time period. Based on the general trend of such interconnected business VoIP lines and the reduction in traditional switched access lines, it is likely that there will be further growth in this market segment.

**Figure 5-5**  
**Florida Business Interconnected VoIP Subscribers**



Source: FCC, Voice Telephone Services Report, Nationwide and State-Level Data for 2014

## **C. Broadband**

### **1. National Broadband Trends**

Having access to a high-speed Internet connection has become an essential part of our daily lives. According to the latest report from the Pew Research Center, 67 percent of Americans had broadband connections in their homes in 2015.<sup>95</sup> Overall, broadband adoption rates are steadily increasing each year. However, it appears that in-home high-speed connections are declining as more people begin to rely solely on their smartphones for online access.<sup>96</sup>

Despite 67 percent of Americans having in-home broadband connections in 2015, this percentage is down slightly from 70 percent in 2013 and mirrors the 2012 in-home broadband

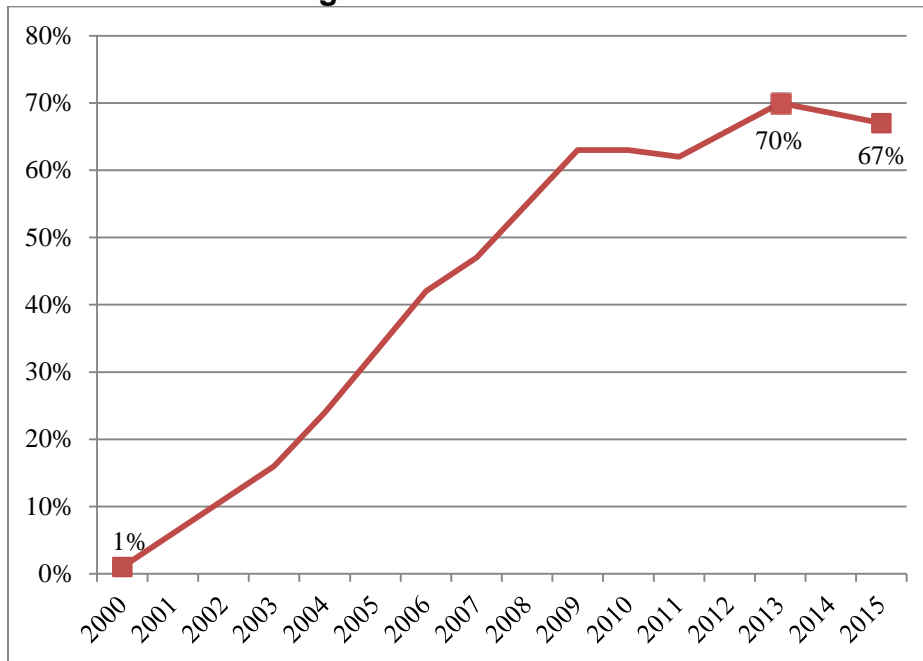
<sup>95</sup> Pew Research Center, "Home Broadband 2015," December 21, 2015, <http://www.pewinternet.org/files/2015/12/Broadband-adoption-full.pdf>, accessed May 4, 2016.

<sup>96</sup> Ibid.

connection rate. This downturn suggests that the number of households with a broadband connection in their home may have plateaued.<sup>97</sup> Figure 5-6 indicates the percentage of adults who were home broadband users between 2000 and 2015.<sup>98</sup>

As in-home, high-speed Internet adoption rates decrease, the number of Americans who solely rely on their smartphones to access the Internet has simultaneously increased.<sup>99</sup> According to the Pew Report, smartphone adoption has reached parity with home broadband adoption as 68 percent of Americans reported that they owned a smartphone in 2015, an increase from 55 percent in 2013. Thirteen percent of Americans are “smartphone-only,” meaning they exclusively rely on their smartphones for their broadband connection. This is an eight percent increase since 2013.<sup>100</sup>

**Figure 5-6**  
**Percentage of Broadband Households**



Source: Pew Research Center Surveys

Table 5-1 shows the demographic groups who have shifted their home internet connectivity away from home broadband connections to smartphones.<sup>101</sup> It appears that low income households and those living in rural areas are among the major demographic groups who have made the most significant changes in their broadband adoption patterns.

<sup>97</sup> Ibid.

<sup>98</sup> Ibid.

<sup>99</sup> Ibid.

<sup>100</sup> Ibid.

<sup>101</sup> Ibid.

**Table 5-1  
Percentage of Households that Switched from  
Home Broadband Connections to Smartphones**

	Broadband at Home			Smartphone, But No Broadband at Home		
	2013	2015	Percent Change	2013	2015	Percent Change
All adults	70%	67%	-3%	8%	13%	+5%
Rural residents	60%	55%	-5%	9%	15%	+6%
Household income < \$20K	46%	41%	-5%	13%	21%	+8%
\$20K-\$50K	67%	63%	-4%	10%	16%	+6%
\$50K-\$75K	85%	80%	-5%	5%	10%	+5%
Parents	77%	73%	-4%	10%	17%	+7%
High school grad or less	50%	47%	-3%	11%	18%	+7%

Source: Pew Research Center

In addition, the number of households that have both an in-home broadband connection and a smartphone broadband connection has also increased. As of July 2015, 55 percent of all households reported having both a smartphone and a home high-speed Internet connection. This is an eight percent increase since 2013. Among non-home broadband adopters, 33 percent indicated that the monthly subscription cost is the primary reason they do not have a broadband connection at home.<sup>102</sup> Twelve percent of non-home broadband adopters indicated that they did not have a home high-speed Internet connection because their smartphones provided a sufficient broadband connection, while five percent indicated that home broadband service in their area was either not available or had insufficient speeds.

The most recent report published by the FCC indicated that 66 percent of U.S. households had fixed broadband connections with download speeds of at least three Mbps in 2014. By comparison, 54 percent had fixed broadband connections with download speed of at least ten Mbps and 35 percent with at least 25 Mbps.<sup>103</sup> Demographic groups that are most likely to have broadband connections within their homes include households with relatively young members, Asian and White households, and households that are affluent and highly educated. Households located within suburban and urban areas are also more likely to have broadband connections than those located in rural areas. Minority households, low income individuals, and those without a college education are less likely to have high-speed internet connections within their homes.<sup>104</sup>

<sup>102</sup> Pew Research Center, “Home Broadband 2015,” December 21, 2015, <http://www.pewinternet.org/files/2015/12/Broadband-adoption-full.pdf>, accessed May 4, 2016.

<sup>103</sup> FCC, Internet Access Services: Status as of December 31, 2014, released March 2016, [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-338630A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-338630A1.pdf), Figure 32, accessed May 4, 2016.

<sup>104</sup> Pew Research Center, “Home Broadband 2015,” December 21, 2015, <http://www.pewinternet.org/files/2015/12/Broadband-adoption-full.pdf>, accessed May 4, 2016, and U.S. Census Bureau, “Computer and Internet Use in the



Efforts continue to extract more bandwidth from copper loops. Telecommunications companies have begun to deploy a new Digital Subscriber Line (DSL) technology called G.fast. G.fast is a DSL standard for local copper loops shorter than 500 meters. Currently, G.fast performance allows for aggregate upstream and downstream speeds of 150 Mbps over 500 meters over traditional phone wiring. The aggregate speed increases to roughly 300 Mbps when the distance is decreased to 300 meters.

Using coaxial cable in place of traditional phone wiring can provide a further boost to G.fast bandwidth. When AT&T acquired DirecTV, it also acquired the coaxial connections in the homes of DirecTV's customers. As a result, AT&T is considering leveraging these connections to support G.fast. AT&T expects to be able to offer up to 750 Mbps in both downstream and upstream performance over coaxial cable with current G.fast technology. The company also expects to double its performance with the next generation of G.fast chipsets.<sup>105</sup>

Efforts also continue to increase the bandwidth of broadband delivered via satellite. High-speed satellite broadband provider ViaSat expects to deliver satellite broadband services at speeds of 100 Mbps or higher to its residential customers by 2019. ViaSat also plans to support 4K ultra-high definition video streaming.<sup>106</sup> Currently, the company delivers speeds of up to 25 Mbps. ViaSat's name for the planned 100 Mbps satellite broadband platform is ViaSat-3. The platform will consist of three satellites, with two focused on the Americas, Europe, the Middle East, and Africa. The third satellite will target the Asia Pacific region.<sup>107</sup>

## **2. Florida Broadband Trends**

According to the FCC, 78 percent of households in Florida had fixed broadband connections with download speeds of at least three Mbps in 2014. Sixty-six percent of households had broadband speeds of at least ten Mbps and 37 percent had speeds of at least 25 Mbps.<sup>108</sup> Cable modem services account for roughly 63 percent of the non-mobile broadband connections in Florida with download speeds greater than 200 kilobits per second (kbps). Mobile broadband connections accounted for 65 percent of all broadband connections in Florida with download speeds greater than 200 kbps.<sup>109</sup>

Reflecting advances in technology, market offerings by broadband providers, and consumer demand, the FCC updated its broadband benchmark speeds to 25 Mbps for downloads and three Mbps for uploads. The FCC found that its four Mbps standard set in 2010 was dated and inadequate for evaluating whether advanced broadband is being deployed to all Americans in a timely way. Figure 5-7 illustrates the FCC's fixed broadband deployment results described in the

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United States: 2013," issued November 2014, <http://www.census.gov/content/dam/Census/library/publications/2014/acs/acs-28.pdf>, accessed May 4, 2016.

<sup>105</sup> Joan Engebretson, "G.fast Bandwidth Improvement Better Positions Copper Broadband Against Cable, DOCSIS," Telecompetitor, May 16, 2016, <http://www.telecompetitor.com/g-fast-bandwidth-improvement-better-positions-copper-broadband-against-cable-docsis/>, accessed June 6, 2016.

<sup>106</sup> Joan Engebretson, "ViaSat-3 100 Mbps Satellite Broadband Planned for 2019 Delivery," Telecompetitor, February 10, 2016, <http://www.telecompetitor.com/viasat-3-100-mbps-satellite-broadband-planned-for-2019-delivery/>, accessed June 6, 2016.

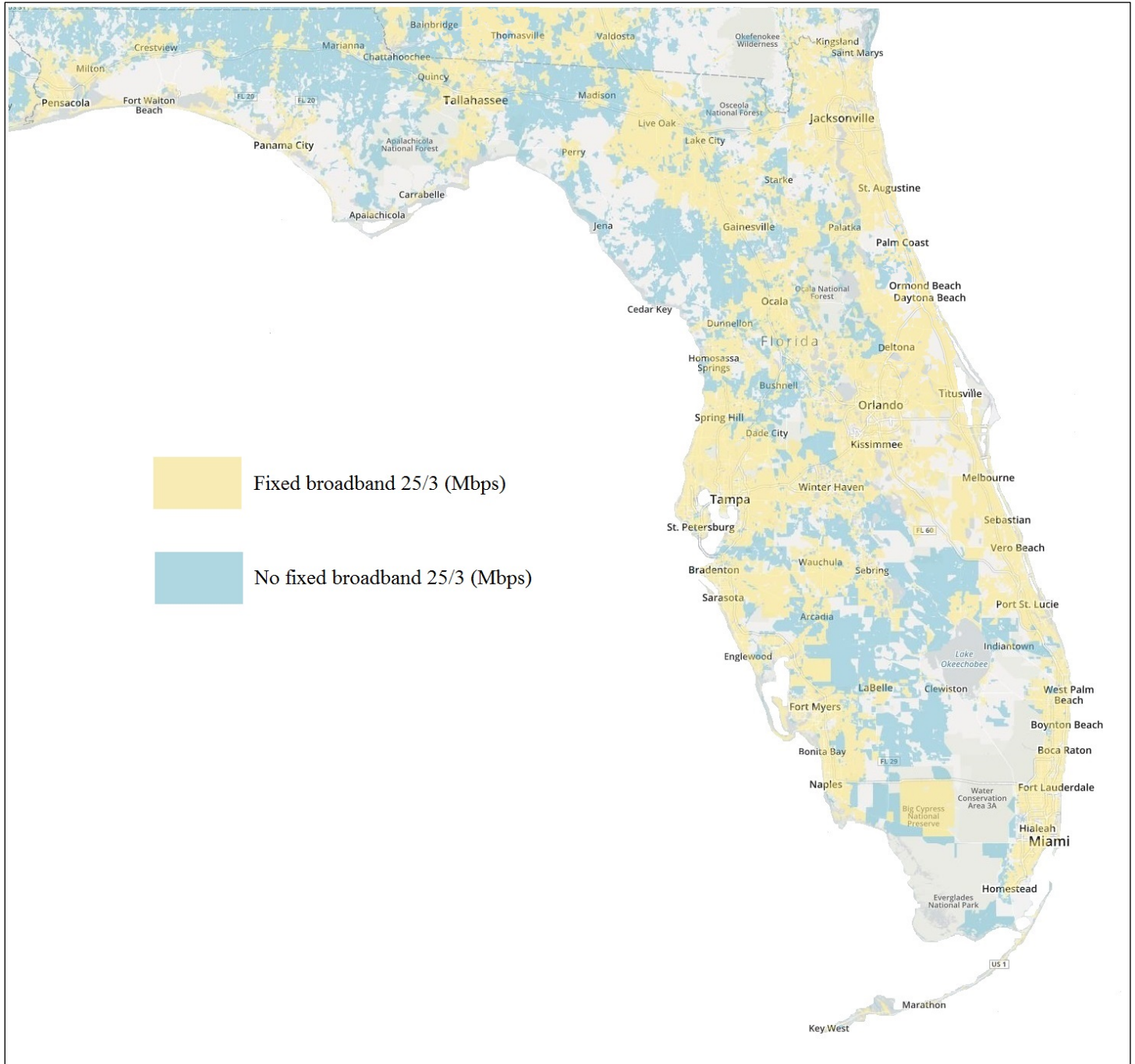
<sup>107</sup> Ibid.

<sup>108</sup> FCC, "Internet Access Services: Status as of December 31, 2014," released March 2016, [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-338630A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-338630A1.pdf), accessed May 4, 2016, Figure 34.

<sup>109</sup> Ibid, Figure 34.

2016 Broadband Progress Report. It relies on data from the National Broadband Map, as of December 31, 2014.<sup>110</sup> It shows which areas in Florida have access to fixed broadband services of at least 25 Mbps download and three Mbps upload.

**Figure 5-7**  
**Fixed 25 Mbps Download Speed Broadband Deployment Map**



Source: FCC, National Broadband Map, Data as of 12/31/14

<sup>110</sup> FCC, Residential Fixed Broadband by Speed (2016 Broadband Progress Report), <https://www.fcc.gov/reports-research/maps/bpr-2016-fixed-speed>, accessed June 6, 2016

## Chapter VI. Competitive Market Analysis & Statutory Issues

Section 364.386, F.S. requires the Commission to address four issues in its annual report on telecommunications competition. These issues emphasize analysis of the impact of competition and regulatory changes on the telecommunications market.

### ***A. Statutory Issue - Competitive Providers***

**The ability of competitive providers to make functionally equivalent local exchange services available to both residential and business customers at competitive rates, terms, and conditions.**

In general, the wireline residential and business markets are declining for both ILECs and CLECs. The total number of access lines decreased by 14 percent in 2015 in Florida. CLEC lines decreased 21 percent between December 2014 and December 2015, driven by declines in business lines. As a result, total CLEC wireline market share in Florida decreased to 23 percent in 2015 from 24 percent in 2014.

By comparison, residential VoIP subscribership accounted for 2.8 million connections by December 2015 representing about a one percent increase from the prior year.<sup>111</sup> Comparable 2015 end of year data was not available for wireless and business VoIP segments of the market. However, recently released data for 2014 from the FCC indicates that the number of business VoIP lines grew 66 percent from 2013 through 2014.<sup>112</sup> Continued growth in 2015 is likely.

Wireless carriers in Florida also experienced growth in 2014. The FCC reported that there were 19.9 million handsets in service as of December 2014, up one million from the prior year.<sup>113</sup> Figure 6-1 uses the FCC's data regarding the number of voice subscribers by technology for 2014 to illustrate the competitive nature of the industry in Florida. While the data does not reflect the market for the reporting period of this report, it does provide insight regarding how carriers are meeting the market demand for service.

This data suggests that CLECs, VoIP, and wireless carriers are able to provide functionally equivalent services to residential and business customers at rates, terms and conditions acceptable to consumers. The number of CLECs offering a variety of services also indicates the availability of functionally equivalent services at comparable terms. Other services offered by CLECs that reported providing local service include:

- Bundles including services (54 CLECs)
- VoIP (61 CLECs)
- Broadband Internet access (54 CLECs)
- Video service (7 CLECs)

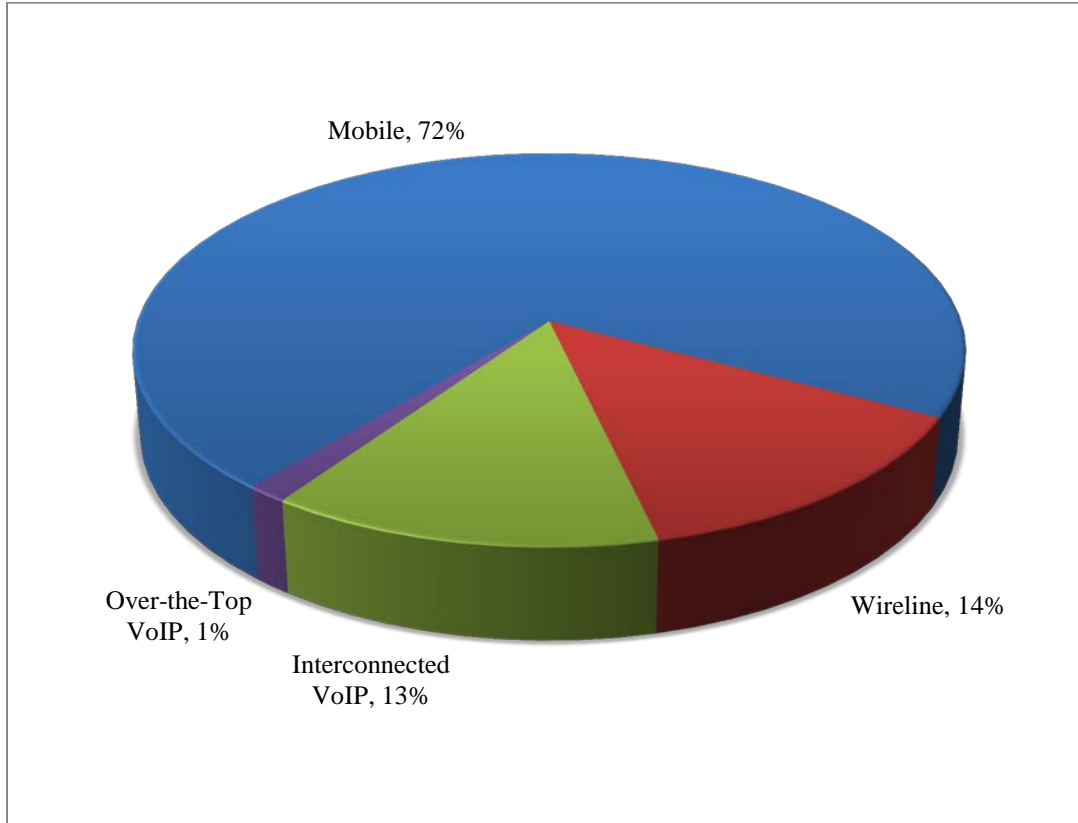
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<sup>111</sup> Responses to FPSC data requests 2015-2016.

<sup>112</sup> FCC, "Voice Telephone Services as of 12/31/14," State-Level Subscriptions spreadsheets, released March 30, 2016, <https://www.fcc.gov/file/3657/download>, accessed June 3, 2016.

<sup>113</sup> Ibid.

**Figure 6-1**  
**2014 Florida Voice Market**



Source: FCC, Voice Telephone Services Report, Nationwide and State-Level Data for 2014

The majority of CLECs reported no barriers to competition or elected not to respond in the comment portion of the survey. Those carriers that did provide comments to the Commission regarding barriers, however, represent approximately 38 percent of the CLEC business market in Florida. Those companies expressed concern regarding:

- The actions of some ILECs to unilaterally decide that a contract is not an interconnection agreement and, thus foreclose the opportunity for CLECs to either opt into such agreements or for the Commission to review them for discriminatory terms.
- The potential of the transition to an all-IP network to be used as a means to eliminate or significantly limit the availability of last-mile facilities.
- Actions by AT&T to use the IP transition as an excuse to construct new barriers to competition in Florida's local exchange markets and thereby increase prices for non-residential customers.<sup>114</sup>

<sup>114</sup> Several CLECs asserted that AT&T charges 8 times more for a basic connection in IP versus TDM in its Kings Point, Florida Trial site (\$1,075 for 2 Mbps in IP vs. \$126 for 1.5 Mbps in TDM). Competitors often must employ ILEC infrastructure to reach customers in the last mile preceding individual locations.

- Impairments a CLEC faces in a market do not “magically” change when the mode of transmission changes to IP.
- The need for concurrent jurisdiction and cooperation between the Commission and the FCC to maintain an industry structure that prohibits anticompetitive behavior and the detrimental use of market power.
- The identification of replacement services, which the FCC has said must be comparable in price and quality to the services being discontinued, during an IP transition.
- The preferential treatment by an ILEC of its CLEC affiliates regarding interconnection terms and conditions than those offered to non-affiliated competitors.<sup>115</sup>

**Conclusion:** Subscribers to VoIP and wireless services continued to show signs of growth, reflecting the opportunity for customers to seek out services from providers other than traditional ILECs. Many CLECs reported offering a variety of services and packages comparable to those offered by ILECs. All of these factors contribute to the conclusion that competitive providers are able to offer functionally equivalent services to both business and residential customers. We note that the CLECs have not filed a petition with the FPSC to address the issues above. Some of these issues may be addressed by the FCC.

## ***B. Statutory Issue – Consumers***

**The ability of consumers to obtain functionally equivalent services at comparable rates, terms, and conditions.**

Functionally equivalent services are available to customers via wireline telephony, wireless telephony, or VoIP. The primary focus of this report is the provision of wireline telecommunications by ILECs and CLECs, which submit responses to the FPSC’s annual data request.

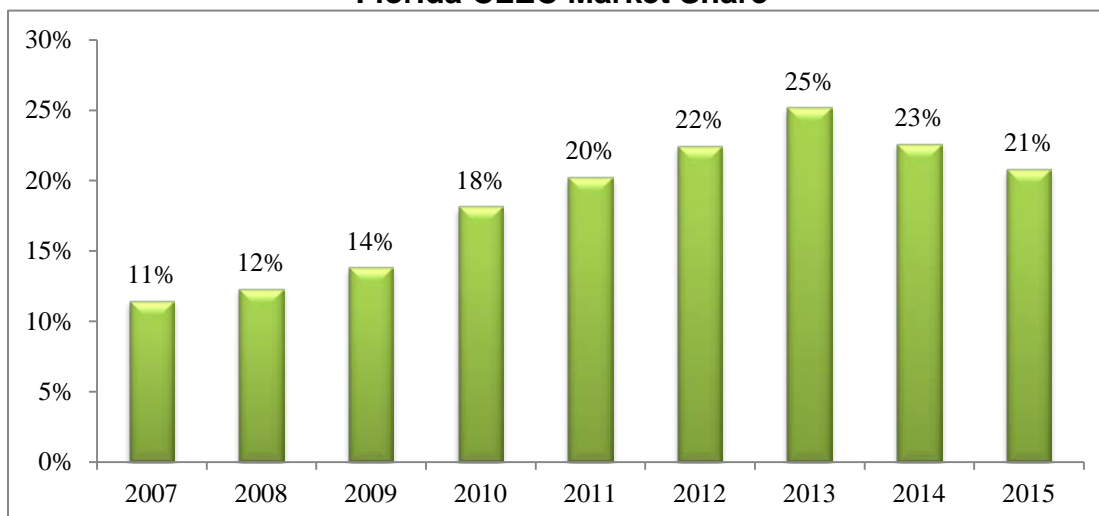
As of December 31, 2015, 63 CLECs provided data indicating that they provide local voice service in Florida. In contrast, last year 72 CLECs responded, continuing the gradual decline in the number of CLECs providing service. Between 2011 and 2015, the number of CLECs providing voice service declined 46 percent, averaging a reduction of about 13 per year.

Competitive carriers can offer service through resale of an ILEC’s or a CLEC’s wholesale services, by using their own facilities, by leasing portions of their networks from an ILEC, or a combination of any of these methods. Figure 6-2 provides a historical view of CLEC market share in Florida for the traditional wireline access line market. As of December 2015, 21 percent of total traditional wireline access lines in Florida are provided by companies other than ILECs.

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<sup>115</sup> Such preferential treatment includes freely providing unbundled facilities to its affiliate at off-book terms and prices which it denies to CLECs, including for use by non-telecommunications services such as Internet access and television.

**Figure 6-2**  
**Florida CLEC Market Share**



Source: Responses to FPSC data requests

Business lines from incumbent carriers fell 10 percent in 2015, while business lines from competitive carriers fell 23 percent. While business VoIP data was not provided by all segments of the industry for 2015, non-ILEC VoIP business lines grew 69 percent from 2013 to 2014 according to data from the FCC. This suggests that business customers have the ability to find reasonable pricing packages with CLECs and are taking advantage of these options. These options include CLEC cable companies and, in some cases, wireless providers. Residential ILEC lines decreased 14 percent in Florida in 2015, while nationally, wireless-only households continued to grow, reaching 48.3 percent through December 2015.<sup>116</sup>

As stated in Chapter V of this report, there are 2.8 million interconnected residential VoIP subscribers in Florida.<sup>117</sup> These and other factors demonstrate that customers are able to find comparable services at reasonable prices through wireless, CLEC, and VoIP providers.

**Conclusion:** Access lines for both residential and business customers have maintained a steady decline over the past several years (see Figure 4-1). This contrasts with the continued growth in wireless-only households. While declines have occurred in the business market, they are partially offset by significant growth in business VoIP lines. Carriers are managing the shifts in market conditions by bundling services and providing a variety of pricing plans in an attempt to meet consumer demand and expectations.

<sup>116</sup> Stephen J. Blumberg, Ph.D., Julian V. Luke, “Wireless substitution: Early release of estimates from the National Health Interview Survey, July–December 2015,” National Center for Health Statistics, Centers for Disease Control and Prevention, released May 11, 2016, <http://www.cdc.gov/nchs/nhis/releases.htm>, accessed May 28, 2016.

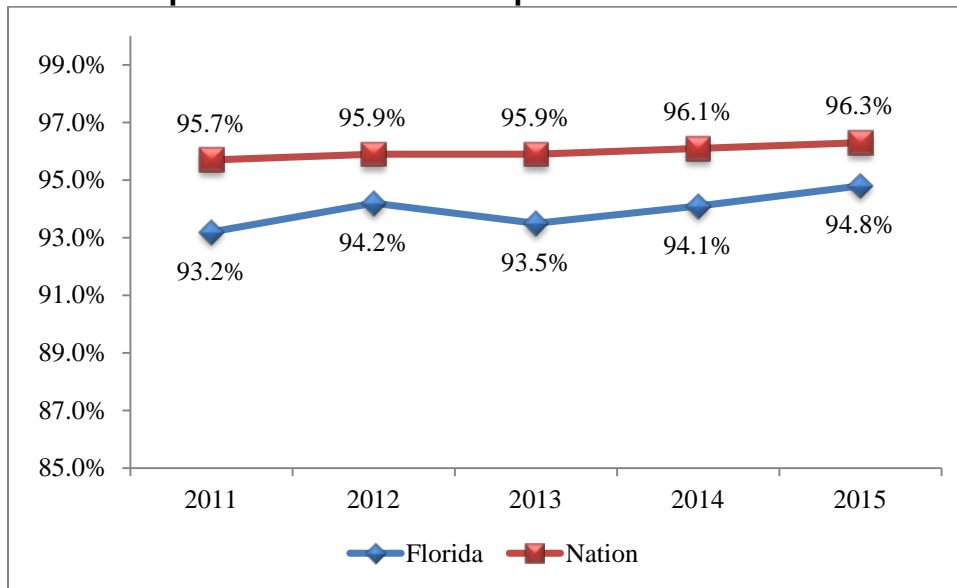
<sup>117</sup> Responses to FPSC Local Competition Data Request for 2016.

### C. Statutory Issue – Affordability & Service Quality

The overall impact of competition on the maintenance of reasonably affordable and reliable high-quality telecommunications services.

The telephone subscription rate in Florida for 2015 was 94.8 percent, according to the FCC. This is slightly lower than the national subscription rate of 96.3 percent.<sup>118</sup> The Florida telephone penetration rate has consistently been below the national penetration rate and the variance has varied little between 2011 and 2015, as shown in Figure 6-3.

**Figure 6-3**  
**Telephone Service Subscription: Florida vs. Nation**



Source: FCC, Telephone Subscribership & USF Monitoring Report

Nationally, about 48 percent of adults live in wireless-only households according to a report on wireless substitution by the Centers for Disease Control and Prevention (CDC) for the period July-December 2015.<sup>119</sup> State-specific data on wireless-only households was not provided in the most recent CDC report; however, a February 2016 report containing state-level data noted that 47.6 percent of Florida’s households were wireless-only in 2014.<sup>120</sup> That report found that seven

<sup>118</sup> FCC, “Telephone Subscribership in the United States as of July 2011,” released December 2011, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-311523A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-311523A1.pdf), accessed May 19, 2013, Table 3; “Universal Service Monitoring Report,” released December 22, 2015, [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-337019A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-337019A1.pdf), accessed June 4, 2016, Table 6.7.

<sup>119</sup> Stephen J. Blumberg, Ph.D., Julian V. Luke, “Wireless substitution: Early release of estimates from the National Health Interview Survey, July–December 2015,” National Center for Health Statistics, Centers for Disease Control and Prevention, released May 11, 2016, <http://www.cdc.gov/nchs/nhis/releases.htm#wireless>, accessed May 28, 2016.

<sup>120</sup> National Center for Health Statistics, Centers for Disease Control and Prevention, “Wireless Substitution State-Level Estimates from the National Health Interview Survey,” released February 2016, [http://www.cdc.gov/nchs/nhis/new\\_nhis.htm](http://www.cdc.gov/nchs/nhis/new_nhis.htm), accessed June 2, 2016.

percent of Florida adults live in households with only a wireline phone. It also found that 3.7 percent of Florida adults living without any form of telephone service.<sup>121</sup> Based on the data from both the FCC and the CDC, it appears that most Florida households are able to afford telephone service and have access to a variety of service providers, including ILECs, CLECs, VoIP, and wireless. This data also supports the fact that many consumers choose to subscribe to more than one type of telephone service.

While regulatory reliability standards have applied historically to landline telecommunications service, such reliability standards are no longer insured as many states, including Florida, eliminated these standards. Given the continued growth of interconnected VoIP and wireless-only households, and the continued decline of landline access lines, it appears that the reliability of these alternatives is acceptable to consumers. Moreover, mobility, pricing, and the demand for data-based services are consumer preference factors that may be changing how consumers view reliability.

**Conclusion:** Based on the continued growth of interconnected VoIP and wireless-only households and the ongoing decline of wireline access lines, network reliability of non-ILEC providers appears to be sufficient. The telephone penetration rate of 94.8 percent supports the conclusion that the vast majority of Florida residents are able to afford telephone service. The number and variety of competitive choices among all types of service providers suggest that competition is having a positive impact on the telecommunications market in Florida.

#### ***D. Statutory Issue – Carrier Disputes***

**A listing and short description of any carrier disputes filed under Section 364.16, F.S.**

**Conclusion:** The number of docketed and informal intercarrier complaints remained relatively stable in 2015. This information can be found in Appendix B.

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<sup>121</sup> Ibid.



## **Chapter VII. State Activities**

The Commission dealt with several intercarrier and compliance issues during the past year. The following is a summary of activities affecting local telecommunications competition in 2015.

### **A. Intercarrier Matters**

#### **1. Communications Authority v. AT&T**

On August 20, 2014, Communications Authority, Inc. (CA) filed an arbitration petition between it and AT&T Florida.<sup>122</sup> CA sought resolution of certain issues arising with AT&T Florida in the negotiation of an interconnection agreement pursuant to Section 252(b) of the Act. The Commission held a two-day hearing beginning on May 6, 2015. On October 13, 2015, the FPSC resolved the remaining 74 open issues, including subparts. Neither party asked for reconsideration of the FPSC's decision or appealed it.

#### **2. Wholesale Performance Measurement Plans**

Wholesale performance measurement plans provide a standard against which the Commission can monitor performance over time to detect and correct any degradation in the quality of service ILECs provide to CLECs. The Commission adopted performance measurements for AT&T in August 2001 (revised in 2010), for CenturyLink in January 2003 (revised in 2013), and for Verizon in June 2003 (revised in 2007). Trending analysis is applied to monthly performance measurement data provided by each ILEC.

AT&T is the only ILEC that is required to make payments to CLECs when certain performance measures do not comply with established standards and benchmarks. AT&T's approved Performance Assessment Plan consists of 47 measurements, of which 24 measurements have remedies applied to them. For the calendar year 2015, AT&T paid approximately \$363,401 in remedies to CLECs, a decrease of 35 percent from 2014.

On October 15, 2015, CenturyLink filed proposed revisions to its Performance Measurement Plan as a result of a negotiated settlement in Nevada. The revisions included revising reporting requirements from monthly to quarterly, eliminating several performance measures from the PMP measures, and amending two measures. The proposal was pending at the end of 2015 and so did not affect CenturyLink's OSS reporting for that year. For the 2015 calendar year, CenturyLink's monthly compliance with established standards ranged from 97 percent to 100 percent. CenturyLink's measure with the most non-compliant instances was its average time to restore service.

Verizon's current Performance Measurement Plan contains 29 measures. For the calendar year 2015, Verizon's monthly compliance with approved standards ranged from 86.3 percent to 96.6 percent. The previous year, Verizon's compliance ranged from 85.0 percent to 91.9 percent. Verizon's customer trouble report rate was its most non-compliant measure.

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<sup>122</sup> Docket No. 140156-TP – Petition by Communications Authority, Inc. for arbitration of Section 252(b) interconnection agreement with BellSouth Telecommunications, LLC d/b/a AT&T Florida.

### 3. Other Matters

In addition to these proceedings, the Commission processed a number of other telecommunications-related items in 2015. The Commission processed 85 service schedule and tariff filings, 59 interconnection agreements and amendments, 15 carrier certifications, 19 certificate cancellations, 2 Eligible Telecommunications Carrier certificate relinquishments, and over 380 general inquiries/informal complaints.

#### **B. Lifeline**

The FPSC created an online Lifeline application for consumers participating in Supplemental Nutrition Assistance Program (SNAP), Medicaid, or Temporary Cash Assistance (TCA) in order to comply with FCC requirements and keep the applications process uncomplicated.<sup>123</sup> When an application is completed, a FPSC computer automatically makes a query to a Florida Department of Children and Families (DCF) Web services interface to confirm current participation in SNAP, Medicaid, or TCA. The real-time response verifies participation in at least one of the programs, but does not identify the program. A positive response will generate an automatic email to the appropriate Lifeline provider advising that an approved Lifeline application is available for retrieval on the FPSC Web site. A negative response will cause a letter to be sent to the applicant stating his/her participation in SNAP, Medicaid, or TCA could not be confirmed and offering Commission staff assistance with any questions. Based upon June 2015 SNAP participants, the Lifeline eligible households decreased by 8.2 percent compared to 2014 data.<sup>124</sup> Table 7-1 shows the Lifeline eligibility and participation rate in Florida for the last five years.<sup>125</sup>

**Table 7-1  
Florida Lifeline Eligibility and Participation Rate**

<b>Year</b>	<b>Lifeline Enrollment</b>	<b>Eligible Households</b>	<b>Participation Rate</b>
June 2011	943,854	1,690,512	55.8%
June 2012	1,035,858	1,864,183	55.6%
June 2013	918,245	1,952,890	47.0%
June 2014	957,792	1,930,106	49.6%
June 2015	831,612	2,011,166	41.4%

Sources: U.S. Department of Agriculture data figures are as of June 2015

If a program other than Medicaid, SNAP, or TCA is used for certification, the customer must provide documentation of participation from the administering agency, which could be the Florida Department of Education (free school lunch program), the Social Security Administration (Supplemental Security Income), a county-level agency (Low-Income Home Energy Assistance Plan or Section Eight Housing), or the Bureau of Indian Affairs. As of June 2015, over 98 percent of Florida applicants using the Lifeline Coordinated Enrollment Process

<sup>123</sup> Nationally known as Temporary Assistance for Needy Families (TANF).

<sup>124</sup> According to the US Department of Agriculture Report, "Supplemental Nutrition Assistance Program: Number of Households Participating, ending June 30, 2014," over 1,930,106 Florida households participated SNAP.

<sup>125</sup> FPSC, "2015 Florida Lifeline Report," released December 2015, <http://www.floridapsc.com/Publications/Reports#>, Table 7-1, accessed June 6, 2016.

use Medicaid, SNAP, or TCA for eligibility. If a Lifeline applicant chooses to apply for Lifeline directly with an eligible telecommunications carrier, the carrier can access the DCF web services to confirm program participation for Medicaid, SNAP, and TCA. In Florida, certification and verification can be accomplished using this process if the applicant or existing Lifeline customer participates in the Medicaid, SNAP, or TCA programs which are administered by the DCF.

On April 27, 2016, the FCC released its Lifeline Modernization Order.<sup>126</sup> In this Order, the FCC took steps to both expand services supported and also limit the qualifying criteria consumers can use to sign up for Lifeline services. The FCC anticipates that its new rules will be in effect by December 2016.<sup>127</sup> Once this new rule is in effect, the only qualifying programs for the Lifeline enrollment will be: SNAP, Medicaid, Supplemental Security Income (SSI), Federal Public Housing Assistance (FPHA), or the Veterans Pension benefit. Other previously qualifying programs will no longer be accepted. Consumers that are already enrolled in the Lifeline program will continue to be eligible for up to one year from their initial application or recertification. In addition, state-specific eligibility criteria will no longer be qualifying consumers in the federal program. The FCC has maintained its income qualification criteria. Additional information regarding the FCC's Lifeline Modernization Order can be found in Chapter VIII.

### **C. Telephone Relay Service**

It is estimated that approximately 2.5 to 3 million<sup>128</sup> of the estimated 20 million persons living in Florida have been diagnosed as having a hearing loss. Relay service in Florida provides telecommunications service for deaf, hard of hearing, deaf-blind, or speech impaired persons functionally equivalent to the service provided to hearing persons.

Chapter 427, Part II of the Florida Statutes established the Telecommunications Access System Act of 1991 (TASA). TASA provides funding for the distribution of specialized telecommunications devices and intrastate relay service through the imposition of a surcharge of up to \$0.25 per landline access line per month, for up to 25 access lines per account. The surcharge billed per month per landline access line was \$0.12 in the 2015-2016 budget year.

Pursuant to TASA, the FPSC is responsible for establishing, implementing, promoting, and overseeing the administration of a statewide telecommunications access system to provide access to telecommunications relay services by people who are deaf, hard of hearing, deaf-blind or speech impaired. In accordance with TASA, the FPSC directed the local exchange companies (LECs) to form a not-for-profit corporation, known as Florida Telecommunications Relay, Inc. (FTRI) to directly administer basic relay service in Florida.

Basic relay service is provisioned in Florida under contract by a single service provider. Through a competitive bid evaluation process, the FPSC awarded the current relay provider contract to

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<sup>126</sup> FCC 16-38, WC Docket No. 11-42, Lifeline and Link Up Reform and Modernization, Third Report and Order, Further Report and Order, and Order on Reconsideration, released April 27, 2016, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-16-38A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-38A1.pdf), access on June 5, 2016.

<sup>127</sup> Beginning on the later of December 1, 2016 or 60 days following Paperwork Reduction Act approval.

<sup>128</sup> 2015 Florida Coordinating Council for the Deaf and Hard of Hearing Biennial Report to Governor Rick Scott, the Florida Legislature & the Supreme Court and "Demographics and Statistics," Florida Telecommunications Relay, Inc., <http://ftri.org/index.cfm/go/public.view/page/12>, accessed April 21, 2016.

Sprint, effective March 1, 2015, for a period of three years. The contract contains options to extend the contract for four additional one-year periods, and requires mutual consent by both parties to extend the contract.

On July 7, 2016, the FPSC approved FTRI's 2016-2017 budget, directing FTRI to reduce its proposed budget. The reduction is due to projected lower costs by Sprint and review of the requested budget items. Specifically, the FPSC approved FTRI's operating revenue of \$7,331,581 and expenses of \$7,199,722. As a result, the TASA surcharge will decrease \$0.01 to \$0.11, beginning September 1, 2016.

## Chapter VIII. Federal Activities

### **A. Consumer Complaint Data Center**

In an effort to provide greater transparency into consumer complaints, the FCC launched a new online Consumer Complaint Data Center on May 18, 2016.<sup>129</sup> The online platform is intended to provide consumers with more information about complaints and tools to customize how they view the data. Informal complaints submitted to the FCC are added to the database, which is updated on a daily basis. The FCC has indicated that this is intended to be part of a broader initiative to streamline its consumer complaint processing and make more detailed, real-time data available to the public.

### **B. Data Breach**

AT&T agreed to pay a \$25 million fine as a result of an FCC investigation into whether AT&T failed to properly protect the confidentiality of almost 280,000 customers' proprietary information in April 2015.<sup>130</sup> The information included sensitive personal data such as customers' names, partial Social Security numbers, and account-related data known as customer propriety network information. As part of the Consent Decree, AT&T will hire a compliance officer, create a compliance plan that will be submitted to the FCC and then file compliance reports.

In an unrelated data breach involving Cox Communications, the FCC entered into a \$595,000 settlement to resolve an investigation into whether the company failed to properly protect its customers' personal information when the company's electronic data systems were breached in 2014.<sup>131</sup> The settlement adopted in November 2015 also requires Cox to identify all affected customers, notify them of the breach, and provide them one year of free credit monitoring. These actions represent the FCC's first privacy and data security enforcement action with a cable operator.

### **C. Robocall Protections**

The FCC approved an order to protect consumers against unwanted robocalls and spam texts on June 18, 2015.<sup>132</sup> This order was the result of a request initiated by the National Association of Attorneys General and thirty-nine state Attorneys General (including Florida's Attorney General) asking the FCC for an opinion on what actions telephone providers could legally take to block

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<sup>129</sup> FCC, News Release, "FCC Launches Consumer Complaint Data Center," released May 18, 2016, [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0518/DOC-339434A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0518/DOC-339434A1.pdf), accessed June 13, 2016.

<sup>130</sup> FCC DA 15-399, File No. EB-TCD-14-00016243, In the Matter of AT&T Services, Inc., Order and Consent Decree, released April 8, 2015, [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2015/db0408/DA-15-399A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0408/DA-15-399A1.pdf), accessed June 13, 2016.

<sup>131</sup> FCC DA 15-1241, File No. EB-IHD-14-00017829, In the Matter of Cox Communications, Inc., Order, released November 5, 2015, [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-15-1241A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-15-1241A1.pdf), accessed June 13, 2016.

<sup>132</sup> FCC, News Release, "FCC Strengthens Consumer Protections Against Unwanted Calls and Texts," released June 18, 2015, [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2015/db0619/DOC-333993A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0619/DOC-333993A1.pdf), accessed June 24, 2015.

unwanted telemarketing calls.<sup>133</sup> Complaints related to unwanted calls are the largest category of complaints received by the FCC, numbering more than 215,000 in 2014.

Two months after the adopting of its new rules, the FCC announced a \$2.96 million fine against Travel Club Marketing, Inc. and its related companies, based in Tampa, Florida, for violation of the FCC's rules.<sup>134</sup> The FCC noted that this company had initiated at least 185 robocalls, all of which were unsolicited, prerecording advertising calls to over 142 consumers who had not consented to the robocalls and the majority of whom had placed their telephone number on the National Do-Not-Call registry.

#### ***D. Wi-Fi Blocking***

The FCC received an informal complaint in June 2014 that consumers could not connect to the Internet at several venues where Smart City provided Wi-Fi service. In providing services at convention centers, Smart City charged exhibitors and visitors a fee of \$80 per day to access the company's Wi-Fi service. The FCC's investigation concluded that Smart City blocked consumers from using their own Wi-Fi networks at several convention centers in cities including Orlando, Florida. As part of its settlement, Smart City will pay a \$750,000 civil penalty and cease its Wi-Fi blocking activities.<sup>135</sup> This is the FCC's second major enforcement action regarding Wi-Fi blocking. In October 2014, the FCC fined Marriott International and Marriott Hotel Services, Inc. \$600,000 for similar Wi-Fi blocking.<sup>136</sup> More recently, the FCC's Enforcement Bureau proposed a \$25,000 fine against Hilton Worldwide Holdings, Inc. for apparent obstruction of an investigation regarding an ongoing Wi-Fi blocking investigation.<sup>137</sup>

#### ***E. Prepaid Calling Cards***

Six companies were fined for deceptively marketing prepaid calling cards by the FCC in October 2015. The companies, each receiving a fine of \$5 million, were: Locus Telecommunications, Inc.; Lyca Tel, LLC; NobelTel, LLC; Simple Network, Inc.; STi Telecom Inc.; and Touch-Tel USA LLC. The FCC concluded that the companies' disclosures did not clearly and conspicuously disclose or explain the actual charges that would be incurred for a call and that those charges were subject to change by the companies, often without any notice to customers. The FCC's Enforcement Bureau initially released apparent liability notices to these companies in 2011 and 2012.

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<sup>133</sup> FCC DA 14-1700, CG Docket No. 02-278, Consumer and Governmental Affairs Bureau Seeks Comment on Robocalls and Call-Blocking Issues Raised by the National Association of Attorneys General on Behalf of Thirty-Nine Attorneys General, Public Notice, released November 24, 2014, [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-14-1700A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1700A1.pdf), accessed June 26, 2015.

<sup>134</sup> FCC 15-102, File No. EB-TCD012-00000265, In the Matter of Travel Club Marketing, Inc., et al., released August 11, 2015, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-102A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-102A1.pdf), accessed June 13, 2016.

<sup>135</sup> FCC 15-917, Order, File No. EB-SED-15-00018248, In Matter of Smart City Holdings, LLC, and its Wholly-Owned Subsidiaries, Smart City Networks, LP, and Smart City Solutions LLC, released August 18, 2015, [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-15-917A1\\_Rcd.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-15-917A1_Rcd.pdf), accessed June 13, 2016.

<sup>136</sup> FCC 14-1444, Order, File No. EB-IHD-13-00011303, In the Matter of Marriott International, Inc., released October 3, 2014, [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-14-1444A1\\_Rcd.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1444A1_Rcd.pdf), accessed June 13, 2016.

<sup>137</sup> FCC, DA 15-1227, Notice of Apparent Liability for Forfeiture and Order, File No. EB-SED-15-00019993, In the Matter of Hilton Worldwide Holdings, Inc., released November 2, 2015, [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-15-1227A1\\_Rcd.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-15-1227A1_Rcd.pdf), accessed June 13, 2016.

## F. Universal Service

Universal service is the principle that all Americans should have access to communications services. While Florida consumers benefit from being able to make and receive calls from all parts of the nation, there is a cost associated with this policy.

In general, Florida consumers pay more into the federal Universal Service Fund (USF) than what is returned to eligible service providers in Florida.<sup>138</sup> For 2014, only California and New York continue to be larger net contributors than Florida. The FPSC monitors and participates in ongoing proceedings at the FCC and with the Federal-State Joint Board on Universal Service (Joint Board). Table 8-1 shows Florida's estimated contribution and receipts for 2014 and provides a comparison of net contributions for 2012 and 2013.

**Table 8-1**  
**2014 Federal Universal Service Programs in Florida**  
 (Annual Payments and Contributions in Thousands of Dollars)

	2012	2013	2014		
			Payments to Service Providers	Estimated Consumer Contributions	Estimated Net
High-Cost	(\$209,239)	(\$200,627)	\$65,601	\$232,510	(\$168,908)
Low Income	(23,613)	(13,418)	106,617	103,379	3,238
Schools & Libraries	(63,175)	(51,483)	81,541	141,342	(59,801)
Rural Health Care	(9,607)	(9,869)	185	12,019	(11,834)
<b>Total</b>	<b>(\$312,806)</b>	<b>(\$282,278)</b>	<b>\$251,944</b>	<b>\$496,657</b>	<b>(\$244,712)</b>

Source: FCC Universal Service Monitoring Report, various years, Tables 1.13 and 1.9.

### 1. Contribution System Reform

Telecommunications service providers fund the USF based on a quarterly FCC assessment factor and the amount of telecommunications revenues service providers collect from end-users. Specifically, the assessment factor is applied to interstate and international telecommunications revenues.

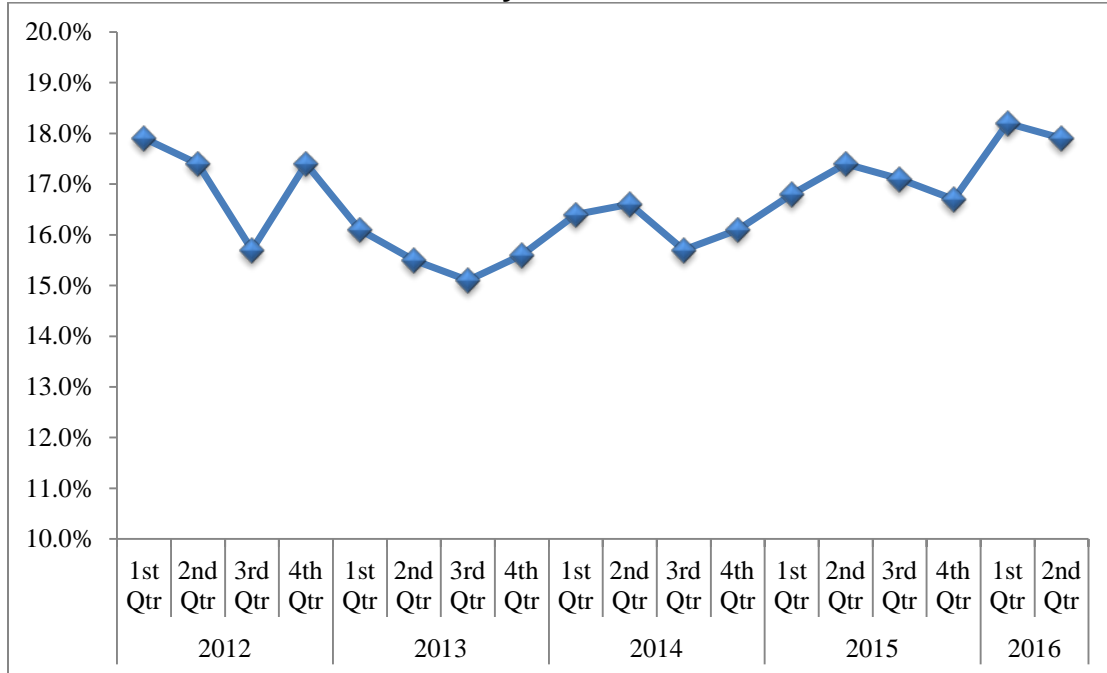
Mobile wireless carriers and interconnected VoIP providers are also required to contribute.<sup>139</sup> In 2015, the assessment factor ranged from a high of 17.4 percent in the second quarter to a low of 16.7 percent in the fourth quarter.<sup>140</sup> Figure 8-1 illustrates changes to the assessment factor over the last four years.

<sup>138</sup> FCC, "Universal Service Monitoring Report - 2015," released December 22, 2015, [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-337019A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-337019A1.pdf), accessed June 4, 2016, Table 1.9.

<sup>139</sup> Wireless carriers and interconnected VoIP providers may use the interim safe harbor percentages to estimate the interstate portion of their revenues.

<sup>140</sup> FCC, "Contribution Factor & Quarterly Filings - Universal Service Fund (USF) - Management Support," <http://www.fcc.gov/encyclopedia/contribution-factor-quarterly-filings-universal-service-fund-usf-management-support>, accessed June 4, 2016.

**Figure 8-1  
USF Quarterly Assessment Factor**



Source: FCC, Public Notices on Proposed Contribution Factors, various quarters

The FCC initiated a proceeding in 2012 to consider modernizing how Universal Service Fund contributions are assessed and recovered.<sup>141</sup> The FCC has acknowledged that the current contribution system has given rise to uncertainty, inefficiency, and market distortions. Outdated rules and loopholes mean that services that compete directly against each other may face different treatment.

The FCC is considering a number of options including assessing contributions based on either total revenues (i.e., interstate and intrastate), connections, numbers, or a hybrid approach (of connections and revenues). The FCC sought comment on expanding the types of providers that should be required to contribute. Such providers include enterprise communications service providers, text messaging providers, and broadband Internet service providers. On August 7, 2014, the FCC referred these issues to the Federal-State Joint Board on Universal Service.<sup>142</sup> While the Joint Board was asked to file its recommendation with the FCC by April 7, 2015, that deadline has been extended by the FCC.

<sup>141</sup> FCC 12-46, WC Docket No. 06-122, Universal Service Contribution Methodology, Further Notice of Proposed Rulemaking, released April 30, 2012, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-12-46A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-12-46A1.pdf), accessed June 4, 2016.

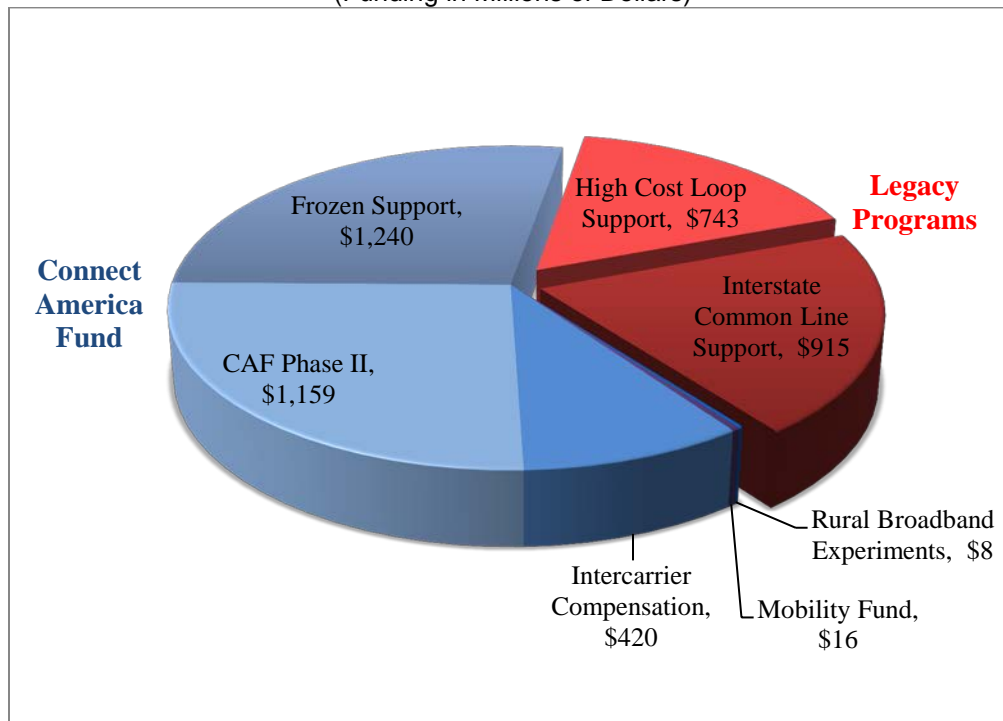
<sup>142</sup> Florida Public Service Commissioner Ronald Brisé serves on the Federal-State Joint Board on Universal Service.



## 2. High-Cost

In 2011, the FCC reformed and modernized its existing high-cost fund to maintain voice services and extend broadband capable infrastructure.<sup>143</sup> As part of this reform, the FCC began to phase out the existing high-cost support programs and began funding through the Connect America Fund (CAF). The CAF focuses on supporting and expanding fixed broadband availability and voice service. Figure 8-2 identifies 2015 authorized national support by high-cost program and represents an increase of 20 percent from 2014.

**Figure 8-2**  
**2015 Authorized Federal High-Cost Support**  
(Funding in Millions of Dollars)



Source: USAC 2015 Annual Report

In 2015, support increased due to implementation of the CAF Phase II support for interstate priced-capped carriers.<sup>144</sup> This fund provides support that is based on a model, or when model-based support is declined, competitive bidding. The model estimates the cost to provide voice and broadband services in high-cost areas where unsubsidized carriers are not providing comparable services. Carriers accepting Phase II model-based support must provide at least 10/1

<sup>143</sup> FCC 11-161, WC Docket No. 10-90, Connect America Fund, Report and Order and Further Notice of Proposed Rulemaking, released November 18, 2011, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-11-161A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-161A1.pdf), accessed May 22, 2015.

<sup>144</sup> Interstate priced capped carriers are: AT&T, CenturyLink, Frontier, GTC, Verizon, and Windstream.

Mbps broadband throughout their accepted areas by 2020.<sup>145</sup> Of the carriers that were offered model-based support in Florida, only Verizon declined.

On March 30, 2016, the FCC released an Order reforming high-cost support for interstate rate-of-return carriers.<sup>146</sup> The focus of the reforms implemented in this Order were to provide an option under which rate-of-return carriers may elect model-based support for a term of 10 years in exchange for meeting defined build-out obligations. The Order also modernizes one of the existing support mechanisms to allow for support for facilities that provide broadband services, but where the consumer has elected not to also subscribe to voice service.<sup>147</sup> Under previous rules, carriers would only be able to receive support if a customer subscribed to a voice service, either by itself or as part of a bundle of services. There are only four interstate rate-of-return carriers in Florida, representing less than 2 percent of traditional switched access lines.<sup>148</sup>

Finally, the FCC released an Order establishing its competitive bidding rules in those areas where CAF Phase II support was not accepted by the incumbent carrier in May.<sup>149</sup> In general, the FCC established minimum broadband standards within an annual budget of \$215 million. It requires network build-out requirements of 40 percent of funded locations within three years, 60 percent after four years, 80 percent after five years, and 100 percent by six years. Verizon (in Florida) was one of the price-cap carriers that declined last year's Connect America Fund offer. As a result, support will be based on competitive bidding in the area served by Verizon. Frontier, which recently acquired Verizon's assets in Florida, will be able to participate in the competitive bid for support.

### 3. Low Income

The Lifeline program provides a \$9.25 discount on phone service for qualifying low-income consumers to ensure that all Americans have the opportunities and security that phone service brings. On June 22, 2015, the FCC released a Notice of Proposed Rulemaking and Order seeking comments on restructuring the program to include access to broadband.<sup>150</sup> The FCC has found that broadband has become essential to participation in modern society, offering access to jobs, education, health care, government services and opportunity.

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<sup>145</sup> FCC 14-190, WC Docket No. 10-90, Connect America Fund, Report and Order, released December 18, 2014, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-14-190A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-14-190A1.pdf), accessed June 5, 2016.

<sup>146</sup> FCC 16-33, WC Docket No. 10-90, Connect America Fund, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, released March 30, 2016, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-16-33A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-33A1.pdf), accessed June 5, 2016.

<sup>147</sup> Going forward Interstate Common Line Support (ICLS) will be known as Connect America Fund Broadband Loop Support (CAF BLS).

<sup>148</sup> Interstate rate-of-return carriers are: NEFCOM, Quincy, Smart City, and ITS.

<sup>149</sup> FCC 16-64, WC Docket NO. 10-90, Connect America Fund, Report and Order, and Further Notice of Proposed Rulemaking, released May 26, 2016, [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0526/FCC-16-64A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0526/FCC-16-64A1.pdf), accessed June 13, 2016.

<sup>150</sup> FCC 15-71, WC Docket No. 11-42, Lifeline and Link Up Reform and Modernization, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, Second Report and Order, and Memorandum Opinion and Order, released June 22, 2015, [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2015/db0622/FCC-15-71A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0622/FCC-15-71A1.pdf), accessed June 24, 2015.

Based on comments in this proceeding, the FCC released its Lifeline Modernization Order on April 27, 2016.<sup>151</sup> The FCC's Order takes a variety of actions to encourage more Lifeline providers to deliver newly supported broadband services as the FCC transitions from primarily supporting voice services to targeting support at providing broadband services. To further incentivize investment in Lifeline service offerings, the FCC will implement Lifeline benefit port freezes, which limit how frequently Lifeline consumers can switch from one Lifeline carrier to another. For voice services, the customers will have to stay with their selected Lifeline carrier for 60 days. For customers receiving Lifeline support for broadband services, the length of time they are locked in to that provider is 12 months.

At the same time, the FCC will also establish a budget for the expanded Lifeline program of \$2.25 billion, indexed to inflation. By way of comparison, the authorized support for the Lifeline program in 2015 was \$1.49 billion.<sup>152</sup> The new rules would require FCC staff to notify the FCC when spending reaches 90 percent of the budget and prepare an analysis of the causes of spending growth, with recommended actions for the FCC to consider. The current rate of support would be maintained at \$9.25 per household.

The FCC states that to be sustainable and achieve its goals of providing low-income consumers with robust, affordable, and modern service offerings, a forward-looking Lifeline program must focus on broadband services. Therefore, the FCC concludes that it is necessary that going forward the Lifeline discount will no longer apply to voice-only offerings following an extended transition period, except in Census blocks with only one Lifeline provider.

After this transition, the federal Lifeline program will continue to support voice service when bundled with a broadband service which meets the FCC's minimum service standards.<sup>153</sup> The table below outlines the FCC's phase down schedule.

**Table 8-2  
Lifeline Support Phase Down Schedule**

Effective Dates	Fixed Voice	Mobile Voice	Fixed Broadband	Mobile Broadband
Through 11/30/19	\$9.25	\$9.25	\$9.25	\$9.25
From 12/1/19 to 11/30/20	\$7.25	\$7.25	\$9.25	\$9.25
From 12/1/20 to 11/20/21	\$5.25	\$5.25	\$9.25	\$9.25
After 11/30/21	\$0	\$0	\$9.25	\$9.25

Source: FCC, Lifeline Modernization Order

<sup>151</sup> FCC 16-38, WC Docket No. 11-42, Lifeline and Link Up Reform and Modernization, Third Report and Order, Further Report and Order, and Order on Reconsideration, released April 27, 2016, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-16-38A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-38A1.pdf), access on June 5, 2016.

<sup>152</sup> Universal Service Administrative Company, 2015 Annual Report, [http://www.usac.org/\\_res/documents/about/pdf/annual-reports/usac-annual-report-2015.pdf](http://www.usac.org/_res/documents/about/pdf/annual-reports/usac-annual-report-2015.pdf), accessed June 5, 2016, p. 41.

<sup>153</sup> The fixed broadband speed standard is based on what a substantial majority of consumers receive (currently 10 Mbps downloads / 1 Mbps uploads). The FCC also sets minimum monthly fixed broadband usage allowances, starting at 150 GB, and updated thereafter. Mobile broadband services standards are phased in starting at 500 MB per month of 3G data by December 1, 2016, 1 GB by December 1, 2017, and increasing to 2 GB per month by the end of 2018.

As part of this Order, the FCC will create the National Verifier, which will transfer the responsibility of eligibility determination away from Lifeline providers. The FCC hopes that this will lower providers' costs of conducting verification and reduce the risks of facing a verification-related enforcement action.

The FCC has stated that it believes the National Verifier will make the Lifeline program more attractive to providers. The FCC's Order provides little guidance on how the National Verifier will coordinate with those states, like Florida, that use their own automated eligibility system. As noted in Chapter VII, the FCC has also limited the criteria for Lifeline program qualification.

Federal rules regarding income-based eligibility were maintained as an avenue to access Lifeline support. The FCC's income eligibility is at or below 135 percent of the Federal Poverty Guideline. However, the FCC amended its rules to remove state-specific eligibility criteria, thus creating a conflict between the FCC's income eligibility threshold of 135 percent and that found in Florida Statutes at 150 percent.<sup>154</sup>

#### **4. Schools and Libraries**

The schools and libraries support program, commonly known as the E-rate Program, provides financial assistance for eligible schools and libraries. The program provides support to reduce the cost associated with telecommunications services, Internet access, and eligible equipment, along with repair and upkeep of eligible equipment. The discounts range from 20 percent to 90 percent of the costs of eligible services depending on the level of poverty and whether the school or library is located in an urban or rural area.

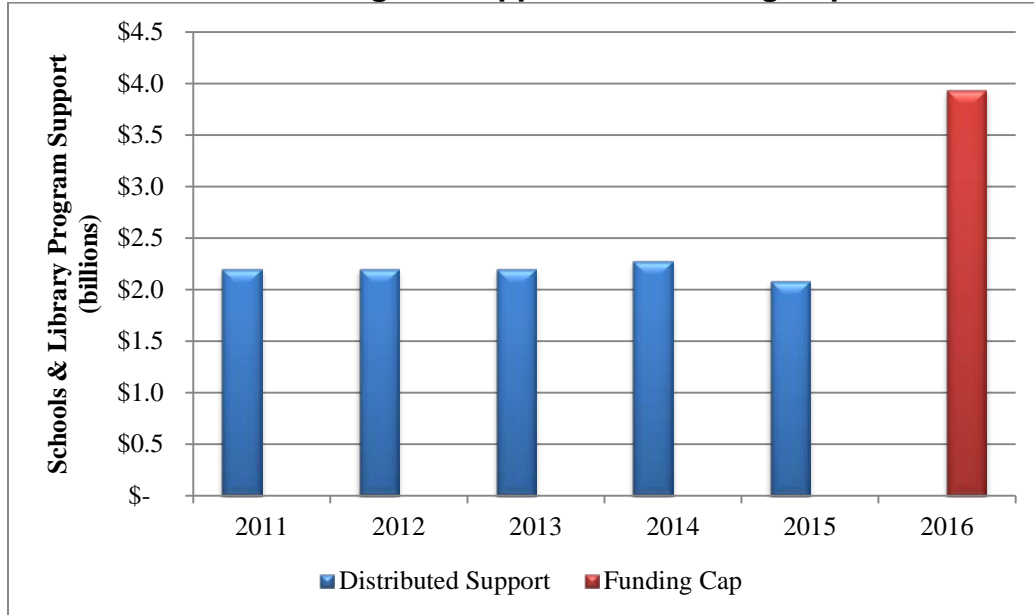
Figure 8-3 reflects the new cap relative to the amount of support distributed in prior years.<sup>155</sup> On an annual basis, Florida consumers can expect to pay about \$60 million more per year into the federal program than the amount support Florida schools and libraries will receive based on 2014 estimated contribution data. Because the cap is almost twice the amount as what was distributed, there is the potential for increased net contributions into the program in the future.

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<sup>154</sup> Section 364.10(2)(a) F.S.

<sup>155</sup> FCC Public Notice, DA 16-505, Wireline Competition Bureau Announces E-Rate Inflation-Based Cap for Funding Year 2016, released May 6, 2016, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-16-6A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-6A1.pdf), accessed June 5, 2016.

**Figure 8-3  
E-Rate Program Support and Funding Cap**



Source: USAC 2015 Annual Report

### **G. Lifeline Program Fine**

On April 7, 2016, the FCC announced that it plans to fine Total Call Mobile \$51 million for enrolling tens of thousands of duplicate and ineligible consumers into the Lifeline program.<sup>156</sup> The FCC alleges that since 2014, Total Call has received an estimated \$9.7 million in improper payments for duplicate or ineligible consumers, despite repeated and explicit warnings from its own employees and compliance specialists, that the company’s sales agents were engaged in widespread enrollment fraud. Total Call was not approved to offer Lifeline services in Florida.

### **H. Slamming and Cramming**

“Slamming” is the illegal practice of switching a consumer’s traditional wireline telephone company for local, local toll, or long distance service without permission. The slamming rules also prohibit unreasonable delays in the execution of an authorized switch by your local telephone company. “Cramming,” by comparison, is the illegal act of placing unauthorized charges on your wireline, wireless, or bundled services telephone bill. Crammers often rely on confusing telephone bills to trick consumers into paying for services they did not authorize or receive, or that cost more than the consumer was led to believe. Below is a list of slamming and cramming enforcement actions taken by the FCC.

- On July 30, 2015, the FCC announced its plans for a \$2.4 million fine against Long Distance Consolidated Billing Company (LDCB). This telephone company, based in Waterford, Michigan, allegedly switched consumers’ regional toll service providers

<sup>156</sup> FCC 16-44, File No. EB-IHD-14-00017650, In the Matter of Total Call Mobile, Inc., released April 7, 2016, [https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-16-44A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-44A1.pdf), accessed June 13, 2016.

without their authorization, misrepresented the company's identity during telemarketing calls, and placed unauthorized charges on consumers' telephone bills.

- On November 18, 2015, the FCC announced a \$1.44 million fine against Encino, California-based long distance carrier Preferred Long Distance (Preferred). The company's telemarketers pretended to be representatives of customers' existing long distance providers, and switched the customers' long distance carriers without proper authorization, verified in accordance with the FCC's rules.

The FCC became aware of this activity after receiving numerous complaints against Preferred. Small businesses, along with several individuals, reported that Preferred telemarketers pretended to be employed by the customers' existing long distance providers. They also reported learning that their long distance service had been switched only after receiving their telephone bills.

- On February 12, 2016, the FCC announced a \$29.6 million proposed fine against four related long distance carriers for a variety of apparent fraudulent, deceptive, and manipulative practices targeting consumers with Hispanic surnames. In the action, the FCC found that OneLink Communications, Inc., TeleDias Communications, Inc., TeleUno, Inc., and Cytel, Inc., slammed and crammed consumers. In addition, it is alleged the companies, which operate as a single enterprise, fabricated audio recordings that they then submitted to the FCC as "proof" the consumers authorized these changes and charges.

Some consumers alleged that the companies' telemarketers pretended to be from the post office calling about a nonexistent package delivery to obtain information to create fake consumer authorization recordings. In other cases, it appears the companies impersonated individuals in the authorization recordings. The companies then allegedly provided the fake authorizations to the FCC in response to its investigation into the consumer complaints. OneLink, TeleDias, TeleUno, and Cytel are resellers of domestic and international long distance telecommunications services. OneLink operates the companies as a single enterprise out of Alpharetta, Georgia. OneLink is headquartered in Florida. The companies purportedly refused to provide refunds until consumers filed complaints with the FCC, Better Business Bureau, or other agencies.

- On February 18, 2016, the FCC fined Florida-based related companies Telseven and Calling 10, as well as their owner, Patrick Hines, \$1.68 million for billing consumers for unauthorized charges and fees and for deceptive marketing. The agency also fined Telseven and Mr. Hines over \$1.75 million for failing to pay regulatory fees. The companies deceived consumers who mistakenly called their toll-free numbers about their services and then subsequently billed those consumers for services that were neither provided nor requested. Telseven and Mr. Hines are jointly and severally liable for both fines, totaling over \$3.4 million.

At the direction of Mr. Hines, the companies, based in Jacksonville, acquired approximately one million toll-free numbers, some of which were similar to existing working numbers or formerly used by well-known entities such as Chase Bank and other

financial institutions. These acquisitions served no apparent purpose other than to increase the likelihood that consumers would dial one of these numbers and reach Telseven or Calling 10 by mistake.

The companies failed to notify consumers that they tried to reach an inactive or incorrect number and falsely implied that their service was related to the party the caller tried to reach. In addition, the companies charged consumers approximately seven dollars for service that the consumers never authorized and the companies never provided.

## **I. Business Data Services**

On May 24, 2016, the FCC released an Order and Notice addressing Business Data Services (BDS), traditionally known as special access services.<sup>157</sup> The FCC defines BDS as “the dedicated point-to-point transmission of data at guaranteed speeds and service levels using high-capacity connections.” BDS is different from broadband Internet access service provided to residential end users. BDS costs substantially more than broadband Internet and is offered to support mission critical applications and have greater demands for symmetrical bandwidth, increased reliability, security, and service to multiple locations.<sup>158</sup>

The ILECs’ provision of BDS has historically been subject to rate regulation and tariffing requirements. The focus of this proceeding is on geographic areas where the ILEC is subject to price cap regulation that sets ceilings on the rates ILECs can charge for BDS services through price caps.

The FCC proposes to replace the existing regulatory BDS structure with a technology-neutral framework that classifies markets as either competitive or non-competitive, with rules designed for each. The FCC proposes to identify competitive markets as those in which material competitive effects are present and proposes a set of deregulatory rules to govern them.

The FCC proposes tariffs should not be used as part of the regulation of any BDS but does not identify a path to de-tariff BDS. As a result of the FCC’s investigation, it directed the ILECs to remove designated shortfall penalties from their respective tariffs.

The FCC proposes rules that safeguard customers in non-competitive markets, including price regulation, and prohibit certain tying arrangements that harm competition. The FCC declared tying arrangements such as “all or nothing” provisions unjust and unreasonable, and concluded shortfall and early termination penalties in some pricing plans are unjust and unreasonable to the extent the penalties exceed expectation damages. The FCC did not take action on percentage or term commitments.

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<sup>157</sup> FCC 16-54, WC Docket No. 16-143, Tariff Investigation Order and Further Notice of Proposed Rulemaking, released May 2, 2016, [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0602/FCC-16-54A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0602/FCC-16-54A1.pdf), accessed May 31, 2016.

<sup>158</sup> *Ibid*, page 6.

While the FCC did not appear to address de-tariffing at the state level, ILEC access tariffs on file with the states may contain the tying arrangements the FCC prohibited in the order. The FCC order noted that its list of services or plans was not intended to include all the tariffs that may be related to the plans under investigation. In Florida, ILECs are required to file intrastate access tariffs. No immediate action will be required as a result of this Order.

The FCC proposes periodic data collection that will allow it to update its identification of competitive and non-competitive markets. It also proposes to eliminate the current exemption from the basic provisions of the Act for Verizon services governing just and reasonable offerings of telecommunications services.



## Appendix A. List of Certificated CLECs as of 12/31/2015

\*\* Indicates the company did not respond to the Commission's data request.

	365 Wireless, LLC	BT Communications Sales LLC
	382 Networks, Inc.	Budget Phone
	Access One, Inc.	BudgeTel Systems, Inc.
	Access Point, Inc.	BullsEye Telecom, Inc.
	ACN Communication Services, LLC	C3
**	Advanced Communications	Callis Communications, Inc.
	Southeast, Inc.	Campus Communications Group, Inc.
	Aero Communications, LLC	Cbeyond Communications, LLC
	Airespring, Inc.	CenturyLink
	Airus, Inc.	Cincinnati Bell Any Distance Inc.
	ALEC, LLC	Citrix Communications LLC
	Alternative Phone, Inc.	City of Daytona Beach
	American Telephone Company LLC	City of Lakeland
**	Americatel Corporation	City of Ocala
	ANEW Broadband, Inc.	Clear Rate Communications, Inc.
	ANPI Business, LLC	Cogent Communications of Florida
	AT&T Corp.	LHC, Inc.
	AT&T Florida	Comcast Long Distance
	AT&T Florida	Comcast Phone of Florida, LLC
	ATC Outdoor DAS, LLC	d/b/a Comcast Digital Phone
	Atlantic Broadband (Miami), LLC	Comity Communications, LLC
	Atlantis Communications LLC	Communications Authority, Inc
	ATN, Inc.	ComNet (USA) LLC
	Backbone Communications Inc.	Comtech21, LLC
**	Baldwin County Internet/DSSI	Conterra Ultra Broadband, LLC
	Service, L.L.C.	Convergia, Inc.
	Bandwidth.com CLEC, LLC	CoreTel Florida, Inc.
	Barr Tell USA, Inc.	Cox Florida Telcom, L.P.
	BCM One, Inc.	Crexendo Business Solutions, Inc.
	BCN Telecom, Inc.	Crosstel Tandem, Inc.
	Benchmark Communications, LLC	Crown Castle NG East LLC
	BetterWorld Telecom	Custom Network Solutions, Inc.
	Birch Communications, Inc.	Custom Tel, LLC
	Birch Telecom of the South, Inc.	Dais Communications
	Bright House Networks Information	Dedicated Fiber Systems, Inc.
	Services (Florida), LLC	Dialtone Telecom, LLC
	Broadband Dynamics, L.L.C.	DIGITALIPVOICE, INC.
**	BroadRiver Communication	Discount CLEC Services
	Corporation	Corporation
	Broadview Networks, Inc.	dishNET Wireline L.L.C.
	Broadvox-CLEC, LLC	
	Broadwing Communications, LLC	

**	DRS Training & Control Systems, LLC.	Hotwire Communications, Ltd.
	DSCI Corporation	IDT America, Corp.
	EarthLink Business	inContact, Inc.
	EarthLink Business	iNetworks Group, Inc.
	EarthLink Business, LLC	INNOVATIVE TECH PROS
	Easy Telephone Services Company	Integrated Path Communications, LLC
	Electronet Broadband Communications, Inc.	IntelaCloud, LLC
	Embarq Communications	Inteltrace, Inc.
	ENA Services, LLC	Intellicall Operator Services, Inc.
	ENGAGE COMMUNICATIONS	Intellifiber Networks, LLC
	Enhanced Communications Network, Inc.	InterGlobe Communications, Inc.
	Entelegent Solutions, Inc.	InterMetro Fiber, LLC
	ExteNet Systems, Inc.	Internet & Telephone, LLC
	FairPoint Communications	Intrado Communications Inc.
	FiberLight, LLC	IPFone
	First Choice Technology, Inc.	ITS Fiber
	First Communications, LLC	ITS Telecommunications Systems, Inc.
	FLATEL, Inc.	ITS Telecommunications Systems, Inc.
**	Florida Hearing and Telephone Florida Phone Systems, Inc.	J C Telecommunication Co., LLC
	Florida Telephone Services, LLC	Joytel Wireless Communications, Inc.
	FPL FiberNet, LLC	**
	FPUAnet Communications	Keys Energy Services
	France Telecom Corporate Solutions L.L.C.	Level 3 Communications, LLC
	Frontier Communications of America, Inc.	Lightspeed CLEC, Inc.
	Frontier Communications of the South, LLC	Litestream Holdings, LLC
	Georgia Public Web, Inc.	LMK Communications, LLC d/b/a
	Global Capacity	Clarity Communications Group
	Global Connection Inc. of America (of Georgia)	Local Access LLC
	Global Crossing Local Services, Inc.	Local Telecommunications Services - FL, LLC
	Granite Telecommunications, LLC	Maryland TeleCommunication Systems, Inc.
	Great America Networks, Inc.	Mass Communications
	GRUCom	Matrix Telecom, Inc.
**	GTC Communications, Inc.	**
	Harbor Communications, LLC	MCC Telephony of Florida, LLC
	Hayes E-Government Resources, Inc.	McLeodUSA Telecommunications Services, L.L.C.
	HD Carrier, LLC	MetTel
	Home Town Telephone, LLC	Miami-Dade Broadband Coalition I LLC
		Micro-Comm, Inc.
		Mitel Cloud Services, Inc.
		Mobilitie, LLC

	Momentum Telecom, Inc.		Sage Telecom Communications, LLC
	MOSAIC NETWORKX LLC		Sago Broadband, LLC
	MULTIPHONE LATIN AMERICA, INC.	**	SanTel Communications
	Nebula Telecommunications of Florida LLC	**	Seminole Telecom of Florida, LLC
	NEFCOM	**	Semnac Technologies, LLC
**	NET TALK.COM, INC.		SH Services LLC
**	Network Billing Systems, L.L.C.		Shands Teaching Hospital and Clinics, Inc.
	Network Innovations, Inc.		SKYNET360, LLC
	Network Telephone LLC		Smart City Communications
	Neutral Tandem-Florida, LLC		Smart City Networks, Limited Partnership
	New Horizons Communications Corp.		Smart City Telecom
	Norstar Telecommunications, LLC		SNC Communications, LLC
	North American Telecommunications Corporation		Southeastern Services, Inc.
	North County Communications Corporation		Southern Light, LLC
	NOS Communications, Inc.		Southern Light, LLC
	O1 Communications East, LLC		Southern Telecom
	Offramp, LLC		Sprint Communications Company Limited Partnership
	One Voice Communications, Inc.		Stratus Networks, Inc.
**	OneStar Long Distance, Inc.		Summit Broadband
	OneTone Telecom, Inc.		Sunesys, LLC
	Onvoy, LLC		T3 Communications, Inc.
	Opextel LLC d/b/a Alodiga		Talk America Inc.
	Optical Communications, Inc.		Talk America Services, LLC
**	Pac-West Telecomm, Inc.		TCG South Florida
	PAETEC Business Services	**	TDS Telecom/Quincy Telephone
	PaeTec Communications, LLC		TelCentris Communications, LLC
	Peerless Network of Florida, LLC		Telco Experts, LLC
	Phone Club Corporation		TelCove Operations, LLC
	Pioneer Telephone		Tele Circuit Network Corporation
	PowerNet Global Communications, Inc.		TeleDias Communications, Inc.
	Preferred Long Distance, Inc.		Telepak Networks, Inc.
**	Primus Telecommunications, Inc.		Telrite Corporation
	Pro-Net, Inc.		Telscape Communications, Inc.
**	Public Wireless, Inc.		Terra Nova Telecom, Inc.
	QuantumShift Communications, Inc.		TerraNovaNet, Inc.
**	Quo Call LLC		The Other Phone Company, LLC
	RCLEC, Inc.		Time Warner Cable Business LLC
	Reliance Globalcom Services, Inc.		TNCI Operating Company LLC
	Rosebud Telephone, LLC		Total Marketing Concepts, LLC
			Touch Base Communications
			Touchtone Communications Inc. of Delaware

\*\* TQC Communications, Corp.  
 \*\* Trans National Communications  
 International, Inc.  
 Tristar Communications Corp.  
 tw telecom of florida l.p.  
 US Signal Company, L.L.C.  
 Vanco US, LLC  
 Velocity The Greatest Phone  
 Company Ever, Inc.  
 Verizon Access Transmission  
 Services  
 Verizon Florida LLC  
 \*\* Verizon Florida LLC  
 Verizon Select Services Inc.  
 Vitcom, LLC  
 VoDa Networks, Inc.  
 Vodafone US Inc.  
 \*\* Voice Stream Network, Inc.  
 \*\* VOX3COM  
 Voxbeam Telecommunications Inc.  
 West Telecom Services, LLC  
 Wholesale Carrier Services, Inc.  
 Wide Voice, LLC  
 WiMacTel, Inc.  
 Windstream Florida, LLC  
 Windstream KDL, LLC  
 Windstream Norlight, LLC  
 Windstream NTI, LLC  
 Windstream NuVox, LLC  
 \*\* WonderLink Communications, LLC  
 WOW! Internet, Cable and Phone  
 WTI Communications, Inc.  
 XO Communications Services, LLC  
 YMax Communications Corp.  
 Zayo Group, LLC

## Appendix B. Summary of Complaints by Carriers

Carrier		Docket Number	Description
Terra Nova Telecom	AT&T	N/A	Late payment charges
Terra Nova Telecom	AT&T	N/A	911 fees
Terra Nova Telecom	AT&T	N/A	Relay surcharge
Terra Nova Telecom	AT&T	N/A	LNP charges
Terra Nova Telecom	AT&T	N/A	Trunk cutover
Terra Nova Telecom	AT&T	N/A	Trunk outage
Terra Nova Telecom	AT&T	N/A	Local interconnection
Communications Authority	AT&T	140156-TP	Arbitration
Terra Nova Telecom	AT&T	N/A	Number portability

## Glossary

4G	The short name for fourth-generation wireless, the stage of broadband mobile communications that will supercede the third generation (3G). A 4G network requires a mobile device to be able to exchange data at 100 Mbit/sec.
5G	5G is the coming fifth-generation wireless broadband technology. 5G will provide better speeds and coverage than the current 4G. 5G is set to offer speeds of up to 1 Gb/s for tens of connections or tens of Mb/s for tens of thousands of connections. 5G is not scheduled for launch until 2020.
Access Line	The circuit or channel between the demarcation point at the customer's premises and the serving end or class 5 central office.
Backhaul	In wireless networks, the connection from an individual base station (tower) to the central network (backbone). Typical backhaul connections are wired high-speed data connections (T1 line, etc.), but they can be wireless as well (using point-to-point microwave or WiMax, etc.).
Broadband	A term describing evolving digital technologies offering consumers integrated access to voice, high-speed data services, video on demand services, and interactive information delivery services.
Circuit	A fully operational two-way communications path.
CLEC	<i>Competitive Local Exchange Company</i> . Any company certificated by the Florida Public Service Commission to provide local exchange telecommunications service in Florida on or after July 1, 1995.
Communications Act	The federal Communications Act of 1934, as amended by the Telecommunications Act of 1996, established a national framework to enable CLECs to enter the local telecommunications marketplace.
DSL	Digital Subscriber Line, a technology that connects the user to broadband connections across a telephone network. It uses the same copper loops as wireline telephone service.
Facilities-based VoIP service	This term refers to VoIP service provided by the same company that provides the customer's broadband connection. Facilities-based VoIP services are generally provided over private managed networks and are capable of being provided according to most telephone standards. While this service uses Internet Protocol for its transmission, it is not generally provided over the public Internet.
FiOS	FiOS is Verizon's suite of voice, video, and broadband services provisioned over fiber optic cable directly to the customer premises. FiOS can currently provide Internet access with maximum download speed of 500 Mbps and upload speed of 500 Mbps.

ILEC	<i>Incumbent Local Exchange Company.</i> Any company certificated by the FPSC to provide local exchange telecommunications service in Florida on or before June 30, 1995.
Interconnected VoIP service	According to the FCC, it is a VoIP service that (1) enables real-time, two-way voice communications; (2) requires a broadband connection from the user's location; (3) requires Internet protocol-compatible customer premises equipment; and (4) permits users generally to receive calls that originate and terminate on the public switched telephone network.
Intermodal	The use of more than one type of technology or carrier to transport telecommunications services from origination to termination. When referring to local competition, intermodal refers to non-wireline voice communications such as wireless or VoIP.
Internet Protocol (IP)	The term refers to all the standards that keep the Internet functioning. It describes software that tracks the Internet address of nodes, routes outgoing messages, and recognizes incoming messages.
Over-the-Top VoIP service	This term refers to VoIP service that is provided independently from a particular broadband connection and is transmitted via the public Internet. Examples of this service include Vonage and Skype.
Switched Access	Local exchange telecommunications company-provided exchange access services that offer switched interconnections between local telephone subscribers and long distance or other companies. Long distance companies use switched access for origination and termination of user-dialed calls.
TDM	Time Division Multiplexing is a method of transmitting and receiving independent signals over a common signal path by means of synchronized switches at each end of the transmission line so that each signal appears on the line only a fraction of the time in an alternating pattern. TDM circuit switched lines represent the traditional wireline access line data within this report and do not include VoIP connections.
U-verse	U-verse is the brand name of AT&T for a group of services provided via Internet Protocol (IP), including television service, Internet access, and voice telephone service. Similar to Verizon's FiOS service, AT&T's U-verse is deployed using fiber optic cable.
Universal Service	This term describes the financial support mechanisms that constitute the national universal service fund. This fund provides compensation to telephone companies or other communications entities for providing access to telecommunications services at reasonable and affordable rates throughout the country, including rural, insular, high-cost areas, and public institutions.

Universal Service Administrative Company (USAC)	USAC is an independent American nonprofit corporation designated as the administrator of the federal Universal Service Fund by the Federal Communications Commission. USAC is a subsidiary of the National Exchange Carrier Association.
VoIP	<i>Voice over Internet Protocol</i> . The technology used to transmit voice conversations over a data network using Internet Protocol.
Wireline	A term used to describe the technology used by a company to provide telecommunications services. Wireline is synonymous with “landline” or land-based technology.