



The Status of Local Telephone Competition in South Carolina 2020 Annual Report

South Carolina
Office of Regulatory Staff



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OVERVIEW

- Status of competition in the local telephone exchange market
- Impact of changes in 2020
- Consumer complaints received and resolved by ORS

Introduction

South Carolina Code Ann. § 58-9-280 (G)(3) requires the South Carolina Office of Regulatory Staff (ORS) to compile information to monitor the status of local telephone competition in South Carolina. This information must be compiled and made available prior to May 15th of each year. To compile this information, ORS requires all local exchange carriers (as defined in South Carolina Code Ann. § 58-9-10(12)) to report annually to the ORS the total number of access lines providing local exchange telecommunications services to an end user in South Carolina. Additionally, the ORS must maintain a copy of all written complaints received regarding the impact broadband services may be having on the competitive local exchange (CLEC) market. The ORS has not received a specific written complaint related to how broadband service has impacted the CLEC market.

Today, most wired telephone service is delivered over a broadband connection to each consumer or business. After the passage of Act 142, the ORS began receiving requests both verbal and written for broadband / internet service. As

of the date of this report the ORS is currently tracking an estimated 125¹ requests for broadband service that are not filled.

The ORS sourced information for South Carolina from reports compiled and published by the Federal Communications Commission (FCC) Form 477, information reported to the ORS by the communication carriers in the 2020 Annual Report, the 2020 South Carolina Universal Service Fund (SC USF) Worksheet, and information gathered from Broadband Service Providers (BSPs) during 2020 to develop broadband availability maps for the state.

Notable Telecommunications Events of 2020

In 2020, the telecommunications industry united during the COVID-19 pandemic by signing the “Keep American Connected Pledge.” The pledge ensured that Americans did not lose their Broadband or Telephone service resulting from COVID-19 related circumstances. The companies pledged not to terminate service to any residential or small business customer because of the customer’s inability to pay their bills due to the financial disruptions caused by the coronavirus pandemic; pledged to waive any late fees that any residential or small business customer incurs because of their economic circumstances related to the coronavirus pandemic; and pledged to open Wi-Fi hotspots to any American who needs them. The FCC also waived several rules so that Lifeline Subscribers would not be unenrolled from the program due to COVID-19. During the pandemic, ORS received and continues to receive numerous calls and emails from consumers seeking internet service where none was currently available and from consumers seeking increased bandwidth.

¹ These are consumers for whom ORS has not yet found a broadband service solution.

The ORS also began the process of developing a map of broadband service availability across the state. See: <https://south-carolina.vetro.io/>

Local Telephone Competition

The local telephone market is defined as the delivery of voice telephone service to residential and/or business customers over a wired or wireless communications path regardless of the technology used. Traditional wired telephone service, VoIP service, and wireless or cellular telephone service make up the local telephone market today. Each of these services allows two or more individuals to engage in a simultaneous speaking conversation, even though they are not all located in the same place and are considered direct substitutes for each other. Local competition is measured by counting the number of access lines, telephone lines, or wireless handsets sold or controlled by each provider.

Incumbent Local Exchange Carriers (ILECs) are the traditional local telephone companies that existed prior to the Federal Telecommunications Act of 1996. The term “local telephone service” is fast becoming obsolete as ILECs and Competitive Local Exchange Carriers (CLECs) are converting their services to VoIP technology, and wireless/cellular service continues to increase in dominance as the preferred personal communications device of most individuals.

The number of wired access lines in South Carolina as reported to the ORS peaked in 2002 and has gradually declined since that time. This trend may be attributed to the increasing number of households replacing their wireline telephone with a cell phone. This phenomenon has been studied extensively by the Centers for Disease Control and Prevention, National Center for Health Statistics (CDC). The most recent data published by the CDC estimates that in

South Carolina, 55.7% of all households now exclusively use a wireless phone for communication, or they are “wireless-only.”² In households with children under age 18, representing younger families, the wireless-only percentage is nearly 67.2%.³

While VoIP service is gradually replacing traditional TDM-based telephone service, VoIP service is still delivered over a copper or fiber optic connection to the customer’s location. VoIP is further delineated as either interconnected or non-interconnected.⁴ Interconnected VoIP providers are required to contribute to the state and federal Universal Service Fund (USF) and state and federal Telecommunications Relay Service Fund (TRS).⁵ On the federal level, interconnected VoIP providers are generally being treated in many respects as traditional telecommunications carriers.

² NCHS, National Health Interview Survey, 2014–2018; U.S. Census Bureau, American Community Survey, 2013–2018; Table 1. Modeled estimates (with standard errors) of the percent distribution of household telephone status for adults aged 18 and over, by state: United States, 2018

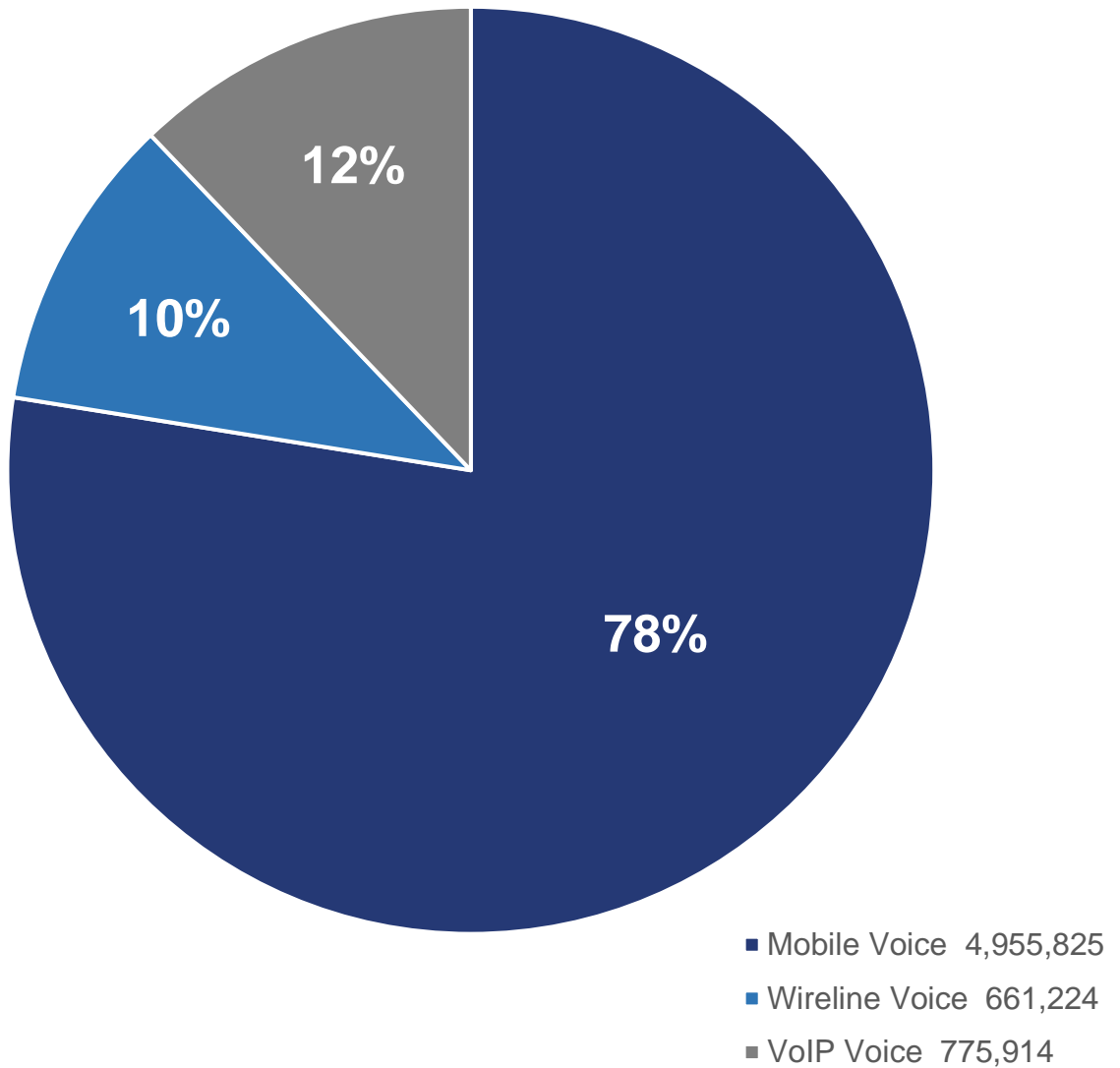
³ NCHS, National Health Interview Survey, 2014–2018; U.S. Census Bureau, American Community Survey, 2013–2018; Table 2. Modeled estimates (with standard errors) of the percent distribution of household telephone status for children under age 18, by state: United States, 2018

⁴ See, 47 C.F.R. § 9.3 and 47 C.F.R. § 64.601(a).

⁵ See 47 C.F.R. § 64.604(c)(5)(iii)(A) for TRS and 47 C.F.R. § 54.706 for USF.

Chart 1 illustrates consumer subscription preference.

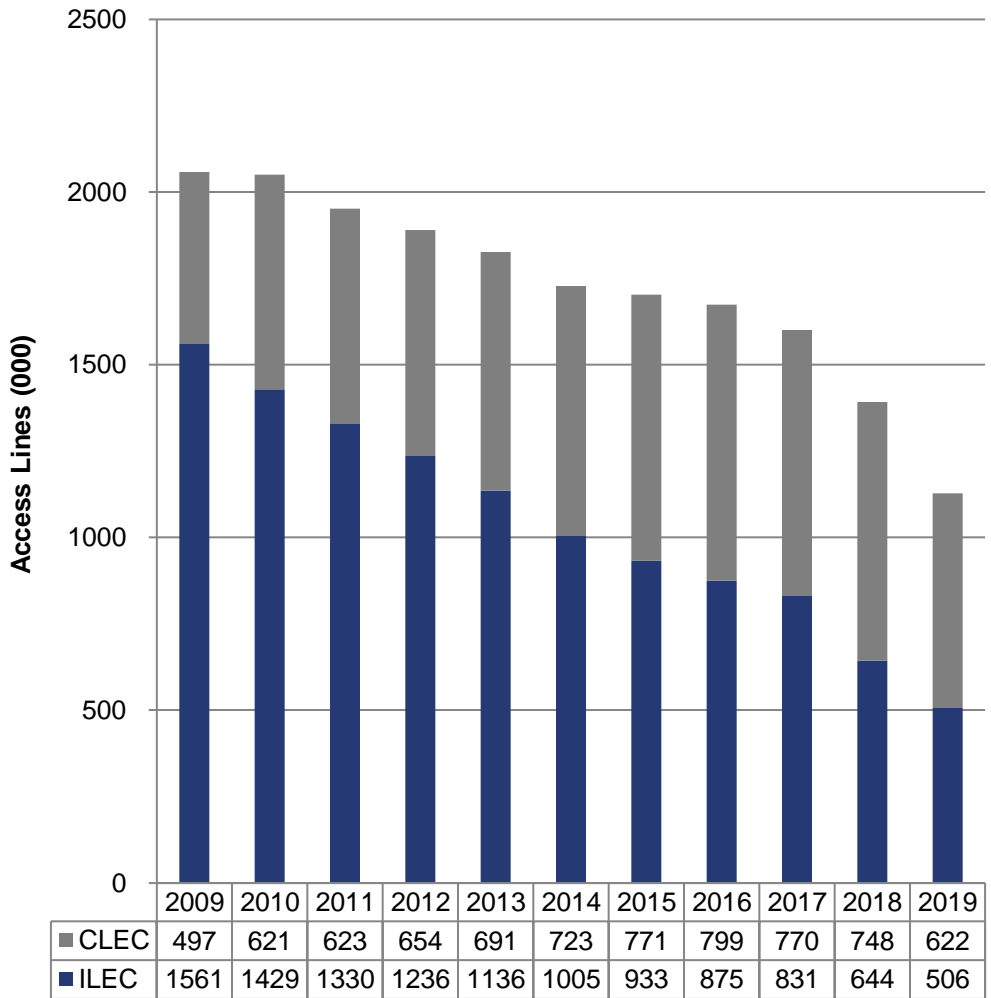
Chart 1: Voice Subscriptions by Service Type



Source: 2019 FCC Form 477 -Latest Available Published Data

Chart 2 illustrates the gradual decline in total wired access lines occurring since 2009.

Chart 2: Local Telephone Connections in South Carolina



Source: Local Telephone Competition Status as of Dec. 31, 2019, issued by Industry Analysis and Technology Division of the FCC Wireline Competition Bureau, 2019 Annual Reports and 2020 USF

Incumbent Local Exchange Carriers

During 2018 the ILEC market share continued its decline in South Carolina, with market share at 46%. In 2019 the market share dropped by approximately 1% to 45% market share. In 2020, all ILECs in South Carolina are continuing to operate under the Alternative Regulation provisions of the Code, Section 58-9-576(B) or (C). (See Table 1, page 14).

Competitive Local Exchange Carriers

The FCC now refers to competitive carriers as “Other (Non-ILECs),” no longer as CLECs. The ORS will continue to use Competitive Local Exchange Carrier (CLEC). In 2020, 132 South Carolina CLECs provided 621,703 access lines to businesses and residents of the state.

VoIP Providers

As of December 2020, the ORS recorded 190 registered VoIP providers serving subscribers in South Carolina. Some of these VoIP providers are certificated CLECs, and some are uncertificated providers of VoIP telephone service.

Wireless Carriers

During 2020, three facilities-based, mobile wireless providers⁶ and another 60 registered wireless resellers were operating in South Carolina. These wireless companies provided service to nearly 4.2 million wireless subscribers as reported to ORS.

⁶ Communications Marketplace Report et al., GN Docket No 20-60 et al., Report, FCC-20-188 (rel. Dec. 31, 2020).

Broadband Deployment⁷

The latest Broadband Deployment Report issued by the FCC was released on January 19, 2021, and reports data for the year ending December 31, 2019. The FCC report is based on FCC Form 477 reporting by telecommunications providers and indicates the following for South Carolina:

- There are 5.149 million residents in SC
- The FCC reports 91.3% of SC residents have broadband at speeds of 25 Mbps down and 3 Mbps up available, while the US average is 95.6%.
- The FCC also reports 69.3% of SC residents have adopted broadband at speeds of 25 Mbps down and 3 Mbps up available, while the US average adoption rate is 68.9%.

It should be noted:

- The FCC report does not address the availability of broadband to businesses.
- The FCC 477 data has not been verified or validated.

In 2020 the ORS surveyed broadband availability in the state and began mapping and analyzing that data based on information provided by broadband providers.

- The ORS reports that 86% of SC residents have broadband at speeds that are at least 25 Mbps down and 3Mbps up; 5% lower than the FCC's published information for South Carolina.
- The ORS has also observed, through conversations with SC consumers, that some areas reported as served are not.

⁷ FCC – FCC 21-18, Fourteenth Broadband Deployment Report, Released January 19, 2021 in GN Docket No. 20-269

The ORS broadband data also reveal several facts about the nature of broadband competition in the state and its potential ramifications:

- 14% of SC homes and businesses have no access to wired broadband service at speeds necessary for K-12 distance learning, remote work, or telehealth purposes.
- 38% of SC homes and businesses have access to only one wired broadband service provider (BSP).
- 44% of SC homes and businesses have wired access to two BSPs.

Due to the COVID-19 pandemic, the United States Congress passed the Coronavirus Aid, Relief, and Economic Security or “CARES Act.” The South Carolina General Assembly passed Act 142 that allocated \$50 million of CARES Act funding to the ORS for broadband initiatives related to COVID-19. The total expended was \$38,391,886. Act 142 provided funding for the following:

- **Online Learning Initiative:** Procurement of mobile hotspots and monthly internet service for qualifying student households through December 31, 2020. The ORS collaborated with schools across the state. Schools reported monthly on the status of mobile hotspots and monthly internet service. The ORS created communications materials including press releases, a program overview, and a video tutorial on how to complete monthly reporting. The Online Learning Initiative program transferred to the SC Department of Education on December 31, 2020 along with \$8.2 million to provide service through June 2021.
- **Mapping and Planning:** The ORS requested all broadband service providers and broadband infrastructure owners operating in South Carolina to submit broadband availability data to the ORS. The ORS

procured the services of CostQuest Associates, Inc. to perform various Geographic Information Systems (GIS)-related services. A detailed map was made available in December 2020. The ORS also contracted the SC Revenue and Fiscal Affairs Office for the continuing storage, security, and maintenance of the map.

- **Broadband Infrastructure Program:** The ORS engaged Revolution D, Inc. to identify areas of the state that are unserved with broadband, impacted by COVID-19, and would support distance learning, telehealth, and/or teleworking. Broadband companies completed infrastructure projects in December 2020, helping to expand broadband availability in the state.

The ORS created program overviews, various press releases, an application, guidelines, funding agreements, and reporting tools. Companies were required to submit Financial Progress Reports and Construction Progress Reports to the ORS.

Applications Funded: 78	Households Served: 2,169
Companies: 14	Households Passed*: 18,574
Counties Served: 27	Businesses Passed: 1,000
Program Targets: 59	Community Anchor Points Passed: 202
Priority Targets: 35	Educational Institutions Passed: 38
	Health-care Facilities Passed: 29

**The residence or business is eligible to subscribe to services.*

- **Allendale Broadband Pilot Project:** To advance deployment of broadband to unserved areas during the COVID-19 pandemic, the ORS partnered with SCETV, USC- Salkehatchie, Allendale County School District, the Allendale Hampton Jasper Regional Library, and Revolution

D, Inc. to launch a pilot program allowing free Wi-Fi and residential broadband service to students and/or the public in Allendale County. Project partners collaborated with Palmetto Rural Telephone Cooperative to get fiber backhaul and Dominion Energy South Carolina to get electricity to the SCETV towers located in Allendale County. Equipment was installed on the towers that will provide residents with fixed wireless (citizen broadband radio service) access to broadband service.

- Potential Number of Impacted Households: 1,000
- Public Wi-Fi Maximum Download/Upload Speeds: 50 Mbps / 10 Mbps
- Residential Network Maximum Download/Upload Speeds: 78 Mbps / 6 Mbps

Alternative Regulation

Prior to the development of competition in the telecommunications market, each ILEC's rates were regulated by the Public Service Commission of South Carolina (the Commission) based on the telephone utility's rate of return. With the passage of the federal Telecommunications Act of 1996, as well as legislative changes implemented in South Carolina since 1996, ILECs are regulated in a more flexible manner. Section 58-9-576(C) provides local exchange companies the ability to offer nearly all retail local service on a deregulated basis.

If an ILEC or a CLEC opts for alternative regulation pursuant to Section 58-9-576(C) or Act 7, then its retail service offerings are deregulated – thereby allowing them the ability to set price, terms, and conditions without Commission review. In addition, an ILEC choosing Act 7 deregulation will be subject to a three-year phase-down of any SC USF support it receives, but it will continue to

contribute to the SC USF. The Commission retains authority over wholesale services — for example, switched access and services sold to other carriers, as well as limited authority over stand-alone basic residential lines.

Lifeline – Eligible Telecommunications Carriers

Beginning in 2007, South Carolina began accepting applications from carriers requesting permission to become Eligible Telecommunications Carriers (ETCs) offering Lifeline services to low-income households. In addition to the ILECs, South Carolina had 13 wireless Lifeline ETCs actively offering Lifeline to customers at the end of 2020. The wireless Lifeline ETCs received approximately \$11 million in total Lifeline support from the federal Universal Service Fund and the ILEC's received approximately \$461,187 in total Lifeline support from the state and federal Universal Service Fund during calendar year 2020.

The FCC's 2016 Lifeline Modernization Order outlined the need to bridge the digital divide. The Order mandated the inclusion of broadband to help connect Americans to the internet. As of December 2016, the consumers of the Lifeline Program are able to choose how to apply the benefits. The choices include:

- Fixed or mobile broadband
- Fixed or mobile Voice-only (phasing out by the end of 2021)
- Bundles of fixed or mobile voice and broadband

Beginning December 2019, the federal Lifeline program began a reduction of the support to providers of Voice-only service. The Order further reduced support in December 2020. Finally, the federal Lifeline program will cease the provision of support to Lifeline providers for Voice-only services in December 2021 where there is more than one Lifeline provider in the area.

In addition to the federal Lifeline program, the FCC introduced the Emergency Broadband Benefit which provides a discount of up to \$50 per month towards broadband service for eligible households and up to \$75 per month for those on Tribal lands. Eligible households can also receive a one-time discount of up to \$100 to purchase a laptop, desktop, or tablet from participating providers if they contribute \$10-\$50 toward the purchase price.

ORS Consumer Services

The ORS tracks a wide range of consumer complaints related to regulated and non-regulated telecommunications services. [Chart 3](#) depicts a breakdown of complaint calls received by the ORS during 2020. By far, the largest area of complaints in telecommunications relates to non-regulated aspects of the business (76%). Service quality (15%), billing (4%), information requested (3%) and miscellaneous (2%) round out the top five complaint areas.

**Chart 3: Consumer Services Department:
Telecommunications Complaints by Type, Number &
Percentage - 2020**

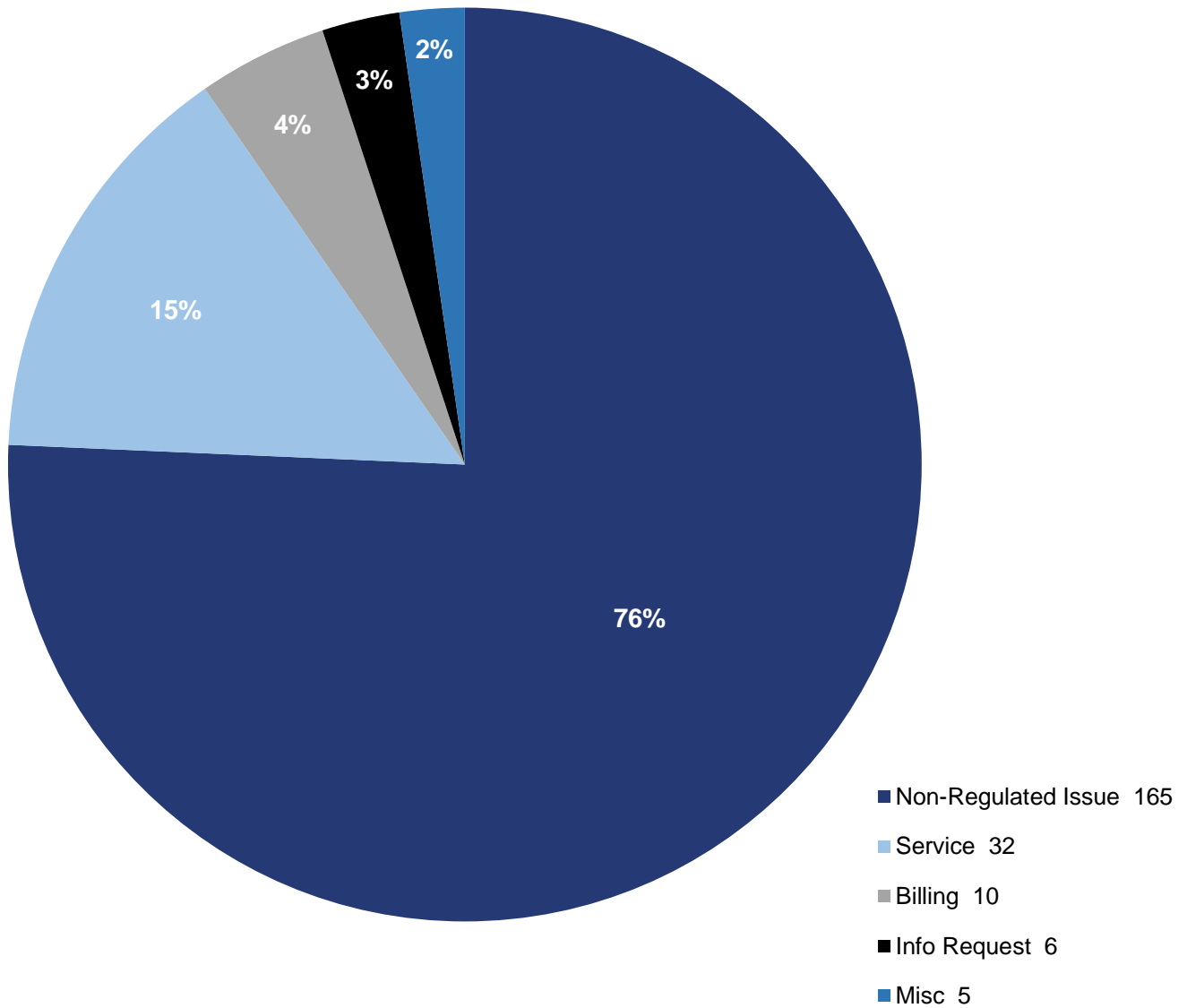


Table 1: Alternative Regulation: ILECs

Carrier	Alt. Reg. § 58-9-576(B)	Alt. Reg. § 58-9-576(C) Act 7	Rate of Return Regulation
United Telephone Company of Carolinas dba CenturyLink, fka Embarq, fka Sprint	29-Sep-1997 ⁸		
BellSouth Telecommunications	13-Aug-1999 ⁷	1-Oct.-09 ⁹	
Frontier fka Verizon South, Inc.	14-Oct-2000 ⁷		
Windstream South Carolina	27-Sep-2002 ⁷		
Horry Telephone Coop.	30-Jan-2003 ⁷		
PBT Telecom	18-Feb-2006 ⁷		
Home Telephone Co.	7-Apr-2006 ⁷		
West Carolina Rural Tel. Coop.	16-Oct-2006 ⁷		
Piedmont Rural Telephone Coop.	12-Jan-2007 ⁷		
Lockhart Telephone Co.	9-Aug-2007 ⁷		
Farmers Telephone Coop.	1-May-2008 ⁷		
Bluffton Telephone Co.	4-Mar-2005 ¹⁰		
Hargray Telephone Co.	4-Mar-2005 ¹⁰		
McClellanville Telephone Co. (TDS)	30-May-2005 ¹⁰		
Norway Telephone Co. (TDS)	30-May-2005 ¹⁰		
St. Stephen Telephone Co. (TDS)	30-May-2005 ¹⁰		
Williston Telephone Co. (TDS)	30-May-2005 ¹⁰		
Fort Mill Telephone Co. dba Comporium	1-Aug-2005 ¹⁰		
Lancaster Telephone Co. dba Comporium	1-Aug-2005 ¹⁰		
Rock Hill Telephone Co. dba Comporium	1-Aug-2005 ¹⁰		
Chester Telephone Co.	9-Aug-2007 ¹⁰		
Ridgeway Telephone Co.	9-Aug-2007 ¹⁰		
Chesnee Telephone Co.	23-Aug-2014 ⁷		
Palmetto Rural Telephone Coop.	1-May-2014 ⁷		
Sandhill Telephone Coop.	26-Jul-2019 ⁷		

⁸ Company requested Alternative Regulation based on interconnection agreement.

⁹ Company requested Alternative Regulation based on Section 58-9-576(C), which effectively deregulates retail service pricing.

¹⁰ Company requested Alternative Regulation based on determination that at least two wireless providers have coverage generally available in the LEC's service area.