8 VERIZON/FRONTIER CORPORATE AND CALIFORNIA ILEC INVESTMENT POLICIES

Principal observations and takeaways

- In contrast to AT&T, which has the financial resources but not the interest in maintaining and upgrading its local wireline network, Frontier has a strong interest in pursuing such upgrades, but lacks the necessary financial resources to do so.
- Frontier's primary goal is to ensure the success and profitability of all of the wireline operations in its nationwide portfolio.
- Frontier's expansion/acquisition strategy was clearly ill-timed: Frontier was pursuing massive acquisitions into a market – wireline circuit-switched voice telephony – that was already in a steep decline.
- Frontier's precarious and highly leveraged financial structure raises serious concern as to its ongoing access to sufficient capital to maintain and upgrade its California network.
- Frontier's net income declined following each successive acquisition, to the point where it has now been negative for seven consecutive quarters.
- Unlike AT&T, which had raised its legacy flat-rate residential POTS rates by 152% since the onset of URF, Verizon's rates for this service had risen by only 31% as of the date of the sale to Frontier, and Frontier has not effected any rate increase since the acquisition.
- As a "pure play" ILEC holding company, Frontier Communications has a strong financial incentive to stabilize and grow its ILEC operations in California and elsewhere – but if it is not able to stabilize and strengthen its overall financial health, some sort of rescue may become necessary.

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VERIZON/FRONTIER CORPORATE AND CALIFORNIA ILEC INVESTMENT POLICIES

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Frontier's 2016 acquisition of Verizon's ILEC operations in California, Texas and Florida

There are stark differences between Frontier and AT&T with respect to each of these two ILECs' financial situation and their respective ability and willingness to invest in the ongoing maintenance and upgrading of their California local service infrastructure. Whereas AT&T's legacy ILEC operations have become increasingly a less important component of the parent company's activities and interest, Frontier's only business is that of operating Incumbent Local Exchange Carriers ("ILECs"), making Frontier a "pure play" ILEC whose primary, if not its only goal is the success and profitability of all of the operating ILECs in its nationwide portfolio.

In contrast to AT&T, which has the financial resources but not the interest in maintaining and upgrading its local wireline network, Frontier has a strong interest in pursuing such upgrades, but lacks the necessary financial resources to do so.

On the other hand, where parent company AT&T's overall financial condition is strong, with a market cap of approximately $240-billion, 2017 revenues of $160-billion, a 22.3% return on common equity, and some $21-billion in free cash, Frontier has been teetering on financial collapse for the past several years. As of April 10, 2019, Frontier;s market cap was $261.2-million, Frontier's share price hit its high point on February 9, 2015, at the pre-reverse split equivalent of $124.50; on April 10, 2019, its stock closed at $2.48, a drop of around 98% from its 2015 high. The last time that Frontier had posted positive earnings per share was in the first quarter of 2016; the Company has been posting losses for every quarter since then.[155] Frontier has been hemorrhaging customers in all major service categories across all of its 29-state footprint since its last major acquisition in 2016, as summarized in Table 8.1 below:

Table 8.1

FRONTIER COMMUNICATIONS, INC.
CUSTOMER COUNTS BY SERVICE CATEGORY, 2016-2018

	Voice	Broadband	Video
2Q2016	5,771,000	4,570,000	1,628,000
2Q2017	5,058,000	4,063,000	1,007,000
2Q2018	4,667,000	3,863,000	902,000
3Q2018	4,574,000	3,802,000	873,000

Source: Frontier Communications, Inc. Forms 10-Qs

155. Frontier 10-Qs for 2016, 2017 and 2018.

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On April 1, 2016, Frontier Communications, Inc. completed its acquisition of what is now Frontier California under a three-state ILEC purchase from Verizon that also included Verizon ILEC operations in Florida and Texas. Frontier paid Verizon $10.54-billion for the three ILECs, and financed the acquisition primarily through the issuance of new debt. Even before Frontier took over control of these three Verizon ILECs, its stock had fallen by around 35% from where it was in March 2015 when the deal with Verizon had been announced. Because the overall condition of what is now Frontier California changed so abruptly as of the closing date of the transaction, it is most useful to examine the company's financial condition and investment practices separately for each of the two ownership periods.

Figure 8.1. Frontier Communications stock prices 2015-2019.

All three of the ILECs in the 2015 year had become part of Verizon in 2000 as a result of the merger of Bell Atlantic and GTE. In that transaction, Bell Atlantic, which had by then merged with NYNEX, another Regional Bell Operating Company that served New York and five New England states,[156] acquired all of the GTE ILECs as well as GTE's mobile wireless services business. The merged company was renamed Verizon and proceeded to integrate the GTE and Bell Atlantic mobile operations into a single organization. However, while the former

156. *Applications of NYNEX Corporation and Bell Atlantic Corporation for Consent to Transfer Control of NYNEX Corporation and Its Subsidiaries*, File #: NSD-L-96-10, Memorandum Opinion and Order, Rel. August 14, 1997, FCC-97-286, 12 FCC Rcd 19985 (32).

GTE ILECs were now operated under the Verizon brand, they were not organizationally integrated with the Bell Operating Company ILECs in the 13 northeastern jurisdictions that had represented the dominant Bell Atlantic business activity.

Verizon's ownership of the GTE ILECs was short-lived. Beginning just months after its merger with GTE in 2000, Verizon commenced selling off portions of its wireline ILEC portfolio. The first of these divestitures involved the sale of portions of what had been GTE Southwest's operating areas in New Mexico and Oklahoma to Valor Communications.[157] GTE Southwest's Texas operations were retained until the 2016 3-state deal with Frontier. In 2005, Verizon sold its wireline and directory businesses in Hawaii to an affiliate of the private equity firm The Carlyle Group.[158] In 2007, it sold its three Northern New England territories (Maine, New Hampshire and Vermont) to FairPoint Communications, a small North Carolina-based Independent ILEC.[159] Verizon also sold three offshore GTE ILEC operations, in the Northern Mariana Islands (2005), the Dominican Republic (2006), and Puerto Rico (2007).[160] In 2010, Verizon's former GTE operations in 13 states along with the former Bell ILEC in West Virginia, were sold to Frontier.[161] Following completion of the 2016 3-state transaction, Verizon had divested its ILEC operations in 25 of the former GTE states plus four former Bell states. The only GTE territories that remain within Verizon's portfolio are those in Pennsylvania and Virginia, states where Verizon still operates the legacy Bell Atlantic ILEC, and in North Carolina.

Verizon had also retained the three largest GTE markets – Florida, Texas, and California – until the final 2016 divestiture. Verizon's remaining wireline ILEC footprint is now limited to eight northeastern states plus the District of Columbia plus two small territories in Connecticut and North Carolina. And recent reports in the financial press have suggested that Verizon may be shopping for a buyer of these properties as well,[162] a move that would transform Verizon into a wireless-only business. Table 8.2 below summarizes the various Verizon ILEC divestitures

157. https://www.fcc.gov/gte-southwest-inc-dba-verizon-southwest-gtsw (accessed 1/29/19)

158. Verizon Communications Inc. 2006 Annual Report, p. 27.

159. Verizon Communications Inc. 2008 Annual Report, p. 30.

160. 2005 sale of Micronesian Telecommunications Company, Verizon 2005 10-K, at 14; 2006 sale of Dominicana Telecom, Verizon 2006 Annual Report, at 18; 2007 sale of Puerto Rico Telephone Company, Verizon 2007 Annual Report, at 48.

161. *Frontier Communications Corporation and Verizon Communications Inc. for Assignment or Transfer of Control*, FCC WC Docket No. 09-95, *Memorandum Opinion and Order*, Rel. May 21, 2010; *see also*, ARMIS Corporate History Verizon GTE Corporation (GTTC).

162. "Altice and Verizon Wireline? Really?," Powell, R. (June 4, 2015). in *Telecom Ramblings*, http://www.telecomramblings.com/2015/06/altice-and-verizon-wireline-really/ [accessed on July 15, 2015]/

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and Frontier ILEC acquisitions that have occurred since the mid-2000s. A number of these transactions proved to be highly problematic.

Table 8.2

VERIZON ILEC DIVESTITURES AND FRONTIER ILEC ACQUISITIONS, 2005-2016

	DIVESTED BY VERIZON		ACQUIRED BY FRONTIER	
Year	**ILEC**	**Sold to**	**ILEC**	**Bought from**
2005	GTE-Southwest, New Mexico, Okla.	Valor Communications		
2005	Northern Marianas			
2006	GTE-Illinois	Frontier	GTE-Illinois	Verizon
2006	Dominican Republic			
2007	GTE Hawaiian Tel	Carlyle Group		
2007	Puerto Rico			
2007	Maine, NH, VT	Fairpoint		
2010			Connecticut	AT&T
2010	GTE-13 state	Frontier	GTE-13 state	Verizon
2010	VZ-West Virginia	Frontier	West Virginia	Verizon
2016	GTE California, Texas, Florida	Frontier	GTE California, Texas, Florida	Verizon
Sources: Verizon 10-K 2006-2017; Frontier 10-K 2006-2017				

Table 8.3 below compares the total (parent) company switched access lines in service of Verizon and Frontier between 2000 and the end of 2016. Figure 8.2 provides this same data graphically. As Verizon's presence in this segment has declined, Frontier's has mushroomed:

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Table 8.3

FRONTIER AND VERIZON
TOTAL SWITCHED ACCESS LINES IN SERVICE
(Nationwide – 2000-2014)

Year	Frontier	Verizon
2005	2,219,000	47,650,115
2006	2,126,500	43,920,668
2007	2,431,676	40,285,195
2008	2,254,333	36,161,000
2009	2,117,512	32,561,000
2010	5,745,718	26,001,000
2011	5,266,916	24,137,000
2012	4,880,017	22,503,000
2013	4,727,935	21,085,000
2014	5,412,750	19,795,000
2015	5,248,853	18,387,000
2016	8,293,895	13,939,000
2017	7,458,815	12,821,000

Source: Verizon ARMIS reports 2005-2007; 10-K 2008-2017.; Frontier Form 10-K reports, 2005-2017. Note: Beginning in 2012, Frontier changed its reporting from Access Lines to Customers. Frontier access line figures for 2012-2017 are estimates based upon a conversion factor for access lines-to-customers of 1.5379, calculated by dividing the number of access lines (5,373,859) by the number of customers (3,494,294) provided in Frontier 2012 3rd quarter 10-Q filing, the last filing in which both quantities are provided. Since this ratio is likely decreasing over time, the Frontier access line estimates for 2012 forward are likely overstated.

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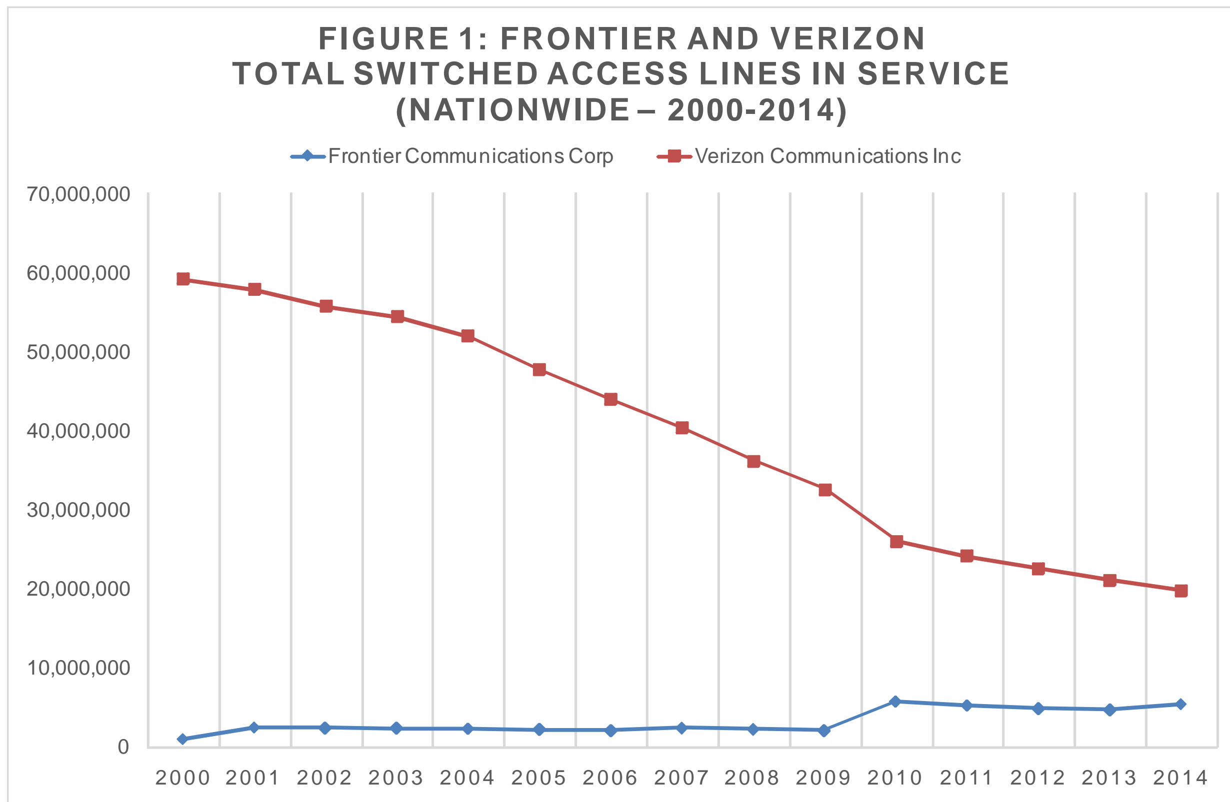

Figure 8.2: Frontier and Verizon Total Switched Access Lines in Service between 2000 and 2014.

A brief history of Frontier

Frontier had its genesis as Rochester Telephone Corporation[163] ("RTC"), an ILEC whose service area consisted of the Rochester, New York metropolitan area. RTC was at the time the largest Independent telephone company not affiliated with any other ILEC system or holding company. While it is clear that Verizon has been shedding its wireline operations generally, and its GTE territories in particular, nearly all of Frontier's investments over the past 25 years have been in wireline operations, which have included the acquisition of a number of GTE territories. In 1993 RTC acquired half a million access lines from GTE. Just six years later, the company made a series of acquisitions from GTE in Arizona, California, Minnesota, Nebraska, and Illinois that amounted to 361,000 additional access lines.[164] Up through its 2016 California/Texas/Florida acquisition, Frontier continued to invest heavily in wireline operations both within and outside former-GTE territories. In 2007, the company acquired nearly half a

163. Frontier Corporation New York, Press Release in 8-K filing, April 2, 1996, at 1.

164. A.15-03-005 Joint Application, at 33, fn. 55.

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million access lines in Pennsylvania from Commonwealth Telephone Enterprises, Inc. for $1.1-billion, which it had paid for with $804.1-million in cash and newly-issued common stock, which raised $247.4-million. Frontier paid off all but $8.5-million of preexisting Commonwealth debt, such that this acquisition had no material impact upon Frontier's debt position overall. In that same year, Frontier acquired small ILEC properties in California from Global Valley Networks, Inc., for $62-million, paid for with cash on hand.[165] Frontier's largest acquisition prior to 2016 was in 2010, a 13-state deal with Verizon involving roughly half of the former GTE ILEC properties (and Verizon West Virginia, a BOC) for $8.7-billion, financed by $3.5-billion in new debt plus $5.2-billion in newly-issued stock.[166]

That acquisition more than doubled Frontier's size. Since a tiny portion of that transaction involved some exchanges in California, CPUC approval was required. In its decision approving the transaction, the CPUC found that "Frontier and its operating companies have a long history in serving rural areas in California and elsewhere;" and that the transaction "will accelerate Frontier's growth, creating a much larger company with increased financial strength and flexibility."[167] In 2014, Frontier purchased The Southern New England Telephone Company from AT&T for $2.02-billion, adding nearly one million access lines in Connecticut.[168] To pay for this acquisition, Frontier issued $775-million in 6.250% senior unsecured notes due in 2021, plus $775-million in 6.875% senior unsecured notes due in 2025. Finally, the $10.54-billion California/Texas/Florida purchase in 2016 was financed by approximately $4-billion in cash plus $6.6-billion of senior unsecured notes.[169]

Following the 2016 purchases, Frontier became the nation's fourth largest ILEC with roughly 4.85-million residential and business customers (roughly corresponding to about 7.5-million switched access lines) across 28 states,[170] but in making these various acquisitions the company had assumed $11.9-billion in new debt, bringing its total debt as of the end of 2017 to approximately $17-billion. Frontier's growth strategy has, in each case, involved the absorption

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165. Frontier 2007 Form 10-K, at 2.

166. Frontier 2010 Form 10-K, at 2

167. *Joint Application of Frontier Communications Corporation et al. and Verizon West Coast Inc. et al for Approval of the Sale of Assets, Transfer of Certificates and Customer Bases, and Issuance of Additional Certificates*, A.09-06-005, D.09-10-056, Nov. 4, 2009, *slip op.*, at 15.

168. Frontier 2014 Form 10-K, at 2.

169. Frontier 2016 Form 10-K, at 2.

170. "Frontier Communications to Acquire Verizon's Wireline Operations in California, Florida and Texas, Doubling Frontier's Size and Driving Shareholder Value," Press Release, February 5, 2015 http://investor.frontier.com/releasedetail.cfm?ReleaseID=895055 [accessed on July 15, 2015].

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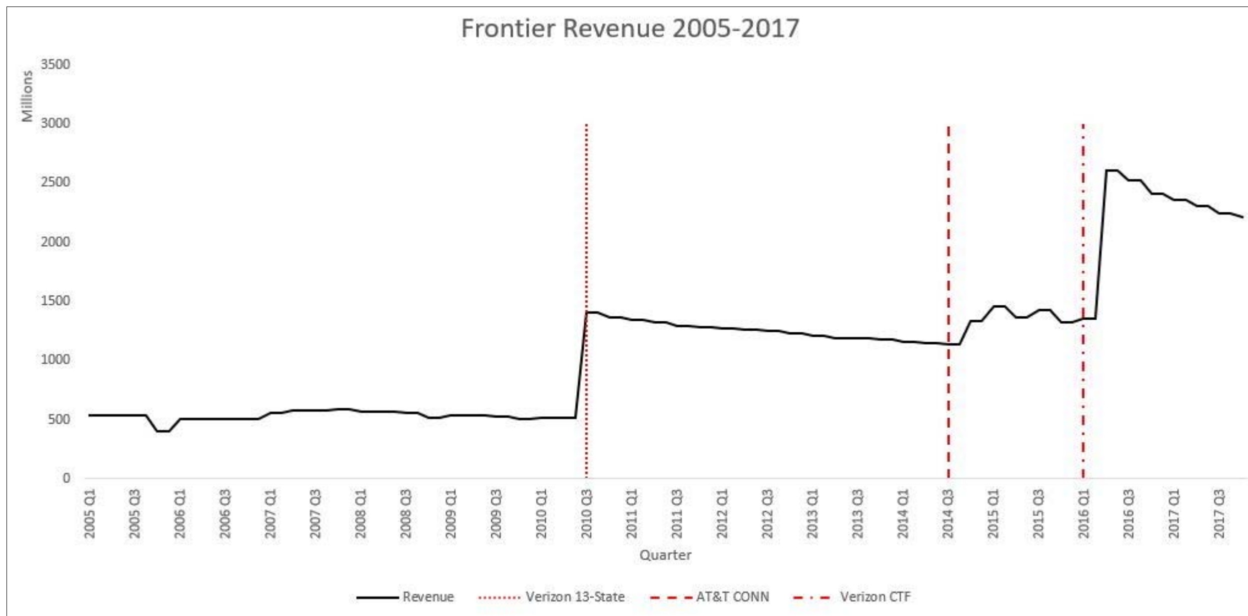

Figure 8.3. Following of its acquisitions, Frontier's revenue resumed its pattern of steady erosion, producing a sort of "sawtooth" effect.

of large, multi-state operations, some of which had been larger in size than the pre-acquisition Frontier. Notably, and as illustrated on Figure 8.3 above, each of these acquisitions produced a large, one-time revenue spike followed in each instance by revenue erosion from the new immediate post-acquisition level – producing a sort of "sawtooth" effect.

> Frontier's expansion/acquisition strategy was clearly ill-timed: Frontier was pursuing massive acquisitions into a market – wireline circuit-switched voice telephony – that was already in a steep decline.

Frontier's expansion/acquisition strategy was, at the very least, ill-timed. The same type of "sawtooth" effect can be seen in the demand for access lines (Figure 8.4). As these "sawtooth" graphs suggest, Frontier was pursuing massive acquisitions into a market – wireline circuit-switched voice telephony – that was already in a steep decline. Verizon certainly seems to have reached this assessment, as evidenced by its decision to off-load these legacy wireline ILECs. And some securities analysts were skeptical as to the merits of Frontier's decision to agree to this deal with Verizon.[171] Verizon had some six years earlier come to the conclusion that further

171. *See*, e.g., Saibus Research, "Verizon Fools Frontier Again," *Seeking Alpha*, Feb. 5, 2015. ("In our September 2012 report on Frontier and CenturyLink (NYSE:CTL) as well as preceding reports on other wireline companies, we noted that nearly every company that struck a strategic deal with Verizon ended up regretting it.")

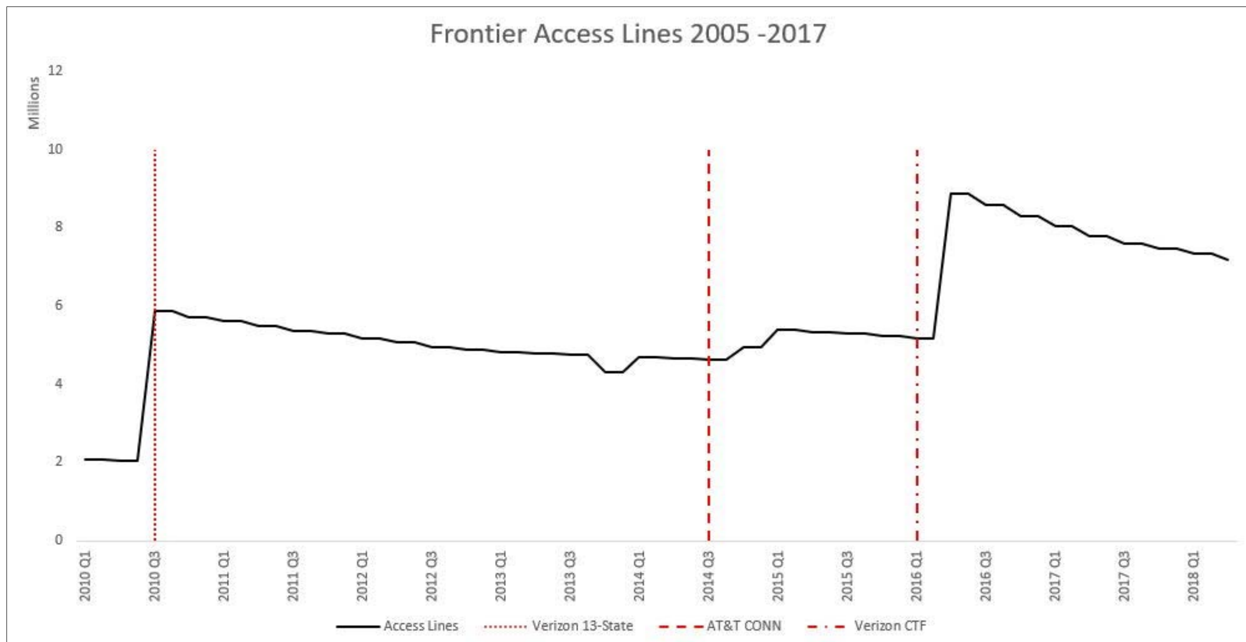

Figure. 8.4. As with revenues, each of Frontier's major ILEC acquisitions produced a large, one-time spike in total access lines served, followed in each instance by a steady drop-off in demand following the acquisition, producing a similar type of "sawtooth" effect.

expansion of *FiOS* beyond its 2010 footprint was no longer going to be pursued.[172] As a business decision, Frontier's strategy is reminiscent of the decision in 1977 by Polaroid Corporaton to invest in a new Super-8 mm silent movie film product called *Polavision* at the same time that home video cassette recorders (VCRs) and camcorders were coming onto the market.

In testimony submitted by Frontier's then-Chief Financial Officer John M. Jureller in the 2015 CPUC Verizon/Frontier transaction proceeding, A.15-03-005, Mr. Jureller explained that "Frontier is raising an estimated total of $10.85 billion – $2.75 billion of equity and $8.10 billion of debt. Based upon the dividend rate of the equity already raised, and using an average debt cost of 9.0%, the total estimated incremental annual cost of capital to Frontier is approximately $1.015 billion. This should be compared to the annual cost 'savings' of $700 million. Frontier

Available at https://seekingalpha.com/article/2886186-verizon-fools-frontier-again (accessed 1/14/19).

172. See Robert Cheng, "Verizon to End Rollout of FiOS," *Wall Street Journal*, March 30, 2010, http://online.wsj.com/article/NA_WSJ_PUB:SB10001424052702303410404575151773432729614.html.

has estimated that the operation will generate incremental cash flow to support operations and capital investment, but those savings should not be in isolation of other factors."[173]

Testifying before the CPUC in the 2015 proceeding considering the Frontier/Verizon transaction, Frontier's then-CFO John M. Jureller had all but conceded that after the transaction was completed, Frontier's debt service costs would exceed its anticipated cost savings by several hundred million dollars.

But commenting on Mr. Jureller's statement, ETI President Dr. Lee Selwyn, testifying on behalf of ORA, observed that

> Based on [Mr. Jureller's] testimony, Frontier's total costs to operate the three state companies included in the transaction, including the various costs it will incur to perform the functions that are now being supported by Verizon centralized services, will actually be *higher* than Verizon's current total operating costs when the "allocation" of Verizon corporate overheads is excluded. Mr. Jureller now admits that "operating costs for California are not expected to be reduced." But because Frontier will be paying Verizon $10.54-billion, a price that far exceeds the net book value of the [California/Texas/Florida] assets as currently being carried on Verizon's books, Frontier's debt service and other costs of carrying this $10.54-billion will be considerably greater than Verizon's costs, not even considering the higher overall cost of capital confronting Frontier due to its poorer credit rating relative to Verizon's.
>
> If this new information provided by Mr. Jureller is taken at its face value, the Commission would be compelled to find that §854(b)(1) – the threshold requirement that the transaction provide short-term and long-term economic benefits for ratepayers – is not satisfied. Frontier's operating expenses will be greater than those that Verizon is incurring, and its capital-related costs will be substantially higher, indeed the increment in Frontier's cost of capital *will exceed the avoided allocation of Verizon corporate overheads by nearly 50%.* In its attempt to avoid having to allocate any of the

173. *I/M/O the Joint Application of Frontier Communications Corporation et al. and Verizon California, Inc. et al for Approval of Transfer of Control Over Verizon California, Inc. and Related Approval of Transfer of Assets and Certifications*, A.15-03-005, Rebuttal Testimony of John M. Jureller, CFO, Frontier Communications, Inc., August 24, 2015, at 16. Note that while Mr. Jureller had testified that Frontier planned to raise $8.1-billion in new debt to finance the Verizon acquisition, the company's 2016 Form 10-K refers to only $6.485-billion in new debt raised through a private debt offering of up to $6.6-billion in senior notes. 2016 Form 10-K, at 41, This same offering is further outlined in Frontier's April 22, 2016 S-4 Registration of Securities filing, at 8.

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economic benefits of the transaction to ratepayers, Frontier's Chief Financial Officer is now asserting that there will not be any net economic benefits to be shared.[174]

By the end of 2017, Frontier's total debt was nearly $17-billion, resulting in 2017 debt service (interest and amortization) of $1.9-billion annually. Frontier's cost of debt now averages 8.99%, well into the junk bond range.

Frontier's various acquisitions were accomplished at a total cost of $22.4-billion, financed by $10.5-billion in new equity and some $11.9-billion in new debt.[175] By the end of 2017, Frontier's total debt had reached nearly $17-billion (see Figure 8.5).[176] Frontier's annual debt service (interest and amortization) had, by 2017, escalated to $1.9-billion.[177] Together with the persistent drop-off in customers and revenues, this resulted in severe cash flow challenges and major earnings erosion despite the revenue growth overall. At year-end 2017, Frontier's debt-to-revenue ratio was 1.86. Frontier's cost of debt now averages 8.99%, well into the junk bond range. Thus, some $1.5-billion out of the total annual debt service of $1.9-billion represents interest on that debt. Total 2017 debt service payments account for some 20.8% of total Frontier 2017 operating revenues.[178]

174. *Id.*, Supplemental Testimony of Lee L. Selwyn on behalf of the Office of Ratepayer Advocates, at paras. 9-10, pp. 11-12, footnote references omitted.

175. Frontier 10-K reports, 2007-2017.

176. Frontier 2017 Form 10-K, at 27.

177. *Id.*, at 27. In 2018, debt service interest plus debt amortization is projected at $2.14-billion.

178. Frontier 2017 Form 10-K, at 48.

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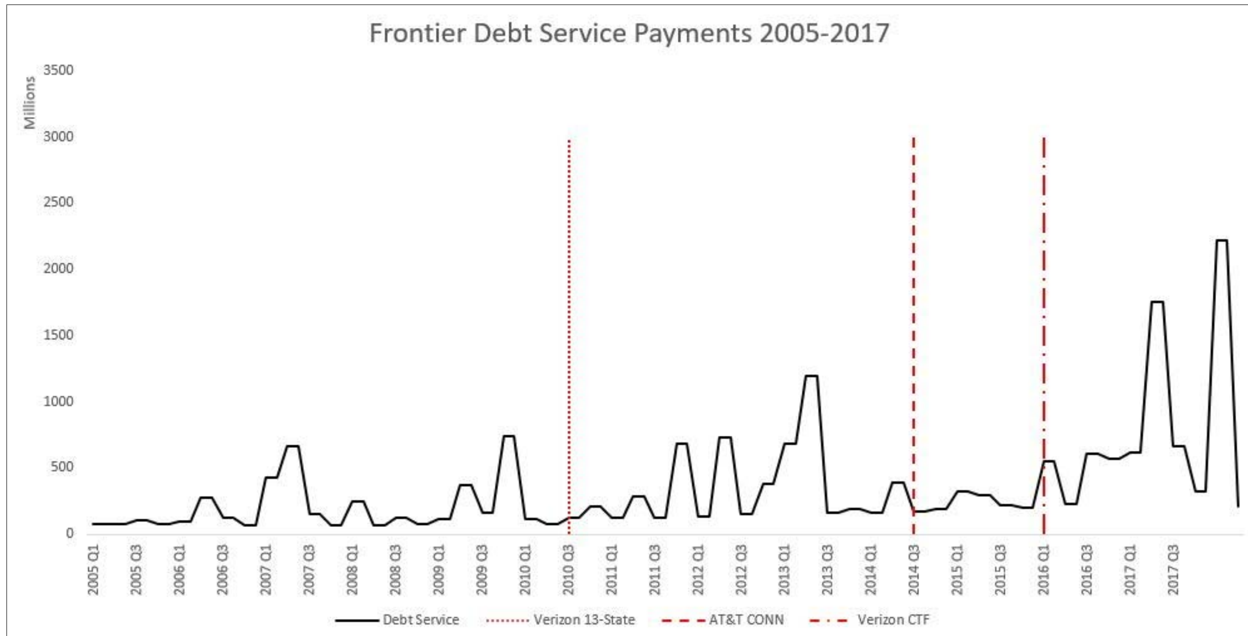

Figure 8.5. Each of Frontier's major ILEC purchases involved substantial debt financing, almost quadrupling between 2010 and its peak in 2017.

Frontier's 2017 Annual Report to Shareholders gives end-of-year long-term debt at $16.97-billion, with total long-term and current liabilities at $19.48-billion. Total assets are shown as $24.88-billion, and total shareholder equity is given as $2.27-billion.[179] Using this data, the company's debt/equity ratio as of year-end 2017 was 8.58, with its total debt ratio (calculated as the ratio of total liabilities to total assets) was 78.3%. But while these figures reflect amounts being carried on Frontier's books, they understate the reality as currently being perceived by investors. Frontier's closing stock price on December 31, 2017 was $6.76. Shares outstanding as of that date were 78.44-million, indicating a market capitalization as of the end of 2017 of $530.26-million, or only 23.4% of the nominal book value shareholder's equity.

Included in the $24.88-billion of assets being carried on Frontier's books is $7.024-billion of "Goodwill." At least one source of the "Goodwill" that appears on a company's balance sheet results from an acquisition of assets in excess of the book value of those assets as recorded on the books of the seller. In this case, Frontier paid Verizon $10.54-billion for the California/ Texas/Florida purchase, a sum that greatly exceeded the book value of these assets as had been carried on Verizon's books. When the acquisition was closed, Frontier recorded essentially the same *net book value* of the purchased assets as these had been carried on Verizon's books under

179. Frontier Communications Corporation *2017 Annual Report and Proxy Statement,* dated February 28, 2017, at p. F-5.

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the asset category "Property, plant and equipment, net," with the additional amount that it had paid Verizon over the net book value as "Goodwill."

Notably, Verizon had no amount for "Goodwill" shown on its regulatory accounting balance sheet, as reflected on its ARMIS Form 43-02 submissions. However, Frontier has included a portion of the "Goodwill" resulting from the premium over book value that it had paid for the Verizon assets on its 2016 and 2017 Forms 43-02. In 2016, Frontier recorded as a gross addition a Goodwill amount of $511.12-million. For 2017, Goodwill gross additions are shown as $93.97-million, for a total end-of-year 2017 value of $611.09-million. To put these amounts in context, consider that, according to Frontier California's Form 43-02 for 2017, the Company's total *net* assets as of the end of 2017 were $3.42-billion. Thus, the $611.09-million of Goodwill resulting from the excessive purchase price of the Verizon assets represents 17.9% of the Company's total net assets.

Frontier's precarious and highly leveraged financial structure raises serious concern as to its ongoing access to sufficient capital to maintain and upgrade its California network.

Under traditional rate-of-return type regulation, such "Goodwill" is not included in the utility's rate base and is not recoverable via return or amortization. Because of this, sales of utilities subject to rate of return regulation were rarely if ever consummated at a price materially in excess of book value. The fact that Frontier's shareholders have discounted the value of the company's stock so far below its nominal book value (including "Goodwill") is an indication that investors have come to understand that Frontier had overpaid Verizon for these assets. In fact, if the $7-billion of "Goodwill" is subtracted from the $24.88-billion of assets, the result would be a *negative* equity for the parent company.

Frontier's shareholders have come to understand that Frontier had grossly overpaid Verizon for these assets, and have discounted the value of Frontier's stock far below its nominal book value (including "Goodwill").

There is no realistic scenario under which a state public utilities commission would allow a rate-of-return-regulated utility to carry this level of debt or adopt the type of financial structure that Frontier has created for itself here. This is not by any means to suggest that the CPUC should reinstate rate-of-return regulation for Frontier. However, it is entirely reasonable for the CPUC to evaluate Frontier's financial performance using RORR principles as a benchmark. And the requirement that URF ILECs (Frontier and AT&T) continue to submit annual ARMIS-

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type financial reports to the Commission enables precisely this type of benchmark evaluation. Since acquiring the Verizon ILEC operations in April 2016, Frontier California has invested some $384-million in new plant, including $94.6-million in new central office equipment (COE) and $270.7-million in new outside plant (OSP). Most of this occurred in 2017, and represented a significant increase over the level of gross additions that Verizon had made in recent years. Frontier's 2017 Annual Report indicates that the company had made some $2.4-billion in capital expenditures (not including the three-state acquisition) during 2016 and 2017.[180] The California operation received a substantial portion of those outlays. There is, however, serious concern as to Frontier's continued ability to sustain this level of new investment in light of its highly leveraged financial condition, eroding revenues, and its disappearing earnings.

In addition to its overall leverage increases resulting from the succession of new debt, Frontier's cost of debt has also been pushed skyward due to a series of downgrades by Moody's to the company's credit rating over the past two years. Moody's has downgraded Frontier's credit rating three separate times, from Ba3 to B1 in November 2016, from B1 to B2 in May 2018 and, most recently, from B2 to B3 in November 2017.[181] Moody's justifies these downgrades on the basis of high default risk and risk of refinancing from bonds that come due in 2020 and shortly thereafter. While Moody's report suggests that Frontier's credit rating could be improved if Frontier were successful in upgrading the physical condition of the former Verizon network infrastructures in Texas, California, and Florida, it also suggests that the time for any tangible results here likely extends beyond the time frame of Frontier's existing debt constraints.

Frontier's spate of major acquisitions, while expanding its overall revenue base, has had precisely the opposite effect upon its overall profitability. As shown in Figure 8.6, the company's profits, which had peaked in 2006 at over $350-million, had turned into losses of $1.8-million in 2017.[182] These decreases in profit are driven largely by two main factors – the steady and continuing erosion of its core wireline customer base, and a cost structure that has a large, volume- and traffic-insensitive component. At this point, Frontier has no realistic ability to raise equity capital, and whatever new debt capital that might be available to the company would almost certainly involve massive costs.

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180. *Id.*, at page F-8.

181. Moody's Investors Service, November 2nd, 2017: "Moody's downgrades Frontier to B3, outlook remains negative."

182. Frontier 2017 Form 10-K, at 27.

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Frontier's net income declined following each successive acquisition, to the point where it has now been negative for seven consecutive quarters.

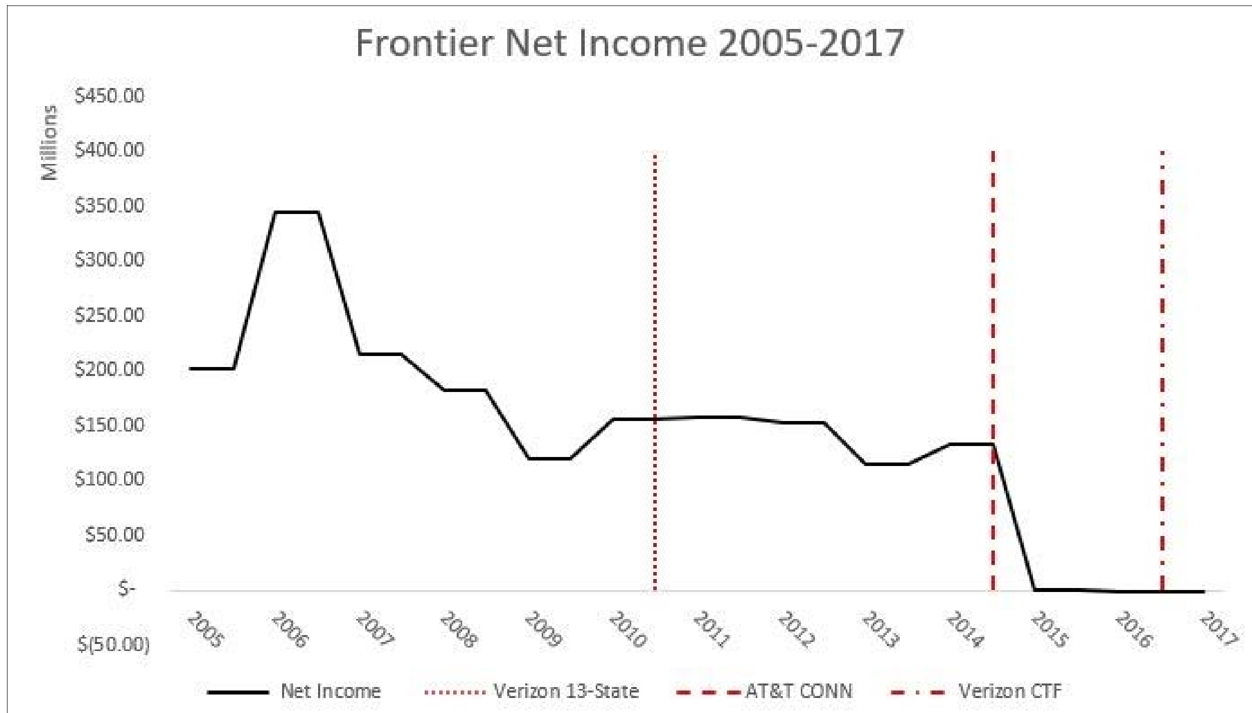

Figure 8.6. While its various acquisitions produced large increases in the number of customers and total operating revenues, their impact upon Frontier's net earnings was a succession of steep declines. [Source: Frontier 10-K Reports 2005-2017].

The extraordinary erosion in Frontier's earnings was highlighted on a performance graph that was provided in the Company's 2017 Annual Report, which compares the cumulative total return of Frontier common stock to the S&P 500 Stock Index and to the S&P Telecommunication Services Index for the five-year period commencing December 31, 2012. This graph is reproduced in Figure 8.7 below:

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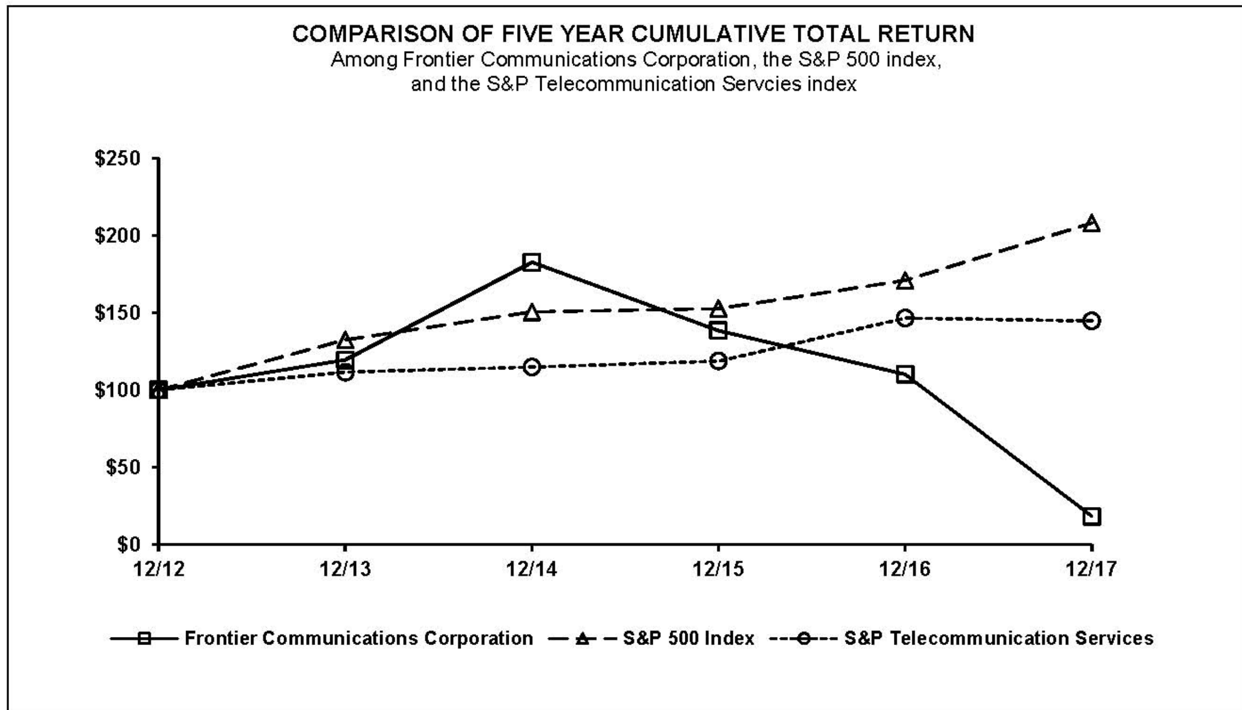

Figure 8.7. Frontier's cumulative five-year total return in comparison to the five-year total return for all S&P 500 Index stocks and for all S&P Telecommunications Services Index stocks. [Source: Frontier 2017 Annual Report, at 25.]

Prior to the 2016 transaction, Frontier had only a minimal presence (approximately 1.07%) in California, serving census blocks containing only 135,551 of the total 12.65-million households statewide. Following this transaction, however, Frontier became the second largest ILEC in the state, serving some 20.78% of the total California wireline market.[183] When the CPUC issued its *URF* decision in 2006, it applied this new regulatory paradigm to the two largest ILECs – AT&T and Verizon. Having acquired Verizon's operations, Frontier is now subject to the *URF* as well, and receives similar regulatory – and, more importantly, *deregulatory* – treatment as AT&T.

183. Pre-transaction Verizon California serves census blocks containing 2,628,438 households, which is 20.78% of the total 12.65-million California households as estimated by the US Census Bureau for 2013. (accessed 7/22/15) http://www.dof.ca.gov/research/demographic/state_census_data_center/american_community_survey/

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Frontier retains its critical role in the California telecommunications infrastructure

Frontier California remains the underlying provider of most retail local network services offered within its service area. In addition to legacy POTS-type circuit-switched services, the scope of the direct retail offerings by Frontier California also includes bundles of voice, high-speed Internet access and video marketed under the *FiOS* brand. *FiOS* was introduced by Verizon in 2005 for its fiber-to-the-premises ("FTTP") service. By the April 1, 2016 date that its purchase of the California, Texas and Florida ILEC operations from Verizon closed, Verizon had built out FTTP to approximately 1.5-million homes within its California operating areas. These FTTP build-outs were included in the assets being transferred to Frontier, and Frontier retained the right to utilize the Verizon *FiOS* brand. Frontier also provides legacy circuit-switched local access and message services, private lines, and special access.

As of the end of 2017, Frontier California facilities passed some 2.63-million homes within the former Verizon California operating footprint. Approximately 1.52-million of these were passed by fiber-to-the-premises ("FTTP") facilities.[184] Since acquiring the California ILEC in 2016, Frontier has built out FTTP and is offering *FiOS* in another 59 wire centers, serving additional areas with a population of roughly 2.32-million.[185] As discussed in Chapter 4, although the *motivation* behind the deployment of FTTP and other network upgrades is the capability to offer high-data rate broadband and video services to compete with cable MSO offerings, once installed these same facilities can and will be used to provide legacy POTS and other circuit-switched services.

184. Data derived from CPUC Broadband Availability Database. See Reply Testimony of Lee L. Selwyn (redacted) on behalf of ORA, A.15-03-005, July 28, 2015, at 53.

185. Frontier response to DR-05F, Attachment 4.

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A Note about the Financial Analysis of Frontier California

The time frame of this study is January 2010 through and including December 2017. For 75 out of the 96 months in this study period, the ILEC entity that is now Frontier California was a wholly-owned subsidiary of Verizon Communications, Inc. When the ILEC changed hands, its new owners adopted reporting protocols that differed significantly from those in effect under Verizon's stewardship. Any direct comparability of conditions that pre-date and post-date the closing is thus problematic. Compounding this difficulty is the fact that two different Verizon/Frontier ILECs are involved – the former GTE affiliate and the former Continental ILEC affiliate that was acquired by GTE prior to its merger with Bell Atlantic to form Verizon. Although owned by GTE/Verizon for some 26 years, the two ILECs remained separate for regulatory reporting purposes. As a "Large ILEC," the former GTE-California entity continued to prepare and file ARMIS type annual financial reports with the CPUC that included, among other things, detailed account-level balance sheets and income statements, as well as details of affiliate transactions. However, the former Continental ILEC, a "Small ILEC" for regulatory purposes, had been submitting far less detailed reports. Following the transfer, Frontier had been submitting the more abbreviated financial reports for both. However, in response to a data request, the more detailed reports were prepared and provided, but for both companies combined. Except for those situations where direct comparability applies, ETI has found it necessary to prepare and include in this report separate analyses for each of the Verizon and Frontier ownership periods and for the former GTE and former Continental ILEC entities.

Verizon California revenues had been steadily diminishing, as had its share of the overall parent company Verizon Communications, Inc. capital budget that was being allocated to the California ILEC.

Verizon California's reporting to the CPUC is bifurcated into two (2) "study areas," one of which corresponds to the former GTE California operating company (which Verizon refers to as "GTCA"); the other corresponds to the former Continental Telephone Company of California, which GTE had acquired in 1990 (i.e., long before its merger with Bell Atlantic), and which Verizon refers to as "COCA." Over the 2010-2015 period, Verizon California's parent Verizon Communications Inc. had experienced significant growth in its overall gross revenues, rising 23.4%, from $106.6-billion in 2010 to $131.6-billion in 2015. The primary source of that growth came from wireless services, which had experienced revenue growth of 44.6%, rising from $63.4-billion in 2010 to $91.7-billion in 2015. Put differently, wireless revenues increased

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by $28.3-billion, whereas all other Verizon business segments combined experienced a net decrease *of $2.6-billion* over that same period. As of the date of the closing of its sale of Verizon California, Texas and Florida to Frontier (April 1, 2016), Verizon's market capitalization was approximately $220-billion.[186]

> Verizon corporate-level senior management's interest in and attention to its legacy wireline ILEC operations had been largely supplanted by its wireless operations and various acquisitions, culminating in the sale of these operating units to Frontier and others.

Verizon California revenues, on the other hand, have been moving in the opposite direction. As shown on Table 8.4 below, in 2011, Verizon California gross revenues were $3.13-billion, dropping to $2.77-billion in 2014 but then recovering to $3.15-billion in 2015, the last full year prior to the sale to Frontier. But even though the California ILEC's revenues remained relatively stable over the period, its share of parent company revenues has fallen from 2.82% in 2011 to 2.39% in 2015. These results are also summarized in Table 8.4 below:

Table 8.4

**VERIZON CALIFORNIA AND VERIZON COMMUNICATIONS INC.
TOTAL OPERATING REVENUES
($000)**

	2010	2011	2012	2013	2014	2015
VZ-CA (GTE)		$2,611,749	$2,219,317	$2,157,811	$2,669,928	$2,644,724
VZ-CA (Continental)		516,957	538,246	571,044	615,106	476,753
VZ-CA Total		3,128,706	2,757,563	2,728,855	3,285,034	3,121,477
VZ Comm, Inc.	106,565,000	110,875,000	115,846,000	120,550,000	127,079,000	131,620,000
VZ CA %		2.82%	2.38%	2.26%	2.59%	2.37%

Source: Verizon California CPUC Annual Summary Reports, 2011-2015, Table I-Cost and Revenue (Verizon California 2010 CPUC reports were not available); Verizon Communications, Inc. Annual Reports 2010-2015.
NOTE: Verizon California filed separate CPUC Reports for the former GTE-California (U-1002) and the former Continental Telephone Company of California (U-1003-C).

186. https://www.marketcaphistory.com/vz/

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As we discussed in Chapter 4, like AT&T California, Verizon California has experienced a precipitous drop in total legacy circuit-switched access lines over the 2010-2015 period. Nationally, Verizon has actually sustained a 23.8% drop in voice switched access lines from 2011 through 2015, whereas in California the company's voice access line demand dropped by 41.6%, as shown in Table 8.5 below:

Table 8.5

VERIZON CALIFORNIA AND VERIZON COMMUNICATIONS iNC.
LEGACY SWITCHED ACCESS LINES IN SERVICE

	2010	2011	2012	2013	2014	2015
VZ-CA (GTE)		2,195,252	1,844,558	1,606,811	1,448,684	1,274,404
VZ-CA (Continental)		238,236	211,640	197,425	167,262	147,244
VZ-CA Total		2,433,488	2,056,198	1,804,236	1,615,946	1,421,648
VZ Comm, Inc.	26,001,000	24,137,000	22,503,000	21,085,000	19,795,000	18,387,000
VZ CA %		10.08%	9.14%	8.56%	8.16%	7.73%

Source: Verizon California CPUC Annual Summary Reports, 2011-2015, Table II-Demand Analysis (Verizon California 2010 CPUC reports were not available); Verizon Communications, Inc. Annual Reports 2010-2015. NOTE: Verizon California filed separate CPUC Reports for the former GTE-California (U-1002) and the former Continental Telephone Company of California (U-1003-C).

Thus, where Verizon nationally experienced a net legacy switched access line decrease of 23.8% over the 2011-2015 period, for California, Verizon's switched access lines decreased by a significantly greater amount, about 41.6%. The downward trend in the number of legacy circuit-switched access lines persisted into the post-transaction era. By 2017, average circuit-switched access lines in service had fallen by 51.5% relative to the 2011 level. Table 8.6 below extends the average number of switched access lines into the 2016-17 Frontier period:

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Table 8.6

VERIZON/FRONTIER CALIFORNIA AVERAGE LEGACY SWITCHED ACCESS LINES IN SERVICE 2010-2015

	2010	2011	2012	2013	2014	2015	2016	2017
	VERIZON							FRONTIER
Verizon/Frontier CA	2,641,467	2,322,926	1,991,862	1,706,402	1,507,460	1,482,032	1,151,074	928,531
% of 2010		87.9%	75.4%	64.6%	57.1%	56.1%	43.6%	35.2%

Source: CA POTS lines in service derived from GO 133-C/D § 3.3 and 3.4 Trouble Reports per 100 Lines (TRPH) quarterly filings, 2010-2015. Switched access lines are average over each year.

Notably, however, despite experiencing a 48.48% drop in legacy switched access lines over the 2011-2017 period, Verizon California gross revenues remained relatively constant through 2015, but then went into a steep decline following Frontier's takeover of the company, as summarized on Table 8.7 below:

Table 8.7

VERIZON/FRONTIER OPERATING REVENUES DECREASED, BUT BY FAR LESS THAN THE DECREASE IN LEGACY SWITCHED ACCESS LINES, 2010-2017 ($000)

	2010	2011	2012	2013	2014	2015	2016	2017
	VERIZON						FRONTIER	
Revenues		$3,128,706	$2,757,563	$2,728,855	$3,285,034	$3,121,477	$2,252,145	$2,054,289
% of 2011			88.1%	87.2%	105.0%	99.8%	72.0%	65.7%
Switched access lines	2,641,467	2,322,926	1,991,862	1,706,402	1,507,460	1,482,032	1,151,074	928,531
% of 2011		85.7%	73.5%	64.6%	64.9%	63.8%	49.0%	40.0%

NOTE DATA FOR 2010 IS NOT AVAILABLE, SO ANALYSIS IS BASED ON 2011-2015. Source: Verizon/Frontier CA ARMIS Form 43-01 as filed with CPUC; POTS lines in service derived from GO 133-C/D § 3.3 and 3.4 Trouble Reports per 100 Lines (TRPH) quarterly filings, 2010-2017. Switched access lines are average over each year.

Of course, a portion of the Verizon/Frontier California operating revenues come from services other than legacy POTS lines. It is thus instructive to compare the decrease in switched access lines more directly with the principal revenue sources associated with these services. Fortunately, more detailed revenue data is provided in the annual financial reports, ARMIS Forms 43-

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01, 43-02 and 43-03, that were filed by Verizon California with the CPUC. However, this breakdown is only available for the period of Verizon ownership (2011-2015) and for the former GTE California (U-1002) entity, as summarized in Table 8.8 below.

As these data demonstrate, when confined to only those revenue sources directly attributable to legacy switched access line services – specifically, USOA Account 5001 (Basic Area Revenue), USOA Account 5081 (End User Common Line revenue), and USOA Account 5082 (Switched Access revenue) – Verizon California legacy access line-related revenues decreased by about 38.8%, only slightly less than the 42% drop in switched access line demand, over the 2011-2015 period. Switched access rates, which remain subject to tariff at both the state and federal levels, had remained unchanged over the 2010-2017 period.

Table 8.8

VERIZON CALIFORNIA (U-1002) LEGACY SWITCHED ACCESS LINE REVENUES HAVE DECREASED ROUGHLY IN PROPORTION TO THE DECREASE IN LEGACY SWITCHED ACCESS LINES, 2011-2015 ($000)

	2010	2011	2012	2013	2014	2015	2016	2017
	VERIZON						FRONTIER	
USOA Acct 5001 Basic Area Rev		$670,218	$566,696	$591,229	$429,960	$389,036	$282,413	$219,314
USOA Acct 5081 EUCL Revenue		$220,551	$198,073	$191,186	$186,869	$171,415	$123,579	$97,175
USOA Acct 5082 Switched Access		$174,462	$44,270	$42,549	$114,878	$91,143	$88,246	$79,357
Total switched access line rev		$1,065,231	$809,039	$824,964	$731,707	$651,594	$494,238	$395,846
Switched access lines (000)		2,195,252	1,844,558	1,606,811	1,448,684	1,274,404	1,178,593	955,624
$ per Switched access line		$485.24	$438.61	$513.42	$505.08	$511.29	$419.35	$414.23

NOTE DATA FOR 2010 IS NOT AVAILABLE. ANALYSIS IS BASED ON 2011-2015. Source: Verizon CA ARMIS Form 43-01 as filed with CPUC; POTS lines in service derived from GO 133-C/D § 3.3 and 3.4 Trouble Reports per 100 Lines (TRPH) quarterly filings, 2011-2015. Switched access lines are average over each year.

However, local switched POTS access line rates other than California LifeLine[187] have been detariffed and have been subject to modest rate increases – substantially less than those implemented by AT&T California – over the 2010-2017 period, as shown in Table 8.9 below:

187. PU Code § 871.5(a) caps LifeLine rates at one-half of the 1FR rate for flat-rate basic residential service.

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Table 8.9

VERIZON/FRONTIER CALIFORNIA
BASIC RESIDENTIAL (POTS) ACCESS LINE SERVICE
RATE INCREASE HISTORY, 2006-2018

		Flat-rate Residence (1FR)			Measured Rate Residence (1MR)		
	Eff date	Monthly Rate	% incr since onset of URF	% incr relative to 1/1/10	Monthly Rate	% incr since onset of URF	% incr relative to 1/1/10
2006	9/1/2006	$16.85	–		$10.00	–	
2008	1/1/2008	$17.25	2.37%		$10.24	2.40%	
2009	1/1/2009	$19.50	15.73%		$11.80	18.00%	
2010	1/1/2010	$19.50	15.73%	–	$11.80	18.00%	–
2011	1/1/2011	$20.50	21.66%	5.13%	$12.39	23.90%	5.00%
2012	3/1/2012	$20.50	21.66%	5.13%	$12.39	23.90%	5.00%
2013	1/1/2013	$20.50	21.66%	5.13%	$12.39	23.90%	5.00%
2014	1/1/2014	$22.00	30.56%	12.82%	$13.40	34.00%	13.56%
2015	1/1/2015	$22.00	30.56%	12.82%	$13.40	34.00%	13.56%
2016	1/1/2016	$22.00	30.56%	12.82%	$13.40	34.00%	13.56%
2017	1/1/2017	$22.00	30.56%	12.82%	$13.40	34.00%	13.56%
2018	1/1/2018	$22.00	30.56%	12.82%	$13.40	34.00%	13.56%

Source: CPUC Communications Division Staff.

It is instructive to compare the history of Verizon California rate increases to those imposed by AT&T California as summarized on Table 4A.10 (and referenced in Chapter 7). Historically, Verizon (and its predecessor GTE) basic local residential service rates were always higher than those of AT&T (Pacific Bell). However, that relationship changed in 2012, when AT&T raised its flat-rate residential service rate to $21.00. Since the onset of URF, AT&T California has increased the price for its flat-rate residential POTS service by 152.57% vs. Verizon's 30.56% increase over the comparable time frame. Looking only at the 2010-2017 period under examination in this study, AT&T has raised its flat-rate residence rate by 64.13% vs. 12.82% for Verizon/Frontier.

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Unlike AT&T, which had raised its legacy flat-rate residential POTS rates by 152% since the onset of URF, Verizon's rates for this service had risen by only 31% as of the date of the sale to Frontier, and Frontier has not effected any rate increase since the acquisition.

Verizon California had been consistently disinvesting in its California local network infrastructure.

Because Verizon California was a wholly-owned subsidiary of Verizon Communications Inc., it is the parent company Verizon that had been determining the amount of capital investment funds that it would make available for local infrastructure investment by its individual operating companies. Verizon California would dividend out some portion of its net operating income to its parent. Table 8.10 below summarizes Verizon California (U-1002) net income and dividend payments to its sole shareholder over the 2010-2017 period:

Table 8.10

VERIZON/FRONTIER CALIFORNIA (U-1002)
NET INCOME AND DIVIDEND PAYMENTS TO PARENT COMPANY, 2010-2017
($000)

	2010	2011	2012	2013	2014	2015	2016	2017
	VERIZON						FRONTIER	
VZ/FTR CA Net Income		293,766	242,212	500,163	171,559	427,759	(239,860)	244,434
Dividend paid to PARENT		0	0	500,000	0	0	0	0
Effect on Retained Earnings		293,766	242,212	163	171,559	427,759	(239,860)	244,434

NOTE DATA FOR 2010 IS NOT AVAILABLE. ANALYSIS IS BASED ON 2011-2017. Source: Verizon CA ARMIS Forms 43-03 as filed annually with CPUC.

Cumulatively, over the full 2011-2017 period, Verizon/Frontier California had total net after-tax income of 1.64-billion, and paid out only $500-million of that to its parent company, thereby retaining $1.14-billion of earnings and, in so doing, adding that to the California company's capital base. Verizon's, and later Frontier's, dividend policy was thus precisely the opposite of AT&T's – where AT&T California had paid a dividend to its parent that was some $4.2-billion

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more than its net income over the full 2010-2017 period, Verizon had allowed its California ILEC to *retain* $1.14-billion of its earnings over the five years immediately preceding the sale of the company to Frontier. Like AT&T, Verizon was *disinvesting* in its California ILEC operations over the 2011-2015 period, as is demonstrated in Table 8.11 below. Note, this information is not available for the former Continental Telephone Company component of Verizon California's operations.

Table 8.11

VERIZON/FRONTIER CALIFORNIA (U-1002)
PATTERN OF INVESTMENT, 2010-2017
($000)

	2010	2011	2012	2013	2014	2015	2016	2017	TOTAL
		VERIZON					FRONTIER		
BOY Gross Telecom Plant in Service (TPIS)		13,038,542	12,883,509	13,027,270	13,162,075	13,271,646	13,496,895	13,392,504	
Gross Plant Additions		350,459	348,443	182,887	175,465	295,395	80,373	428,559	1,861,581
Retirements		(640,085)	(198,425)	(117,927)	(298,138)	(58,819)	190	(135,489)	(1,449,073)
Transfers/ Adjustments		134,595	(6,258)	69,846	232,244	(11,327)	(164,574)	3,934	258,460
EOY Gross Telecom Plant in Service	13,038,542	12,883,511	13,027,269	13,162,076	13,271,646	13,496,895	13,392,504	13,689,508	
Annual TPIS depreciation accruals (acct 6561)		570,624	489,250	486,677	489,645	464,288	316,101	428,639	3,245,224
Cumulative depreciation reserve		9,931,044	9,271,944	10,662,757	10,976,452	11,384,050	11,229,881	11,229,881	
Net EOY TPIS		2,952,467	3,755,325	2,499,319	2,295,194	2,112,845	2,162,623	2,459,627	
Net/Gross TPIS		22.92%	28.83%	18.99%	17.29%	15.65%	16.15%	17.07%	
Change in Net Telecommunications Plant in Service 2011-2017									(492,840)

NOTE DATA FOR 2010 IS NOT AVAILABLE. ANALYSIS IS BASED ON 2011-2017. Source: Verizon CA 2011-2015 ARMIS Form 43-02 as filed with CPUC; Frontier CA responses to DR-03F as revised 11/7/2018. Verizon filed Forms 43-02 only for the former GTE California study area. Accordingly, no detailed rate base data is available for the former Continental Telephone Company study area. This table reflects only the Verizon/Frontier U-1002 investment data for the 2010-2015 period. In response to a Communications Division data request, Frontier prepared Forms 43-02 for 2016 and 2017 that included both the former GTE and former Continental study areas. The figures shown here for 2016 and 2017 thus include both the GTE and Contel results. The accounting treatment that Frontier had adopted reflects the pre-acquisition condition of Frontier's books as of January 1, 2016. The TPIS from Verizon California that was transferred to Frontier on April 1, 2016 had been included in the 2016 "Transfer/Adjustment" on Frontier's 2016 Form 43-02. As submitted, Frontier had reported the beginning-of-year 2016 amount for TPIS as 0 and showed a positive adjustment of $13,332,321. For consistency, the BOY TPIS for 2016 is shown on this Table is the EOY 2015 amount, and the 2016 "Adjustment" has been modified to reflect only the net adjustmen to TPISt, a negative $164,574

Verizon/Frontier California's Gross Telecommunications Plant in Service ("TPIS") remained relatively stable in the $13-billion range over the 2010-2017 period. Total Gross Plant Additions – $1.86-billion – were exceeded by the total depreciation accruals taken over the corresponding period – 3.24-billion – which, together with $258-million in net Transfers and Adjustments,

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resulted in a net *disinvestment* (change in net TPIS) of just under $500-million. With some 1.48-billion in in retirements, end-of-period net TPIS had decreased to only $2.46-billion.

Verizon had been disinvesting in its California ILEC, with plant retirements and depreciation accruals generally exceeding its Gross Plant Additions on an annual basis, and the company's net Telecommunications Plant in Service (TPIS) had eroded to only about $2.1-billion prior to its sale to Frontier in 2016.

To put this in perspective, and as also discussed in Chapter 7 for AT&T, consider the following. In D.16-12-035, the CPUC adopted a set of costs of capital for small ILECs still subject to rate-of-return regulation ranging between 8.44% and 9.22%.[188] Verizon California's Form 43-03 annual financial report for 2015 as submitted to the CPUC put the company's Net Plant at $2.11-billion. Small ILECs were typically allowed somewhat higher rates-of-return than large ILECs such as Verizon or Frontier California, since their smaller size and limited geographic scope tended to elevate their risk above that for the larger ILECs. Thus, if we were to conservatively apply a 9.0% authorized rate of return to Verizon California's Net Plant of $2.11-billion, the company would be allowed net after-tax earnings of approximately $189-million if the company had been subject to traditional rate-of-return regulation.

By contrast, the same Form 43-03 puts Verizon California's 2015 net after-tax income at $427-million, or $238-million more than would have been allowed under RORR. Put differently, Verizon California's 2015 return on net investment can be roughly calculated as $427-million / $2.11-billion,[189] which works out to a rate of return in the range of 20.25%. This is not a precise calculation as it would be undertaken in a formal General Rate Case under RORR, where various adjustments would typically be applied that could modify this calculation either upward or downward.

If Verizon California had been subject to Rate of Return Regulation, its RORR-equivalent return on investment for 2015 exceeded 20% due mainly to the erosion in the net book value of its asset base.

But even Verizon California's nominally reported revenues, expenses and net income cannot by themselves provide a complete or accurate picture of the ILEC entity's financial performance. This is because of the extensive nature and amount of inter-affiliate transactions that took place on an ongoing basis between the Verizon California ILEC entity and numerous other affiliates that are themselves, directly or indirectly, wholly owned by the parent company.

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188. *Application of Calaveras Telephone Company et al ("Independent Small ILECs") for a Determination of Applicants. Cost of Capital for Ratemaking Purposes*, A.15-09-005, D.16-12-035, at Ordering Paragraph 1.

189. AT&T California 2017 Form 43-02, Table B-1, p. 3.

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Similar affiliate transactions also arise between Frontier California and its affiliates, although Frontier has apparently not been providing the same level of detail to the Commission as Verizon had been doing.[190] These transactions involve both *purchases* made by the ILEC from other Verizon affiliates as well as *sales* made by the ILEC to other Verizon affiliates. Table 8.12 below provides a summary of these transactions and their relationship to Verizon California's overall revenues, operating expenses, and net income.

Table 8.12

VERIZON CALIFORNIA (U-1002)
AFFILIATE TRANSACTIONS WITH OTHER VERIZON UNITS, 2011-2015
($000)

	2011	2012	2013	2014	2015
Verizon California operating revenue	2,611,74	2,219,317	2,728,855	2,669,928	2,644,724
Sales to other VZ affiliate	597,425	598,088	949,735	61,670	45,315
Pct of revenues from sales to other VZ affiliates	22.87%	26.95%	34.80%	2.31%	1.71%
VZ CA pre-tax OpEx excl depr/amort (see footnote 191)	1,585,295	1,677,857	1,312,176	1,870,528	1,394,090
Services Purchased from VZ affiliates	949,735	1,065,542	1,058,412	1,249,482	1,066,240
Pct of total OpEx paid to VZ affiliates	44.05%	49.17%	59.53%	52.94%	57.37%
VZ-CA Net Income	293,766	242,212	500,163	171,559	427,759

NOTE DATA FOR 2010 IS NOT AVAILABLE. ANALYSIS IS BASED ON 2011-2015. Source: Verizon CA ARMIS Form 43-02, Table I-2, Form 43-03, as filed annually with CPUC.

With the exception of tariffed switched and special access services that were being purchased from Verizon California by various other Verizon affiliates, the specific *transfer prices* at which these transactions are recorded can hardly be viewed as being set on the basis of arm's length negotiations. Since both the seller and buyer in each instance are wholly-owned by the same parent company, the nominal transfer price has little or no effect upon the parent company's

190. Form 43-02, Table I-2, enumerates the dollar amounts of purchases by the ILEC from its affiliates and of sales by the ILEC to its affiliates. Frontier does not appear to have been submitting this information to the CPUC following its 2016 acquisition of Verizon California.

191. Amounts shown are calculated as Total Operating Expenses (Form 43-03 Line 720) – Depreciation/ Amortization expenses (Form 43-03 Line 6560), which represents current cash operating expenses. The source data for this calculation is as follows:

	2011	2012	2013	2014	2015
Line 720 Total Operating Exp	2,155,919	2,167,107	1,777,990	2,360,173	1,858,378
Line 6560 Depre/Amort	(570,624)	(489,250)	(465,814)	(489,645)	(464,288

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bottom line. However, if it is the parent company's goal to extract cash from the ILEC entity, setting an inflated transfer price can accomplish this as effectively as making a dividend payment to the parent, but with far less exposure as to the precise purpose of the policy. As Table 8.12 demonstrates, from 2012 onward, in the range of *50% or more of Verizon California total operating expenses net of depreciation and amortization were paid over to other Verizon affiliates for services rendered*.

Because so much of Verizon California's revenues and operating expenses came from inter-affiliate transactions, its nominally reported revenues, expenses and net income cannot by themselves provide a complete or accurate picture of the ILEC entity's financial performance.

As discussed more fully in Chapter 7, this type of manipulation arising from affiliate transactions has occurred in the case of Bell System companies at numerous times in the past. And of particular relevance here, Frontier had expressly stated – to investors and in testimony before this Commission in support of its assessment as to the financial merit of the 2016 Verizon ILEC acquisition – that it had concluded that the payments for centralized services allocated to Verizon California by the parent company for centralized and other affiliate services were excessive and that these could be accomplished at considerably lower cost by Frontier.[192]

Frontier's assessment as to the economic merit of the 2016 Verizon ILEC acquisition was heavily influenced by its belief that Verizon affiliate charges for centralized services were much higher than the cost that Frontier would incur to provide comparable services to these ILECs.

Where Verizon California's earnings would have been considered excessive by traditional RORR standards (even without adjusting for distortions resulting from less-than-arm's length

192. *I/M/O Joint Application of Frontier Communications Corporation, Frontier Communications of America, Inc. (U5429C), Verizon California, Inc. (U1002C), Verizon Long Distance LLC (U5732C), and Newco West Holdings LLC for Approval of Transfer of Control Over Verizon California, Inc. and Related Approval of Transfer of Assets and Certifications*, A.15-03-005, Direct Testimony of John M. Jureller, Executive Vice President and Chief Financial Officer, Frontier Communications Corporation, May 11, 2015, at 30 ("The Company estimates $700 million in annualized corporate consolidated cost efficiencies for the pro forma combined company primarily through costs that do not transfer to Frontier at the closing of the transaction."), 25 ("While noting that [Standard & Poor's] eventual rating will depend on the specific funding for the Transaction, the agency explained that its current ratings affirmation reflects a view that 'the acquisition offers some business benefits and significant potential cost synergies' arising to a great extent from avoided expenses previously allocated by Verizon to the acquired assets."). Citations omitted.

transfer prices between the California ILEC and other Verizon affiliates), Frontier's post-acquisition earnings have been negatively impacted by conditions that would not even be considered under a traditional rate-of-return type of analysis. As discussed above, in its purchase of Verizon's three ILECs in April 2016, the price that Frontier paid to Verizon was well in excess of the amount that Verizon had been carrying on its books for these assets.

That excess over book value is carried as "Goodwill" on parent company Frontier's balance sheet. Frontier explains the basis for this treatment as follows: "Goodwill represents the excess of purchase price over the fair value of identifiable tangible and intangible net assets acquired."[193] Goodwill would not be includable as a rate base asset under RORR, yet its acquisition created a real cost to Frontier in terms of cost of capital (debt and equity) plus any periodical amortization of the premium amount that Frontier may deem it necessary to make. Indeed, it is even possible that the California ILEC could be earning a satisfactory rate of return under traditional RORR standards while sustaining losses on a financial basis, which necessarily includes any premium above book value that it had paid to Verizon.

The focus of Verizon/Frontier California's capital investments over the 2010-2017 period

Frontier has not provided any wire center level accounting data for the 2010-2015 Verizon ownership period. However, aggregate account-level gross plant additions were provided in Verizon's ARMIS Form 43-02 filings with the CPUC.[194] Table 8.13 below summarizes the types of capital expenditures that Verizon California had made during the 2011-2015 period preceding the sale of the ILEC to Frontier.

193. Frontier 2016 Annual Report and Proxy Statement, at p. F-11.

194. Verizon's ARMIS filings made with the CPUC for 2010 were not available.

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Table 8.13

VERIZON CALIFORNIA
GROSS PLANT ADDITIONS, 2010-2015

Account	Account name	VERIZON 2010-15
2003	Telecommunications plant under construction	
2111	Land	
2112	Motor vehicles.	756
2114	Tools and other work equipment.	5,373
2121	Buildings	34,510
2122	Furniture	13
2123	Office Equipment	
2124	General purpose computers	3,723
2211	Non-digital switching	
2212.1	Circuit switching	28,463
2212.2	Packet switching	6,375
2220	Operator systems	602
2231	Radio systems	4,612
2232.1	Circuit equipment - electronic and electronic/optical	612,556
2232.2	Circuit equipment - optical	2,294
2341	Large private branch exchanges	
2362	Other terminal equipment.	8,610
2411	Poles	55,338
2421	Aerial cable	106,593
2422	Underground cable	211,622
2423	Buried cable	214,426
2424	Submarine & deep sea cable	6
2426	Intra-building network	574
2431	Aerial wire	
2441	Conduit systems	25,549
2681	Capital Leases	209
2682	Leasehold improvements	6,957
2690	Amortizable Tangible Assets	7,166
2690.1	Network software	13,932
2690.2	General purpose computer software	3,559
2690	Intangibles	65,836
TOTAL GROSS TPIS ADDITIONS		**1,419,654**
Source: Verizon Forms 43-02, 2011-15; Frontier response to DR-03F.		

Nearly half of the total $1.4-billion expended by Verizon in new plant additions over this five-year period was in Account 2232.2 – Circuit equipment - Electronic and Electronic/Optical.

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This account includes circuit equipment that converts between electronic and optical signaling, and was likely a major component of the *FiOS* FTTP upgrades that had been accomplished prior to the transfer of the company to Frontier. About the same amount was spent in three outside plant categories – Account 2421, Aerial cable; Account 2422, Underground cable; and Account 2423, Buried cable. These were also likely directed toward the FTTP upgrades.

Frontier has provided annual data for 2016 and 2017 by account and by wire center in response to DR-03F and DR-04F. DR-03F, Request 1, sought "the dollar amount of Gross Plant Additions as recorded on each of [a specified list of] 47 CFR Part 32 Uniform System of Accounts ("USOA") Telecommunications Plant in Service ("TPIS") accounts separately for each central office building and its associated wire center serving area for the period June 30, 2010 through December 31, 2017, in six-month intervals." DR-04, Request 3, asked Frontier to provide "specific data on annual outside plant undertakings from 2010- 2017" as "a) Spreadsheet with financial data for Construction project investment by wire center (former Verizon territories); [and] b) Spreadsheet with financial data for Maintenance and Repair expenses by wire center (former Verizon territories)." These responses are not consistent. In Chapter 6 (Table 6.1), we provided these investment details based upon Frontier's responses to DR-04F. Table 8.14 below summarizes the data as provided in response to DR-03F.

Overall, Frontier California (both the former GTE California and Continental Telephone components) made gross plant additions totaling $384.1-million over the 21 months from April 2016 (when Frontier acquired the company) through December 2017. $94.6-million was spent on central office equipment (including both switches and circuit equipment), and $270.7-million was spend on outside plant.

Table 8.14

FRONTIER CALIFORNIA
PATTERN OF INVESTMENT
2016-2017

	2016			2017			TOTAL
	GTE-Cal	ConTel	Total	GTE-Cal	ConTel	Total	2016-17
Gross Plant Additions	59,762,538	741,261	60,503,799	285,188,955	38,397,407	323,586,362	384,090,161
COE	16,222,307	688,621	16,910,928	63,917,305	13,810,878	77,728,183	94,639,110
OSP	41,910,031	43,860	41,953,891	207,927,759	20,838,039	228,765,798	270,719,689

Source: Frontier Response to DR-03F. The COE and OSP categories combined are slightly less than the total gross additions, which also include several minor asset categories.

The overwhelming majority (72.3%) of Frontier's 2016-17 gross additions were for outside plant. Central office equipment, including switching and circuit equipment, accounted for 23.2%, with the remaining 4.3% spread across various miscellaneous categories – Buildings, Other Terminal Equipment, Motor Vehicles, and tools. As noted in Chapter 3 above, Frontier has expanded the availability of *FiOS* well beyond the 55 wire centers that were *FiOS*-capable

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FTTP as of the April 2016 acquisition date. While some portion of the nearly $385-million in new plant additions made by Frontier since the acquisition has undoubtedly been directed at correcting service problems, it is far more likely that the bulk of these investments has been aimed at expanding *FiOS* availability throughout the Frontier California footprint. Frontier has provided account level plant additions by wire center for 2016 and 2017, as well as Forms 43-02 for those same years. There are extensive inconsistencies between these two data sources that we are not able to reconcile.

Frontier's 2016-17 plant additions were spread across 221 of the company's 270 wire centers. However, roughly 75% of the total 2-year spend was directed toward only 30 individual wire centers, as summarized in Table 8.15 below:

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Table 8.15

**FRONTIER CALIFORNIA
30 WIRE CENTERS THAT ACCOUNTED
FOR 75% OF 2016-17 GROSS PLANT ADDITIONS**

Wire Center	2016-17 Gross Additions	Percent of Total Gross Adds
HEMET	29,687,330	8.61%
LA VERNE	24,450,163	7.09%
SAN BERNARDINO	22,792,801	6.61%
TORRANCE	20,732,143	6.01%
UPLAND	17,249,342	5.00%
CULVER CITY	14,836,715	4.30%
PALM SPRINGS	13,795,220	4.00%
ONTARIO	11,825,350	3.43%
LONG BEACH	9,594,370	2.78%
SANTA BARBARA	9,585,356	2.78%
PACOIMA	8,946,553	2.59%
LA PUENTE	8,722,210	2.53%
GLENDORA	7,191,469	2.08%
LANCASTER	6,774,490	1.96%
SANTA MONICA	6,737,847	1.95%
WHITTIER	4,929,137	1.43%
ANZA	4,435,854	1.29%
CAMARILLO	4,282,009	1.24%
LOS GATOS	4,089,234	1.19%
MALIBU	3,230,446	0.94%
CUCAMONGA	3,039,201	0.88%
POMONA	3,031,332	0.88%
CHINO	2,989,723	0.87%
HUNTINGTON BEACH	2,909,877	0.84%
ARTESIA	2,796,512	0.81%
COVINA	2,561,325	0.74%
SUN CITY	2,469,328	0.72%
THOUSAND OAKS	2,273,805	0.66%
OXNARD	2,231,090	0.65%
LA QUINTA	2,209,649	0.64%

Source: Frontier response to DR-03F

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Summary and conclusions

Unlike Verizon California's diminishing role as a component of its parent company, Frontier California represents a major component of its new parent, Frontier Communications Corporation. But with the parent company's financial condition approaching crisis (if not already there), Frontier California's financial condition and investment policies will be dictated by conditions that are largely beyond the CPUC's control. The California ILEC entity has no ability to raise equity capital on its own.

There is no indication that Frontier investment dollars are being directed toward those wire centers that have been underperforming with respect to service quality or in their ability to meet the Commission's GO 133-C/D service quality standards.

Verizon California did not sustain the same type of capital erosion as its AT&T counterpart, where dividend payments to the parent exceeded earnings and depreciation accruals consistently exceeded gross additions. On the other hand, AT&T California's parent company is financially strong, while Frontier's parent is at the opposite end of the financial spectrum. There appears to be wide variation across all of Frontier California's 270 wire centers as to the amount of new investment that has been directed at each of them, and ETI has not observed any specific pattern to explain this prioritization. There is no indication, for example, that investment dollars are being directed toward those wire centers that have been underperforming with respect to service quality or in their ability to meet the Commission's GO 133-C/D service quality standards.

Verizon California and post-acquisition Frontier California have not implemented the extreme succession of significant price increases for its legacy residential POTS services. And unlike AT&T, there is not evidence of a "harvesting strategy" on the part of Frontier or even Verizon before the transfer, which is not surprising. Verizon was in the process of divesting its former GTE ILECs, and a strategy aimed at allowing steady erosion of its customer base would have undermined the marketability of these ILEC operations. Frontier, as a "pure-play" ILEC, has a strong incentive to maintain and to grow its customer base, not to allow it to dissipate. These are all positives for Frontier's future if it is somehow able to reverse its financial decline.

As a "pure play" ILEC holding company, Frontier Communications has a strong financial incentive to stabilize and grow its ILEC operations in California and elsewhere – but if it is not able to stabilize and strengthen its overall financial health, some sort of rescue may become necessary.

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