

time, as technology, prices, product characteristics, and consumer preferences evolve.¹⁴⁶

a. Wholesale Product Markets

47. The relevant distinct wholesale product markets we consider below are informed by prior Commission precedent,¹⁴⁷ the evidence in the record, and the regulations at issue.

(i) Wholesale Loops and Dedicated Local Transport

48. In determining which network elements it would require to be unbundled pursuant to section 251(c)(3), the Commission found impairment with respect to certain loops and dedicated interoffice transport, and it accordingly imposed unbundling obligations in certain situations.¹⁴⁸ In prior analyses, the Commission likewise has identified separate product markets for wholesale loops and local transport.¹⁴⁹ Consistent with our traditional approach to market definition, we find that, in the face of a “small but significant and nontransitory” increase in the price of wholesale loops, wholesale customers would be unlikely to switch to wholesale dedicated transport, since dedicated transport will not permit the wholesale customer to reach its customers. Likewise, we find that, in the face of a “small but significant and nontransitory” increase in the price of wholesale dedicated transport, a wholesale customer would be unlikely to switch to wholesale loops, since wholesale loops will not permit the wholesale customer to carry its traffic back to its switch. Thus, we find it appropriate here to define loops and dedicated local transport as distinct wholesale product markets.¹⁵⁰

49. The Commission also has found that, in general, circuits of differing capacities, such as DS0, DS1, and higher-capacity circuits are likely to constitute separate relevant product markets.¹⁵¹

¹⁴⁶ Because the record does not contain data necessary to perform the hypothetical monopolist test quantitatively, we use the conceptual framework of the traditional approach as “a methodological tool for gathering and analyzing evidence pertinent to customer substitution and to market definition” as a way to measure competition. *Draft Revised Horizontal Guidelines*, § 4.1.3. We reject as unfounded concerns that the use of formal market definition, “if carried to its logical extreme, [could] eliminate the Commission’s ability to bracket uncertainty about complex market interactions even when clearing up that uncertainty would not affect the result,” and “would threaten to render section 10 a dead letter by imposing a requirement that . . . would be practically impossible to meet.” AT&T Market Power PN Comments at 10–11.

¹⁴⁷ See, e.g., *SBC/AT&T Order*, 20 FCC Rcd at 18305–06, 18352–53, paras. 25–27, paras. 112–13; *Verizon/MCI Order*, 20 FCC Rcd at 18447–49, 18494–95, paras. 25–27, 113–14; *AT&T/BellSouth Order*, 22 FCC Rcd at 5677–78, 5729, paras. 28–30, 125.

¹⁴⁸ See generally *Triennial Review Order*, 18 FCC Rcd at 17035–49, paras. 84–104; *Triennial Review Remand Order*, 20 FCC Rcd at 2536–37, para. 5. In addition, the Commission required unbundling of certain subloops—particularly inside wire subloops. *Triennial Review Order*, 18 FCC Rcd at 17184–95, paras. 343–54 (discussing subloop unbundling obligations).

¹⁴⁹ See, e.g., *SBC/AT&T Order*, 20 FCC Rcd at 18305, para. 25; *Verizon/MCI Order*, 20 FCC Rcd at 18447–48, para. 25; *AT&T/BellSouth Order*, 22 FCC Rcd at 5677, para. 28.

¹⁵⁰ Cf. Framework Recommendation at para. 8 (identifying wholesale unbundled access to metallic loops and subloops and wholesale trunk segments of leased lines as separate relevant product markets, which Member State regulators must examine under the Framework Directive).

¹⁵¹ See *SBC/AT&T Order*, 20 FCC Rcd at 18306, para. 27 n.90; *Verizon/MCI Order*, 20 FCC Rcd at 18448–49, para. 27 n.89; *AT&T/BellSouth Order*, 22 FCC Rcd at 5678, para. 30 n.94. The Commission has also distinguished, for example, between “‘Type I’ special access services, which are offered wholly over a carrier’s own facilities, and ‘Type II’ special access services, which are offered using a combination of the carrier’s own facilities for two of the segments and the special access services of another carrier for the third segment.” *AT&T/BellSouth Order*, 22 FCC Rcd at 5677–78, para. 29. Given the record evidence here, we need not address this distinction.

Consequently, we find it appropriate to distinguish product markets further based on capacity. Although Qwest maintains that “there are “numerous options for carriers to purchase ‘last mile’ wholesale services that allow them to bypass Qwest’s network entirely,”¹⁵² we disagree and find instead that, however evaluated, the record in this proceeding reveals a lack of significant wholesale competitors to Qwest in the Phoenix MSA. We therefore need not define the wholesale loop and transport product markets more precisely here.¹⁵³

(ii) Originating and Terminating Switched Access

50. Qwest seeks forbearance from dominant carrier regulation of carrier’s carrier switched access charges. These are charges that LECs impose on interexchange carriers for originating and terminating interexchange calls. We define originating and terminating switched access as separate relevant product markets.

b. Retail Product Markets

(i) Retail Residential/Mass Market Services

51. Retail mass market services generally are purchased by residential customers and some very small business customers.¹⁵⁴ Sometimes, however, the differences between residential customers and very small business customers make it more appropriate to treat products sold to very small business customers as part of a distinct product market.¹⁵⁵ In some situations, very small business customers demand different services or face different prices than residential customers.¹⁵⁶

52. We begin our analysis by recognizing that, even though telecommunications offerings typically include multiple features that may be relevant when defining product markets, at the most basic level, a consumer demands “access” from a provider to connect to a communications network.¹⁵⁷ Depending upon the type of access, the consumer will be able to connect to a wireline telephone network, a mobile wireless network, a data network, or another communications network. Our determination of the

¹⁵² Qwest Petition at 39.

¹⁵³ See *infra* Part III.D.4.a.

¹⁵⁴ See *Triennial Review Order*, 18 FCC Rcd at 17063, para. 127 (stating that “[m]ass market customers typically purchase ordinary switched voice service (Plain Old Telephone Service or POTS) and a few vertical features”).

¹⁵⁵ As in our recent merger orders, we recognize that some small businesses are more appropriately considered with residential customers, while others are more appropriately considered separately as part of the enterprise customer segment. See *SBC/AT&T Order*, 20 FCC Rcd at 18335, para. 82 n.243 (defining mass market to include both residential and small business customers); *Verizon/MCI Order*, 20 FCC Rcd at 18477, para. 83 n.245; *Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements, 2000 Biennial Regulatory Review Separate Affiliate Requirements of Section 64.1903 of the Commission’s Rules, Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) with Regard to Certain Dominant Carrier Regulations for In-Region, Interexchange Services*, CC Docket No. 00-175, WC Docket Nos. 02-112, 06-120, Report and Order and Memorandum Opinion and Order, 22 FCC Rcd 16440, 16452, para. 22 (2007) (*Section 272 Sunset Forbearance Order*); *Petition of Qwest Communications International Inc. for Forbearance from Enforcement of the Commission’s Dominant Carrier Rules As They Apply After Section 272 Sunsets*, WC Docket No. 05-333, Memorandum Opinion and Order, 22 FCC Rcd 5207, 5222, para. 24 (2007) (*Qwest Section 272 Sunset Forbearance Order*).

¹⁵⁶ See, e.g., *Triennial Review Order*, 18 FCC Rcd at 17063, para. 127 n.432; Arizona Corporation Commission Comments at 10–11 (arguing that small business market is distinct from the residential market).

¹⁵⁷ The access provider usually charges a recurring monthly fee, and it frequently offers various communications services in combination with this access service.

relevant product market considers the demand for access. For example, we consider the extent to which Qwest's residential voice customers would switch from Qwest's service to Cox's residential voice services or to mobile wireless voice service in response to an increase in Qwest's monthly price for voice service.¹⁵⁸

53. *Wireline Services.* In prior proceedings, the Commission has determined that services offered to mass market customers fall into several separate product markets, including local voice service, bundled local and long distance voice service, broadband Internet access service, and bundled voice and broadband Internet access service.¹⁵⁹ We find no reason to reach a different conclusion in this proceeding.¹⁶⁰

54. *VoIP.* We find that the degree to which particular VoIP services are viewed as close substitutes for other local services varies depending upon the characteristics of the particular VoIP offering. In accord with Commission precedent, we divide VoIP providers into two general types: (1) facilities-based VoIP providers; and (2) "over-the-top" VoIP providers.¹⁶¹ As in the past, we find that mass market consumers view facilities-based VoIP services, such as those offered by cable providers, as sufficiently close substitutes for local service to include them in the relevant product market.¹⁶² Also as in prior proceedings, we agree with commenters that the record here is insufficient to determine which over-the-top VoIP services should be included in the relevant product market.¹⁶³

¹⁵⁸ As used in the present context, "usage substitution" occurs when a customer who subscribes to wireline telephone service and to mobile wireless service begins using the mobile wireless service more and the wireline telephone service less, or vice versa. "Access substitution," in contrast, occurs when the customer stops subscribing to wireline telephone service altogether in favor of mobile wireless service, or vice versa. See *infra* at para. 55.

¹⁵⁹ *SBC/AT&T Order*, 20 FCC Rcd at 18336, para. 82; *Verizon/MCI Order*, 20 FCC Rcd at 18477, para. 83; *Section 272 Sunset Forbearance Order*, 22 FCC Rcd at 16452, para. 22; *Qwest Section 272 Sunset Forbearance Order*, 22 FCC Rcd at 5217, para. 15; *AT&T/BellSouth Order*, 22 FCC Rcd at 5723, para. 114. Stand-alone long distance service is not implicated by the regulations at issue here, and thus we do not consider that product market in our analysis. Although there is insufficient evidence in this record to define a separate relevant market for voice and broadband Internet service bundles, or other bundles such as those including video, there is some evidence that bundling may have competitive significance. See, e.g., *Qwest Petition* at 14 (discussing bundling by cable operators); *Qwest Brigham Decl.*, Exh. 4 at 8 (discussing evidence of the role of bundles in the decision whether to rely solely on wireless service). We note in addition that Staff analysis of the December 2008 data collected on Form 477 indicates that, nationwide, 91% of fixed interconnected VoIP customers purchase bundled voice and broadband service. Given the specific record here, we did not conduct a detailed analysis of broadband Internet services and bundled services. In future proceedings, such analysis may prove necessary.

¹⁶⁰ Incumbent LECs' mass market subscribers pay both intrastate rates for local telephone service and a "subscriber line charge," or "SLC," which is the end-user charge regulated by this Commission, for interstate access. As discussed below, the SLC and the carriers' carrier charge components collectively make up the regulation of rates for the switched services from which Qwest seeks dominant carrier relief.

¹⁶¹ *SBC/AT&T Order*, 20 FCC Rcd at 18337, para. 86; *Verizon/MCI Order*, 20 FCC Rcd at 18479, para. 87.

¹⁶² *SBC/AT&T Order*, 20 FCC Rcd at 18338, para. 87; *Verizon/MCI Order*, 20 FCC Rcd at 18479-80, para. 88. Arizona Corporation Commission Reply at 14.

¹⁶³ See, e.g., *Qwest 4 MSA Forbearance Order*, 23 FCC Rcd at 11740, para. 16 ("We do not include providers of 'over-the-top' or nomadic [VoIP] services in our competitive analysis because there are no data in the record that justify finding that these providers offer close substitute services."); *Broadview Comments* at 41 (Qwest provides no Phoenix-specific data regarding VoIP usage); *Covad Opposition* at 11-12 (VoIP over-the-top services are not equivalent substitutes for an incumbent LEC's wireline services); *PAETEC Opposition* at 11-12 (same); *Arizona Corporation Commission Reply* at 14 (same). Over-the-top VoIP providers do not operate their own loop and transport networks and instead require customers to obtain access facilities from Qwest or its competitors.

55. *Mobile Wireless Services.* Whether mobile wireless services should be included in the same relevant product markets as fixed wireline service is a complicated issue, and one that is evolving over time. Although a growing number of mass market customers subscribe exclusively to mobile wireless service, the majority of households continue to subscribe to both a wireline and a mobile wireless telephone service, and the proportion of households subscribing to both services has not substantially changed since the first half of 2006.¹⁶⁴ With respect to such households, the Commission previously has found that most subscribers to both wireline and wireless engage in some *usage* substitution.¹⁶⁵ The more difficult question is how to measure the degree of *access* substitution between mobile wireless and wireline services.¹⁶⁶ The issue of *access* substitution is critical for purposes of market definition, since, given trend toward flat-rated prices for wireline services, it is the degree of access substitution that will affect most directly whether mobile wireless services constrain the price of wireline services. The increasing percentage of residential customers that rely solely on mobile wireless voice service suggests that an increasing percentage of voice customers view wireless and wireline services as close substitutes, increasing the likelihood that wireless service may materially constrain the price of residential wireline voice service. As discussed below, however, the record here does not enable us to make such a finding for purposes of Qwest's forbearance request.

56. The fundamental question in a traditional product market definition exercise is whether mobile wireless access service constrains the price of wireline access service.¹⁶⁷ These two services should be in the same relevant market only if the prospect of buyer substitution to mobile wireless access constrains the price of wireline access. The first question before us then is whether a hypothetical profit-maximizing firm that was the only present and future seller of wireline local access services could

¹⁶⁴ The Centers for Disease Control and Prevention (CDC) estimates that 58.2% of households subscribe to both a mobile wireless and wireline service. For the last 3 years, the proportion of households subscribing to both landline and mobile wireless service has fluctuated around 59%, while the proportion of households that subscribe only to mobile wireless increased from 13.6% to 24.5%. CENTERS FOR DISEASE CONTROL AND PREVENTION, WIRELESS SUBSTITUTION: EARLY RELEASE OF ESTIMATES FROM THE NATIONAL HEALTH INTERVIEW SURVEY, JULY - DECEMBER 2009 tbl. 1 (2010) (2010 CDC Wireless Substitution Report), available at <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201005.htm>.

¹⁶⁵ In the *Section 272 Sunset Forbearance Order*, the Commission analyzed markets using different metrics to account for wireless usage substitution. *Section 272 Sunset Forbearance Order*, 22 FCC Rcd at 16453, para. 24; see also, e.g., *SBC/AT&T Order*, 20 FCC Rcd at 18342-44, paras. 92-94.

¹⁶⁶ See, e.g., *Cingular/AT&T Wireless Order*, 19 FCC Rcd at 21612-13, para. 239 (finding it "premature to consider the existence of a separate relevant market in which wireline and wireless services compete for mass market consumers"); *Verizon/MCI Order*, 20 FCC Rcd at 18481-02, para. 90 (finding no evidence that mobile wireless service has a price constraining effect on residential wireline service, but including mobile wireless in the relevant market "when it is used as a complete substitute for all of a consumer's voice communications needs"); *High Cost Universal Service Support*, Order, 23 FCC Rcd 8834, 8843-44 paras. 20-21 (2008) (concluding that "the majority of households do not view wireline and wireless services to be direct substitutes," and that "rather than providing a complete substitute for traditional wireline service, these wireless competitive ETCs largely provide mobile wireless telephony service in addition to a customer's existing wireline service"); *Qwest 4 MSA Forbearance Order*, 23 FCC Rcd at 11742-43, paras. 19-20 (finding that "mobile wireless service should be included in the local services product market to the extent that it is used as a complete substitute for all of a consumer's voice communications needs").

¹⁶⁷ Cf. Cavalier Opposition, Declaration of Michael D. Pelcovits at 6-9 (Cavalier Pelcovits Decl.) (explaining that to properly define the relevant product market here, one would consider the demand for wireline service, estimate the cross elasticity of demand between wireline and wireless service, and analyze switching patterns between wireline and wireless in response to changes in the marketplace); *id.* at 10 ("[T]he key empirical test is *how much switching* between wireline and wireless access is due to changes in the relative prices (*i.e.*, the cross-elasticity of demand).").

profitably impose a small but significant and nontransitory increase in price (SSNIP).¹⁶⁸ In other words, we consider whether there are a sufficient number of wireline service customers who, in response to a price increase in wireline local access service, would stop subscribing to their wireline service and instead rely exclusively on mobile wireless service, so as to render the price increase unprofitable.

57. As an initial matter, we note that the Commission, the DOJ, and foreign regulators have previously found that mobile wireless service does not constrain the price of wireline service. For example, in 2005 and 2007 the Commission found that mobile wireless substitution does not appear to have a price-constraining effect on wireline service.¹⁶⁹ A recent report by the DOJ likewise found no evidence that mobile wireless access substitution constrains landline telephone service prices.¹⁷⁰ In addition, Ofcom (the telecom regulator for the United Kingdom), in evaluating the retail market for fixed (*i.e.*, wireline) access, found that, “while there is some substitutability between fixed and mobile access, consumers predominantly view the two types of access as meeting different needs and have a strong preference to purchase both fixed and mobile access.”¹⁷¹ It thus concluded that mobile wireless services should not be included in the same relevant product market as wireline access service.¹⁷²

¹⁶⁸ See *EchoStar/DirectTV Order*, 17 FCC Rcd at 20607, para. 109 n.330; see also, *e.g.*, *DOJ/FTC Guidelines*, § 1.11.

¹⁶⁹ See *Verizon/MCI Order*, 20 FCC Rcd at 18483, para. 91 n.276; *SBC/AT&T Order*, 20 FCC Rcd at 18340–42, paras. 89–90; *AT&T/BellSouth Order*, 22 FCC Rcd at 5711, 5714–15, paras. 90, 95–96. In those decisions, the Commission nevertheless counted “cut-the-cord” wireless customers in calculating market shares for wireline service. As discussed above, we find that that prior approach incorrectly deviated from economically sound standards for defining product markets.

¹⁷⁰ U.S. DEPARTMENT OF JUSTICE, VOICE, VIDEO, AND BROADBAND: THE CHANGING COMPETITIVE LANDSCAPE AND ITS IMPACT ON CONSUMERS 61 (2008) (DOJ VOICE, VIDEO AND BROADBAND SYMPOSIUM), available at <http://www.justice.gov/atr/public/reports/239284.pdf> (discussing the competitive importance of service bundles); see also Cavalier Pelcovits Decl. at 16 n.22. Contrary to Qwest’s claims, the DOJ report does not merely provide a summary of industry positions. See Qwest Market Power PN Comments at 13–16. Qwest also argues that the report reached incorrect conclusions because it compared wireless prices to stand-alone landline access prices rather than to the price for a bundle of local and long distance services. *Id.* However, the DOJ report primarily focused on purchasing patterns and did not conduct a price analysis. We therefore find little merit to Qwest’s argument. For the reasons, discussed here, we also reject Qwest’s assertion that the Commission should include wireless similar to Canada and the California Commission. Qwest Market Power PN Comments at 7–8.

¹⁷¹ Ofcom, *Fixed Narrowband Retail Services Markets: Consultation on the Identification of Markets and Determination of Market Power* at 21, paras. 4.33–4.34 (Mar. 19, 2009) (Ofcom Market Study), available at http://www.ofcom.org.uk/consult/condocs/retail_markets/fnrsm_condoc.pdf (“In a hypothetical scenario where BT’s line rental price increased by 10% (and the price of other fixed and mobile access remained constant)[,] only 4% of respondents stated that they would cancel the fixed line with 22% responding they would switch to a different supplier. Of those who indicated that they would switch calls, only 5% (1% of total sample) would switch to a mobile phone supplier. While these hypothetical questions are more relevant for the assessment of BT’s market power nonetheless they do provide some evidence that mobile access is not regarded by consumers as a particularly strong substitute for fixed line access.”); see also *supra* note 164 (citing data showing that most U.S. households purchase both mobile wireless and landline services).

¹⁷² See generally Ofcom Market Study at 19–21, paras. 4.26–4.34. We acknowledge that there is a split among the state regulators that have addressed this issue. Compare Qwest Comments at 7–8 (providing evidence that several state authorities have concluded that wireless service provides competitive discipline to wireline providers) with Letter from Samuel L. Feder, Counsel to Cavalier, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 09-135, at 1–3 (filed May 11, 2010) (Cavalier May 11, 2010 *Ex Parte* Letter) (providing evidence that several state authorities have reached the opposite conclusion and that none of the states cited by Qwest conducted or reviewed an econometric study).

58. No evidence in the record here causes us to reach a different conclusion. In particular, neither Qwest nor any other commenter has submitted evidence that would support a conclusion that mobile wireless service constrains the price of wireline service.¹⁷³ For example, Qwest has produced no econometric analyses that estimate the cross-elasticity of demand between mobile wireless and wireline access services.¹⁷⁴ Nor has it produced any evidence that it has reduced prices for its wireline services or otherwise adjusted its marketing for wireline service in response to changes in the price of mobile wireless service.¹⁷⁵ Nor has it produced any marketing studies that show the extent to which consumers

¹⁷³ Although Qwest argues that wireless provides competitive discipline on wireline prices and that competition at the margin disciplines a firm's pricing behavior, it has provided no empirical or documentary evidence that its pricing has been constrained by wireless service offerings. See Qwest Reply at 29; Qwest Reply, Declaration of Timothy J. Tardiff and Dennis L. Wiesman, Exh. 1 at paras. 84–87 (Qwest Reply Tardiff/Weisman Decl.). Qwest's observation that the number of wireless access lines exceeds the number of wireline access lines is not probative of the issue of the substitutability between wireline and wireless services for residential households. See Qwest Reply Tardiff/Weisman Decl. at para. 87. We note there generally is a substantial price differential between mobile wireless service and fixed wireline service, although the record does not contain sufficiently geographically disaggregated pricing information for us to make findings with respect to the Phoenix MSA. Moreover, each individual in a multi-person household would need a mobile telephone to fully benefit from the mobility of such services, thereby somewhat increasing the equipment and service costs related to the service. In addition, although Qwest offers DSL service on a "stand-alone" basis, Qwest offers discounts for DSL service that is bundled with Qwest's local exchange service; thus, the effective price difference between Qwest's wireline telephone service and mobile wireless service is even larger for customers who wish to subscribe only to mobile wireless service and Qwest's DSL service. See Qwest Petition at 25; Compare Qwest High-Speed Internet Plans, available at http://www.qwest.com/residential/internet/broadbandlanding/compare_plans.html.

¹⁷⁴ See, e.g., Cavalier May 11, 2010 *Ex Parte* Letter at 1–2 & Attach. at 1–3 (Cavalier Supp. Pelcovits Decl.) (attaching a copy of Supplemental Declaration of Michael D. Pelcovits filed in WC Docket Nos. 08-24 & 08-49) (discounting an econometric study by Ware and Taylor, which is cited by Qwest, because the study assumes the central question the analysis should be seeking to answer, contains no modeling, statistical analysis, or hypothesis testing, and, in any event, was not submitted in the record). Further, here, as well as in other proceedings, we find that the Mikkelsen Mobile Services White Paper is inadequate to estimate the cross-elastic effect from wireless price change on the decision to subscribe to any fixed line. See Kent W. Mikkelsen White Paper, *Mobile Wireless Service to "Cut the Cord" Households in FCC Analysis of Wireline Competition* (Apr. 21, 2008) (Mikkelsen Mobile Services White Paper), available at http://www.comptel.org/files/free-to-compete/econ-inc_wireless-cut-cord_april21_2008.pdf; *Qwest 4 MSA Forbearance Order*, 23 FCC Rcd at 11743, para. 20 n.73; see also *SBC/AT&T Order*, 20 FCC Rcd at 18342, para. 90 n.277; *Integra Opposition* at 25–26, n.82. Cavalier's economic expert argues that the demand for wireline services may have become less elastic over time if the remaining wireline customers view the actual or perceived benefits of retaining the wireline service to have increased over time. Cavalier Pelcovits Decl. at 15. If the demand for wireline services has become less elastic, then the remaining customers could face a higher risk of a supra-competitive price increase, and this risk could increase with consumer preferences for voice services bundled with broadband and/video services.

¹⁷⁵ Indeed, the DOJ recently observed that "there is little evidence that landline telephone companies consider the threat of wireless substitution sufficient to change their access prices. In response to customers 'cutting the cord,' a telephone company can either lower its prices to all customers to keep subscribers from switching, or leave prices where they are. A company would choose the first option if the loss of revenue from cord-cutting is expected to be greater than the loss of revenue from reducing the fees paid by customers who would not switch. If, however, the extent of wireless substitution in response to price changes is small, the company would choose not to lower prices. In fact, stand-alone landline access prices have remained relatively stable and do not appear to have declined substantially below the levels at which they are capped by regulation." DOJ VOICE, VIDEO AND BROADBAND SYMPOSIUM at 66.

view wireless and wireline access services as close substitutes.¹⁷⁶

59. Instead, Qwest submitted studies that estimate the percentage of households that exclusively rely upon mobile wireless services in the Phoenix area,¹⁷⁷ which cannot alone establish whether mobile wireless services should be included in the same relevant product market as residential wireline voice service.¹⁷⁸ Knowing the percentage of households that rely exclusively upon mobile wireless is insufficient to determine whether mobile wireless services have a price-constraining effect on wireline access services.¹⁷⁹ Moreover, while we acknowledge that the number of customers that rely solely on mobile wireless service has been growing steadily, we find that other reasons may explain the growth in the number of wireless-only customers, besides an increasing cross-elasticity of demand between mobile wireless and wireline services. For example, nationwide statistics published by the CDC suggest that the choice to rely exclusively upon mobile wireless services could be driven more by differences in consumers' age, household structure, and underlying preferences than by relative price

¹⁷⁶ See, e.g., *id.*; Cavalier Pelcovits Decl. at 16 (arguing that the extent to which customers would substitute wireless service in response to a price increase in wireline service "remains unknown and a large substitution effect cannot simply be assumed to exist").

¹⁷⁷ Qwest Petition, Exh. 4, Nielsen Study: Call My Cell—Wireless Substitution in the United States, September 2009 (Nielsen Study); Qwest Petition, Exh. 5, MarketStrategies: Understanding Wireless-Only Versus Wire-line Penetration in the Phoenix Metropolitan Area (MarketStrategies Study).

¹⁷⁸ We acknowledge that the Commission in the *Qwest 4 MSA Forbearance Order* suggested that geographically disaggregated evidence of the percentage of voice subscribers that rely on mobile wireless only might demonstrate that Qwest was entitled to forbearance in the Phoenix MSA. See *Qwest 4 MSA Forbearance Order*, 23 FCC Rcd at 11745, para. 22. Since those statements were made, however, the D.C. Circuit remanded the *Verizon 6 MSA Forbearance Order* and instructed the Commission to provide a more complete economic analysis of its decision to deny forbearance. The D.C. Circuit, at the Commission's request, also remanded the *Qwest 4 MSA Forbearance Order*. After the remands, the Wireline Competition Bureau issued a Public Notice in the present proceeding seeking new record data that might show that, under a traditional market power analysis, mobile wireless service is in the same relevant product market as mass market wireline telephone service. See *supra* paras. 17–20.

¹⁷⁹ See, e.g., DOJ VOICE, VIDEO AND BROADBAND SYMPOSIUM at 65–67; see also *id.* at 65 (stating that "[t]he existence of some consumers who choose to substitute wireless service for access to the landline network does not demonstrate that wireless service is an effective constraint on the prices for access to landline services" and that, while the evidence before it did not allow definitive conclusions, there are reasons "to think that wireless is not by itself an effective competitive constraint today"); Cavalier Pelcovits Decl. at 19 (explaining that a decline in demand should not be confused with an increase in demand elasticity). Even if we were to find the number of "cut-the-cord" customers to be relevant in our market definition analysis, however, we find that the Qwest studies provide insufficient detail about how the data was collected to assess the validity or confirm the results obtained. In the case of the MarketStrategies Study, we find that details on the data weighting are lacking as well as how this data is used to calculate the confidence intervals for the estimates. The report does not include the survey or describe the survey protocol in particular with respect to non-responses or follow-up contacts. Cf., Arizona Corporation Commission Reply at 17-18 (asserting that the MarketStrategies Study is too small and the methodology of the Nielsen Study is not clear); COMPTTEL Opposition at 32 (Nielsen Study has insufficient detail to evaluate and there are no details on the survey methodology), 33–35 (MarketStrategies Study appears to disproportionately survey mobile wireless households; unclear how households were selected). We reject Qwest's assertion that the studies' estimated proportion of wireless-only households are not statistically different from each other. See Qwest Reply, Exh. 3 at 1–2. This hypothesis cannot be accepted without conducting a statistical test of the difference between the two survey's estimated proportions. See generally ROBERT JOHNSON AND PATRICIA KUBY, JUST THE ESSENTIALS OF ELEMENTARY STATISTICS, ch. 10 (10th 2008). For these reasons above, we reject Qwest's assertion that the proportion of wireless-only households confirm "the validity of treating wireline and wireless as substitutes." Qwest Market Power PN Comments at 9.

differentials.¹⁸⁰ Furthermore, just as some customers may rely solely on mobile wireless service regardless of the price of wireline service, several classes of customers appear unlikely to drop wireline service in response to a significant price increase,¹⁸¹ including those who: (a) value the reliability and safety of wireline service; (b) value a single point of contact for multiple household members; (c) live in a household with poor wireless coverage; (d) operate a business out of their home and believe that wireline service offers better reliability and sound quality; or (e) desire a service that is more economically purchased when bundled with a local service (e.g., wireline broadband Internet service, or a video service).¹⁸² Indeed, because the record reflects that the majority of residential customers continue to subscribe to both mobile wireless and wireline services, it appears that most mass market consumers use mobile wireless service to supplement their wireline service rather than as a substitute for their wireline service.¹⁸³

60. Accordingly, we find that Qwest has proffered insufficient evidence to justify including mobile wireless service in the same relevant product market as wireline service for purposes of evaluating the instant petition. We emphasize, however, that we make no affirmative finding that mobile wireless services do not currently, or may not soon, belong in the same product market as residential wireline voice services. Nor are we suggesting that mobile wireless services must be a perfect substitute for residential wireline services for it to constrain the price of wireline service.¹⁸⁴ In fact, we acknowledge that the increasing number of households that rely solely on mobile wireless services suggests that more consumers may view mobile wireless as a closer substitute for wireline voice service than in the past. We find only that there is insufficient data in the record to make such a determination here.¹⁸⁵

¹⁸⁰ Nationwide, the CDC finds that, of the adults living in wireless-only households, 48.6% are 25–29 years old and 37.8% are 18–24 years old, while only 14.9% are 45–64 years old and fewer than 5.3% are 65 years old or older. 2010 CDC Wireless Substitution Report, Tbl. 2. In addition, 62.9% of adults living in wireless-only households live with unrelated adult roommates and only 24.1% of wireless-only households contain children. *Id. Cf.*, Cavalier Pelcovits Decl. at 14 (“[T]he complexity of the data points to significant differentiation in consumer demand for wireline and wireless services based on many different factors. Price is only one of these factors, whose importance has not been measured properly.”).

¹⁸¹ DOJ VOICE, VIDEO AND BROADBAND SYMPOSIUM at 63.

¹⁸² See, e.g., Cavalier Pelcovits Decl. at 17–19; see also *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, GN Docket No. 07-45, Fifth Report, 23 FCC Rcd 9615, 9619–21, 9624–26, paras. 8–14, 19–21 (2008) (describing the capabilities of various wireline and wireless technologies for providing broadband Internet access service); see also Qwest Brigham Decl., Exh. 4 at 8 (reporting the top reasons for returning to landline service); Integra Opposition at 5 (asserting that Qwest had not claimed that mobile wireless broadband belongs in the residential wireline broadband market nor do they belong in the same market).

¹⁸³ See, e.g., *supra* note 164; DOJ VOICE, VIDEO AND BROADBAND SYMPOSIUM at 66 (more than 80% of consumers do not consider mobile wireless and wireline telephone services to be substitutes because they pay for both services).

¹⁸⁴ See Qwest Brigham Decl. at paras. 20–21.

¹⁸⁵ Even assuming *arguendo* that the Commission were to include mobile wireless service in the same product market as residential wireline voice service and concluded that Qwest lacked market power for this service, this would not change the outcome of our ultimate forbearance decision in this proceeding. The regulations at issue in Qwest’s petition are not targeted to residential voice service, and the record does not reveal how any relief from such regulations could be tailored in a way that was limited in that manner. In our analysis below, we have sought to identify a number of the policy and administrability questions associated with tailoring such relief to inform the record in future proceedings seeking regulatory relief based on similar competitive claims.

61. We recognize that excluding mobile wireless service from the product market for residential wireline service may appear to represent a change in course from the statements in some prior forbearance orders. In the *Qwest 4 MSA Forbearance Order*, the Commission, in *dicta*, and without a thorough economic analysis, suggested that geographically-specific estimates of “mobile wireless service should be included in the local services product market,”¹⁸⁶ though it recognized that “mobile wireless service and wireline telephone services are not perfect substitutes.”¹⁸⁷ Consistent with the more comprehensive analytic approach we use here, we conclude that mobile wireless-only customers should be included in calculating residential voice market shares only upon a showing that residential mobile wireless service constrains the price of residential wireline service.¹⁸⁸

(ii) Retail Enterprise Services

62. Consistent with Commission precedent and with the record in this proceeding, we find that the communications services offered to enterprise customers fall into a number of separate relevant product markets.¹⁸⁹ We again find that local voice, long distance voice, and data services constitute distinct product markets.¹⁹⁰ In addition, enterprise customers frequently purchase high-capacity transmission services. We find again that different capacity services may constitute separate relevant product markets.¹⁹¹ As in our prior merger orders, the evidence in the record is insufficient to define precisely the boundaries of various transmission service markets.

63. In previous orders, the Commission has found it appropriate to define separate relevant product markets based on the class of customer.¹⁹² For example, the Commission previously found that small business customers fall into a separate relevant product market from mid-sized to large retail enterprise customers.¹⁹³ Moreover, carriers treat small enterprise customers differently from larger business customers, both in the way they market their products and in the prices they charge. As in our prior orders, we again find that there are separate product markets for the different enterprise customer groups. Although we also conclude that the record is insufficient to differentiate one class from another in a precise manner for most enterprise services, for purposes of this proceeding we accept the line-size classification used by the Arizona Corporation Commission to delineate small, medium, and large

¹⁸⁶ *Qwest 4 MSA Forbearance Order*, 23 FCC Rcd at 11742, para. 19; *id.* at para. 20 (recognizing “that mobile wireless service and wireline telephone services are not perfect substitutes”). The approach taken in the *Qwest 4 MSA Forbearance Order* relied on certain statements in the Commission’s *BOC/LXC Merger Orders* but did not independently consider whether the facts in that record supported the inclusion of mobile wireless services in the relevant product markets in the particular 4 MSA areas. *See id.* at para. 20.

¹⁸⁷ *Id.*

¹⁸⁸ *See supra* para. 56.

¹⁸⁹ *SBC/AT&T Order*, 20 FCC Rcd at 18321–24, paras. 57–61; *Verizon/MCI Order*, 20 FCC Rcd at 18463–66, paras. 57–61.

¹⁹⁰ As with services provided to mass market customers, incumbent LECs’ rates for local telephone service include both intrastate rates and interstate switched access charges, known as “subscriber line charges” (*i.e.*, SLCs).

¹⁹¹ *SBC/AT&T Order*, 20 FCC Rcd at 18321–24, paras. 57–61; *Verizon/MCI Order*, 20 FCC Rcd at 18463–66, paras. 57–61.

¹⁹² *SBC/AT&T Order*, 20 FCC Rcd at 18323, para. 60; *Verizon/MCI Order*, 20 FCC Rcd at 18465, para. 60.

¹⁹³ This distinction exists because, unlike small enterprise customers, larger businesses often contract for more complex services, including Frame Relay, virtual private networks, and enhanced 800 services. Larger businesses also tend to negotiate commercial contracts rather than taking services off of a tariff or general offering.

businesses.¹⁹⁴

2. Geographic Markets

64. Consistent with Commission precedent, we reaffirm that each customer location constitutes a separate relevant geographic market, given that a customer is unlikely to move in response to a small, but significant and nontransitory increase in the price of the service.¹⁹⁵ For reasons of administrative convenience, the Commission traditionally has aggregated customers facing similar competitive choices.¹⁹⁶ We continue to follow this approach here.¹⁹⁷

65. In addition to the effect on competition in the properly-defined relevant geographic market, however, forbearance could have effects in broader geographic areas, depending upon the particular facts and circumstances.¹⁹⁸ To the extent that we have evidence of effects in broader geographic areas, such as for wholesale loops and dedicated transport, we consider those broader areas as well in our competitive analysis below.

3. Marketplace Competitors

66. We find that Qwest faces competition in the Phoenix MSA from numerous competitors, though principally for retail services. Because the evidence indicates only minimal wholesale competition, we simply note below the extent to which any of these marketplace competitors might provide wholesale services.

67. *Residential Services.* The record indicates that, in addition to Cox, the incumbent cable operator in Phoenix, Qwest faces competition from a small number of competitive LECs in the Phoenix MSA. These competing providers of residential service, other than Cox, rely predominantly—if not exclusively upon Qwest facilities, including UNEs and other wholesale services, to provide their services.¹⁹⁹

68. *Enterprise Services.* The record indicates that, in addition to Cox, Qwest faces

¹⁹⁴ The Arizona Corporation Commission recommended and obtained access line counts from each carrier in the Phoenix MSA, disaggregated into three business customer classifications: small (less than 4 lines provided); medium (4 to 100 lines provided); and large (more than 100 lines provided). Arizona Corporation Commission Comments at 10; Arizona Corporation Commission Reply at Exhs. 1–13.

¹⁹⁵ A relevant geographic market has been defined “as the region where a hypothetical monopolist that is the only producer of the relevant product in the region would profitably impose at least a ‘small but significant and nontransitory’ increase in the price of the relevant product, assuming that the prices of all products provided elsewhere do not change.” See *supra* note 142. For multi-location enterprise customers that want a single provider, the issue is more complicated. To be administratively feasible, we have adopted different relevant geographic markets to capture different classes of business customers. Thus, in some cases, we have looked at broader geographic areas, sometimes even the entire United States, for example. See, e.g., *SBC/AT&T Order*, 20 FCC Rcd at 18325, para. 63; *Verizon/MCI Order*, 20 FCC Rcd at 18467, para. 63. For each of these geographic markets, we then focus on carriers that provide service throughout the areas as defined.

¹⁹⁶ See, e.g., *Qwest Omaha Forbearance Order*, 20 FCC Rcd at 19426, para. 18; *Qwest Section 272 Sunset Forbearance Order*, 22 FCC Rcd at 5222–23, paras. 25–28; *AT&T/BellSouth Order*, 22 FCC Rcd at 5700–01, paras. 68–69 & 5718, paras. 103–04.

¹⁹⁷ Although Qwest seeks forbearance from the relevant regulations in the 64 wire centers comprising its service area footprint in the Phoenix MSA, the geographic scope of its requested relief is not dispositive of the definition of the “relevant geographic markets” under the traditional market power analysis.

¹⁹⁸ *SBC/AT&T Order*, 20 FCC Rcd at 18307, para. 29; *Verizon/MCI Order*, 20 FCC Rcd at 18450, para. 29.

¹⁹⁹ Qwest Petition at 13–16, 27–28; see also *supra* Part III.D.1.b(i).

competition from more than a dozen competitive LECs in the Phoenix MSA.²⁰⁰ These competitors, other than Cox, rely predominantly upon Qwest facilities, including UNEs and other wholesale services, to provide their services.²⁰¹

69. *Wholesale Services.* The record indicates that Cox offers some wholesale services in the Phoenix MSA. Cox's non-cable plant facilities are not widely deployed, however, and it apparently provides little, if any, wholesale service over its cable plant, which is deployed primarily in residential areas.²⁰² The other potential wholesale suppliers Qwest cites, including Integra (via its acquisition of Electric Lightwave), XO, Level 3, tw telecom, SRP Telecom, and AGL Networks,²⁰³ likewise have comparatively few networks facilities in the Phoenix MSA and rely primarily upon Qwest's facilities to provide services.²⁰⁴ In addition, the record does not reveal significant fixed wireless wholesale service offerings in the Phoenix MSA.²⁰⁵

4. Competitive Analysis

a. Wholesale Competition

(i) Wholesale Loops

70. Although there are no data in the record by which to calculate market shares for any relevant wholesale loop product market,²⁰⁶ we note that, in the *Qwest 4 MSA Forbearance Order*, the

²⁰⁰ Qwest Petition at 25–32; *see also, e.g.*, Arizona Corporation Commission Reply, Exh. 7 (showing [REDACTED]); *infra* Part III.D.4.b(ii).

²⁰¹ Arizona Corporation Commission Reply, Exh. 7.

²⁰² *See infra* para. 71.

²⁰³ Qwest Petition at 33–37; *id.* at 31 (reporting competitive fiber in the Phoenix MSA). *See* Integra Opposition, Declaration of Steve Fisher, Attach. D, at para. 7 (Integra Fisher Decl.).

²⁰⁴ *See infra* para. 71.

²⁰⁵ *See infra* notes 210, 212 (describing evidence of fixed wireless alternatives in the Phoenix MSA).

²⁰⁶ Nor is there information in the record that would enable us to evaluate other factors, such as elasticity of demand, or whether any wholesale competitors have comparable size, resources, or cost structure to Qwest. Our analysis in this order relies upon line count data submitted by the Arizona Commission because it is the most recent and most complete data available for all competitors in the Phoenix MSA. The data indicate that Qwest is the only significant provider of wholesale services. Arizona Corporation Commission Reply, Exh. 7. Qwest argues it is critical to include all competitors in our market share analysis. Qwest Market Power PN Comments at 5. The Arizona Corporation Commission included data from all competitors in the Phoenix market, including facilities-based and providers that rely upon wholesale inputs. Arizona Corporation Commission Reply, Exh. 7. Qwest expresses concern about Commission reliance on the Arizona Corporation Commission data because it was filed pursuant to the *Second Protective Order*. *See* Letter from Harisha J. Bastiampillai, Senior Attorney, Qwest, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 09-135 at 3 & n.8 (filed May 26, 2010). Specifically, Qwest notes that under the terms of the *Second Protective Order* only outside counsel or third-party consultants are allowed to review the data, and claims that such individuals “are not familiar with the market data” and that the need to rely on such individuals would “significantly undermine Qwest’s ability to address the validity of the data submitted by the ACC.” *See id.* We find that the Arizona Corporation Commission data contains Highly Confidential Information, and is properly subject to the *Second Protective Order* adopted in this proceeding. In adopting the *Second Protective Order*, the Commission carefully balanced the Commission’s desire to obtain the best available evidence against companies’ legitimate interest in protecting highly confidential information. *See generally* *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Docket No. 09-135, Second Protective Order, 24 FCC Rcd 9509 (WCB rel. July 29, 2009) (*Second Protective Order*). The Commission routinely adopts protective orders like this in other proceedings that involve highly (continued....)

Commission found there were no “significant alternative sources of wholesale inputs” in the Phoenix MSA.²⁰⁷ There is nothing in the record here to cause us to alter this conclusion.²⁰⁸

71. Specifically, the record indicates that, other than Qwest, there are no significant suppliers of relevant wholesale loops with coverage throughout the Phoenix MSA, either individually or in the aggregate. Further, the record reveals no wholesale suppliers of last-mile connections to *mass market* end users in the Phoenix MSA other than Qwest.²⁰⁹ In limited situations, competitive carriers,²¹⁰ including Cox,²¹¹ have constructed their own last-mile connections to enterprise customers, and in even more

(Continued from previous page) _____
confidential information. More importantly, Qwest did not object to adoption of the *Second Protective Order* and Qwest has submitted confidential data pursuant to the *Second Protective Order* in this proceeding—including in Qwest’s petition itself. *See, e.g.*, Qwest Petition (seeking protective orders for the confidential and highly confidential information contained in Qwest’s forbearance petition). The *Second Protective Order* applies to all participants in this proceeding, and commenters that want to review Qwest’s highly confidential information must rely on outside counsel or consultants, just as Qwest must do to review other parties’ highly confidential information. Thus, we find no procedural unfairness or merit to Qwest’s claims in this regard.

²⁰⁷ *See Qwest 4 MSA Forbearance Order*, 23 FCC Rcd at 11756, para. 37.

²⁰⁸ Much of the information Qwest submitted is insufficiently detailed to permit any specific inferences regarding the level of competition in the Phoenix MSA. *See, e.g.*, Qwest Petition at 12, 33–39; Qwest Brigham Decl. at para. 51 (providing information that Cox advertises certain wholesale offerings but not providing any evidence on the price of those services or Cox’s success in marketing them); *id.* at paras. 57, 59–62 (primarily providing nationwide data regarding certain competitors taken from their marketing materials). For instance, Qwest relies on a competitor’s marketing assertions as evidence that this competitor is a “very viable option for carriers that seek an alternative access solution to the use of Qwest’s network in the Phoenix MSA.” Qwest Brigham Decl. para. 53 (stating that this provider has “comprehensive ‘last-mile’ solutions to connect commercial buildings . . . throughout the Phoenix area—all without the use of Qwest facilities”). However, the same marketing materials explain that this competitor’s fiber network reaches only 50 buildings and business campuses in the Phoenix MSA, which does not approach the coverage needed to provide effective competition to Qwest for retail or wholesale services throughout the Phoenix MSA. *Id.*

²⁰⁹ Although Cox has an extensive last-mile network, it does not appear to supply wholesale loops connected to residential homes or very small businesses. *See Arizona Corporation Commission Reply*, Exh. 15 (showing that Cox provides [REDACTED] in the Phoenix MSA). The record does not indicate that any entity other than Qwest and Cox has extensive last-mile connections to residential customers or very small business customers that would enable it to provide wholesale services, nor are we aware of any entity other than Qwest actually providing a wholesale mass market wireline access service.

²¹⁰ *See, e.g.*, Arizona Corporation Commission Reply at 21 & Exh. 14 (showing that AGL Networks serves [REDACTED] and the Salt River Project serves [REDACTED] buildings over their own facilities in the Phoenix MSA); Broadview Comments at 48–49 (explaining that XO has its own facilities connected only to [REDACTED] buildings in the market and has added only [REDACTED] new commercial buildings in the last 16 months); Covad Opposition at 20–23; Integra Opposition at 18 (asserting there are no significant alternative sources of wholesale loops for carriers serving businesses in the Phoenix MSA); Integra Opposition, Declaration of Scott Liestman, Attach. C at para. 5 (Integra Liestman Decl.) (reporting that tw telecom has deployed its own loop facilities to only [REDACTED]% of its customer locations in Phoenix, and that it had constructed loops to only [REDACTED]% of the commercial buildings in Phoenix); PAETEC Opposition at 21, 25 (claiming a lack of wholesale competition and that competitive facilities deployment is limited); Broadview Comments at 50 (stating that Nextlink, a provider of fixed wireless services, has only [REDACTED] hubs in the Phoenix MSA, one of which is subject to [REDACTED] and currently serves business customers in only [REDACTED] buildings).

²¹¹ Arizona Corporation Commission Reply, Exh. 6 (providing Cox’s access line counts for its large business customers by ZIP Code area); Broadview Comments at 34 (Cox only provides services to [REDACTED] of 133,000 commercial buildings in Phoenix MSA); Integra Fisher Decl. at para. 7 (Cox only offers wholesale loops facilities to a limited number of buildings and [REDACTED]; *id.* at paras. 8–9 (discussing Cox’s OSS limitations).

limited situations appear to offer these services to competitors as wholesale inputs.²¹² We find that the record evidence does not provide support for Qwest's assertion that "wholesale customers have access to a wide range of competitive alternatives," or that the market for wholesale services is competitive.²¹³ In light of the limited state of competitive loop deployment and the even more limited availability of alternative wholesale loop facilities, we need not analyze in detail all the specific product and geographic markets defined above.²¹⁴

72. Our analysis of whether Qwest possesses market power also considers potential entry.²¹⁵ We find, however, that the existence of significant barriers to entry, both in general²¹⁶ and specifically in

²¹² See, e.g., Arizona Corporation Commission Reply at 11, 22–23 (explaining that there are not many wholesale alternatives in the Phoenix MSA particularly for last-mile facilities); *id.* at 9, 21 & Exh. 7 (showing competitive carriers' extensive reliance on Qwest facilities, including UNEs); *id.* at Exh. 15 (showing the extent to which [REDACTED] rely on Cox's wholesale services); Integra Fisher Decl. at para. 10 ("Integra has not found any fixed wireless providers that have the capabilities to serve as alternatives to Qwest for wholesale loops in the Phoenix MSA."). Even if we were to accept Qwest's claim that competitive fiber has been deployed to approximately [REDACTED] buildings in the Phoenix MSA and that the only end-users locations of relevance are the approximately [REDACTED] buildings Qwest asserts have more than \$1,000 in monthly telecommunications demand, this would amount to competitive deployment to less than [REDACTED]% of end-user locations. Qwest Petition at 31 (reporting GeoTel data with additional Commission analysis); Letter from Thomas Jones et al., Counsel to Integra et al., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 09-135, Attach. at 4 (filed Apr. 28, 2010) (Integra Apr. 28, 2010 *Ex Parte* Letter) (estimating there are approximately [REDACTED] buildings in the Phoenix MSA with [REDACTED] of demand). We note that various commenters contend that Qwest's estimate of the percentage of buildings with competitive fiber deployment is significantly overstated and that a much larger number of buildings should be considered relevant when estimating the size of the addressable market. See, e.g., Broadview Comments at 38–39 (asserting that there is competitive LEC fiber to less than [REDACTED]% of 133,000 commercial buildings in Phoenix MSA and that aggregating the last-mile connections of the seven largest competitive networks in the Phoenix MSA plus XO yields only approximately [REDACTED] last-mile connections); Broadview Reply at 9 (citing a 2006 U.S. Government Accountability Office (GAO) Report showing that competitors with last-mile facilities reached only 3.7% of buildings in the Phoenix MSA with at least DS1 capacity). Whatever specific measure of competitive deployment is more accurate, we find insufficient competitive deployment of last-mile facilities to allow significant levels of competition in the relevant wholesale markets.

²¹³ Qwest Petition at 33; see *supra* note 206.

²¹⁴ As noted above, the Commission also required unbundling of subloops used for access to multiunit premises. 47 C.F.R. § 51.319(b); see generally *Triennial Review Order*, 18 FCC Rcd at 17184–95, paras. 343–54 (discussing subloop unbundling obligations). As the Commission found in the *Triennial Review Order*, generally there are no alternatives to the incumbent for these facilities, and future facilities-based entry is unlikely. *Triennial Review Order*, 18 FCC Rcd at 17193, para. 351 (stating that often there is no alternative inside wiring other than the incumbent LEC's).

²¹⁵ See, e.g., *Applications for Consent to the Transfer of Control of Licenses XM Satellite Radio Holdings Inc., Transferor to Sirius Satellite Radio Inc., Transferee*, MB Docket No. 07-57, Memorandum Opinion and Order and Report and Order, 23 FCC 12348, 12373 para. 50 (2008).

²¹⁶ The Commission previously has recognized that there are significant barriers to the deployment of last-mile network facilities. See, e.g., *Triennial Review Remand Order*, 20 FCC Rcd at 2579–81, 2616–19, paras. 72–77, 150–54; *Triennial Review Order*, 18 FCC Rcd at 17107–09, 17122–25, 17160–62, 17207–09, paras. 205–07, 237–40, 303–06, 371–73. We note that, in evaluating the competitive effects of certain BOC/IXC mergers on wholesale special access, both the DOJ and the Commission used a "screen" designed to predict the potential for additional competitive entry into particular buildings with certain minimum levels of enterprise demand. *AT&T/BellSouth Order*, 22 FCC Rcd at 5682–83, para. 42 n.114 (discussing the screens, which applied to buildings with demand of two DS3s or greater). Qwest failed to provide the data necessary to apply such a screen in the Phoenix MSA.

the Phoenix MSA,²¹⁷ indicates that potential competition poses no significant competitive constraint in this MSA. Our evaluation of the likelihood of potential competition for wholesale loops considers entry via supply-side substitution (*i.e.*, whether an existing provider of services is likely to construct new loop facilities to expand its service offerings) and *de novo* entry (*i.e.*, whether an entrant is likely to construct its own last-mile network).²¹⁸

73. We find potential competition from either supply-side substitution or from *de novo* entry to be unlikely in the Phoenix MSA. That a few competitors have constructed some competitive loop facilities in the Phoenix MSA does not support a conclusion that competitors would find it potentially profitable to build duplicative loop facilities throughout the market. Thus, potential entry cannot be relied upon to constrain market prices.²¹⁹ Further, there is no record evidence suggesting that Cox is likely to begin providing wholesale connections to mass market customers, and, as described above, the evidence indicates that Cox's network is connected to relatively few enterprise customers.²²⁰ The record further indicates that Qwest's other competitors likewise have few lit buildings, and that these competitors are not viewed as offering significant alternatives to Qwest's wholesale service offerings.²²¹ Although there is some evidence of limited wholesale activity with respect to particular buildings, we find no basis to conclude that potential entry would be sufficient to ensure a competitive market in the overall Phoenix MSA. Rather, the fact that facilities-based competitors have so few last-mile connections suggests that entry is costly and difficult. Consequently, we conclude that new wholesale entry in the Phoenix market is not likely to be reasonably timely and that Qwest is therefore likely to remain the only major wholesale provider of relevant services in the Phoenix MSA.

74. The record indicates that competitors generally make entry and exit decisions based on an evaluation of broader geographic areas than individual buildings.²²² Moreover, if a competitor seeks to serve a multi-location business customer, it must have access to facilities that reach all of the customer's

²¹⁷ See, e.g., Broadview Comments at 49 (explaining that adding buildings is costly and XO will only undertake such investment if there is a strong business case and demonstrated capacity need for at least 3 DS-3s); Integra Opposition, Declaration of Byron S. Cantrall, Attach. A at paras. 3–6 (Integra Cantrall Decl.) (discussing barriers to building a profitable competitive network in Phoenix); see also Integra Opposition, Declaration of Dave Bennett, Attach. B at para. 4–5 (Integra Bennett Decl.); Integra Liestman Decl. at paras. 5–11.

²¹⁸ We note that the Commission often has framed its consideration of potential competition as part of its discussion of supply elasticity. Considerations of potential competition also relate to the issue of barriers to entry, however, and we consider it in that context here.

²¹⁹ See *supra* paras. 70–71.

²²⁰ Arizona Corporation Commission Reply at 8 & Exhs. 7–10; Broadview Comments at 35, 45–46 (noting that Cox's switched Ethernet private line and virtual private line circuits are not provided on a dedicated basis and are susceptible to throughput degradation; Cox does not offer 10MB services; and Cox's maximum Transition Unit size differs from the industry standard).

²²¹ See *supra* para. 71 and accompanying notes; see also Qwest Petition at 34–35. We reject Qwest's assertion that the competitive LEC lit building data is understated. As discussed below, data supplied by the Arizona Commission indicates that of the [REDACTED] business access lines served by competitive LECs (excluding Cox), only [REDACTED] of these lines, or [REDACTED]% are served without relying on Qwest's facilities. Arizona Corporation Commission Reply at 13 & Exh. 7.

²²² See, e.g., Integra Liestman Decl. para. 6 (explaining that tw telecom will build its own facilities only if: (1) the customer will commit to pay a monthly recurring charge above a certain amount for a lengthy time period; (2) the customer will have at least two locations; and (3) tw telecom can obtain similar commitments from additional customers for at least one of these locations).

locations.²²³ Thus, in addition to evaluating the extent of competitive facilities deployment to particular buildings, we must also evaluate appropriate broader geographic areas. Of particular importance, we find credible assertions that Cox's last-mile network, although extensive in residential areas, could not readily serve most of the enterprise businesses in these markets at this time.²²⁴ The record evidence here further indicates that the networks of competitive LECs other than Cox reach relatively few buildings.²²⁵ We thus find that there is inadequate facilities-based wholesale competition in broader geographic areas to support a finding that Qwest lacks market power with respect to wholesale loops.

75. Based on the record, we also find that Qwest's special access services, section 271 access arrangements, Qwest's Local Services Platform (QLSP) wholesale service,²²⁶ and section 251(c)(4) resale are not adequate alternatives to section 251(c)(3) unbundled loops for competitive LECs. As an initial matter, as discussed above, the proposition that competitors could rely on special access or wholesale access rights under section 271 is inconsistent with prior Commission decisions, which among other things have noted that these alternative wholesale offerings are not priced at cost-based rates.²²⁷ There are technical distinctions between unbundled loops and these wholesale offerings, as well.²²⁸ Finally, we do not find that section 251(c)(4) resale presents an adequate alternative. A carrier that resells Qwest's service is unable to compete on service quality or service features other than those offered by Qwest. Moreover, because it is unable to use its own network facilities to provision the service, a carrier using section 251(c)(4) resale has little incentive to invest in its own network facilities. As the Commission has recognized, competition over service quality and features is one of the key advantages of UNE-based competition over resale competition.²²⁹

(ii) Dedicated Local Transport

76. As with wholesale loops, there is insufficient data in the record to identify the location of competitive local transport facilities or to calculate market shares for dedicated local transport.²³⁰ Although there appears to be a limited amount of competitive deployment of transport facilities in Phoenix, based on the present record, we cannot find that Qwest is subject to effective competition for its transport services in this market.

²²³ See *Integra Cantrall Decl.* at para. 4 (explaining that "[m]ulti-location customers generally demand that their service provider serve all of their locations within the urban area").

²²⁴ See *supra* note 211.

²²⁵ See *supra* para. 71.

²²⁶ QLSP is Qwest's commercially negotiated wholesale service that replaced its UNE-P service (UNE loop and switching).

²²⁷ See *supra* Part III.B (discussing certain factors considered in the *Triennial Review Remand Order*, such as risk of abuse, and finding them persuasive in this instance as well).

²²⁸ See, e.g., Letter from Samuel L. Feder, Counsel to Cavalier, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 09-135 at 3 (filed May 7, 2010) (Cavalier May 7, 2010 *Ex Parte* Letter) (stating that, unlike UNEs, the voice-grade loop special access service that is offered by certain incumbent LECs is a voice-grade service only, meaning that Cavalier would not be able to provide DSL, VoIP, or IPTV services over that special access offering).

²²⁹ See *First Local Competition Order*, 11 FCC Rcd at 15667-69, paras. 332-34. Moreover, we note that other provisions of the Act suggest that resale cannot effectively discipline the behavior of facilities-based providers. See, e.g., 47 U.S.C. § 271 (requiring the presence of a facilities-based competitor, not just a reseller, as a precondition of Bell Company entry into the long distance market).

²³⁰ Likewise, we do not have data or information that would enable us to evaluate other factors, such as elasticity of demand, or whether any wholesale competitors have comparable size, resources, or cost structure to Qwest.

77. As an initial matter, competitive carriers allege they have only limited alternatives to Qwest for transport services.²³¹ To support its claims of adequate transport alternatives, Qwest submitted evidence from GeoTel that approximately 25 unaffiliated providers have approximately [REDACTED] fiber route miles in the Phoenix MSA.²³² However, these data do not demonstrate the presence of facilities-based competitive alternatives for any relevant product market—*i. e.*, routes between any two Qwest wire centers,²³³ particularly given that “there are many routes between Qwest wire centers in which Qwest is the only provider of wholesale transport facilities.”²³⁴ In fact, the record indicates that the only competitive transport facilities deployed in the Phoenix MSA are on routes where Qwest already has obtained relief from UNE transport obligations by virtue of the Commission’s unbundling rules (and for which further unbundling relief thus is unnecessary).²³⁵ We therefore are not persuaded that Qwest is subject to effective competition for dedicated local transport services in relevant geographic markets in the Phoenix MSA, and we find no other record evidence demonstrating competitive alternatives for dedicated local transport services in the relevant geographic markets.

78. The Commission has recognized that barriers to entry in the provision of dedicated interoffice transport, while possibly somewhat easier to overcome than for loops, nevertheless may be significant.²³⁶ The present record does not reveal likely widespread potential competition for wholesale

²³¹ See, e.g., Broadview Comments at 47–48 & Declaration of Bryan Burns, App. A at para. 7 (explaining AGL Network’s capabilities as a provider of transport in the Phoenix MSA).

²³² Qwest Petition at 30.

²³³ As the Commission has repeatedly found, general evidence that a competitor has constructed fiber in a particular region, such as evidenced through fiber maps or the total number or route miles of fiber in a geographic region, is not alone sufficiently indicative of competition on particular transport routes to justify granting forbearance. See, e.g., *Qwest 4 MSA Forbearance Order*, 23 FCC Rcd at 11757–58, para. 39; *Verizon 6 MSA Forbearance Order*, 22 FCC Rcd 21316–17, para. 40; *Triennial Review Remand Order*, 20 FCC Rcd at 2583, 2597, paras. 82, 110 (cautioning that evidence of competitive transport based on maps and numbers of route miles of fiber is limited); *Verizon/MCI Order*, 20 FCC Rcd at 18455–56, para. 45 n.123. See *Triennial Review Remand Order*, 20 FCC Rcd at 2589–94, paras. 96–102; see also *id.* at 2589, para. 96 (establishing “fiber-based collocation as a key factor . . . because a sufficient degree of such collocation indicates the duplicability of these network elements and, thus, a lack of impairment”).

²³⁴ See *Integra Fisher Decl.* at para. 11; see also *id.* at Exh. 1 (listing [REDACTED] of a total of 64 wire centers in the Phoenix MSA in which Qwest is the only wholesale transport provider).

²³⁵ See *Integra Fisher Decl.* at para. 11 & Exh. 2 (listing wire centers in the Phoenix MSA in which Qwest is not the only wholesale transport provider); see also Qwest Non-Impaired Wire Center Lists for Loops and Dedicated Transport, available at <http://www.qwest.com/wholesale/clecs/nta.html> (Non_Impaired_Wire_Center_12_23_09.xls) (last visited May 12, 2010) (listing wire centers in which Qwest has obtained unbundling relief under the Commission’s unbundling rules); 47 C.F.R. § 51.319(e) (setting forth dedicated transport unbundling obligations); *Triennial Review Remand Order*, 20 FCC Rcd at 2575, para. 66 (establishing that for DS1 transport, competing carriers are impaired on routes for which at least one end-point is a wire center with fewer than 38,000 business lines and fewer than four fiber-based collocators; for DS3 transport, competing carriers are impaired on routes for which at least one end-point is a wire center with fewer than 24,000 business lines and fewer than three fiber-based collocators).

²³⁶ *Triennial Review Remand Order*, 20 FCC Rcd at 2578–79, para. 71 (“Compared to loops, which serve individual customers, dedicated transport carries much more traffic and has much greater potential for added future traffic, as competitive LECs continue to aggregate traffic on a route. For these reasons, competitive LECs can take advantage of economies of scale, and can also make decisions about whether to self-deploy transport based not only on actual traffic, but on potential traffic as well.”). We also note that carriers may not find it economic to purchase competitive transport in limited quantities. See *Integra Fisher Decl.* at para. 5 (describing the fixed and recurring costs associated with establishing and managing multiple wholesale relationships, and noting that establishing these (continued....)

dedicated local transport between Qwest's central offices in these areas. In particular, there is no evidence that competition via capacity expansion by existing facilities-based providers or *de novo* entry is likely. Evidence that present competitors have deployed limited amounts of fiber in a larger geographic area does not support a conclusion that those providers readily could offer wholesale services on a particular route, or that a potential entrant economically could deploy its own fiber on a particular route in a timely manner in response to a small but significant and nontransitory increase in the price of wholesale transport services.

(iii) Originating and Terminating Switched Access

79. In the *CLEC Access Charge Reform Order*, the Commission explained that, for switched access services, only end-user customers have the possibility of competitive alternatives in the market in which they purchase access service.²³⁷ IXCs, which also must pay switched access charges, face a bottleneck monopoly from the LECs—whether incumbent LEC or competitive LEC—that provide access to their end users.²³⁸ The Commission also recognized that, as long as switched access charges may be imposed by tariff, the market for these services is not structured in a way to allow competition to discipline rates for carriers' carrier charges, and the Commission thus determined that these charges may not be fully deregulated.²³⁹ Nothing in the record here contradicts those conclusions. Thus, we conclude that Qwest, like other LECs, possesses market power over originating and terminating switched access.

b. Retail Competition

(i) Mass Market

80. For the reasons described below, we find the retail mass market for wireline services in Phoenix remains highly concentrated with two dominant providers, Qwest and Cox. Of particular importance to our analysis, Cox is Qwest's only competitor that now provides or is soon likely to provide²⁴⁰ retail service to mass market customers over its own last-mile network to any significant extent in the Phoenix MSA. Although there are several other providers that serve some mass market customers in the Phoenix MSA, they are "fringe"²⁴¹ competitors that are able to compete only by relying extensively on UNEs and other Qwest wholesale services.

81. We begin by considering evidence regarding current retail market shares in the relevant geographic markets. Our analysis of mass market services relies upon line count data submitted by the Arizona Commission because it is the most recent and most complete data available for all competitors in

(Continued from previous page) _____

duplicate capabilities and incurring duplicate costs make it difficult and in many instances impossible to offer and sustain a profitable service offering).

²³⁷ *Access Charge Reform, Reform of Access Charges Imposed by Competitive Local Exchange Carriers*, CC Docket No. 96-262, Seventh Report and Order and Further Notice of Proposed Rulemaking, 16 FCC Rcd 9923, 9938, para. 38 (2001) (*CLEC Access Charge Reform Order*).

²³⁸ *Id.* The Commission explained that end-user customers have no incentive to choose a LEC that charges low switched access charges, since he or she does not pay the charges directly, and the customer's IXC is prevented by geographic rate averaging requirements from passing those charges on to the customer. *Id.* at 9935-36, para. 31.

²³⁹ *Id.* at 9938, paras. 39-40.

²⁴⁰ *See supra* note 209.

²⁴¹ A fringe competitor is a small firm operating in a market that is dominated by a single firm or a few firms. The fringe competitors take the price set by the dominant firm(s) as given and maximize their profits given this price. *See, e.g.,* NOEL D. URI, *THE ECONOMICS OF TELECOMMUNICATIONS SYSTEMS* at 148-49 (Nova Science Publishers, Inc. 2004).

the Phoenix MSA.²⁴² Based on these data, we find that Qwest and Cox [REDACTED] percent in Phoenix MSA,²⁴³ and that mass market consumers effectively face a duopoly for these services in the Phoenix MSA. The remaining [REDACTED] percent share of the relevant market are served by various fringe providers²⁴⁴ that rely upon Qwest's resale or wholesale offerings.²⁴⁵

82. In conducting its traditional market power analysis, the Commission, among other things, generally has considered whether there are competitors in the market with spare capacity that readily could serve Qwest's customers if Qwest, or Qwest in conjunction with Cox, sought to raise prices above competitive levels.²⁴⁶ We continue to believe that such evidence of facilities-based competition is highly

²⁴² We base our market share calculations on residential data because we cannot extract the data for very small business customers from the Arizona Commission's data. We believe these residential market shares are likely to approximate sufficiently closely the market shares for the mass market residential and very small business customers because they have similar demand patterns, are served primarily through mass marketing techniques, purchase similar volumes and types of communications services, and would likely face the same competitive alternatives within a geographic market. *See, e.g., SBC/AT&T Order*, 20 FCC Rcd at 18347, para. 102 n.307; *Verizon/MCI Order*, 20 FCC Rcd at 18488, para. 103 n.306.

²⁴³ *Compare* Arizona Corporation Commission Reply, Exh. 7 (showing that competitive LECs provide [REDACTED] residential access lines using Qwest facilities); Arizona Corporation Commission Reply at 12 & Exh. 11 (showing that Cox provides [REDACTED] residential access lines in the Phoenix MSA) with Arizona Corporation Commission Reply at 15–16 & Exh. 13 (showing that Qwest provides [REDACTED] residential access lines in the Phoenix MSA, including reported VoIP “lines”). The Arizona Commission supplied estimates of Cox's access line totals by ZIP Code and by wire center; we rely on the wire center totals because they represent the area for which Qwest has requested forbearance. We are not persuaded by Qwest's attempt to demonstrate the level of competition in Phoenix by citing to reductions in Qwest's retail access lines in service. *See* Qwest Petition at 6. We find market share data based on actual line counts to be a more reliable indicator of the extent of competition in the market than Qwest's line loss data. In addition, there are many possible reasons for such decreases unrelated to the existence of last-mile facilities-based competition. *See, e.g., ACS UNE Forbearance Order*, 22 FCC Rcd at 1975, para. 28 n.88; *Verizon 6 MSA Forbearance Order*, 22 FCC Rcd at 21311, para. 32; *see also* Broadview Comments at 52.

²⁴⁴ *See* Integra Besen Decl. at 8 & n.17 (citing a study that “estimate[s] that the presence of a third competitor affects prices once its share is greater than or equal to 16 percent”); Covad Opposition, Attach. 1 at 15 (discussing the DOJ's allegations that the merger of WorldCom and Sprint would leave only two major competitors for particular services, along with a competitive fringe that was “insufficient to prevent coordinated pricing or other anticompetitive behavior” (citing *United States v. Worldcom, Inc., & Sprint Corp.*, Complaint, paras. 69–71, 94–95, 112, 134)); *U.S. v. Rockford Mem. Corp.*, 898 F.2d 1278, 1283–84 (7th Cir. 1990) (noting that for a competitive fringe with 10% of the market to take an additional 10% share from the leading firms would only reduce the leading firms' shares to 81 percent but would require the fringe firms to increase their own output by 90% (*i.e.*, from 10 to 19% of the market), which would take time and would “force up their costs, perhaps steeply”); Landes and Posner Market Power Law Review, *supra* note 82, at 947 (“Intuitively, it is cheaper to raise price by curtailing output if fringe sellers have a lower market share since the same percentage increase by the fringe will yield a smaller absolute increase in their output.”).

²⁴⁵ Arizona Corporation Commission Reply, Exh. 7 (showing that [REDACTED] competitive LECs in the Phoenix MSA provide an aggregate of [REDACTED] residential access lines using Qwest facilities); Qwest Brigham Decl., Exh. 7 (showing that Qwest provides a total of [REDACTED] QLSP, UNE-P, and resale lines).

²⁴⁶ *See, e.g., AT&T Domestic Nondominance Order*, 11 FCC Rcd at 3303–04, 3308, paras. 59, 70 (finding that AT&T faced at least three nationwide facilities-based providers and hundreds of smaller competitors, which possessed the ability to accommodate a substantial number of new customers on their networks with little or no investment immediately, and relatively modest investment in the short term).

relevant to determining whether competition is sufficient to satisfy the section 10 criteria.²⁴⁷ Indeed, we believe that facilities-based coverage should be a leading factor in the Commission's analysis of whether, not just where, forbearance is warranted.²⁴⁸ The record does not reveal any wireline providers other than Cox that have last-mile network facilities coverage to any significant degree, however.²⁴⁹ To the contrary, as discussed above, the record indicates that other competitors are dependent on Qwest's last-mile facilities, including UNE loops, to serve mass market customers.²⁵⁰

83. We next evaluate the potential for competition to ameliorate the possibility of unilateral or joint exercise of market power by the entry of new facilities-based competitors by supply-side substitution and *de novo* entry. We find the potential for entry via supply-side substitution to be unlikely in the Phoenix MSA. Prior to Cox's offering of local services, it was a potential entrant via supply-side substitution in locations where its cable system was deployed and upgradeable (at relatively low incremental cost). It is now an actual competitor in the mass market where it has appropriate network facilities. Based on the current record, however, we are unable to identify any other potential facilities-based competitors for mass market services in Phoenix. Although the leading mobile wireless providers have ubiquitous networks, as described above, we cannot conclude on the basis of this record that residential mobile voice services fall within the same relevant product markets as wireline services.²⁵¹ Nor is there any evidence that mobile wireless carriers are likely to alter their pricing strategies dramatically to offer a closer substitute to Qwest's local service offerings in response to a small but significant and nontransitory increase in the price of fixed mass market services, particularly given that the majority of consumers already purchase mobile wireless services at current price levels.

84. With respect to the possibility of *de novo* entry, the Commission, in the *Triennial Review Order*, found that competitive carriers face extensive economic barriers to the construction of last-mile

²⁴⁷ In the *Qwest Omaha Forbearance Order* and subsequent decisions, the Commission evaluated this to some extent with respect to the cable operator, by considering data regarding cable "coverage." See *supra* note 53 (citing the *Qwest Omaha Forbearance Order* and explaining that an intermodal competitor "covers" a location where it uses its own network, including its own last-mile facilities, through which it is willing and able, within a commercially reasonable time, to offer the full range of services that are substitutes for the incumbent LEC's local service offerings); see also *ACS UNE Forbearance Order*, 22 FCC Rcd at 1977, para. 32. We clarify that, for purposes of the analysis we now undertake, we do not require that a competitor offer "the full range of services that are substitutes for the incumbent LEC's local service offerings" for its facilities to be considered at all. Instead, we consider competitive facilities deployment if those facilities are, or readily could be, used to compete in particular product markets, but only to that extent.

²⁴⁸ Thus, under the Commission's approach as articulated above, the presence of multiple competitors possessing facilities with sufficient spare capacity that are, or readily could be, used to compete in a particular product market potentially could be sufficient for forbearance in that product market, even if the incumbent carrier retained a majority share of the market. See *supra* Part III.B. As noted above, however, in light of our concerns about the sufficiency of a duopoly given the record evidence here, the presence of a single facilities-based competitor in a market for particular services is not a sufficient basis for us to conclude that Qwest is subject to effective competition. *Id.*

²⁴⁹ See Arizona Corporation Commission Reply at 13 (stating that Cox is Qwest's only meaningful wireline facilities-based competitor for residential customers in the Phoenix MSA and that the only other carrier with significant market share relies on Qwest's facilities to provide service, and that AT&T and MCI, "to the best of the ACC's knowledge, have not been actively marketing any residential services to customers in the Phoenix MSA for some time"); see also *id.*, Exh. 7 (providing access line count data).

²⁵⁰ Arizona Corporation Commission Reply at 9 & Exh. 7.

²⁵¹ See *supra* paras. 55-61.

facilities.²⁵² Congress enacted and the Commission implemented the UNE framework in an attempt to lower barriers to entry and to create a viable platform for entry into the local market. We see nothing in the record to indicate that, in the years since the passage of the 1996 Act, these barriers have been lowered for competitive LECs that do not already have an extensive local network used to provide other services today.²⁵³ In short, cable operators may have faced comparatively lower barriers to entering telecommunications services markets because they owned existing cable networks that could be upgraded at a feasible incremental cost, but this does not imply that entry barriers for other competitive LECs have eased.

85. We recognize that, in a small number of geographic markets, cable over-builders such as RCN have entered the market. The extent of this entry has been limited, however, and the marketplace has become more difficult for these providers with the expansion of LECs into video services.²⁵⁴ There is no record evidence that any cable over-builder is considering expanding its network into Phoenix. Nor is there any evidence that any new entry would be timely; likely; or sufficient in its magnitude, character, and scope to operate as a competitive counterbalance to any attempted price increase by a hypothetical monopolist.²⁵⁵ In the absence of any record evidence that a *de novo* entrant is likely to construct a network in this market in the near future, we do not find the theoretical possibility of such occurrence sufficient to support a finding that Qwest, or Qwest in conjunction with Cox, would not have the ability to exercise significant market power with respect to retail mass market services.

86. Consequently, we are unable to find that Qwest is subject to effective competition in the Phoenix MSA. The theoretical and empirical concerns above prevent us from simply assuming that a duopoly in this context is sufficient to ensure effective competition for the legacy services at issue in Qwest's petition.²⁵⁶ We recognize that, under some models and in some situations, duopoly can provide

²⁵² See, e.g., *Triennial Review Order*, 18 FCC Rcd 17035–41, paras. 85–91; see also *Triennial Review Remand Order*, 20 FCC Rcd at 2615–19, paras. 149–54 (discussing barriers to entry for high-capacity loops).

²⁵³ *Id.*; see, e.g., *supra* paras. 71–73.

²⁵⁴ Gary Kim, *Overbuilds, Municipal or Otherwise, a Tough Sell*, SATELLITE TECHNOLOGY, March 15, 2010 <http://satellite.tmcnet.com/topics/satellite/articles/78538-overbuilds-municipal-otherwise-tough-sell.htm>.

²⁵⁵ See *DOJ/FTC Guidelines*, § 3.0.

²⁵⁶ See *supra* paras. 30–31. We note that the Commission has, in some instances, granted regulatory relief in certain markets where there were only two competitors at the time, based on findings of potential competition, among other considerations. See, e.g., *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities; Universal Service Obligations of Broadband Providers; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review—Review of Computer III and ONA Safeguards and Requirements; Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided via Fiber to the Premises; Consumer Protection in the Broadband Era*, CC Docket Nos. 02-33, 01-337, 95-20, 98-10, 01-337, WC Docket Nos. 04-242, 05-271, Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 14853, 14880–81, 14894–98, paras. 50, 77–85 (2005) (*Wireline Broadband Internet Access Order*) (finding that the marketplace for broadband Internet service was “an emerging market,” and that while “[c]able modem and DSL providers are currently the market leaders,” there was evidence of “other existing and developing platforms, such as satellite and wireless, and even broadband over power line in certain locations,” and noting that, consistent with the mandate of section 706, it was appropriate to limit certain regulatory requirements); *Implementation of Sections 3(n) and 332 of the Communications Act Regulatory Treatment of Mobile Services*, 9 FCC Rcd 1411, 1467–68, 1470, paras. 138, 148 (1994) (noting that “the Commission has previously acknowledged that, while competition in the provision of cellular services exists, the record does not support a conclusion that (continued....)

sufficient competition. In particular, under the Bertrand model, duopoly can result in a competitive equilibrium under the assumption of perfectly homogeneous products and no capacity constraints even in the short run.²⁵⁷ We have no evidence in the record here, however, suggesting that these conditions are present in the markets at issue. Nor do we find direct evidence that the markets at issue are behaving in a competitive manner, or other record evidence that duopoly has resulted in effective competition for the relevant products.²⁵⁸

(ii) Enterprise Market

87. Based on the record evidence, we find competitors offering retail enterprise services in the Phoenix MSA primarily rely upon Qwest's wholesale services,²⁵⁹ and that Qwest has not demonstrated that there exists significant actual or potential competition for enterprise services by competitors that rely on their own last-mile connections to serve customers.

(Continued from previous page)

cellular services are fully competitive," but finding that "[i]n addition to actual competition today, the threat of potential competition in the future may also affect current cellular pricing and investment"). As discussed above, we likewise consider any evidence of potential competition as part of our traditional market power analysis. *See supra* paras. 84–85.

²⁵⁷ As noted above, however, the Bertrand model can also result in noncompetitive equilibrium under different assumptions (e.g., product differentiation). *See supra* notes 88 & 89.

²⁵⁸ *See generally* Covad Opposition, Attach. 1 at 10 (noting that, as the D.C. Circuit has explained, in a market "characterized by few producers, price leadership occurs when firms engage in interdependent pricing, setting their prices at a profit-maximizing, supracompetitive level by recognizing their shared economic interests with respect to price and output decisions"); COMPTTEL Opposition, Attach. at 23–26; Integra Apr. 28, 2010 *Ex Parte* Letter, Attach. at 6 (Cox's prices for wholesale loops are high in the limited number of locations it offers such facilities). We reject Qwest's argument that modest levels of competition may be sufficient to impose pricing discipline in a market where the providers have pronounced scale and scope economies and high price-cost margins, because Qwest's explanation implicitly assumes a relatively high elasticity of demand, and there is no evidence in this record that the demand for the relevant product is particularly elastic in Phoenix or any other geographic market. We also reject Qwest's hypothetical argument about the incentives of an incumbent LEC offering a bundled service offering of local, long-distance, vertical features, and broadband service. First, this bundled service offering is not within the relevant product market for the Petition under consideration. Second, even if this bundled service offering were being considered in this proceeding, we would reject this argument because there is no evidence in this record of an estimate of the elasticity of demand for this service offering and Qwest's analysis does not consider the impact of any switching costs that the consumer would incur with the substitution of one firm's bundled service offering for a competitor's bundled service offering. *See* Qwest Reply Tardiff/Wiseman Decl. at paras. 61–65.

²⁵⁹ In prior proceedings, we have not had sufficiently detailed data to define localized relevant geographic markets in which all enterprise customers face the same competitive choices, and instead used the most disaggregated data possible in performing the structural analysis for different types of business services and for certain broad classes of business customers, where such data is available. *See, e.g., SBC/AT&T Order*, 20 FCC Rcd at 18328–31, paras. 69–72; *Verizon/MCI Order*, 20 FCC Rcd at 18470–73, paras. 69–72; *Section 272 Sunset Forbearance Order*, 22 FCC Rcd at 16459–60, paras. 34, 35. In this proceeding, most competitive deployment of facilities is reported as a Phoenix MSA total rather than being provided in a more disaggregated geographic area. *See, e.g., Arizona Corporation Commission Reply*, Exh. 7 (showing competitive LEC lines served with non-Qwest facilities in the Phoenix MSA). Thus, even though some of the data in the record is provided on a more disaggregated basis, we would be ignoring facilities-based competition of which we are aware to conduct our analysis on that more disaggregated basis. *See, e.g., Qwest Brigham Decl.*, Exh. 2 (providing Qwest's retail switched access line totals by wire center); *Arizona Corporation Commission Reply*, Exhs. 8–10 (providing Cox's business retail switched access line total estimates by wire center); *id.* at 22 & Exh. 14 (providing lit building totals by ZIP Code for AGL Networks and Salt River Project). Nevertheless, having examined the ZIP Code and wire center data that has been filed in the record, we find nothing in that data that causes us to alter our conclusions above.

88. We begin by considering evidence regarding current retail market shares in the Phoenix MSA where Qwest provides services.²⁶⁰ Our analysis of retail enterprise services, like our analysis of mass market services, relies upon line count data submitted by the Arizona Commission because it is the most recent and most complete data available for all competitors in the Phoenix MSA. Although we find that we cannot precisely define separate relevant product markets for all enterprise services, we rely upon the Arizona Commission data to inform our analysis of the enterprise market.²⁶¹ These data indicate that Qwest has a market share of [REDACTED] percent across all business customer classes, a market share of [REDACTED] percent for small business, a market share of [REDACTED] percent for medium businesses; and a market share of [REDACTED] percent for large businesses.²⁶² In addition, competitors other than Cox rely heavily on Qwest's wholesale offerings to provide enterprise services.²⁶³ The Arizona Commission data suggest that Qwest's facilities are used to provide the following percentages of competitors' lines: [REDACTED] percent for all business lines, [REDACTED] percent for small businesses, [REDACTED] percent for medium businesses, and [REDACTED] percent for large businesses.²⁶⁴ These data further show that Cox has a market share of [REDACTED] percent for all businesses, a market share of [REDACTED] percent for small businesses, a market share of [REDACTED] percent for medium businesses, and a market share of [REDACTED] percent for large businesses.²⁶⁵ Along with the other data in the record, these market share data suggest that none of Qwest's competitors, either individually or in the aggregate, have deployed facilities that enable effective

²⁶⁰ We do not have data or information that would enable us to evaluate other factors, such as elasticity of demand, or whether any retail enterprise competitors have comparable size, resources, or cost structure to Qwest. We do not find Qwest's evidence of decreases in its switched business access lines persuasive. See Qwest Reply at 12. We find market share data based on actual line counts to be a more reliable indicator of the extent of competition in the market than Qwest's line loss data. In addition, Qwest does not provide any evidence of the overall size of the market during the relevant time period, or the extent to which decreases in Qwest's retail switched access sales could be offset by increases in its retail special access sales or its wholesale switched and special access sales, or the extent to which Qwest's retail switched access customers are migrating to managed services or IP-based technologies that can reduce the number of voice-grade-equivalent access lines required to serve the same level of demand, or other relevant possibilities.

²⁶¹ Our analysis of particular enterprise customer classes is determined by the availability of data in this record. The analysis may overstate or understate Qwest's competitive significance because the number of lines used by an enterprise customer may be an imperfect means of delineating customer classes.

²⁶² The Arizona Corporation Commission obtained access line counts from each carrier in the Phoenix MSA disaggregated into three business customer classifications: small (less than 4 lines provided); medium (4 to 100 lines provided); and large (more than 100 lines provided). Arizona Corporation Commission Comments at 10; Arizona Corporation Commission Reply, Exhs. 1, 3, 5 (Cox Business lines), Exh. 7 (non-Cox competitive LEC lines), Exhs. 8-10 (Qwest lines, including VoIP "lines").

²⁶³ See *supra* note 221 (stating that of the [REDACTED] business lines that are served by competitive LECs in the Phoenix MSA, only [REDACTED], or [REDACTED]% of those lines are served without Qwest facilities). For instance, the data submitted by the Arizona Commission indicates that [REDACTED] business lines, [REDACTED] business lines, [REDACTED] business lines and [REDACTED] business lines are served using Qwest's facilities. See Arizona Corporation Commission Reply, Exh. 7.

²⁶⁴ Arizona Corporation Commission Reply Exh. 7 (non-Cox competitive LEC lines), Exhs. 1, 3, 5 (Cox lines). Consistent with our findings above, these data are evidence that Qwest's network is practically ubiquitous while the aggregate network capacity of Qwest's competitors is comparably limited. See *supra* at Part III.D.4.a.i.

²⁶⁵ Arizona Corporation Commission Reply Exh. 7 (non-Cox competitive LEC lines), Exhs. 1, 3, 5 (Cox lines), Exhs. 8, 9, 10 (Qwest lines).

competition to Qwest in the absence of the regulated wholesale offerings at issue.²⁶⁶ Qwest has provided no evidence sufficient to rebut this conclusion.²⁶⁷

89. The same barriers to entry noted above in the context of wholesale loop and transport services apply equally to the facilities-based provision of retail enterprise services.²⁶⁸ In this regard, we find no record basis for concluding that Qwest is subject to effective potential competition through either supply-side substitution or *de novo* entry. Although there are other facilities-based communications networks operating in these geographic markets, including mobile wireless providers and satellite providers, there is no persuasive record evidence that the services offered via such networks are in the same relevant product markets as those at issue here. Finally, although Qwest asserts that *fixed* wireless providers are capable of providing enterprise services,²⁶⁹ there is no evidence in this record that one or more of these providers is likely to enter and offer enterprise services to any significant portion of enterprise businesses anytime in the future.²⁷⁰

90. We find that *de novo* entry is equally unlikely. As discussed above, in the *Triennial Review Order*, the Commission found that competitive carriers face extensive economic barriers to the construction of last-mile facilities.²⁷¹ Congress enacted and the Commission implemented the UNE framework in an attempt to lower barriers to entry and to create a viable platform for entry into the local market. We see nothing in the record to indicate that the passage of time has lowered these barriers for competitive LECs that do not already have an extensive local network used to provide other services to enterprise locations today.²⁷² Qwest suggests that fixed wireless is a possible means of *de novo* entry, but the record contains no evidence that such entry is likely in these areas any reasonable timeframe.

91. As discussed above,²⁷³ upon further consideration, we are unwilling to predict that Cox's

²⁶⁶ See, e.g., *supra* note 210 (describing the extent of competitive last-mile facilities deployment in the Phoenix MSA).

²⁶⁷ We reject the Harte-Hanks business share estimate submitted by Qwest. That share estimate is based upon a single question in which some group of 1,500 business customers in the Phoenix MSA were asked to identify their "primary telecommunications provider." Qwest Petition at 27. We do not find this to be a reliable predictor of Qwest's market share of the enterprise market in total or for any customer class for enterprise services because: (1) there is no indication of how respondents were chosen; (2) the response to a single question seeking the name of the customer's "primary provider for telecommunications services" is not dispositive of a firm's market share in the relevant product market at issue here (switched access services) whether for the enterprise market as a whole or for any specific customer class of this market; (3) the survey response is not indicative of the market participants' current output for any service market; and (4) the survey response is not indicative of any competitor's reliance upon Qwest for key product inputs, including the inputs for which Qwest seeks forbearance from unbundling obligations. See, e.g., Ad Hoc Comments at 4–5; Broadview Comments at 26–27; COMPTTEL Opposition at 38–39; Broadview Reply at 5 n.14.

²⁶⁸ To reach potential customers with its own facilities, Cox, like any other competitive LEC, would need to overcome the relevant entry barriers. See Integra Opposition at 14–17; Integra Bennett Decl. at para. 4; Integra Liestman Decl. at paras. 5–9; see also *supra* para. 73 (discussing the hurdles Cox and other competitive LECs face for supply side substitution); *supra* note 217 (describing difficulties competitive LECs other than Cox face in extending their last-mile networks).

²⁶⁹ Qwest Petition at 36; Qwest Brigham Decl. at paras. 45, 58.

²⁷⁰ See *supra* notes 210, 212 (describing evidence of fixed wireless alternatives in the Phoenix MSA).

²⁷¹ See, e.g., *Triennial Review Order*, 18 FCC Red at 17035–41, paras. 85–91.

²⁷² See *supra* para. 84.

²⁷³ See *supra* para. 36.

competitive success in the retail mass market currently subjects, or will in the future subject, Qwest to effective competition in the enterprise market. As a result, we conclude that there is insufficient actual and potential competition to constrain effectively the price of Qwest's enterprise services.

E. Forbearance Analysis

92. The Commission is required to forbear from any statutory provision or regulation if it determines that: (1) enforcement of the regulation is not necessary to ensure that the telecommunications carrier's charges, practices, classifications, or regulations are just, reasonable, and not unjustly or unreasonably discriminatory; (2) enforcement of the regulation is not necessary to protect consumers; and (3) forbearance from applying such provision or regulation is consistent with the public interest.²⁷⁴ In determining whether forbearance is consistent with the public interest, the Commission also must consider "whether forbearance from enforcing the provision or regulation will promote competitive market conditions."²⁷⁵ Forbearance is warranted under section 10(a) only if all three elements of the forbearance criteria are satisfied.²⁷⁶ Moreover, as the Commission has recognized, when seeking forbearance, "the petitioner bears the burden of proof—that is, of providing convincing analysis and evidence to support its petition for forbearance."²⁷⁷ We evaluate the petition for forbearance based on the record as a whole and conclude that Qwest has not satisfied its burden of demonstrating that the section 10(a) standards have been met with respect to its request.²⁷⁸

1. Forbearance from Section 251(c) UNE obligations

93. As discussed above,²⁷⁹ Congress enacted section 251(c)(3) with the goal of opening local markets to competition. With respect to the UNEs at issue here, the Commission has concluded that reasonably efficient competitors face barriers to entry that are likely to make entry into these markets uneconomic without access to those UNEs.²⁸⁰

94. Qwest contends that competition for telecommunications services in the Phoenix MSA is sufficiently developed that the regulations adopted pursuant to section 251(c)(3) from which it seeks forbearance are no longer necessary under the criteria of section 10, and that forbearance is in the public interest. Under the framework described above, competitive conditions might justify forbearance from UNE obligations if the petitioner could demonstrate that it lacks market power in the relevant wholesale markets.²⁸¹ Even in the absence of robust wholesale competition, forbearance relief might be warranted

²⁷⁴ 47 U.S.C. § 160(a).

²⁷⁵ 47 U.S.C. § 160(b) (providing that, in making the determination under section 10(a)(3), the Commission shall consider whether forbearance will promote competitive market conditions).

²⁷⁶ See *Cellular Telecomms. & Internet Ass'n v. FCC*, 330 F.3d 502, 509 (D.C. Cir. 2003) (explaining that the three prongs of section 10(a) are conjunctive and that the Commission could properly deny a petition for failure to meet any one prong).

²⁷⁷ *Forbearance Procedures Order*, 24 FCC Rcd at 9544, para. 20.

²⁷⁸ Because we deny Qwest's request for forbearance on the merits, we decline to reach the substance of Broadview Networks Motion for Summary Denial. See Motion for Summary Denial of Broadview Networks, WC Docket No. 09-135 (filed Aug. 25, 2009) (arguing that the Commission should summarily deny the present petition and consider the merits of Qwest's request for forbearance in the Phoenix MSA only in the pending *Qwest 4 MSA* remand proceeding to avoid the unnecessary expenditure of resources).

²⁷⁹ See *supra* Part II.B.1.

²⁸⁰ See *supra* paras. 11–12.

²⁸¹ See *supra* Part III.C.

if, for example, there is sufficient full, facilities-based competition for the relevant retail services.²⁸² Based on the competitive analysis above, however, we do not find sufficient evidence to conclude that either circumstance is present here.²⁸³

a. Section 10(a)(1)—Charges, Practices, Classifications, and Regulations

95. Based on the record evidence and our analysis above, we conclude that section 251(c)(3) UNE regulations remain necessary to ensure that Qwest's "charges, practices, classifications, or regulations . . . are just and reasonable and are not unjustly or unreasonably discriminatory" in Phoenix.²⁸⁴

²⁸² See *id.* As we observe above, the mere fact that a relevant retail market was effectively competitive would not, by itself, be sufficient to justify relief, particularly if that retail competition may depend on the rules or regulations from which forbearance relief is being sought. *Id.*

²⁸³ COMPTTEL and Covad (among others) argue, as a threshold matter, that the Commission may not forbear from enforcing the pertinent section 251(c)(3) unbundling requirements because it has not validly determined, pursuant to section 10(d), that those requirements have been "fully implemented." See, e.g., COMPTTEL Opposition at 14–20; Covad Opposition at 43–45. These commenters acknowledge that the Commission previously ruled, in the *Qwest Omaha Forbearance Order* that the section 251(c) obligations had been fully implemented "because the Commission has issued rules implementing section 251(c) and those rules have gone into effect" and further conceding that the D.C. Circuit affirmed the Commission's statutory interpretation as reasonable. COMPTTEL Opposition at 14–15; Covad Opposition at 43–44. Nevertheless, COMPTTEL and Covad assert that, because it had not first been presented to the Commission as required by 47 U.S.C. § 405(a), the court expressly declined to address the "distinct" claim that the Commission's interpretation of section 10(d) with respect to section 251(c) obligations was inconsistent with language in the earlier *First Local Competition Order* that allegedly had acknowledged "a role for States and service providers in implementing § 251(c)." See COMPTTEL Opposition at 16; Covad Opposition at 43–44; *Qwest Corporation v. FCC*, 482 F.3d at 478. The commenters contend that the Commission must address and reconcile that alleged inconsistency now. See COMPTTEL Opposition at 15–20; Covad Opposition at 43–44. Doing so here, we find that there is no inconsistency. COMPTTEL and Covad quote general statements from the *First Local Competition Order* and other related rulemaking orders about the roles assigned to state commissions and incumbent carriers under sections 251 and 252. See, e.g., COMPTTEL Opposition at 16–18 (relying on paras. 6, 41, 54, 67, 85, 111, 116, 307 of the *First Local Competition Order*). Those statements do not purport to interpret the "fully implemented" language of section 10(d) that is at issue here. Moreover, the Commission's *Qwest Omaha Forbearance Order* interpretation of sections 10(d)'s "fully implemented" language as it relates to section 251(c) obligations has the practical virtue of establishing a bright line threshold standard for determining whether a forbearance inquiry may proceed, while still preserving more nuanced analysis, under the standards of sections 10(a) and (b), for determining whether forbearance ultimately should be granted. Cf. *Qwest v. FCC*, 482 F.3d at 478 (rejecting claim that the FCC's "fully implemented" interpretation would permit forbearance "before the benefits from unbundling were 'significantly realized,'" in light of the "independent requirements of § 10, such as § 10(b)'s mandate to consider whether forbearance would 'promote competitive market conditions'"). Such analysis is fully capable of taking into consideration the performance of service providers and the actions of state commissions under section 251(c) and section 252. Thus, even if there were tension between the Commission's interpretation of section 10(d)'s "fully implemented" language in the *Qwest Omaha Forbearance Order* and its earlier statements about section 251(c) in the *First Local Competition Order* such tension would provide no basis upon which to set aside our section 10(d) interpretation. See *Nat'l Cable & Telecomms. Ass'n v. FCC*, 567 F.3d 659, 669 (D.C. Cir. 2009) ("[T]he existence of contrary agency precedent gives [the court] no more power than usual to question the Commission's substantive determinations. We still ask only whether the Commission has adequately explained the reasons for its current action and whether those reasons themselves reflect a 'clear error of judgment.'" (internal citations omitted)).

²⁸⁴ 47 U.S.C. § 160(a)(1). As noted above, Qwest also seeks forbearance from section 271(c)(2)(B)(ii) of the Act or checklist item 2, which incorporates and is coextensive with section 251(c)(3). See *supra* para. 22. For the same reasons discussed here, we also reject Qwest's forbearance request with respect to section 271(c)(2)(B)(ii) of the Act.

In particular, we find both the wholesale and the retail markets insufficiently competitive to satisfy section 10(a)(1).

(i) **Wholesale Markets**

96. The present record regarding wholesale competition does not enable us to find that the unbundling requirements no longer are necessary to ensure that Qwest's "charges, practices, classifications, or regulations . . . are just and reasonable and are not unjustly or unreasonably discriminatory" in the absence of section 251(c)(3) regulations. As explained in our competitive analysis, *supra*, there is no record evidence of significant competition for the wholesale products used to serve either mass market or enterprise customers.²⁸⁵ Further, as described above, we have reconsidered several predictions we made in the *Qwest Omaha Forbearance Order* regarding wholesale services and decline to make similar predictions in the context of Qwest's request for forbearance in this proceeding.²⁸⁶

(ii) **Retail Markets**

97. As noted above, notwithstanding a lack of competition in wholesale markets, forbearance nevertheless might be warranted if there were evidence of sufficient retail competition among facilities-based competitors that have deployed last-mile networks to serve end users.²⁸⁷ As the Commission previously has found, "competition is the most effective means of ensuring that . . . charges, practices, classifications, and regulations . . . are just and reasonable, and not unreasonably discriminatory."²⁸⁸ The competitive evidence here, however, falls far short of such a showing.

98. *Retail Mass Market Services.* For the reasons explained in our competitive analysis, we cannot conclude that there is sufficient facilities-based competition for retail mass market services in the Phoenix MSA to meet the section 10(a)(1) criteria for UNE forbearance. As explained above, Qwest and Cox dominate the relevant mass market services. Together, they have a combined market share of [REDACTED] percent in Qwest's service territory in the Phoenix MSA.²⁸⁹ With the exception of Cox, all other providers of the relevant mass market services remain dependent on Qwest's facilities.²⁹⁰ Nothing in the record indicates that the recognized barriers to entry, which UNEs are designed to help competitors overcome, have been lowered to enable similar competitive facilities deployment by any provider other than Cox. Thus, there is no evidence that, absent section 251(c)(3) regulation, Qwest would be subject to effective retail competition for mass market customers. For the reasons discussed above, that is inadequate competition to ensure that the rates and practices for retail mass market services would be just, reasonable, and non-discriminatory.

99. *Retail Enterprise Market Services.* As discussed in our competitive analysis, *supra*, we also conclude there is insufficient evidence of competition in the retail enterprise markets to forbear from UNE obligations under section 10(a)(1). In the retail enterprise markets, Qwest appears to be the sole provider with facilities serving the vast majority of commercial buildings.²⁹¹ Given the need to consider

²⁸⁵ See *supra* Part III.D.1.a.

²⁸⁶ See *supra* Part III.B.

²⁸⁷ See *supra* Part III.C.

²⁸⁸ *US West Forbearance Order*, 14 FCC Red at 16270, para. 31.

²⁸⁹ See *supra* para. 81.

²⁹⁰ See *supra* para. 80.

²⁹¹ See, e.g., *supra* para. 88 (showing Qwest has a market share of [REDACTED]% of all business lines and that its facilities are used to provide [REDACTED]% of competitive LEC business lines).