

## *History*

At the simple click of a mouse or tap of a computer key, students in the Phoenix Elementary School District have the world at their fingertips at the highest possible Internet speed available thanks to a new partnership with Cox Business. Cox Business just inked a deal with the Phoenix Elementary School District to provide the district's connectivity, meaning high speed Internet beginning in July.

## *Solutions*

"This partnership so greatly increases connectivity and bandwidth size that when teachers use the Internet as an instructional tool, the speed will increase by 100 percent and in some cases even faster. It's a phenomenal tool for the students to use in the classrooms," says Tom Lind, the director of instructional technology for the district.

There are 15 schools in the Phoenix Elementary School District and a number of administrative offices and sites, which Cox Business will link together. The schools will communicate back and forth on a private network that links them together, and will allow information to go out to all of the district's schools simultaneously from a central location.

"Cox is very pleased to be providing high speed Internet services and state-of-the-art technology to the students and teachers of Arizona. This is a win-win partnership for everyone, especially and most importantly the students," says Mike Petty, vice president for Cox Business.<sup>41</sup>

This provides just a sampling of Cox's presence in the Phoenix business and government market. Of course Qwest's marketing department is well aware of the competitive pressures applied by Cox in the Phoenix MSA, as Qwest is competing every day with Cox. In fact, Qwest is specifically aware of numerous competitive bids lost to Cox in the Phoenix MSA, especially in the government and education sector.

In the declaration of Steve Fisher, the Integra CLECs claim that "Integra faces substantially more competition from Qwest than from Cox in the retail business market in the Phoenix MSA."<sup>42</sup> The Integra CLECs then claim that Cox is a minor player, and quotes Cox as

---

<sup>41</sup> <http://ww2.cox.com/business/arizona/industries/education/cs-edu-phoixelementary.cox>.

<sup>42</sup> Integra CLECs, Declaration of Steve Fisher.

saying “we’re just scratching the surface” in the business market.<sup>43</sup> Of course this simply exposes the weakness in the CLECs’ competitive argument. Qwest would not argue that Qwest is not a major player in the Phoenix business market today, and that it may currently serve more business customers than Cox. However, this misses the point. The fact that Cox is a rapidly growing presence in the market, is aggressively marketing services to business customers, and yet is “just scratching the surface” makes clear the competitive threat to Qwest. In fact, this illustrates the problems inherent in viewing static market share as a determinant of market power, as described in the *Weisman/Tardiff White Paper*. Cox has the capacity to compete with Qwest for business customers in this *dynamic* market throughout the Phoenix MSA, and this fact must inform the Commission’s decision in this proceeding. Cox claims that: “[i]n the Phoenix area, Cox serves more than 1.7 million service subscribers in 23 communities. . . . Cox’s 15,000-mile hybrid fiber coaxial cable network throughout Phoenix and Southern Arizona, provides homes *and businesses* digital television, high-speed Internet access and telephone service.”<sup>44</sup> It would be entirely inappropriate to ignore the significant presence of Cox in the Phoenix MSA business market.

**E. Cox Provides a Viable Wholesale Alternative for CLECs.**

The CLECs universally discount Cox’ ability to serve the wholesale access market, despite the clear evidence that Cox offers carrier access services throughout the Phoenix MSA. As Qwest described in the declaration of Robert H Brigham, filed with Qwest’s Petition, Cox offers a full slate of wholesale carrier access options, as Cox describes on its website:<sup>45</sup>

---

<sup>43</sup> Integra CLECs at 22.

<sup>44</sup> <http://ww2.cox.com/business/arizona/industries/education/cs-edu-phoenixelementary.cox>.

<sup>45</sup> See: [http://www.coxbusiness.com/pdfs/cox\\_carrier.pdf](http://www.coxbusiness.com/pdfs/cox_carrier.pdf), visited 1-29-09.

**We can help you choose the Cox Carrier Access service level that best meets your communications requirements.**

Service	Features
Cox DS-1 Customer End Loop	1.544 Mbps (DS-1) digital circuit Super Frame (SF) or Extended Super Frame (ESF) AMI or B8ZS line coding
Cox DS-3 Customer End Loop	44.736 Mbps digital circuit
Cox OC-3 Customer End Loop	155.62 Mbps optical circuit
Cox OC-12 Customer End Loop or Carrier Interconnection	622.08 Mbps optical circuit
Cox OC-48 Customer End Loop or Carrier Interconnection	2.488 Gbps optical circuit
Cox OC-192 Customer End Loop or Carrier Interconnection	9.952 Gbps optical circuit

**Standard features that enhance your Carrier Access service:**

Optional Service	Features
Configurations Supported	Channelized or full clear channel configurations available Multiplexing available at one or both ends DS-1s and DS-3s can be fanned out to multiple destinations
Customer Interfaces Available	Variety of hand-off interfaces available, including RJ45, BNC, RS232 and FC, SC and ST optical connectors

Despite the clear evidence of these offerings, the CLECs claim that Cox services are not useful because of alleged operational hurdles and the alleged limited scope of the Cox network.

The Broadview CLECs and the Integra CLECs claim that Cox wholesale services are “unsuitable” for CLECs. First, they complain that Cox’s wholesale services are not ubiquitous, and that the services are available only to a relatively limited number of buildings.<sup>46</sup> While Cox may not serve *all* buildings in the Phoenix MSA today, it has an extensive fiber and fiber/coaxial network in the Phoenix MSA, and is capable of serving many more buildings. Further, Cox has stated its goal of increasing its share of the wholesale market, and has shown a willingness to extend facilities to serve additional buildings where there is customer demand. Thus, Cox

<sup>46</sup> See, e.g., Integra CLECs at 18.

represents a viable CLEC option even where it has not yet connected a building to its network. CLECs are capable of “working out a deal” to obtain Cox service in many buildings that are not currently served throughout the Phoenix MSA.

Second, the CLECs claim that Cox lacks the capacity to serve business customers at DS1 and higher speeds.<sup>47</sup> The Broadview CLECs claim that XO cannot use Cox’s higher speed Ethernet services because the circuits do not comply with XO’s reliability standards.<sup>48</sup> While Qwest cannot vouch for the technical standards of Cox’s Ethernet network, Qwest suspects that Cox would be marketing services to carriers that do not meet a high standard of reliability. In addition, as described above, Cox offers DS1, DS3 and OCn services that they claim are of extremely high reliability. Speeds above DS1 use the Cox fiber network, while DS1 and below services are available on the Cox HFC network. While the CLECs claim that Cox is not a viable option because it can only offer service above a DS1 level over a “limited” fiber network, this argument is a red herring. The fact is, nearly all unbundled loops ordered from Qwest by CLECs in the Phoenix MSA are at the DS1 and below level, where the replacement service may be provided over Cox’s HFC network. For example, as of August 2009, CLECs ordered only **\*\*\*BEGIN CONFIDENTIAL\*\*\*** **\*\*\*END CONFIDENTIAL\*\*\*** DS3 unbundled loops from Qwest in the Phoenix MSA, while they ordered **\*\*\*BEGIN CONFIDENTIAL\*\*\*** **\*\*\*END CONFIDENTIAL\*\*\*** DS1 unbundled loops and **\*\*\*BEGIN CONFIDENTIAL\*\*\*** **\*\*\*END CONFIDENTIAL\*\*\*** DS0 or analog unbundled loops.

---

<sup>47</sup> See, e.g., PAETEC Comments at 17.

<sup>48</sup> Broadview CLECs at 46.

Third, XO, one of the Broadview CLECs, complains that the Cox network is not 100% compatible with the XO network. For example, its argues that Cox uses a different "Maximum Transition Unit" than Cox and that use of the Cox network creates "interoperability issues" that "frustrate tracking, reporting, and efficient responses to trouble tickets."<sup>49</sup> While there may be some technical issues to overcome, it cannot be assumed that this creates an insurmountable barrier to using Cox services. Issues like these must be resolved in all intercarrier agreements, and there is little doubt that these issues could be overcome. Such issues do not provide a legitimate reason to argue that Cox services are not a substitute for Qwest wholesale services

Fourth, XO argues that it cannot use Cox because "Cox does not currently offer 10MB services, which is XO's most popular level of service to business customers."<sup>50</sup> If this is the case, the Commission cannot conclude that just because Cox does not currently offer XO's "favorite" bandwidth service, that Cox is not a competitive option. Given that Cox is seeking wholesale customers, and XO would allegedly like competitive options, it should be assumed that Cox and XO could work out an arrangement that meets XO's needs. These are the kinds of issues that wholesale and retail carriers resolve in the normal course of doing business.

Fifth, the Integra CLECs claim that they cannot use Cox because it does not allow customers to order via an electronic interface or offer access to other OSS Functions.<sup>51</sup> In the declaration of Steve Fisher, Integra claims that "no wholesale provider of loops in the Phoenix MSA other than Qwest comes close to meeting" Integra's OSS requirements."<sup>52</sup> Mr. Fisher

---

<sup>49</sup> Broadview CLECs at 46; arguing that Cox's Maximum Transition Unit (MTU) size is 1522 bytes, which is not compatible with the 1544 MTU used by XO.

<sup>50</sup> *Id.*

<sup>51</sup> Integra CLECs at 19.

<sup>52</sup> *Id.* at Declaration of Steve Fisher.

essentially argues that *no* other provider other than Integra's current provider – Qwest -- could ever meet their needs, because no other provider has Qwest's OSS. Since no provider could precisely replicate Qwest's OSS, one might assume that Integra will be dependent on Qwest *ad infinitum*. According to Integra's theory, Qwest could *never* obtain any regulatory relief, because Integra will always be impaired unless it has the ability to purchase *Qwest* loops, using *Qwest OSS*. This is nonsense. The Act viewed UNEs as a transition mechanism, and clearly did not contemplate that the only meaningful competition would be from another provider that offered OSS that is identical to Qwest's.

Sixth, Mr. Fisher then claims that it must only rely on *one wholesale provider* to serve all of its needs in the Phoenix MSA because "the costs associated with establishing and managing two or more wholesale relationships are generally too high to enable Integra to rely on two wholesale providers for a significant volume of loops."<sup>53</sup> Thus, the Integra CLECs argue that it requires Qwest UNEs because it is too expensive to order service from more than one UNE provider in a geographic area is likewise no reason to conclude Integra does not have options. In essence, Integra CLECs ask the Commission to deny forbearance, because it is inconvenient, and more expensive, for the Integra CLECs to use two providers to purchase loops in the Phoenix MSA. However, the convenience of the Integra CLECs is not a requirement for Qwest forbearance.

Finally, the Integra CLECs complain that Cox's wholesale rates are too high.<sup>54</sup> This is a telling statement, as it indicates that Qwest's regulated UNE rates may be below market levels. In a competitive world, suppliers compete based on quality, price and other attributes. Just

---

<sup>53</sup> Integra CLECs at Declaration of Steve Fisher.

<sup>54</sup> Integra CLECs at 19.

because Qwest's rates are lower does not mean that the Qwest and Cox services are not substitutes. What the Integra CLECs' statement on price really means is that the Integra CLECs would like to keep buying UNEs from Qwest at below-market levels, rather than purchase from Cox or other providers. The Integra CLECs have determined that because Qwest's rates are low and the service quality is high, it is the *best* option; they would rather buy UNEs at low prices from Qwest than seek other competitive options, or self-provision service.

These opposing CLEC complaints carry a common thread. In each case, the CLECs argue that Cox wholesale services are not a viable option because they are not *identical* to Qwest services. That is, to the extent that Cox differentiates its services in *any* way -- e.g., does not offer identical products with identical OSS interfaces, charges a different price, etc. -- the services are not substitutes.<sup>55</sup> Based on the CLECs' criteria, no other providers' wholesale service could ever compete with Qwest, simply because no other provider *is* Qwest. The fact is, any competitive market will have providers offering differentiated services to meet the varied needs of customers, based on differentiation of quality, price, variety, etc. This is how innovation -- rather than simply imitation -- occurs. In fact, there is little doubt that Cox seeks to differentiate its wholesale services from Qwest in a positive way -- highlighting its advantages. The CLECs appear to define wholesale services in a manner that is so tied to Qwest's systems, product offerings, prices and level of service, that no wholesale provider could possibly be declared to be a Qwest competitor. This is simply unreasonable, and erects a standard that is not consistent with the Act or sound economics.

The foregoing also demonstrates that CLECs have become dependent on Qwest UNEs, even when alternatives are available. While CLECs could purchase wholesale services from Cox

---

<sup>55</sup> This is like saying a GSM-based mobile phone is not a substitute for a CDMA-based mobile phone because they are not technically compatible.

and other providers in the Phoenix MSA (as discussed below), they prefer to purchase Qwest UNEs at low TELRIC-based prices, and will pull out all the stops to use the regulatory environment to force Qwest to continue to provide these services even in highly competitive markets like Phoenix. Of course, as pointed out in the *Weisman/Tardiff White Paper* (§ 69), this “addiction to UNEs” encourages imitation, stifles CLEC innovation, and discourages investment. The Commission should not deny forbearance just so CLECs can continue to enjoy artificially low UNE rates forever. *Id.*

**F. Wireless is Unequivocally a Substitute in the Phoenix MSA.**

The opposing CLECs argue that wireless competition should not be considered in Qwest’s Phoenix Petition. The Covad CLECs and PAETEC argue that “[d]espite the *Omaha Forbearance Order*’s unequivocal rejection of Qwest’s assertions (regarding wireless), Qwest surprisingly repeats them in its latest petition.”<sup>56</sup> It is interesting that these CLECs cite the Omaha order then selectively ignore the subsequent *Verizon 6 MSA* and *Qwest 4 MSA Orders*, which specifically state that wireless services will be considered in the forbearance analysis. In the *Qwest 4 MSA Order*, the Commission stated:

[i]n calculating market shares, we believe it is appropriate to include wireless-only households (*i.e.*, residential telephone customers who have “cut the cord”). In particular, we find 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. Over the past several years, as wireless substitution rates have continued to rise, the Commission has begun including such intermodal substitution in its competitive analyses of the local services market.<sup>57</sup>

As demonstrated in Qwest’s Petition, wireless represents a potential substitute for all wireline customers, not just those that have already cut the cord. Thus, Qwest believes the Commission

---

<sup>56</sup> Covad CLECs at 9; PAETEC at 9.

<sup>57</sup> *Qwest 4 MSA Order*, 23 FCC Rcd at 11742 ¶ 19.

should take a broader view of wireless competition. But it is clear that the Commission did consider “cut the cord” wireless in its most recent forbearance decisions, and this is reflected in the “Appendix B” market share test established by the Commission. It is disingenuous for the CLECs to refer back to the *Omaha Order* and ignore the subsequent *Verizon 6 MSA* and *Qwest 4 MSA Orders* for purposes of wireless analysis, especially given that for other issues, the CLECs specifically refer to the these *Orders* for guidance. For example, only two pages after stating that the Commission should refer back to Omaha when considering wireless competition, they argue that the Commission should refer back to the *Verizon 6 MSA Order* when considering VoIP competition.<sup>58</sup> In the market share calculation provided in Confidential Exhibit 2, Qwest has included “cut the cord” wireless data, consistent with the Commission’s direction.

PAETEC and the Covad CLECs also argue that wireless service should not be considered as an intermodal competitor because wireless carriers are heavily dependent on ILECs for Special Access services.<sup>59</sup> This argument is flawed on at least two levels. First, wireless providers are not dependent solely on ILEC access for “backhaul” services, and second, even if they were, this has nothing to do with whether wireless is a substitute for wireline local voice services. To wit, in the *TRRO*, the Commission determined that: “In particular, we deny access to UNEs for the exclusive provision of mobile wireless services and long distance services. In these two markets, where competition has evolved without such access, we are unable to justify imposing the costs of mandatory unbundling to promote competition.”<sup>60</sup>

---

<sup>58</sup> Covad CLECs at 11; PAETEC at 11.

<sup>59</sup> Covad CLECs at 10; PAETEC at 10.

<sup>60</sup> *TRRO*, ¶ 34.

The CLECs universally argue that wireless is a complement, rather than a substitute, for wireline service<sup>61</sup> and that wireless service has no price-constraining impact on wireline service. Qwest explained in its Petition and in the declaration of Robert H. Brigham that wireless is in fact a price-constraining substitute for wireless service. In addition, the *Weisman/Tardiff White Paper* (e.g., see Principles 5 and 10) demonstrates that subscription to both wireless and wireline *does not* imply that the two services are complements, and that wireless provides competitive discipline on wireline prices. As noted in the *White Paper*:

... wireless may exert sufficient competitive discipline on wireline prices even when the two services are imperfect substitutes. This underscores the fact that not all consumers need to view wireless and wireline as close substitutes for wireless to exert sufficient competitive discipline on wireline prices. As discussed above, it is the “competition at the margin” that disciplines the firm’s pricing behavior.

*Weisman/Tardiff White Paper* ¶ 86. In its Petition and the declaration of Robert H. Brigham, Qwest demonstrated that competition from wireless providers is flourishing in the Phoenix MSA and in Arizona as a whole, noting that according to the FCC’s Local Competition Report, as of December 2007 there were over 4.8 million wireless lines in Arizona, while there were only 3.1 million wirelines (both ILEC and CLEC).<sup>62</sup> The latest FCC data, released in July 2009, shows that as of June 2008, wireless lines in Arizona increased to over 4.9 million while incumbent ILEC wirelines continued to decline.<sup>63</sup> Since Qwest filed its initial Petition in March 2009, the National Center for Health Statistics (NCHS) has updated its wireless “cut the cord” data, and the percentage of households without a wireline phone increased from 17.5% in the first 6 months of 2008 to 20.2% in the last six months of 2008 -- a 15% increase in just six months. In

---

<sup>61</sup> See, e.g., Covad CLECs at 10-11; Integra CLECs at 5.

<sup>62</sup> *Local Telephone Competition: Status as of December 31, 2007*; Industry Analysis and Technology Division, Wireline Competition Bureau, September 2008, Tables 7, 9, 10 & 14.

<sup>63</sup> *Local Telephone Competition: Status as of June 30, 2008*; Industry Analysis and Technology Division, Wireline Competition Bureau, July 2009, Tables 7, 9, 10 & 14.

addition, another 14.5% -- up from 13.3 % -- of households are “wireless mostly” and use their wireless phone for nearly all calling. In total, these wireless only and “wireless mostly” households as of the last half of 2008 make up 34.7% of households -- up from 30% in the first half of 2008. This represents a 16% increase in just six months.

This data cannot simply be ignored by the Commission, as the CLECs would like. In fact, the continuously increasing “cord cutting” shown in the NCHS study provides a strong indication that the Qwest “cut the cord” study performed by *Market Strategies* in fall 2008, now may *understate* the percentage of “cord cutters” in the Phoenix MSA today. Thus, Qwest’s Appendix B calculation is conservative.

In its comments, CompTel alleges that the *Market Strategies* study “has several flaws and does not provide a reliable basis for determining wireless only market share in the Phoenix MSA.”<sup>64</sup> CompTel claims, for example, that in the study, “sample size was heavily weighted in favor of wireless only households,” and that “the survey results are skewed in favor of wireless only households.”<sup>65</sup> The CompTel claims are entirely baseless, and betray a lack of understanding as to how statistically valid surveys are conducted using standard statistical tools. While the study procedures are described clearly in the study documentation, Qwest asked *Market Strategies* to respond to the claims made by CompTel, and the Market Strategies response is provided as Exhibit 3 to these comments. This response clearly demonstrates that the study follows standard statistical sampling and survey techniques, and that the study is absolutely *not* skewed in favor of wireless only households. In fact, the study employs accepted statistical

---

<sup>64</sup> CompTel at 33.

<sup>65</sup> *Id.* at 34-35.

techniques designed to assure that such bias is eliminated, as described in the study documentation and in Exhibit 3.

CompTel also claims that the study must be in error because it allegedly does not corroborate the results of the Nielsen wireless substitution study.<sup>66</sup> This claim betrays a lack of understanding regarding confidence intervals in statistical studies. As noted in Exhibit 3:

The Market Strategies estimate of 25% has a confidence interval of +/-5%. This interval of +/-5% means that the estimate of the true level of wireless only households is likely to be in the range of 20% to 30% (that is, 25% plus or minus 5%). So, the Market Strategies confidence interval is quite close to the Nielsen / CDC estimates -- and even closer when we recognize that these two estimates *also* have an associated confidence interval. For example: If the Nielsen precision level is as meager as +/- 3%, its confidence interval would be 14.8% to 20.8% -- meaning the Nielsen and Market Strategies intervals overlap, and there would be *no* statistical difference between the two estimates.

Essentially, Comptel has thrown a *potpourri* of unfounded allegations on the wall, hoping that one sticks. However, none do.

The Broadview CLECs (including XO) argue that the Commission should not consider Fixed Wireless as a meaningful option for connecting customers. They argue that Nextlink, an XO subsidiary that provides fixed wireless services, "is not a significant source of competition for Qwest for last-mile connectivity on either a retail or a wholesale basis."<sup>67</sup> They claim that Nextlink, while providing service in the Phoenix MSA, serves customers in only a limited number of buildings. Thus, they argue, this competitive last mile option should be discounted by the Commission. However, while Nextlink may have a limited number of buildings connected *today*, it remains a viable competitive option to Qwest last mile facilities. In fact, XO's admission that there are buildings in the Phoenix area with Nextlinkd service demonstrates that it

---

<sup>66</sup> *Id.* at 33.

<sup>67</sup> Broadview CLECs at 50.

is a viable option. XO has been marketing its Nexlink services, and certainly has the potential to serve additional customers.

**G. VoIP is yet Another Wireline Substitute that the CLECs Would Have the Commission Ignore.**

The opposing CLECs argue that the Commission should not consider any “over the top” VoIP competition in its forbearance analysis. They criticize Qwest for providing “national” and “promotional” materials regarding VoIP providers, and allege that Qwest has not provided “specifics regarding the success of stand-alone VoIP providers within the Phoenix MSA.”<sup>68</sup> However, in the declaration of Robert H. Brigham, Qwest did provide significant evidence that “over the top” VoIP providers are operating successfully in the Phoenix MSA, and Qwest identified a number of these carriers. The CLECs criticize Qwest because Qwest has not been able to specifically identify the number of “over the top” VoIP subscribers in the Phoenix MSA. Of course there is no publicly available source to determine the exact number of VoIP subscribers in the Phoenix MSA, since the providing companies are not regulated, and are under no obligation to disclose this information. Once again, the CLECs would like to construct a standard that they know no ILEC could meet. The fact is, as demonstrated in Qwest’s Petition, VoIP services are growing rapidly on a national basis, and it is clear that the same thing is occurring in Phoenix. As demonstrated in the declaration of Robert H. Brigham, there are numerous “over the top” VoIP providers marketing services in the Phoenix MSA, and it is clear that some customers are substituting VoIP service for their local wireline voice service.

The *Broadview CLECs* also argue that VoIP does not provide an actual facilities-based last-mile alternative to Qwest.<sup>69</sup> While “over the top” VoIP providers do not provide the “last

---

<sup>68</sup> *Id.* at 41.

<sup>69</sup> *Id.* at 41.

mile” themselves, any customer with a broadband connection can use these VoIP services as a substitute for wireline voice service. The *Broadview CLECs* argue that many of these broadband connections may be Qwest facilities,<sup>70</sup> but not only is this not relevant, but Qwest can never know which of its broadband customers subscribe to a VoIP application. PAETEC argues that “broadband service, which is the essential underpinning of VoIP service, was not ubiquitous enough for VoIP to threaten wireline service.”<sup>71</sup> The reality is that the number of broadband connections is increasing dramatically, and the majority of broadband connections in the Phoenix MSA are not provided by Qwest.

As described in Qwest’s Petition, according to the Commission, broadband access lines in Arizona have grown from 248,172 in December 2001 to 2,578,548 in December 2007 -- an increase of over 930 percent.<sup>72</sup> In fact, broadband access lines in Arizona increased by from 1,832,564 to 2,578,548 -- *an increase of more than 40% -- over the twelve months of 2007 alone.*<sup>73</sup> Since Qwest’s Petition was filed, the FCC has released a new report on broadband, and this report shows that as of June 2008, there were 2,860,516 broadband lines in Arizona, and increase of another 11%. According to the Commission, as of June, 2008, there were 454,036 ADSL connections, 991,729 cable modem connections and 1,414,751 “other” high speed connections (*e.g.*, wireless and satellite) in Arizona.<sup>74</sup> This demonstrates that broadband connections are becoming increasingly ubiquitous in Arizona, as there are now more high speed

---

<sup>70</sup> *Id.* at 41-42.

<sup>71</sup> PAETEC at 12.

<sup>72</sup> *High Speed Services for Internet Access: Status as of December 31, 2007*, FCC Industry Analysis and Technology Division, Wireline Competition Bureau, January 2009, Table 10.

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*, Tables 10, 11 and 12.

connections (2,860,516) than there are households (2,722,725)<sup>75</sup> in Arizona. The data also demonstrates that DSL connections, such as those provided by Qwest, represent only 16% of Arizona high-speed connections, and that there are more than twice as many cable modems from providers such as Cox, than there are DSL high-speed connections. In addition, the statistics showing rapid increases in wireless broadband are even more telling for Qwest, because all of the wireless broadband is provided by unaffiliated carriers. In addition, the statistics showing rapid increases in wireless broadband are even more telling for Qwest, because all of the wireless broadband is provided by unaffiliated carriers. To argue that Qwest is dominant in this area is clearly wrong.

The bottom line is that VoIP-based services are serving as a substitute for wireline services, and the ability for customers to switch to non-Qwest VoIP providers has increased markedly as broadband penetration has exploded. It is folly to say that this has little impact on competition in the Phoenix MSA.

#### **IV. THE COMMISSION SHOULD CONSIDER THE ENTIRE SPECTRUM OF RETAIL COMPETITION**

##### **A. Retail Competition That is Based on CLEC Leasing of ILEC Facilities Is Still Competition.**

As described in Qwest's Petition and the declaration of Robert H. Brigham, CLECs compete with Qwest for residential and business customers throughout the Phoenix MSA.<sup>76</sup> The opposing CLECs argue that as the Commission considers competition in the Phoenix MSA, it should focus solely on competition that is fully facilities-based, *i.e.*, not based on the purchase of any wholesale services from Qwest. Specifically, the CLECs argue that UNE-Platform

---

<sup>75</sup> <http://www.census.gov/popest/housing/tables/HU-EST2008-01.xls>, estimate as of July 1, 2008.

<sup>76</sup> The CLECs that compete in the Phoenix MSA, including Integra, tw telecom, PAETEC and XO, focus almost exclusively on serving business customers.

replacement products as well as resale should not be considered, despite the fact that the Commission specifically included these services in its competitive analysis in the *Qwest 4 MSA Order*:

As we have done in the past, we include resellers and competitive lines provisioned via Qwest's UNE-P replacement service in our market share calculations (the Qwest Platform Plus (QPP) and Qwest Local Services Platform (QLSP) products). Resale and QPP/QLSP lines historically have been a way for competitors to enter the market, are currently used as a competitive option, and will continue to be available after today's order.<sup>77</sup>

Qwest believes that CLEC competition based on platform-based services such as QLSP must be considered in an analysis of competition in this proceeding, especially given the fact that these commercial services would not be eliminated if Qwest is granted forbearance from the provision of UNEs.

The opposing CLECs argue that only facilities-based CLEC competition should be considered in this proceeding and claim, for example, that "Qwest fails to provide any data regarding the extent of competition in the business market from CLEC-owned last mile facilities."<sup>78</sup> These CLECs generally claim that they serve very few customers or buildings in the Phoenix MSA utilizing their own facilities, or facilities leased from other providers. They have filed information in their comments that seek to demonstrate that CLEC facilities coverage is very sparse. The Broadview CLECs cite GeoResults data for the Phoenix MSA which purports to show that only a small percentage of commercial buildings in the Phoenix MSA are lit with CLEC fiber.<sup>79</sup> However, the GeoResults data -- which was filed in an April 23, 2008 letter from Brad Mutscheknaus to the FCC on behalf of the "Joint CLECs" -- "is seriously flawed," as

---

<sup>77</sup> *Qwest 4 MSA Order*, 23 FCC Rcd 11740 ¶ 17, n. 54.

<sup>78</sup> Broadview CLECs at 36.

<sup>79</sup> *Id.* at 39.

Qwest demonstrated in an *ex parte* filed on July 1, 2008 in the same proceeding.<sup>80</sup> Among the flaws in the GeoResults data (which was provided for the three other MSAs in addition to Phoenix) are:

- The CLECs tainted the GeoResults data by including 141 wire centers for which Qwest was not seeking relief, in addition to the 191 wire centers where Qwest was seeking relief.
- The GeoResults data do not include unlit dark fiber. In instances where the CLECs have “lit” the fiber, those instances may appear in the GeoResults “lit building” data by virtue of the type of network terminating equipment the CLECs have chosen to voluntarily report to CLONES (the database used by GeoResults), but in instances in which CLECs have not “lit” the dark fiber, the presence of the dark fiber in a commercial building is not in the GeoResults data set because there would be no associated fiber terminating equipment in the CLONES database.
- GeoResults has confirmed that it does not know whether buildings served by coaxial cable drops are reflected in the lit buildings data.

In addition, and most significantly, any measure of “% of buildings with lit fiber” is not a good indicator of the presence of CLEC facilities in an MSA because the universe of buildings includes each commercial building as one building, even though the size of a building varies significantly, *e.g.*, from a small business building to a 30 story office building. This biases the results. Like the CLECs, Qwest serves certain commercial locations in Phoenix with lit fiber in instances where sufficient customer demand exists to economically justify such deployments.

For instance, in the aforementioned July 1, 2008 *ex parte*, Qwest found that in the Phoenix Main wire center, Qwest served **\*\*\*BEGIN CONFIDENTIAL\*\*\*** **\*\*\*END**

**CONFIDENTIAL\*\*\***commercial locations with lit fiber. The Joint CLECs’ non-confidential spreadsheet attached to their April 23, 2008 *ex parte* in the *Qwest 4 MSA* proceeding, which was obtained from GeoResults, suggests that 22 commercial buildings in the Phoenix Main wire center were served by “facilities-based CLECs” lit fiber. The **\*\*\*BEGIN**

---

<sup>80</sup> Qwest *ex parte*, Letter from Melissa Newman, July 1, 2008; in the Qwest 4 MSA proceeding.

CONFIDENTIAL \*\*\* [REDACTED] \*\*\*END CONFIDENTIAL\*\*\*percent of commercial buildings in the Phoenix Main wire center served by Qwest lit fiber was \*\*\*BEGIN

CONFIDENTIAL \*\*\* [REDACTED] \*\*\*END CONFIDENTIAL\*\*\*commercial buildings served by facilities-based CLEC lit fiber. In other words, in commercial locations housing the bulk of telecommunications demand (*i.e.*, office towers or major business parks), facilities-based CLECs have deployed their own facilities in a\*\*\*BEGIN

CONFIDENTIAL \*\*\* [REDACTED] \*\*\*END CONFIDENTIAL\*\*\*  
This follows the economically-rational model the CLECs have employed for many years: deploy facilities to customer locations with the very high levels of demand, and then gradually deploy facilities to surrounding locations.

The public GeoResults data show that the “Percent of Customer Demand Addressed by Facilities-Based CLECs” is often between *two and four times* as high as the “Percent of Commercial Buildings With Facilities-Based CLECs.” This makes sense, since CLECs build fiber to buildings with above-average demand, and indicates that when a particular CLEC reaches 1% of buildings it might still serve 3-4% of overall demand. Since the fiber is likely located in a central business district, the other buildings nearby are likely to also house above average demand. Thus, the “% of buildings with lit fiber” significantly understates the percentage of CLEC lines that may be served by CLEC fiber.

In addition to relying on GeoResults data, the CLECs have provided CLEC-specific data that attempts to show that CLEC facilities serve very few buildings in the Phoenix MSA. For example the Integra CLECs filed depositions from both Integra and tw telecom employees purporting to show that these providers currently serve very few buildings in the Phoenix MSA with their own facilities, and that they are dependent on Qwest UNEs in most areas to provide

service.<sup>81</sup> This data suffers from the same defects as the GeoResults data. Both Integra and tw telecom understate the impact of their facilities presence in the Phoenix MSA by referring to the number of buildings served, rather than the number of actual businesses or business lines served in those buildings.<sup>82</sup> Integra and tw telecom have made it clear that they will build facilities to large buildings that have a high demand, and rely on Qwest UNEs to serve smaller buildings that have a lower revenue potential.

In its Petition and in the declaration of Robert. H. Brigham, Qwest described the presence of several CLECs in the Phoenix area, including Integra and tw telecom, and demonstrated that both of these carriers have a significant fiber presence in the Phoenix MSA. Interestingly, at the same time that these carriers announce to the Commission that they have a minor facilities-based presence in the Phoenix MSA, their announcements and press releases indicate that they are greatly expanding their presence. Consider the following August 24, 2009 press release from Integra:

**Phoenix – Aug. 24, 2009** – Integra Telecom Inc., a facilities-based, integrated communications provider for business, has **expanded its best-in-class fiber-optic network to four new Central Arizona communities, including Paradise Valley, areas of northern Phoenix, Scottsdale and Chandler.** Integra’s latest expansion, combined with its recent Broadband Internet launch, increases the company’s reach to include nearly 30,000 new businesses and represents a \$5 million investment in the company’s Arizona telecom infrastructure.

“We are pleased to expand our best-in-class fiber-optic network in the Phoenix community and to broaden the availability of our high-touch, local customer care experience to thousands of additional Arizona businesses,” said Rob Smith, senior vice president of Integra Telecom of Arizona. “We see tremendous potential in the Phoenix area and are confident that our investment in the local networks will

---

<sup>81</sup> Integra CLECs at 17; See declaration of Dave Bennett on behalf of Integra and Declaration of Scott Liestman on behalf of tw telecom.

<sup>82</sup> Declaration of Dave Bennet on behalf of Integra CLECs at 2. Declaration of Scott Liestman on behalf of tw telecom at 3.

enable Integra to better serve customers with reliable services and responsive customer care.”

Integra Telecom has served the Phoenix business community since 2006 when it acquired the customers and network assets of Electric Lightwave. Integra furthered its presence in the Arizona market in 2007 upon acquiring Eschelon Telecom. Integra Telecom of Arizona now employs more than 200 telecom professionals in its Phoenix office who deliver the company’s unique brand of local customer service. The competitive telecom provider offers businesses a full range of business-class telecommunications products ranging from business phone lines to broadband Internet and private network solutions in more than twenty communities within the greater Phoenix metropolitan area. All Integra Telecom products and services are supported by locally based customer care representatives and technicians.<sup>83</sup> (emphasis added)

Consider also the following September 15, 2009 press release from tw telecom:

**tw telecom Expands Phoenix Metro Market Footprint**

*- Network connects over 1.2 Million square feet of co-location and data center space*  
PHOENIX , Ariz.– September 15, 2009 – tw telecom (NASDAQ: TWTC), a leading provider of managed voice, Internet and data networking solutions for businesses, today announced that it has **expanded its metro fiber footprint and nearly doubled its network reach throughout the Phoenix metro area.** The network expansion directly connects over 1.2 Million square feet of co-location and data center space in Maricopa County.

“Enterprise demand for secure, easily scalable and highly reliable network services, combined with the need for access to third-party data centers, is fueling growth in our business,” said Ron Martin, vice president and general manager for tw telecom’s Phoenix market. **“We’ve expanded our network throughout the Phoenix metropolitan area to serve more businesses and connect more data centers than just about any other service provider in the valley.**

“Our customers across the country are building out disaster recovery applications and integrating new technologies like Telepresence, all of which require scalable, secure and reliable bandwidth. We have invested in our network infrastructure to capture that market growth,” Martin added.

tw telecom **connects more commercial buildings to its fiber network than any other competitive communications provider.** In fact, it has the third highest market share of retail Ethernet ports in service, according to industry analyst Vertical Systems Group. With its own national footprint of metro fiber networks and one of the ten most interconnected IP backbones in the world, tw telecom has the national capability, robust product portfolio and national/local customer care teams to support mission critical

---

<sup>83</sup> See:

[http://www.integratelecom.com/about/news/press\\_release\\_articles/Summer%2009\\_Arizona%20Expansion\\_FINAL.pdf](http://www.integratelecom.com/about/news/press_release_articles/Summer%2009_Arizona%20Expansion_FINAL.pdf).

enterprise applications and to deliver the industry's most sought after customer experience.<sup>84</sup> (emphasis added)

Thus, both tw telecom and Integra have significant fiber networks in Phoenix today, and plan expansions to connect even more businesses to these networks. These network expansions clearly demonstrate why the Commission should not simply rely on the *existing* buildings connected by these providers, or *existing* market shares, etc. These CLECs would like the Commission to focus only on the existing presence of these carriers, without viewing their potential -- and announced plans -- to serve additional customers. However, the rapid growth of these carriers clearly has an impact on the competitive landscape in the Phoenix MSA -- an impact that reliance on existing market measures would ignore. The *static* measures these carriers endorse would ignore the *dynamic* changes occurring in the marketplace, including the impact of their own expansions.

These announcements also make another important point. The CLECs would have the Commission discount all alleged "anecdotal data," including press releases and other corporate announcements as it considers Qwest's forbearance request. However, the significance of these latest announcements make it clear why the Commission should not discount this type of information, as it clearly provides hard evidence of the increasing facilities-based CLEC competition in Phoenix.

The CLECs argue that the Commission's competitive analysis should consider only buildings that are *currently* "lit" by CLECs, and that this analysis should ignore all buildings that the CLECs have the potential or capacity to serve. The Integra CLECs argue that "the fact that competitors have deployed fiber near commercial buildings does not mean that competitors can

---

<sup>84</sup> See: [http://www.twtelecom.com/Documents/Announcements/News/2009/Phoenix\\_Expansion\\_Final.pdf](http://www.twtelecom.com/Documents/Announcements/News/2009/Phoenix_Expansion_Final.pdf).

actually deploy loops to those buildings.”<sup>85</sup> They argue that even if fiber is close to a building, it is “generally not economically feasible for competitors to deploy their own loop facilities and, as a result, there is little actual facilities-based competition in the business market in the Phoenix MSA.”<sup>86</sup> The Broadview CLECs argue that “there are considerable costs associated with adding “near net” buildings, and there must be a business case for doing so.”<sup>87</sup> They note that XO will only build to a building with at least 3 DS3s of demand.<sup>88</sup> PAETEC and Covad make similar claims. The declarations of Dave Bennett on behalf of Integra and the declaration of Scott Liestman on behalf of tw telecom both point to the “build-buy” analyses that CLECs must perform in order to decide whether to build facilities or lease Qwest facilities. They conclude that it is only “economic” for CLECs to build facilities in very limited circumstances -- where there is significant demand.

Qwest will not address the specific highly confidential “build-buy” calculations that Integra and tw telecom have provided with their comments. However, there are a number of significant points that must be made regarding the implications of such “build-buy” analyses. First of all, Qwest does not doubt that these CLECs perform such an analysis when deciding whether to build or lease; as this is a rational business behavior. It is clear that CLECs will focus their construction on connecting the buildings that have the largest potential payoff, such as large downtown office buildings. Qwest also understands that CLECs such as tw telecom will only connect a building if it is able to secure nearly all of the tenants in the building. The bottom line is, CLECs would like to build facilities in high demand locations and purchase UNEs from

---

<sup>85</sup> Integra CLECs at 14-15.

<sup>86</sup> *Id.* at 15.

<sup>87</sup> Broadview CLECs at 45.

<sup>88</sup> *Id.*

Qwest at low TELRIC-based prices in lower demand locations. As long as there are UNEs available at low TELRIC-based rates, this will continue to be the way these CLECs will serve business customers for the foreseeable future. Thus, the CLECs will always want to serve some customers via UNEs, even if they can build their own facilities, because it is more economic for them to do so. In essence, they have become addicted to UNEs. The Commission should not ask whether particular carriers are more profitable with UNEs at TELRIC prices, but whether an efficient carrier can compete without them.

As pointed out in Qwest's petition, Integra, tw telecom, XO and other CLECs have extensive fiber networks in the Phoenix MSA, and they are clearly capable of building laterals to connect additional buildings to this network, including in buildings that do not meet XO's "3 DS3" criteria. These CLECs simply elect not to do so based on the current economics of the situation. However, the Telecommunications Act did not envision the *permanent* provision of UNEs by ILECs at below-cost prices, simply to align with particular competitors' business models, with no regard for how competitive telecommunications markets may become. Instead, Section 10 of the Act allows the Commission to forbear from regulating Qwest's wholesale rates when competition is robust. Clearly, the CLECs would like to be able to purchase below-cost UNEs *ad infinitum*, but that is not the purpose of the Act, which was to make available low-priced wholesale network elements to "jump start" competition in the telecommunications industry.

This "addiction" has negative competitive implications, and suppresses investment. As described in *Weisman/Tardiff White Paper*:

Indeed, recent studies have shown that leased access has not led to a level of CLEC investment in facilities greater than that which would have obtained otherwise. To the contrary, access dependence turns out to be economically addictive, leading to increased reliance on leased access.

*Weisman/Tardiff White Paper* ¶ 69. The *Weisman/Tardiff White Paper* (¶ 23) also points out that “forcing incumbents to share non-essential network elements with rivals, particularly at unduly favorable prices,<sup>89</sup> invites those new entrants to become *de facto* clones of the incumbent provider. This policy prescription sacrifices innovation for imitation in the sense that artificially encouraging entry via the reseller model may have the effect of “crowding out” facilities-based entry.” Quite simply CLECs do not invest because it is less costly to lease. It is not that the CLECs cannot build to many more customers, it is that they prefer not to because the purchase of low cost UNEs is more economical. The *Weisman/Tardiff White Paper* states:

In other words, mandatory unbundling will crowd out facilities-based competition and thereby serve to ensure that pervasive, mandatory unbundling is required for retail competition in perpetuity. What is of particular concern is a “bad equilibrium” in which the ILECs do not invest because they cannot earn the required (market) returns and the CLECs do not invest because it is less costly to lease.

*Id.* ¶ 26.

The Commission should avoid policies that serve to favor one *competitive platform* over another, and should avoid policies favoring one *competitor* over another. The following passages from the Weisman/Tardiff declaration (¶¶ 76 and 77) are instructive:

---

<sup>89</sup> Whereas the relationship between innovation and competition is complex and not yet settled in the economics literature, there is evidence to suggest that higher market concentration leads to higher rates of innovation when the ability of the firm to appropriate the returns from its investments is weak, which would be the case for mandatory unbundling at regulatory-prescribed prices.

Economic theory is ambiguous on the relationship between competition and innovation. Competition can reduce innovation incentives, particularly in markets where property rights are weak and it is difficult for firms to appropriate the value of their innovations. ... There is also some empirical support for the theoretical result that competition can reduce innovation incentives in markets with weak appropriation.

Richard J. Gilbert, “New Antitrust Laws for the ‘New Economy’?”, Testimony Before the Antitrust Modernization Commission, Washington D.C., November 8, 2005 at 8.

76. Should the Commission's interest in the wholesale market turn on a particular CLEC business model—regardless of the competition from facilities-based providers—it will have violated *Principle 3 supra*. That is to say, it will have violated the principle of both *platform-neutrality* and *competitor-neutrality*. The Commission should be agnostic as to the particular technological platforms that are used to deliver high-value products and services to consumers.

77. To the extent the Commission disavows these principles, it will have confused protecting competitors with protecting the integrity of the competitive process.

**B. There is a Plethora of Wholesale Options for CLECs**

The CLECs generally argue that they do not have reasonable wholesale options to purchasing Qwest services. However, as described in Principle 9 of the Weisman/Tardiff declaration, “wholesale markets are relevant to the implementation of the 1996 Telecommunications Act only insofar as they are required for competition in retail markets.” Paragraph 75 of the declaration states that: “The wholesale market is relevant only to the extent that facilities-based providers acting alone fail to provide for the requisite level of competitive discipline.” Thus, other wholesale options are not required for retail competition to flourish. Nonetheless, alternative wholesale options are available in the Phoenix MSA.

The opposing CLECS argue that Cox, alternative fiber network providers and other CLECs do not offer a reasonable alternative to UNEs. However, the evidence says otherwise. As described earlier, Cox does market wholesale carrier services in the Phoenix MSA, and these services *do* represent a meaningful option for CLECs. In addition, as described in Qwest's Petition and further below, CLECs may purchase fiber services on a wholesale basis from several alternative fiber networks as well as other CLECs in the Phoenix MSA.

The CLECs argue that the alternative fiber maps provided by Qwest are of little value. The Covad CLECs and PAETEC allege that these maps include “absolutely no useful information in terms of identifying actual locations of competitive fiber that could provide

service” and that these maps allegedly represent a “tangle of lines making it impossible to identify any particular streets or building.”<sup>90</sup> These claims are incorrect. In reality, the maps provided by Qwest provide a significant level of detail, and demonstrate that alternative fiber networks are available throughout the Phoenix MSA. In fact, Qwest provided not only maps from GeoTel, but also route maps from several alternative providers themselves, including SRP Telecom (SRP), AGL Networks (AGL) and AboveNet. These maps show the exact location of these carriers’ fiber networks, including where they are located in relation to all of the major streets in the Phoenix MSA. These maps -- which the fiber providers include on their web sites for use in marketing services to CLECs -- provide a valuable tool for assessing the options CLECs have for wholesale fiber services, and show that multiple competitive fiber networks blanket the Phoenix area. These maps are included as Exhibits 9, 10 and 13 of the declaration of Robert H. Brigham.

The CLECs generally argue that the fiber networks of these alternative providers do not represent a viable wholesale option, because allegedly (1) there is insufficient network coverage, (2) access is difficult and (3) there are operational impediments. First, the CLECs understate the coverage of these competitive fiber networks (as the maps provided with Qwest’s Petition attest) and the buildings that could be connected. The Integra CLECs state that SRP and AGL only serve 114 buildings in the Phoenix area at this time.<sup>91</sup> However, they totally ignore these providers’ ability to connect more buildings on request. For example, on its web site, SRP describes its extensive existing network, and touts its ability to connect more buildings to serve

---

<sup>90</sup> Covad CLECs at 21, PAETEC at 21.

<sup>91</sup> Integra CLECs at 19-20.