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April 29, 2008

VIA ECFS

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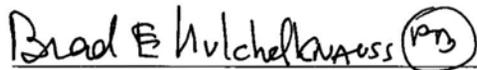
Re: Petitions of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Denver, Minneapolis-St. Paul, Phoenix, and Seattle Metropolitan Statistical Areas, WC Docket No. 07-97

Attached is a copy of *An Analysis of Qwest's Petition for Forbearance, A Quantification of the Impact of Forbearance*, prepared by QSI Consulting, Inc. This provides an assessment of the direct and quantifiable impact of grant of Qwest's petitions under consideration in this docket as they relate to loop and transport unbundling obligations under Section 251 of the Act.

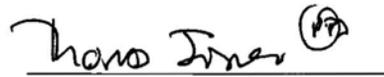
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Impact Study

AN ANALYSIS OF QWEST'S PETITION FOR FORBEARANCE

A Quantification of the Impact of Forbearance

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EXECUTIVE SUMMARY

On April 27, 2007, Qwest Corporation (“Qwest”) filed four separate petitions requesting that the Federal Communications Commission (“FCC”) forbear the application of certain regulatory obligations to Qwest in the Denver, Colorado; Minneapolis-St. Paul, Minnesota; Seattle, Washington; and Phoenix, Arizona Metropolitan Statistical Areas (“MSAs”).¹

Qwest’s requested relief relates to a number of its obligations under the FCC’s rules,² one of which is forbearance from loop and transport unbundling regulation pursuant to Section 251(c)(3) of the Communications Act of 1934, as amended (“Act”).³ Granting Qwest’s Petitions as they relate to unbundling obligations means that loop and transport facilities would no longer be required to be made available at Total Element Long Run Incremental Cost (“TELRIC”)-based rates, which are the rates designed to replicate a competitive market for these wholesale network facilities and produce conditions that promote competition in retail markets.

A grant of Qwest’s Petitions would impact telecommunications markets in the four MSAs in a number of ways. Not only would Qwest itself be impacted but so would other market participants, such as the various competitive local exchange carriers (“CLECs”) which rely in whole or in part on Qwest’s loop and transport unbundled network elements (“UNEs”) and interconnection services, other competitors, such as cable companies, and retail/end-user customers of telecommunications services. Further, because a grant of forbearance would affect regional businesses, due to results ranging from a direct

¹ See *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. §160(c) in the Denver, Colorado Metropolitan Statistical Area*, WC Docket No. 07-97 (filed Apr. 27, 2007), at 3-4 (“*Qwest Petition -Denver*”); *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Minneapolis-St. Paul, Minnesota Metropolitan Statistical Area*, WC Docket No. 07-97 (filed Apr. 27, 2007), at 3-4 (“*Qwest Petition -Minneapolis*”); *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. §160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Docket No. 07-97 (filed Apr. 27, 2007), at 3-4 (“*Qwest Petition Phoenix*”); *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. §160(c) in the Seattle, Washington Metropolitan Statistical Area*, WC Docket No. 07-97 (filed Apr. 27, 2007), at 3-4 (“*Qwest Petition -Seattle*”).

² Qwest seeks forbearance from the loop and transport unbundling regulations contained in Sections 251(c)(3) and 271(c)(2)(B)(ii). Qwest also seeks forbearance from the dominant carrier tariff requirements set forth in Part 61 of the Commission’s rules; from price cap regulations set forth in Part 61 of the Commission’s rules; from the Computer III requirements, including Comparably Efficient Interconnection (“CEI”) and Open Network Architecture (“ONA”) requirements; and from dominant carrier requirements arising under Section 214 of the Act and Part 63 of the Commission’s rule concerning the process for acquiring lines, discontinuing services, making assignments or transfers of control.

³ 47 U.S.C. § 251(c)(3).

negative impact on regional CLECs (affecting employment and investment in the wholesale telecommunications market) and induced effects of higher overall price levels in retail telecommunications and non-telecommunications markets, the regional economies of the affected MSAs would experience a decrease in their competitiveness relative to the competitiveness of other regions in the United States.

The *QSI Study* focuses on the direct and quantifiable impact of granting Qwest's Petitions as they relate to loop and transport unbundling obligations under Section 251 of the Act. More specifically, if Qwest is no longer required to make available loop and transport facilities at TELRIC-based rates, wholesale prices – *i.e.*, the cost of doing business for Qwest's competitors – would increase. Because the ability of competitive entrants to buy essential network facilities at economic cost has created a disciplining force for retail telecommunications prices, forbearance would, in turn, cause an increase in prices for telecommunications services to consumers in the four MSAs at issue. Current pricing trends and Regional Bell Operating Company ("RBOC") proposals indicate that absent the TELRIC pricing standard, prices of Qwest's network elements would increase to approximate the level of its special access prices. This follows from experience with the incumbent local exchange carriers' ("ILECs") reactions to previous changes in unbundling requirements, including Qwest's current offerings in wire centers associated with TRRO⁴ relief and the forbearance from Section 251 unbundling obligations previously granted to Qwest in the Omaha MSA.⁵ Accordingly, competitors that currently rely on Qwest's DS1 and DS3 loop and transport UNEs should expect to pay Qwest's special access rates for the same facilities if the Petitions are granted.⁶ As for basic DS0 loops, experience in Qwest's Omaha wire centers that received forbearance from Section 251 UNE pricing requirements shows that while Qwest is offering a "commercial agreement" for these loops (which is different from a special access tariff offering), prices under this offering still constitute a dramatic increase over UNE DS0 loop pricing. Because special access prices and the Omaha commercial offering are significantly higher than TELRIC-based prices, higher wholesale rates would impair the ability of competitors – and potential entrants – to discipline retail rates.

⁴ *Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Order on Remand, 20 FCC Rcd 2533 (2005) ("TRRO"), affirmed *Covad Communications v. FCC*, 450 F.3d 528 (D.C. Cir. 2006).

⁵ *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Omaha Metropolitan Statistical Area*, Memorandum Opinion and Order, 20 FCC Rcd 19415 (2005) ("Omaha Forbearance Order").

⁶ For example, in Minnesota, Qwest contends that its Section 271 obligations to make unbundled loops and transport available at just and reasonable rates and terms are fulfilled by making those checklist items available at special access rates. See, e.g., Qwest's proposal for Section 271 pricing in Minnesota. *In the Matter of a Potential Proceeding to Investigate the Wholesale Rate Charged by Qwest*, Docket #P-421/CI-05-1996.

Furthermore, as observed by a recent U.S. Government Accountability Office (“GAO”) Report,⁷ ILECs are increasing special access prices in MSAs where they have been granted full pricing flexibility for these services. The GAO Report examined 16 major metropolitan markets for dedicated transport facilities, such as DS1/DS3 loops and transport. The 16 MSAs examined by the GAO include some of the same MSAs for which Qwest is seeking forbearance.⁸ The GAO Report concluded:

[I]n areas where the FCC granted full pricing flexibility due to the presumed presence of competitive alternatives, list prices and average revenues *tend to be higher* than or the same as list prices and average revenues in areas still under some FCC price regulation.⁹

While the issues of special access pricing flexibility and forbearance from UNE pricing rules are not identical, the competitive dynamics of telecommunications markets, especially in light of the GAO’s findings, demonstrate that a predictable increase in wholesale prices will necessarily place upward pressure on retail/end user prices. Further, given that our analysis is predicated on current special access rates, the GAO’s findings also show that our results are conservative for MSAs in which Qwest has been granted special access pricing flexibility, since in the absence of TELRIC-based UNE pricing, those special access rates are likely to go up in the near future if the FCC grants Qwest’s Petitions.¹⁰ That is, we have not captured the effects of these second-round price increases, which would lead to further increases in retail telecommunications expenditures.

To determine the impact of a grant of forbearance for loop and transport unbundling obligations, we built a “bottoms up” model to capture the competitive dynamics (*e.g.*, supply and demand responses) of the telecommunications markets in the four MSAs at issue based on the assumption that loop and transport facilities are no longer available at TELRIC rates in the four MSAs and must be purchased out of Qwest’s special access tariffs or, in case of DS0 loops, commercial offerings. We focus on two scenarios for modeling DS0 loop commercial offerings in the four MSAs, that may ensue if forbearance is granted. The first scenario assumes that DS0 loop prices would go up in a manner similar to the price increases under Qwest’s commercial offering in the Omaha

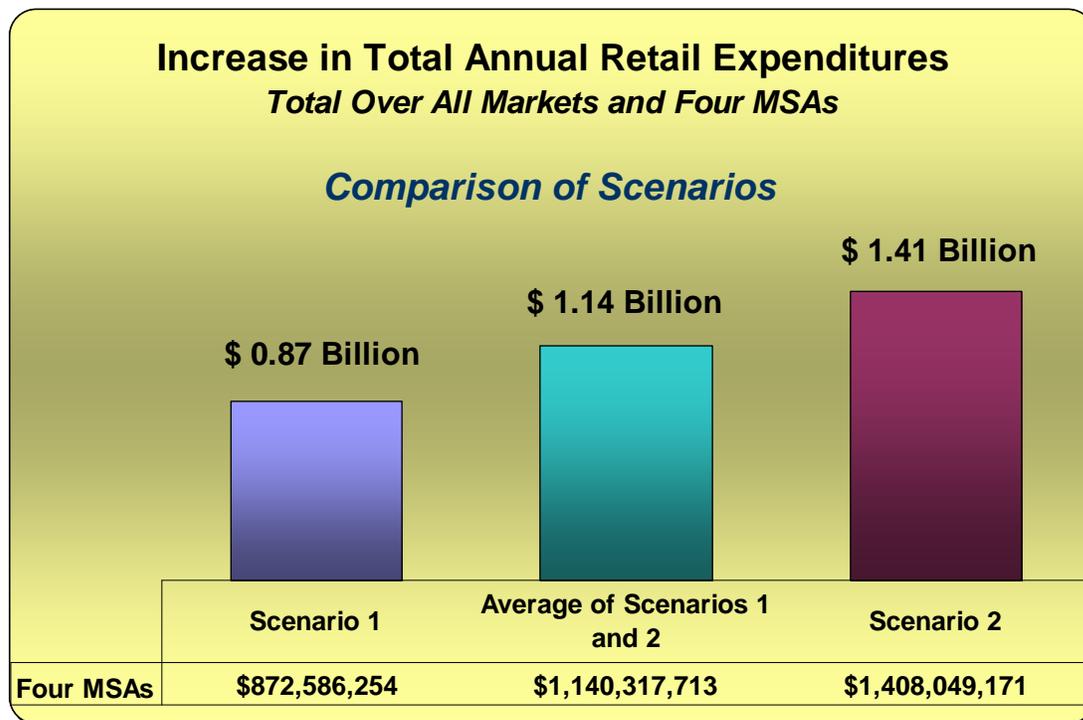
⁷ United States Government Accountability Office, Report to the Chairman, Committee on Government Reform, House of Representatives, *Telecommunications: FCC Needs to Improve Its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services*, November 2006 (“GAO Report”).

⁸ The *GAO Report* examined all four markets for which Qwest is seeking forbearance: Denver, Colorado; Minneapolis-St. Paul, Minnesota; Seattle, Washington; and Phoenix, Arizona. See *GAO Report*, at 10.

⁹ *GAO Report*, at cover page (emphasis supplied).

¹⁰ Qwest has special access pricing flexibility for transport in all four MSAs and pricing flexibility for loops in one MSA (*Phoenix*).

wire centers in which forbearance was granted. The second scenario assumes that Qwest’s DS0 loop commercial offering would be priced at levels proposed by Qwest in its most recent state UNE rate cases (these proposals are in fact Qwest’s own view on its costs associated with DS0 loop elements and, thus, the best estimate of future prices)¹¹. We also examined a third scenario, which assumes that Qwest would offer DS0 loop prices in the four MSAs based on its special access tariffs. We found, however, that the large prices increases under this scenario would engender such severe market responses in our model that we consider it unlikely Qwest would actually pursue this strategy.¹² The impact of a grant of forbearance for loop and transport unbundling obligations was then quantified as the absolute increase in annual telecommunications outlay incurred by retail telecommunications customers in the four MSAs. We have estimated this impact as a range (represented by scenarios 1 and 2, with the midpoint being the average of these scenarios), by MSA and by product market (including mass market voice, enterprise, and broadband Internet markets). The charts below summarize the estimated increases in annual retail wireline expenditures by MSA for each of these market segments.

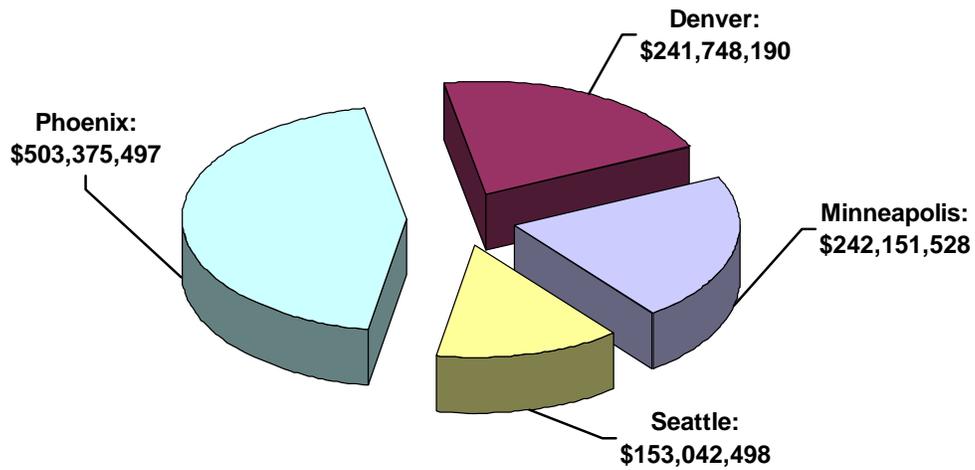


¹¹ As will be discussed in more detail below, it would be irrational to assume that Qwest would offer DS0 loops at prices below Qwest’s stated costs.

¹² For example, while a grant of forbearance may free Qwest from certain regulatory obligations, we believe that extreme pricing responses would not serve the company’s political interests.

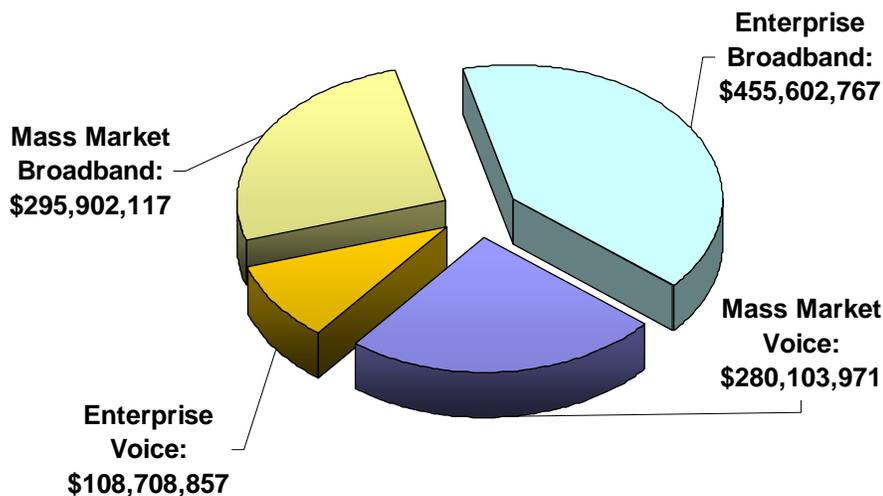
**INCREASE IN ANNUAL RETAIL WIRELINE
EXPENDITURE BY MSA**
Average of Scenarios 1 and 2

Total Increase for Four MSAs: \$1.14 Billion



**INCREASE IN ANNUAL RETAIL WIRELINE
 EXPENDITURE BY MARKET**
Average of Scenarios 1 and 2

Total Increase for Four MSAs: \$1.14 Billion



Based on reasonable assumptions regarding pricing strategies, demand responses, and market dynamics, we estimate that if the FCC grants Qwest its requested forbearance in the four MSAs at issue, the annual impact in terms of increased telecommunications expenses incurred by customers for retail mass market and enterprise voice and broadband services in the four MSAs would range between \$0.87 and \$1.41 billion, which translates into the average of \$1.14 billion.¹³ This amounts to an increase in telecommunications expenditures of \$115 annually for an average household.

¹³ One may also consider the offsetting benefits associated with the *increased profits* that Qwest would be able to extract from these MSAs. In such an analysis, increased profits would be counted on the plus side of an impact analysis. But, while in general corporate profits are a positive event, in the current context it is more appropriate to not recognize an increase in Qwest's corporate profits because those profits would be achieved simply by regulatory fiat – at the expense of end user customers – and would not signify improved efficiencies or other advances generally viewed as genuinely positive and desirable for society. Our approach is further justified by the fact that Qwest makes no demonstration in its Petitions that forbearance is required because of inadequate earnings.

I. DESCRIPTION OF QWEST'S FORBEARANCE PETITIONS

In its four Petitions, Qwest is seeking forbearance from the following:¹⁴

1. Loop and transport unbundling obligations pursuant to Section 251(c) of the Act;
2. Part 61 dominant carrier tariffing requirements;
3. Part 61 price cap regulations;
4. *Computer III* requirements including CEI and ONA requirements; and
5. Dominant carrier requirements arising under Section 214 of the Act and Part 63 of the FCC's rules concerning the processes for acquiring lines, discontinuing services, assignment or transfers of control, and acquiring affiliations.

This paper will focus on the ramifications of forbearance from the first item: loop and transport obligations pursuant to Section 251(c)(3) of the Act.

Under the *Omaha Forbearance Order*, Qwest is no longer required to provide unbundled access to loop and transport UNEs pursuant to Section 251(c)(3) in nine wire centers located in the Omaha, Nebraska MSA.¹⁵ Our analysis assumes that if Qwest's Petitions are granted as they relate to Section 251(c)(3) unbundling obligations, Qwest would no longer be required to provide unbundled access to loops and transport facilities in the four MSAs.

II. FORBEARANCE WOULD IMMEDIATELY INDUCE UPWARD PRESSURE ON WHOLESALE PRICES

Wholesale prices for unbundled loop and transport facilities purchased from Qwest pursuant to Section 251 of the Act are based on the TELRIC pricing standard. If Qwest's Petitions (as they relate to unbundling obligations) are granted, the same loop and transport facilities will no longer be available at TELRIC-based prices; rather, carriers will be forced to purchase these facilities under higher rates as, clearly, Qwest would not be asking for forbearance if it intended to preserve the *status quo* or reduce rates.

A. Pricing Provisions for Loops and Transport Offered Under 47 U.S.C. Section 251(c)(3)

Under the FCC's TELRIC methodology, prices are set based on forward-looking economic cost. The economic reason – as expressed by the FCC – for setting the prices

¹⁴ See, for example, Qwest's *Denver, Colorado Petition*, page 3.

¹⁵ *Omaha Forbearance Order*, at ¶ 2,

for loops and transport offered under Section 251(c)(3) at cost (*i.e.*, TELRIC) is to emulate competitive markets (which tend to drive prices to economic cost) and to provide the appropriate price signals to all market participants.¹⁶ The FCC has concluded that prices based on cost (in particular, forward-looking economic costs) are consistent with this public policy objective.

As will be discussed below, the availability of wholesale facilities at TELRIC-based rates plays a critical role in disciplining retail markets. An increase in wholesale rates, which forbearance would bring about, is certain to impair this disciplining function of competitors – *and would-be competitors* – and fundamentally alter the competitive dynamic in retail markets.

B. Qwest Would Increase Wholesale Prices If Forbearance is Granted

1. Overview

As discussed above, if the FCC grants Qwest's Petitions, Qwest will no longer be required to make its loop and transport network elements available at TELRIC-based rates. Qwest, like other RBOCs, has typically advocated that CLECs obtain these network elements out of Qwest's special access tariffs instead. This is supported by the recent reactions of the ILECs to changes in unbundling requirements, including Qwest's decisions regarding its offerings in wire centers associated with TRRO relief and wire centers in Omaha in which it was granted forbearance. Competitors that currently rely on Qwest's high-capacity loop and transport UNEs should expect to pay Qwest's special access rates for the same facilities if the Petitions are granted.¹⁷ As for basic DS0 loops,

¹⁶ *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order, 11 FCC Rcd 15499 (1996), at ¶ 360 (“*Local Competition Order*”), aff'd in part and vacated in part sub nom. *Comp. Tel. Assoc. v. FCC*, 117 F.3d 1068 (8th Cir. 1997) and *Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997), aff'd in part and remanded, *AT&T v. Iowa Utils. Bd.*, 525 U.S. 366 (1999); on remand *Iowa Utils. Bd. v. FCC*, 219 F.3d 744 (8th Cir. 2000), reversed in part sub nom. *Verizon Communications, Inc. v. FCC*, 535 U.S. 467 (2002), at ¶ 679.

¹⁷ This is documented on Qwest's Wholesale website for commercial agreements in which sub-item “Qwest Commercial DS1 and DS3 Loops Transport and Combinations” simply refers to “applicable tariff” (<http://www.qwest.com/wholesale/clecs/commercialagreements.html>). Similarly, in Minnesota, Qwest contends that its Section 271 obligation to make loop and transport network elements available is fulfilled by making those Section 271 checklist items available at special access rates. Qwest also argues strenuously against the use of TELRIC or mark-ups above TELRIC for purposes of setting rates for unbundled network elements offered under Section 271. *See, e.g.*, Qwest's proposal for Section 271 pricing in Minnesota. *In the Matter of a Potential Proceeding to Investigate the Wholesale Rate Charged by Qwest*, Docket #P-421/CI-05-1996. Further, as pointed out by commenters in this docket, Qwest only offered McLeod in Omaha discounts from special access rates for high-capacity services on the unreasonable condition that McLeod foregoes the opportunity to lease network elements at UNE rates where they are still

experience in Qwest's Omaha wire centers that received forbearance from Section 251 UNE pricing shows that while Qwest is offering a "commercial agreement" for these loops in Omaha (which is different from its special access tariff offering), prices under this offering still constitute a dramatic increase [same comment as before] over UNE DS0 loop pricing.¹⁸ Because there are few if any economically-viable alternatives to Qwest's loop and transport facilities, this means that CLECs will face the higher wholesale prices that Qwest's tariffed special access or commercial offerings constitute.

2. CLECs Have Few, If Any, Economically-Viable Alternatives to Qwest's Wholesale Facilities

CLECs' extensive use of Qwest's facilities today is driven by the fact that, particularly in the short and intermediate run, CLECs have few, if any, economically-viable *wholesale* alternatives.

To economically justify self provisioning facilities, CLECs must consider the demand and the anticipated rate of utilization of the facilities for a specific route. For example, a CLEC must typically expect at least 9 to 12 DS3 transport circuits on a route in the near term to economically justify self provisioning a route.¹⁹ This means that construction of interoffice facilities by multiple CLECs will generally be found only on the very densest traffic routes. The economics of building one's own loop facilities are even more challenging. Specifically, a CLEC will generally require traffic demand requiring approximately three DS3 loops under contract at a particular location before it can economically justify the substantial investment in construction of its own loop facility to that business location.²⁰ Customers with this level of demand are very rare. Very few

available in Qwest's serving territory. See Comments of BT Americas, Inc., WC Docket No. 07-97 (filed Aug. 31, 2007), at 13; Comments of Earthlink Inc. and New Edge Network Inc., WC Docket No. 07-97 (filed Aug. 31, 2007), at 40.

¹⁸ The recurring rate for DS0 loops in Qwest's commercial offering for the wire centers in Omaha for which forbearance was granted are approximately 30% higher than the UNE DS0 loop rate that was applicable to these wire centers before forbearance was granted. (The commercial offering is \$15.71 and is listed on Qwest's Wholesale website for commercial agreements (<http://www.qwest.com/wholesale/clecs/commercialagreements.html>), sub-item "Qwest Commercial DS0 Loop Facility OFO", Exhibit A, section 109.2.1.1. The relevant UNE rate is \$12.14 (see Qwest Nebraska SGAT, Exhibit A, section 9.2.1.1.1 available at http://www.qwest.com/about/policy/sgats/SGATSDocs/nebraska/NE_7th_Rev_5th_Amended_2_16_05_Exh_A_Clean.pdf)).

¹⁹ See, e.g., Declaration of Ajay Govil on behalf of XO Communications, LLC, *Minnesota Public Utilities Inquiry Regarding Petition of Qwest Corporation, Filed with the Federal Communications Commission, for Forbearance Pursuant to 47 U.S.C. Section 160(c) in the Minneapolis-St. Paul Minnesota Metropolitan Statistical Area*. MPUC Docket No.: P421/CI-07-661 (filed Aug. 16, 2007).

²⁰ *Id.*

business customers are served with even one DS3 loop, much less three. Thus, while CLECs do own and operate their own loop and transport facilities in some circumstances, these limited facilities are location-specific and do not represent substitutes for the Qwest facilities that CLECs continue to rely upon. Further, since there are very few CLEC loops to commercial buildings (relative to the number of commercial buildings served), CLECs' ability to utilize loop facilities deployed by other CLECs is scarce.

To the extent CLECs have their own transport facilities, there are a number of problems that limit the viability of these CLEC facilities for use by other CLECs. A third-party carrier is unlikely to be able to provide all of the routes a CLEC would need in a metro area. Therefore, the decision to use a third-party carrier likely would require a CLEC to obtain and manage services obtained from multiple suppliers, and the CLEC may have to build into the third-party carriers' locations in order to connect to its own switch site. When a CLEC decides to obtain facilities from multiple suppliers, it becomes more difficult to monitor and maintain service quality, and maintenance and repair issues may pose problems. Also, the CLEC must establish and maintain cross-connects between the collocation arrangements to access the third party services/facilities, which may be expensive and obviate any perceived advantages of obtaining facilities from a third party. Finally, even if another CLEC has interoffice transport services available, it typically will not be willing to offer these facilities on a wholesale basis to a would-be competitor.

Importantly, cable operators rarely present an economically-viable alternative to Qwest's wholesale loop and transport network elements for a variety of reasons. First, cable television systems are not typically designed to provide these types of services, and cable companies do not offer a wholesale loop or transport product to CLECs over cable television plant.²¹ Second, the traditional cable networks and the needs of most CLECs do not necessarily overlap. CLEC customers often are businesses and, consequently, the CLECs' fiber optic backbones are found in business districts. By contrast, most cable television systems are built to serve residential customers in suburban areas. This means that the cable networks typically do not reach or connect to many of the CLECs' target business customers.²² Lastly, even if a cable network were to reach the CLECs' business

²¹ See, e.g., Letter from Chris MacFarland, McLeodUSA, to Marlene H. Dortch, Secretary, Federal Communications Commission (Dec. 15, 2006), attached as Exhibit D to Opposition of Cavalier Telephone Subsidiaries, WC Docket No. 06-172 (filed Mar. 5, 2007), describing McLeod's experience in Omaha after Qwest's forbearance was granted and stating that "McLeodUSA has approached Cox Communications on at least two occasions regarding its willingness to entertain a commercial arrangement for McLeodUSA to lease from Cox last mile network facilities. McLeodUSA was rebuffed on both occasions."

²² See, e.g., Comments of Cox Communications, Inc., WC Docket No. 07-97 (filed Aug. 31, 2007), at 20-21 (explaining that although it is a facilities-based company, Cox needs to lease Qwest's sub-loops to reach customers in Multiple Tenant Environments).

customers, the cable network is not necessarily constructed to reliably serve most business customers.²³

Likewise, wireless services are not yet a viable wholesale alternative for either residential or business customers.²⁴ This is in part because, overall, fixed and, particularly, commercial mobile wireless wholesale services do not today consistently provide the bandwidth, functionalities, or reliability at a comparable price to the wireline services that typically are required by CLECs serving residential customers, and most certainly for business customers. While this may change in the future, today wireless loop technology is clearly not a close substitute to Qwest's wireline DS1 and DS3 loop facilities. In addition, wireless companies rely on Qwest's special access services to provision their own services.²⁵

In sum, there is no functioning *wholesale* market sufficiently robust to curtail Qwest's incentive and ability to raise *wholesale* prices for loop and transport network elements if its Petitions are granted.

3. The GAO Report Demonstrates that RBOC Pricing Flexibility Causes Upward Pressure on Prices

As noted, the GAO in 2006 examined price movements in special access markets after the FCC granted pricing flexibility to the RBOCs based on the assumption that these markets were sufficiently competitive to restrain RBOC market power.²⁶ The GAO's analysis goes well beyond any analysis performed by the FCC or by any other entity. As such, the market dynamics and the pricing trends identified in the GAO Report are reliable guideposts for what is most likely to transpire if the FCC were to grant Qwest's requests for forbearance and the additional pricing flexibility inherent therein.

²³ The cable networks may be constructed to support infrequent bursts of high speed data associated with cable modems as opposed to more continuous demand of high capacity business services. See *e.g.*, Comments of BT Americas, Inc., WC Docket No. 07-97 (filed Aug. 31, 2007), at 9-10 (stating that cable companies do not offer a "full suite" of services and bandwidth demanded by enterprise customers, and that their reliability is insufficient even for small business applications).

²⁴ See, *e.g.*, Reply Comments of Sprint-Nextel Corporation, WC Docket No. 07-97 (filed Oct. 1, 2007), at 7 (stating that the wireless industry is not a sufficient competitive alternative to enterprise wireline service).

²⁵ See, *e.g.*, T-Mobile USA Reply Comments, WC Docket No. 07-97 (filed Oct. 1, 2007), at 2 (stating that "T-Mobile relies overwhelmingly on Qwest's DS1 special access offerings for the initial links that connect T-Mobile's cell sites to the wireline network."). See also Reply Comments of Sprint-Nextel Corporation, WC Docket No. 07-97 (filed Oct. 1, 2007), at 16.

²⁶ In this context, the term market power is used to indicate that a firm has the ability to profitably raise prices above competitive levels for a sustained period of time.

Specifically, the GAO Report concluded:

Available data suggest that incumbents' list prices and average revenues for dedicated access services have decreased since 2001, resulting from price decreases due to regulation and contract discounts. *However, in areas where FCC granted full pricing flexibility due to the presumed presence of competitive alternatives, list prices and average revenues tend to be higher than or the same as list prices and average revenues in areas still under some FCC price regulation.* According to the large incumbent firms, many large customers needing service in areas with pricing flexibility purchase dedicated access services under contracts that provide additional discounts. However, GAO found that contracts do not generally affect the differential cited previously, and that contracts also contain various conditions or termination penalties competitors argue inhibit customer choice. Government agencies, to the extent that they purchase dedicated access off of General Services Administration contracts, are generally shielded from price increases due to pre-negotiated rates. However, not all agencies purchase off of these contracts.²⁷

These and other findings and conclusions in the GAO Report indicate loops and transport, the services subject to Qwest's Petitions, are offered in markets that remain highly concentrated; *i.e.*, these markets are dominated by a few large players that continue to be able to push prices upward above competitive (reasonably cost-based) levels.

In sum, and for purposes of the analysis at hand, the GAO Report is a clear and definitive demonstration that Qwest's requested relief from TELRIC pricing requirements would generally translate into upward pressure on wholesale prices for network elements used by competing CLECs. If there is not sufficient competitive pressure to keep Qwest from increasing its special access prices when it has the regulatory flexibility to do so, there is no reason to believe that there is sufficient competitive pressure to prevent Qwest from increasing the prices for its loop and transport facilities to, at a minimum, its special access prices with a grant of forbearance.²⁸

²⁷ GAO Report, at 1 (emphasis supplied).

²⁸ It is important to note that special access pricing has been kept in line by the availability of TELRIC-priced UNEs and, in the absence of UNEs, special access prices are very likely to rise.

C. Comparison: Qwest's Current UNE Rates with Rates Expected if Forbearance is Granted

As noted above, the key to the *QSI Impact Study* is the expectation that Qwest's wholesale rates would increase – if forbearance is granted – from TELRIC-based UNE rates to current special access rates, with an exception for DS0 loops, for which the *QSI Study* considered several alternative scenarios discussed in more detail below. To model these rate increases, QSI accounted for a number of factors such as the line counts in each wire center at issue; the rate variance across rate/density zones; distance/mileage sensitive rates and the unavailability of high-capacity UNE loop and transport elements in certain wire centers as a result of the *TRRO*.

Rates for High-Capacity Network Elements

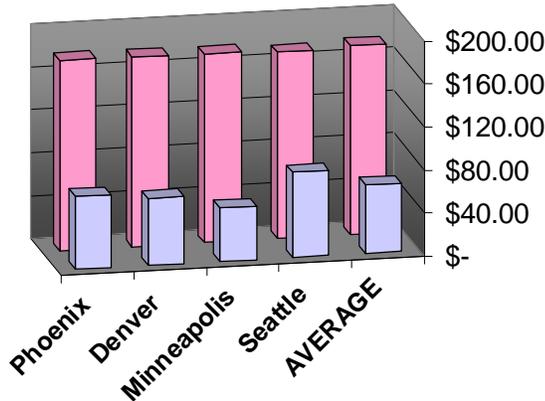
As discussed above, recent ILEC reactions to changes in unbundling requirements, including Qwest's current offerings in wire centers associated with *TRRO* relief and Omaha wire centers for which Qwest was granted forbearance unambiguously indicate that if the forbearance petitions are granted, CLECs would have to buy high-capacity network elements such as DS1 and DS3 loops and transport as services from Qwest's special access tariffs. It is important to note that there is no guarantee that current special access prices would not increase any further: First, Qwest has been granted pricing flexibility (the relief from price controls) for its special access transport services in all four MSAs, and for "loops"²⁹ in the Phoenix MSA. Second, Qwest's petitions ask for forbearance from price cap regulations, meaning that if the petitions are granted, Qwest would receive relief from the remaining price regulation for special access "loops" in the Denver, Minneapolis, and Seattle MSAs. Third, because the availability of UNEs provides certain discipline to special access prices, relief from UNE pricing would remove additional barriers from further increases in Qwest's special access rates. In light of these considerations, an assumption made in the *QSI Study* that if the forbearance petitions were granted, CLECs would have to buy high-capacity network elements at Qwest's **current** special access rates is conservative.

The following charts illustrate the difference, by MSA, between Qwest's current recurring UNE rates and the rates expected if the petitions are granted for high-capacity network elements.³⁰

²⁹ Channel Termination is the special access service that generally replaces unbundled loops in areas where Qwest has received relief from UNE pricing requirements.

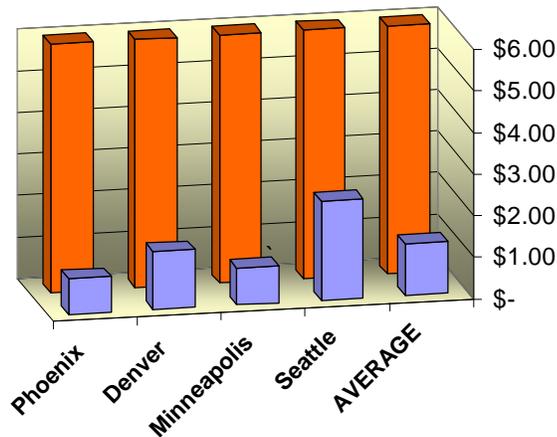
³⁰ Current rates are a weighted average aggregation of currently effective rates, which include not only UNEs (applicable to wire centers that were not de-listed as a result of *TRRO*), but also special access rates (applicable to the *TRRO* de-listed wire centers). For rates that vary by rate zone or band, the charts depict weighted (by line counts) average of the applicable "raw" rates. Special access rates account for the specific pricing flexibility status of each MSA. Transport rates include per termination and mileage-sensitive components aggregated via an assumption of a 10 mile transport. For special access rates with term discounts month-to-month rates were utilized

DS1 Loops:
Current Cost and Cost if Forbearance is Granted
(Recurring per Month)



	Phoenix	Denver	Minneapolis	Seattle	AVERAGE
Current Cost	\$67.81	\$62.34	\$49.97	\$79.23	\$63.81
Cost if Forbearance is Granted	\$177.50	\$176.42	\$176.03	\$173.65	\$176.23

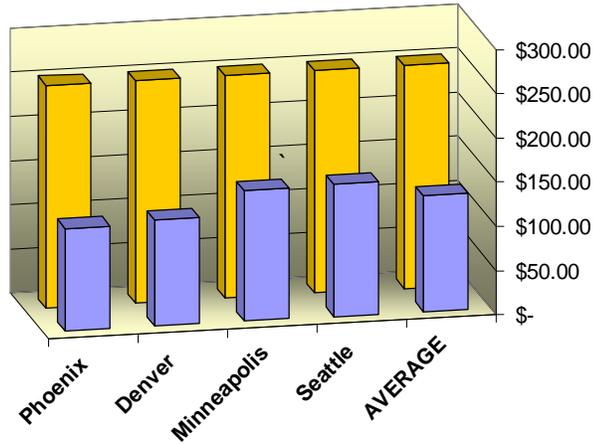
DS1 Tie Pair:
Current Cost and Cost if Forbearance is Granted
(Recurring per Month)



	Phoenix	Denver	Minneapolis	Seattle	AVERAGE
Current Cost	\$0.85	\$1.39	\$0.89	\$2.39	\$1.25
Cost if Forbearance is Granted	\$5.98	\$5.98	\$5.98	\$5.98	\$5.98

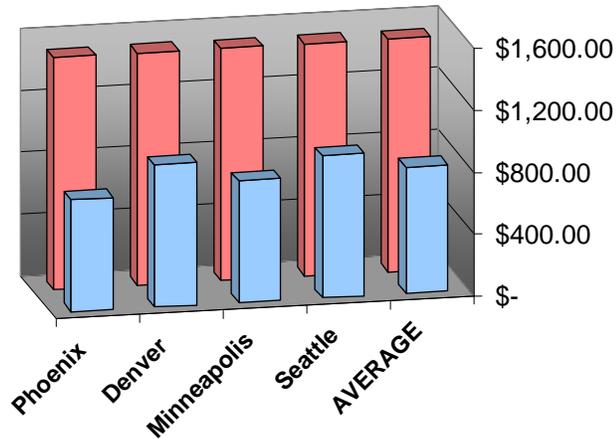
because they present a closer substitute to UNEs (for which no term discounts apply) than term rates.

DS1 Transport:
Current Cost and Cost if Forbearance is Granted
(Recurring per Month)



	Phoenix	Denver	Minneapolis	Seattle	AVERAGE
Current Cost	\$116.39	\$119.95	\$148.27	\$149.93	\$130.73
Cost if Forbearance is Granted	\$252.00	\$252.00	\$252.00	\$252.00	\$252.00

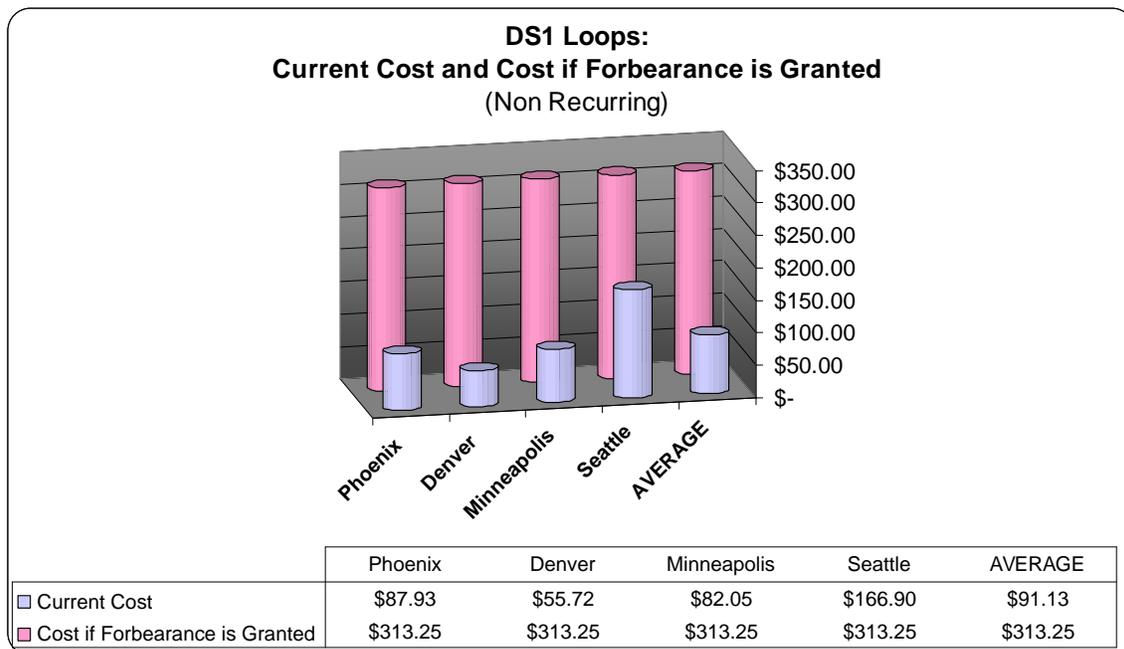
DS3 Transport:
Current Cost and Cost if Forbearance is Granted
(Recurring per Month)



	Phoenix	Denver	Minneapolis	Seattle	AVERAGE
Current Cost	\$722.40	\$917.32	\$783.90	\$916.65	\$814.43
Cost if Forbearance is Granted	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00

As seen in the above charts, the differences between Qwest’s recurring UNE and special access rates for high-capacity loop and transport network elements is significant. On average across the four MSAs, current special access rates for DS1 loops are *almost three times higher* than UNE rates.³¹ The increase is even more pronounced for DS1 tie pairs, with special access rates being *almost 5 times higher* than UNEs³² on average across the four MSAs. Special access DS1 and DS3 transport rates are almost two times higher than current rates on average across the four MSAs.³³

The difference between current and expected non-recurring rates is similarly (if not more) striking, with DS1 loop rates being on average 3.44 times higher, and DS1 tie pairs being more than 13 times higher under current special access tariffs.³⁴ Additional detail on the differences in non-recurring rates for high-capacity network elements is shown in the charts below:



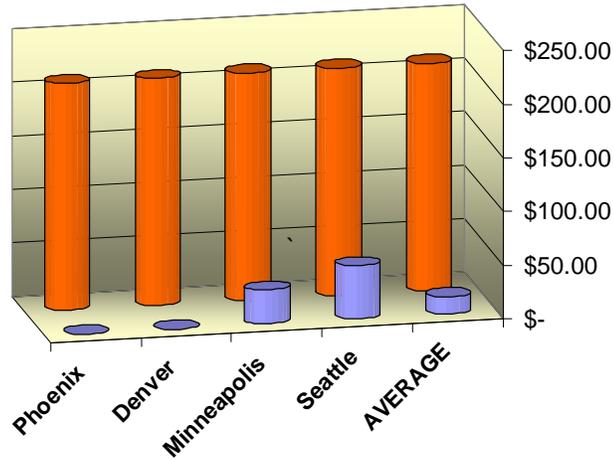
³¹ The exact ratio is calculated as $\$176.23/\$63.81=2.76$.

³² The exact ratio is calculated as $\$5.98/\$1.25=4.79$.

³³ The exact ratios are $\$252/\$130.73=1.93$ for DS1 transport and $\$1,500/\$814.43=1.84$ for DS3 transport.

³⁴ The ratio of expected and current DS1 loop NRCs is calculated as $\$313.25/\$91.13=3.44$. The ratio of expected and current DS1 tie pair NRCs is calculated as $\$211.78/\$15.98=13.26$.

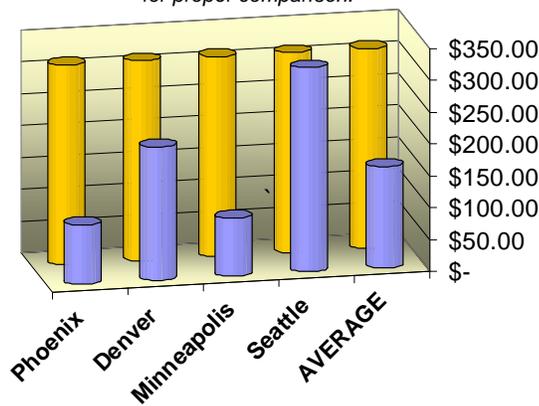
**DS1 Tie Pair:
 Current Cost and Cost if Forbearance is Granted
 (Non Recurring)**



	Phoenix	Denver	Minneapolis	Seattle	AVERAGE
Current Cost	\$-	\$-	\$31.60	\$49.60	\$15.98
Cost if Forbearance is Granted	\$211.78	\$211.78	\$211.78	\$211.78	\$211.78

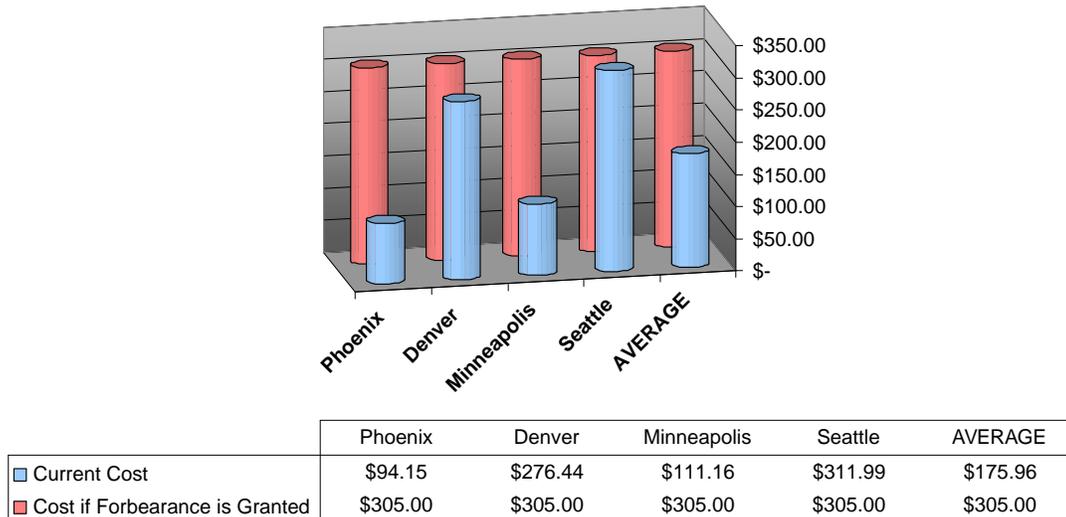
**DS1 Loop + DS1 Transport:
 Current Cost and Cost if Forbearance is Granted
 (Non Recurring)**

Note: Due to structure of special access NRCs, Loop and Transport NRCs are added together for proper comparison.



	Phoenix	Denver	Minneapolis	Seattle	AVERAGE
Current Cost	\$93.27	\$208.96	\$90.86	\$320.16	\$158.80
Cost if Forbearance is Granted	\$313.25	\$313.25	\$313.25	\$313.25	\$313.25

**DS3 Transport:
Current Cost and Cost if Forbearance is Granted
(Non Recurring)**



DS0 Loop Rates

As opposed to high-capacity network elements for which there is substantial empirical evidence about ILECs’ reaction to UNE pricing relief, there is limited evidence for DS0 loops, namely the commercial offering made in the Omaha wire centers in the aftermath of the FCC grant of forbearance discussed above. However, the Omaha commercial offering does not present an adequate foundation when forecasting rates in the four MSAs at issue for a number of reasons. First, the Omaha MSA is a significantly smaller market than any of the four MSAs at issue.³⁵ A smaller market translates into fewer CLEC-based competitors, fewer revenue opportunities in end user markets and less viable competition, meaning that Qwest would likely offer more aggressive (higher) wholesale DS0 loop prices in larger markets such as the four MSAs at issue compared to Omaha. In addition, because of the higher CLEC volumes involved in the four MSAs compared to Omaha,³⁶ Qwest has more to gain in terms of total wholesale revenues when

³⁵ See *e.g.*, Comments of Earthlink Inc. and New Edge Network Inc., WC Docket No. 07-97 (filed Aug. 31, 2007), at 2 (stating that the smallest of the four MSAs, Denver, has a population of 2.4 million, as compared to the population of Omaha of only 850,000). Another illustration of the different “scales” of the geographical areas involved is the count of wire centers: While in Omaha Qwest received forbearance in nine of twenty-four wire centers, a total of 191 wire centers are at issue in the four MSAs |

³⁶ Based on Qwest’s Wholesale website for commercial agreements (<http://www.qwest.com/wholesale/clecs/commercialagreements.html>), only one company, TCG Omaha, signed the Omaha commercial agreement.

pricing its DS0 loop services absent regulatory controls. Second, there is no guarantee that the rate in the Omaha DS0 loop commercial agreement would be offered in other states. In fact, Qwest may be keeping the rate at its current relatively “moderate” level (moderate compared to the corresponding special access rate, which is discussed below) for strategic reasons – until similar forbearances is granted in more important markets such as the four MSAs at issue.

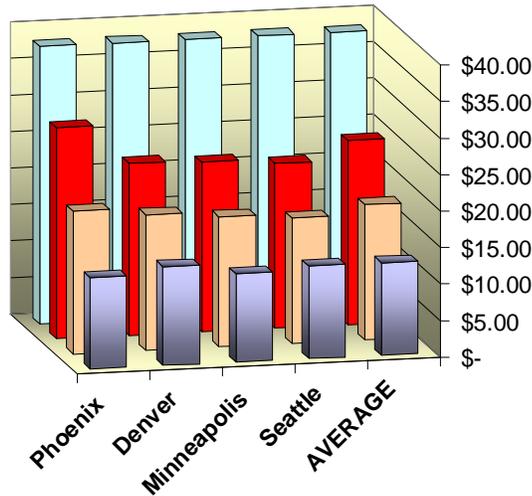
Another data point for the forecast of DS0 loop rates in the four MSAs if forbearance is granted (besides the DS0 loop rate contained in Qwest’s Omaha commercial agreement) is represented by Qwest’s proposals for DS0 loop rates in UNE cases. These proposals constitute Qwest’s estimate of its cost of DS0 loops, and as a rational company, Qwest should price its services at levels no lower than cost. Because Qwest’s proposals in the most recent UNE cases in the four states at issue are higher than the Omaha commercial rate (as shown on a chart below), they represent a distinctive data point.³⁷ A third data point is Qwest’s special access rate for DS0 “loops” (2-wire channel terminations) contained in its current access tariffs.

These data points generated three scenarios considered in the *QSI Study*. (1) The first scenario assumed that DS0 loop prices would go up in a manner similar to the price increase reflected in Qwest’s commercial offering in the Omaha wire centers; (2) The second assumed that Qwest’s DS0 loop commercial offering in the four MSAs would be priced at levels similar to Qwest’s proposals in its most recent state UNE cases. The third scenario assumed that Qwest would offer DS0 loop prices in the four MSAs based on its special access tariffs.

The chart below depicts recurring DS0 loop rates under each scenario and compares them to the current UNE rates:

³⁷ Source of Qwest’s proposed DS0 loop UNE rates in the most recent cases: Public Service Commission of Utah, Docket No. 01-049-85, *In the Matter of the Determination of the Cost of the Unbundled Loop of Qwest Corporation, Inc.*, Surrebuttal Testimony of Douglas Denney on behalf of AT&T Communications of the Mountain States, Inc., TCG Utah, Worldcom, Inc. and XO Utah, Inc. (filed Nov. 11, 2002), at p. 8 (in Arizona, Colorado and Minnesota); Washington: Qwest’s August 22, 2003 cost study filing (public) in Washington, exhibit TKM-4.

**2 Wire Analog Loops:
Current Cost and Cost if Forbearance is Granted
(Recurring per Month)**



	Phoenix	Denver	Minneapolis	Seattle	AVERAGE
■ Current Cost	\$12.49	\$13.55	\$12.06	\$12.71	\$12.67
■ Cost if Forbearance is Granted: Scenario 1	\$19.61	\$18.61	\$17.86	\$17.16	\$18.56
■ Cost if Forbearance is Granted: Scenario 2	\$28.96	\$23.55	\$23.23	\$22.61	\$25.27
■ Cost if Forbearance is Granted: Scenario 3	\$38.00	\$38.00	\$38.00	\$38.00	\$38.00

As shown in the above chart, while the current weighted average UNE rate for DS0 loops is \$12.67 across the four MSAs, the rate if forbearance is granted is expected to be \$18.56 under scenario 1 (Omaha-like increases in rates), \$25.27 under scenario 2 (Qwest’s proposals in UNE cases) and \$38.00 under scenario 3 (special access rate). In relative terms, these scenarios constitute increases over UNE rates of 1.46, almost 2 and 3 times correspondingly.³⁸

³⁸ Rate increases under scenario 1 were assumed to be at least 1.29 times over the current UNE rates (which corresponds to the relative increase of rates in Omaha) but no less than the absolute level of the Omaha commercial offering’s rate (\$15.71) Note that the Omaha wire centers are located in UNE zone 1, the highest density (and the cheapest in terms of cost), while wire centers in the four MSAs are distributed across many (higher and lower density) UNE zones.

III. WHOLESALE PRICE INCREASES INDUCE RETAIL PRICE INCREASES

A. Overview

As discussed in the previous Sections, one effect of a grant of forbearance would be an increase in Qwest's wholesale prices charged to its retail competitors, *i.e.*, the CLECs. In response to these wholesale price increases, CLECs may seek to flow-through these cost increases to their end user customers in order to maintain their levels of profitability. To the extent that market conditions may prevent them from fully and proportionately raising end user/retail rates (either immediately or over time), CLECs will have to absorb some (or all) of the wholesale price increases. CLECs that operate on the narrow edge of profitability and, thus, are unable to either flow through or absorb wholesale price increases may be forced to exit the market, either by shrinking their operations and exiting one or more MSAs or by ceasing operations altogether.³⁹ Be that as it may, the increases in wholesale rates will induce significant upward pressure on the end user/retail rates of virtually all CLECs.

In what follows, we will discuss in more detail the CLECs' pricing responses and the responses from other market participants, such as Qwest, the cable companies, and others. We will discuss why the high degree of concentration in telecommunications markets and the limited ability and interest of intermodal competitors will permit the general level of retail prices to move upward as a result of CLEC-initiated price increases.

B. Wholesale Price Increases Lead to CLECs Increasing Retail Prices and/or Exiting Markets

If the FCC grants Qwest's Petitions as they relate to unbundling obligations pursuant to Section 251, a series of interrelated actions by telecommunications market participants would be set into motion. As discussed above, first and foremost, Qwest would increase its wholesale prices to CLECs.

³⁹ Of course, there are many variations in the scenarios that may occur. Nevertheless, the permutations involve combinations of three basic responses: the CLEC either (1) absorbs the wholesale price increase; (2) flows through the wholesale price increase to end users; or (3) withdraws from the market.

To fully understand the effects of this change, it is important to understand the initial predicament of CLECs when Qwest increases wholesale prices for its network elements.⁴⁰

The predicament in which a grant of forbearance will place CLECs is traditionally known as a “price squeeze.”⁴¹ To defeat the detrimental impact of wholesale price increases on their bottom line, CLECs will seek to increase their end-user rates. It is this initial impetus to raise prices in response to Qwest’s increase in wholesale rates that will cause ripple effects by inducing other market participants to raise their prices in turn. While in well functioning markets, such efforts would be penalized by customers migrating to lower-priced competitors, this is unlikely to occur in the four MSAs at issue for a number of reasons. First, the GAO Report conclusively demonstrated that these markets lack the competitive dynamics for curtailing the RBOCs’, in this instance, Qwest’s, market power. Further, as will be discussed, the upward movement in end user/retail prices is made possible by the high degree of concentration in telecommunications markets and the fact that intermodal competition is not predominantly price-oriented competition.

Of course, as the CLECs increase their retail rates, Qwest could respond by keeping its retail rates constant in order to expand its market share at the expense of the CLECs (rather than matching CLECs’ increases). However, there are a number of reasons why Qwest will opt to increase its retail rates in tandem with other market participants. We have already discussed the GAO Report finding that pricing flexibility for local network facilities translates into higher rates. Further, as will be discussed below, in highly concentrated markets such as telecommunications markets, dominant firms generally are able to increase their profits by raising prices and forfeiting larger market shares.

C. Granting Qwest Forbearance from TELRIC-Based Pricing of UNEs would Create a Qualitative Change in the Nature of the Retail Market

Even more important than a simple increase in the wholesale cost of CLECs is the qualitative change in the retail market structure that would occur if Qwest is relieved of the TELRIC pricing obligation for loop and transport network elements. In the current marketplace, CLECs provide a disciplining force to retail prices. Even though CLECs’

⁴⁰ Of course, not all CLECs use Qwest’s facilities to the same degree, but virtually all CLECs operating in Qwest territory use some Qwest facilities. The QSI Model reflects the various degrees to which CLECs may be impacted.

⁴¹ For a more formal definition, *see* Jean Tirole, “The Theory of Industrial Organization,” The MIT Press, Cambridge, Massachusetts, 1988, at 186 (“Considering a situation in which a monopoly supplier is integrated downstream, a price squeeze [is] the situation in which the monopoly input supplier charges a price for the input to its downstream competitors that is so high they *cannot profitably* sell the downstream product in competition with the integrated firm.”).

actual market share may not be large, the potential for CLEC entry through purchase of TELRIC-based UNEs creates downward pressure on retail telecommunications prices. Because CLECs may obtain bottleneck network elements at economic cost, CLECs are capable of pricing retail services at economic cost and thus, in spite of their relatively small size, they are capable of disciplining the ILECs' retail pricing activities. This situation is similar to the economic concept of contestable markets in which the presence of potential competition (not necessarily actual competition) constrains the prices of a single producer and results in market prices similar to those of a competitive market.

If the requirement of TELRIC-based pricing for network elements is eliminated, however, the retail markets would not be constrained by the threat of quick competitive entry. If Qwest's Petitions are granted, Qwest would have the means (*i.e.*, essential facilities) and the opportunity (*i.e.*, elimination of competitors who obtain network elements at economic cost) to dominate the retail stage of the wireline market, with the surviving CLECs acting as a competitive fringe that follows the price leader, the dominant firm. Even assuming the presence of another facilities-based provider (*i.e.*, a cable company) in certain market segments such as the high-end residential market,⁴² the resulting retail market structure would be an oligopoly,⁴³ in which few dominant suppliers extract above-normal profits through their ability to charge prices that are higher than prices in a competitive market.

⁴² We distinguish here high-end (*i.e.*, high-revenue) residential telephone markets from low-end (*i.e.*, low revenue) residential markets because cable companies typically offer bundled packages in which features are bundled with local and long-distance telephone service and, often, with cable and/or Internet access, and lack an affordable basic plan. See, e.g., *Comments of the Colorado Office of Consumer Counsel*, WC Docket No. 07-97 (filed Aug. 31, 2007), at 22-27, observing that until recently Comcast's phone service came in two flavors – circuit-switched and VoIP-based, but in 2007 Comcast filed with state and federal commissions to discontinue its circuit-switched voice product, meaning that its only other phone offering (VoIP-based Digital Voice) would have to be purchased as an “unlimited” service with all kinds of “bells and whistles.” The same comments also pointed out (at p. 26) that Comcast voice services in Denver cost \$47.95 per month excluding fees and taxes, compared to Qwest's voice stand-alone rate of \$14.88. In other words, cable-based telephony is not affordable to people with relatively low discretionary income.

⁴³ In fact, the state commissions for the MSAs in question expressed a more extreme view that if Qwest's requested forbearance is granted, the residential market would constitute a duopoly: See *Comments of the Colorado Public Utilities Commission*, WC Docket No. 07-97 (filed Aug. 31, 2007), at 30 (“the likely outcome of forbearance is duopoly”); *Reply Comments of the Arizona Corporation Commission*, WC Docket No. 07-97 (filed Oct. 1, 2007), at 33 (“a duopoly such as the Commission believes is developing between Cox and Qwest in the residence market...”); *Ex Parte Comments of Minnesota Public Utilities Commission*, WC Docket No. 07-97, (filed Feb. 8, 2008) at 7 (“[i]n the absence of the CLEC option... the industry offers a Qwest/Comcast duopoly...”)

D. Firms with Market Power – Such as Qwest – Are Willing and Able To Increase Profits by Raising *Retail* Prices and Forfeiting Larger Market Shares

Basic economic theory suggests that Qwest has strong incentives to increase retail prices. A dominant firm, such as Qwest, does not generally seek to price its services so as to achieve – or maintain – a market share that is as large as possible. Rather, it will seek to raise prices to the greatest extent possible so as to maximize profits and it will do so even if this means forfeiting market share to competitors. In seeking to maximize its profits, a dominant firm, such as Qwest, will balance the gains in revenues (and profits) associated with higher prices against the loss of revenues (and profits) associated with a diminished demand and market share (caused by the higher prices). A dominant firm in a regulated industry may also choose to lose market share (while increasing prices) as a strategy for obtaining additional regulatory relief or avoiding regulatory scrutiny. The incentives for Qwest's responses to CLECs' retail price increases are meaningfully captured by the Dominant Firm – Competitive Fringe Pricing Model.⁴⁴ Under this general pricing model, there exists some optimal and sustainable market share for Qwest depending on the magnitude of Qwest's cost advantages over its "fringe" competitors. The greater the cost advantage of Qwest over its fringe competitors, the larger will be the optimal market share that Qwest will be able to sustain at prices above competitive levels. To the extent that a grant of forbearance eliminates the requirement that network elements be priced at TELRIC, Qwest is given the discretion to select the desired level of cost advantage over its fringe competitors, the CLECs. The higher Qwest sets its wholesale prices, the greater will be its cost advantage and the larger will be its optimal market share while charging retail prices above competitive levels.

Within the current context, the implications of the Dominant Firm – Competitive Fringe Pricing Model are that when CLECs are forced to increase their retail prices, Qwest should be expected to follow suit. To summarize, if Qwest's Petitions are granted, Qwest would have the means, opportunity, and incentive to increase retail market prices.

E. The Elimination of a Retail Competitors Will Facilitate Collusive Conditions and Lead to Higher Retail Rates

Some CLECs will not be able to increase their retail rates to levels necessary to sufficiently offset increases in Qwest's wholesale prices. This may be particularly true for CLECs that are heavily dependent on Qwest's facilities. Such CLECs will face greater cost pressures than CLECs that use more of their own network facilities (and who are in part – though only in part – insulated from the wholesale cost increases). Thus,

⁴⁴ See Gaskins, Darius W., Jr., "Dynamic Limit Pricing: Optimal Pricing Under Threat of Entry." *Journal of Economic Theory* 3:306-22 (1971).

some CLECs will be forced to scale back their operations or to exit one or more of the four MSAs if Qwest is granted forbearance.

In general, one or a few relatively small competitors can be an important factor in the nature and intensity of competition in the market. The effect of these retail competitors is often disproportionate to their size or market share. As explained above, as long as the CLECs are able to purchase network elements at TELRIC rates, they provide a disciplining force on retail markets. In addition, CLECs have been responsible for many innovations in telecommunications services.⁴⁵ A CLEC may focus on a specific end-user segment that may have been overlooked by a much larger incumbent. This behavior forces other firms to compete more aggressively and may undermine their ability to coordinate.⁴⁶ Thus, the disruptive behavior of the retail competitor, or maverick, favors consumers.

Qwest's inevitable price squeeze, sanctioned by a grant of forbearance, would remove some CLECs and would significantly change the nature and intensity of retail competition. Higher retail prices would inevitably ensue as the elimination of the retail competitor, the CLEC, would diminish competition and enable the remaining competitors, Qwest and the cable companies, to more easily engage in coordinated interaction – at the expense of consumers.

In short, the elimination of retail competitors, CLECs, from the market as a result of the requested forbearance would increase the degree of Qwest's market power and, potentially, induce collusion, and is yet another reason to anticipate higher retail prices as well as diminished consumer choice if forbearance is granted.

1. The Elimination of CLECs Will Facilitate Coordinated Interaction between Duopolists

The elimination of CLECs as a disciplining force for retail prices would lead to a reduced number of competing entities in the market, which would facilitate tacit coordination or collusion between the shrinking numbers of remaining service providers.⁴⁷ More importantly than a quantitative shift, there would be a qualitative shift in the market

⁴⁵ See, e.g., Comments of Earthlink Inc. and New Edge Network Inc., WC Docket No. 07-97 (filed Aug. 31, 2007), at 5 and 8-10 (describing CLECs' innovative offerings in telecommunications markets).

⁴⁶ Baker, Jonathan B., "Mavericks, Mergers and Exclusion: Proving Coordinated Competitive Effects Under the Antitrust Laws," 77 *New York University Law Review* (2002), at 135.

⁴⁷ More formally, coordinated interaction consists of actions by a group of firms that each are profitable as a result of the accommodating reactions of the other. This behavior may consist of tacit or express collusion. The seminal article addressing this condition is George Stigler, "A Theory of Oligopoly" 72 *Journal of Political Economy* (1964).

structure if the forbearance is granted. As mentioned above, the Arizona, Colorado, and Minnesota Commissions expressed concern that if forbearance is granted, residential markets would become a duopoly.⁴⁸ The qualitative difference between the current retail market and a duopoly market is that the availability of UNEs to CLECs at economic cost allows for quick entry by retail competitors. These retail competitors (*i.e.*, UNE-based CLECs) have been thwarting the ability of the intermodal competitors, predominantly Qwest and the cable companies, to reach consensus. In terms of economic theory, there may have been no coordination heretofore because of the retail competitor-led impediments to such coordination such as (1) differences in incentives to reach consensus due to the practices of retail competitors or maverick practices; (2) complexity and/or lack of transparency in market outcomes to make consensus or detection feasible; or (3) lack of credible punishment strategies.⁴⁹

The focus of the consequences of removing the retail competitor (*i.e.*, the CLECs) is not so much on the joint maximization of profit, but rather that of policing a collusive agreement.⁵⁰ In the presence of the particular factors governing the feasibility of collusion, through repeated interaction the two companies may reach an equilibrium where prices are higher and output lower.⁵¹

The consensus-punishment-detection paradigm illuminated by modern game theory requires that the market and the nature of transactions and other market outcomes be sufficiently simple and transparent. Sufficient simplicity is required in order to make consensus viable and to detect deviations from consensus. Sufficient simplicity generally also is required in order for punishment strategies to be viable. For example, if transactions typically involve very complex terms that are not standardized and vary

⁴⁸ See *Comments of the Colorado Public Utilities Commission*, WC Docket No. 07-97 (filed Aug. 31, 2007), at 30 (“the likely outcome of forbearance is duopoly. In most instances, a duopoly is virtually indistinguishable from a monopoly.”) and at 31 (“Unless regulation remains in place in one form or another - such as a price cap - tacit collusion and joint market dominance likely will occur between Qwest and Comcast sharing a *de facto* monopoly.”); *Reply Comments of the Arizona Corporation Commission*, WC Docket No. 07-97 (filed Oct. 1, 2007), at 33 (“a duopoly such as the Commission believes is developing between Cox and Qwest in the residence market...”); *Ex Parte Comments of Minnesota Public Utilities Commission*, WC Docket No. 07-97, (filed Feb. 8, 2008), at 7 (“[i]n the absence of the CLEC option... the industry offers a Qwest/Comcast duopoly, generating little confidence that competitive forces will be robust and lasting.”)

⁴⁹ Philips, Louis, “Oligopoly and Collusion,” *The Economics of Imperfect Information* (1988).

⁵⁰ Roberts, K., “Cartel Behavior and Adverse Selection,” 33 *Journal of Industrial Economics* (1983), at 401-413. See also *Comments of the Colorado Public Utilities Commission*, WC Docket No. 07-97 (filed Aug. 31, 2007), at 31 (“Unless regulation remains in place in one form or another - such as a price cap - tacit collusion and joint market dominance likely will occur between Qwest and Comcast sharing a *de facto* monopoly.”)

⁵¹ Church, Jeffrey & Roger Ware, *Industrial Organization: A Strategic Approach* (2000), at Chapter 10; Jean Tirole, *The Theory of Industrial Organization* (1992), at Chapter 6.

across customers, coordinated interaction on price is likely to be very difficult. However, in such circumstances, coordinated interaction via dividing customers may still be viable. Sufficient transparency is required in order for deviations from consensus to be detected.

The existing complexities with the retail competitors, the CLECs, cause the profitability of abiding by the terms of coordination to decrease and make coordinated interaction unlikely in the first instance.

The nature of customer orders taken by the retail competitor or maverick are frequent, regular, and small relative to the total output of a market participant and make it more difficult for the network providers to deviate in a substantial way without the knowledge of rivals and without the opportunity for rivals to react. Thus, deviations are less easy to deter.

The presence of the retail competitor disrupts key information flowing to the rival network providers, preventing them from easily reaching terms of coordination. The plausible arrival at acceptable terms of coordination are limited or impeded by the product heterogeneity cast by the independent vendor, which necessarily reduces the flow of required information about the conditions and prospects of their rivals' businesses.

The presence of competitors in the retail arena also obscures key information about specific transactions, individual price or output levels necessary for network providers to tacitly establish collusive arrangements.

Thus, without retail competitors, coordination between duopolists becomes far more likely. Possible methods of coordination may include: (1) coordinating on price; (2) allocating customers; or (3) coordinating on capacity. Without competitors in the retail environment, prices are transparent, rendering price coordination much more feasible. Customer allocation also is feasible because there is consistency in the customer base. In addition, good information about which competitors serve which customers and the reasons for changes can be readily ascertained.

In the current instance, this means that as long as CLECs have access to cost-based wholesale facilities, they will always be able to defeat any attempts at collusion between Qwest and the cable companies. Of course, after a grant of forbearance, Qwest would be able to increase its wholesale rates and diminish or eliminate the CLECs' ability to disrupt collusion.

2. Intermodal Competition is Not Price Constrained Competition

The intermodal competition between the two dominant service delivery platforms, wireline and cable, is not played out primarily by means of price competition. Rather, the dynamics between the platforms is far more complex, with each having unique

functionalities, strengths, and weaknesses, which are not or only partially shared by the other.

Cable companies typically bundle their voice services with high-speed Internet access or cable TV services, or require the customer to purchase multiple services to obtain a favorable rate for voice services. This is particularly true for Comcast, a cable company that serves three of the four MSAs at issue. As pointed out by the Colorado Office of Consumer Counsel, until recently Comcast offered two “flavors” of phone service – circuit-switched and VoIP-based, but in 2007 Comcast filed with state and federal regulators to discontinue its circuit-switched voice product. This means that its only other phone offering (*i.e.*, VoIP-based Digital Voice) would have to be purchased as an “unlimited” service with all kinds of “bells and whistles.”⁵² The Colorado Office of Consumer Counsel explained that Comcast voice services in Denver cost \$47.95 per month excluding fees and taxes, compared to Qwest’s stand-alone voice service rate of \$14.88.⁵³ Similarly, Comcast withdrew its basic residential service offering in Minnesota.⁵⁴ Clearly, Comcast’s phone offering does not represent competition to Qwest’s standalone phone service.⁵⁵

Cable telephone services may also differ from traditional POTS service in terms of quality of service. For example, the Residential Subscriber Agreement for Comcast’s Digital Voice® service describes limitations on emergency services,⁵⁶ potential service

⁵² See, e.g., *Comments of the Colorado Office of Consumer Counsel*, WC Docket No. 07-97 (filed Aug. 31, 2007), at 22-27.

⁵³ Comcast’s standalone offering is the same in Minneapolis and Seattle, while Qwest’s flat-rated basic residential line is priced at \$14.76 in Minneapolis and \$13.50 in Seattle. Cox (the cable provider in Phoenix MSA) has a more “reasonably” priced stand-alone phone service at \$19.95/month, “Simply 3” is an offering that includes a phone line with three calling features and \$0.05/minute long-distance calling plan. Nevertheless, this offering is still less affordable than Qwest’s basic residential phone line of \$13.18/month in Arizona.

⁵⁴ *Ex Parte Comments of Minnesota Public Utilities Commission*, WC Docket No. 07-97, (filed Feb. 8, 2008), at 7.

⁵⁵ As illustrated by the data presented by the Colorado Office of Consumer Counsel, the majority of residential end users prefer “no frills” basic local services (*Comments of the Colorado Office of Consumer Counsel*, WC Docket No. 07-97 (filed Aug. 31, 2007), reporting the results of its end user survey as follows: “Also according to the OCC/Ciruli survey, only 21.7% of the respondents currently choose “the whole package” option; 21.4% currently have only basic local exchange service without optional services or features; 28.3% currently have basic with one or more features; 23.9% have basic with long-distance and no features.⁶¹ For lower income customers (household income less than \$40,000), only 12.5% of the Colorado respondents currently choose “the whole package” option... 64% either strongly or somewhat agreed that they preferred “basic, inexpensive phone service without additional features.”)

⁵⁶ “Limitations: The Services include 911/Enhanced 911 function (“911/E911”) that may differ from the 911 or Enhanced 911 function furnished by other providers. As such, it may have certain limitations.” Comcast Digital Voice ® Phone Terms of Service – Residential Subscriber

interruptions due to the electrical utility power outages,⁵⁷ and incompatibility with equipment and services (including MTAs not certified by Comcast, some home security systems, and fax machines, causal/dial around (10-10) calling, 311/511/other x11 calling). Although Qwest offers “triple play” bundles, Qwest also offers plans consisting only of local telephone services not bundled with long-distance service, high speed Internet, TV, and/or wireless.⁵⁸ The point is that cable companies *do not* directly compete with Qwest for basic telephone services on an apples-to-apples basis in which price is the dominant aspect.

Finally, the weaknesses of intermodal competition (in which one “mode,” a cable company, is not fully committed to the market) is further illuminated by the experience with Comcast’s withdrawal from basic residential phone market discussed in the comments of the Colorado Office of Consumer Counsel⁵⁹ and the Minnesota Commission,⁶⁰ in which thousands of subscribers⁶¹ to Comcast residential circuit-switched telephony have been disconnected and a forced to migrate to alternative providers.⁶²

Agreement, Version 2.0, p. 1. *See*:

<http://www.comcast.com/MediaLibrary/1/1/About/PhoneTermsOfService/PDF/DigitalVoice/SubscriberAgreement/Z33T86CDV%20Agreement1103051.pdf>

⁵⁷ POTS phone service is not affected by power outages of local electrical utilities. In contrast, a cable’s “CDV uses the electrical power in your home. If there is an electrical power outage, 911 calling may be interrupted if the battery backup in the associated MTA...is not installed, fails, or is exhausted after several hours. Furthermore, calls, including calls to 911/E911, may not be completed if there is a problem with network facilities, including network congestion, network/equipment/power failure, or another technical problem.” Comcast Digital Voice ® Phone Terms of Service – Residential Subscriber Agreement, Version 2.0, p. 2. *See*: <http://www.comcast.com/MediaLibrary/1/1/About/PhoneTermsOfService/PDF/DigitalVoice/SubscriberAgreement/Z33T86CDV%20Agreement1103051.pdf>

⁵⁸ *See* Qwest phone offerings, available at https://myaccount.qwest.com/MasterWebPortal/appmanager/home/Shop?_nfpb=true&_pageLabel=LocalLandingPhonePage.

⁵⁹ *See, e.g., Comments of the Colorado Office of Consumer Counsel*, WC Docket No. 07-97 (filed Aug. 31, 2007), at 22-27.

⁶⁰ *Ex Parte Comments of Minnesota Public Utilities Commission*, WC Docket No. 07-97 , (filed Feb. 8, 2008), at 7.

⁶¹ *See, e.g., Comments of the Colorado Office of Consumer Counsel*, WC Docket No. 07-97 (filed Aug. 31, 2007), at 22-27.

⁶² For additional details, *see, e.g.,* “Comments Invited on Application of Comcast Phone of Colorado, LCC D/B/A Comcast Digital Phone to Discontinue Domestic Telephone Service, Public Notice, WC Docket No. 07-231, (rel. Oct. 12, 2007), at 1 (stating that “disconnection will be a “soft disconnect” and that end-user customers in the affected location will continue to be able to call emergency services by dialing 911, and to call the Comcast Phone call center until December 15, 2007, or one month after the authorized disconnection date. Comcast also states that it will

In sum, given the highly concentrated and increasingly duopolistic nature of telecommunications markets, it is highly unlikely that the cable companies will have an interest in meaningfully curtailing Qwest's ability to raise retail rates in the four MSAs at issue. More likely, cable companies will welcome the additional breathing space created by Qwest's higher retail rates and continue to encounter Qwest in the marketplace based on factors other than price.

IV. DESCRIPTION OF *QSI IMPACT STUDY* METHODOLOGY

In the above Sections we have demonstrated that forbearance would first lead to increases in wholesale rates and then to increases in retail rates in the four MSAs at issue. The *QSI Study* quantifies the costs of forbearance by identifying the total increases in retail telecommunications expenditures in the four MSAs.

A. Study Methodology and Data

The expected estimated impact is driven mainly by Qwest's request for forbearance from loop and transport unbundling obligations and the price increases for loop and transport facilities that would occur if Qwest was no longer required to provide those facilities at TELRIC rates in the four MSAs at issue. As discussed above, if the forbearance petitions are granted, CLECs would be forced to buy high-capacity network elements such as DS1 and DS3 loops and transport as services from Qwest's special access tariffs. The *QSI Study* uses current special access rates as a proxy for the rates that would result if forbearance is granted, which is a very conservative approach because special access rates are likely to increase absent the discipline provided by the availability of UNEs.⁶³ Also discussed above is the lack of sufficient evidence about the ILECs' reaction to the de-listing of DS0 loops. To recognize the lower degree of certainty about Qwest's pricing for DS0 loops (or their substitutes) if forbearance is granted, the *QSI Study* considers three scenarios. The first scenario assumes that if forbearance is granted, DS0 loop prices would increase in a manner similar to the price increase reflected in Qwest's commercial offering in the Omaha wire centers. The second scenario assumes that Qwest's DS0 loop would be priced at levels similar to Qwest's proposals in state most

assist affected customers during their transition to new carriers. Comcast indicates that it informed all affected residential customers of the proposed discontinuance by letters sent via first class U.S. Mail on September 26, 2007. Comcast indicates that it informed all of its affected commercial customers throughout Colorado of the proposed discontinuance by letters sent via first class U.S. Mail on September 29, 2007.”).

⁶³ See, e.g., *ACN, et al. Opposition*, at 39; *Comments of Time Warner Cable*, WC Docket No. 06-172, (filed Mar. 5, 2007), at 21 (explaining that the presence of UNEs in the marketplace disciplines the incumbent LEC's special access pricing).

recent UNE cases (the proposals that reflect Qwest's view on its costs associated with DS0 loop elements). The third scenario assumes that Qwest would offer DS0 loop prices in the four MSA based on rates contained in its special access tariffs. We found, however, that the large price increases under this scenario engender such severe market responses in our model that we consider it unlikely that Qwest would actually pursue this strategy.⁶⁴

Using publicly-available demand data, the *QSI Study* focused on the impact of a grant of forbearance in the following three markets:

1. Mass market voice (measured by residential and single line business switched access lines);
2. Enterprise voice market (measured by multi-line switched access lines); and
3. High-speed broadband Internet market.⁶⁵

QSI collected Qwest's current UNE and special access recurring and non-recurring rates for key network elements, *i.e.*, local loops, tie pairs and transport, as well as Qwest's proposed recurring UNE rates for DS0 loops (which are considered in Scenario 2). The impact of non-recurring rates was annualized and aggregated with the recurring rates through the use of churn rates. QSI then calculated the difference between current rates and rates expected if forbearance is granted for various network element combinations under which end-user markets in the study are typically served. The charts depicting the difference between Qwest's current and expected rates by MSA are presented in Section II(c) above.⁶⁶

The calculated difference between current and expected rates constitutes the increase in wholesale costs faced by CLECs if forbearance is granted – the increase that CLECs may

⁶⁴ For example, while a grant of forbearance may free Qwest from certain regulatory obligations, we believe that extreme pricing responses would not serve the company's political interests.

⁶⁵ QSI derived the volume information for these markets by pooling various data sources, including Qwest June 28, 2007 Ex Parte Filing in WC Docket No. 07-97 containing the list of wire centers and their CLLIs subject to Qwest's Petitions, Qwest's retail residential and business line counts contained in its online wholesale ICONN data base (http://www.qwest.com/cgi-bin/iconn/iconn_centraloffice.pl), the ILEC and CLEC line count data from the FCC's most recent and historical Local Competition Reports, ARMIS 43-08 Reports, the FCC Report "High-Speed Services for Internet Access," Qwest's 271 Performance Reports (<http://www.qwest.com/wholesale/results/roc.html>) and publicly-available historical wire center line count data from the FCC's 1998 data request in the federal high-cost fund docket (CC docket Nos. 96-45 and 97-160).

⁶⁶ When utilizing the calculated differences described above in its impact calculations, QSI accounted for the fact that Qwest is not required to provide unbundled access to high capacity loop and transport UNEs in certain wire centers due to the FCC's *TRRO*.

partially absorb (thus decreasing their margins and potentially exiting the market) or/and partially pass through to retail customers (thus weakening the retail price discipline that UNE-based CLECs provide to retail markets).⁶⁷ The end result is that the overall level of retail prices will go up following the increase in CLECs' wholesale costs

The specific channels through which the overall price increases would occur may include an increase in regulated rates within the allowable caps, as well as rates for non-regulated or deregulated services, which may include deregulated vertical features, toll rates, directory assistance, and broadband offerings or business services. Examples of deregulated or non-price-regulated services include basic business lines, which are deregulated in Washington;⁶⁸ and "custom calling services" and toll are non-price regulated in Minnesota.⁶⁹ The most recent illustration of the magnitude of price increases possible for price-regulated services is Qwest's recent proposal of the new AFOR plan in Minnesota, which would allow the company to increase basic residential local rates from the current level of \$14.76 to \$19.76 by 2013 (a 33.9% increase).⁷⁰ In Arizona, the maximum monthly rates for additional flat-rated residential and business lines, "home business lines" and "custom calling services" significantly exceed current rates for these services.⁷¹ Examples of Qwest's recent price increases⁷² include the following. In Arizona: increases in message telephone service rates for business and residential customers (by 6% and 8% respectively), residential calling features (by 13 to 33% depending on service) and business listing (by 23%) (all with the proposed effective date April 14, 2008); in Minnesota: increases in directory assistance rates, business features (by 4% to 73% depending on service) and business listing (by 37% to 111% depending on service) (all effective in March 2008); in Washington: increases in rates for residential calling features (between 10% and 83% depending on service; effective in February 2008) and for various business services (from 8% to 60% depending on service; effective January 2008). Another potential channel of retail price increases was noted by NASUCA, which observed that granting ILEC forbearance petitions may allow the ILEC to increase its Federal Subscriber Line Charge ("SLC"), which is the charge

⁶⁷ For further discussion of the price discipline provided by CLECs, *see* Comments of the Public Counsel Section of the Washington State Attorney General's Office and the Washington Electronic Business and Telecommunications Coalition, WC Docket No. 07-97 (filed Aug. 31, 2007) (explaining that the Washington's Commission's recent decision to deregulate small business market was based on the finding that UNE-P and UNE-L were "price constraining services."

⁶⁸ *See* Washington Qwest Exchange and Network Service Catalog No. 2, Section 5.

⁶⁹ *See* Minnesota Qwest Exchange and Network Service Price List No. 2.

⁷⁰ *See* Staff Briefing Papers for April 17, 2008 Open Meeting, p. 6 in Minnesota PUC docket P421/AR-08-282.

⁷¹ *See* Arizona Qwest Price Cap Tariff No. 2, section 5.

⁷² All examples given in the remainder of this paragraph are based on Qwest's Product Notices.

applied to every end user line.⁷³ Further, more services may become deregulated in the future. Finally, Qwest is seeking additional flexibility for price-regulated services. For example, on April 10, 2008, the *Denver Post* reported that in Colorado, where Qwest's residential rate is currently set by statute and can only be increased by up to 5 percent a year, Qwest is looking to amend state rules "to be allowed to retroactively apply the inflation rate over the last 10 years, which could take the base price of residential service to \$19.61 a month, a 32 percent increase."⁷⁴ On April 15, 2008 this amendment was passed by the Colorado Senate Committee and was sent to the Senate Appropriation Committee.⁷⁵

In short, the result is that the overall level of retail prices will go up following the increase in CLECs' wholesale costs.

The *QSI Study* reasonably assumes that the price increases in retail markets will be smaller than the price increases in the wholesale market, and will be accompanied by decreases in demand.⁷⁶

B. Results of *QSI Study*

QSI calculated the impact of granting Qwest's Petitions as an increase in retail telecommunications expenditures associated with mass market voice, enterprise, and high speed broadband Internet markets under the above described scenarios 1 and 2, which produced the lower and upper boundaries of QSI's estimate of the impact of granting Qwest's forbearance petitions.⁷⁷ QSI's impact estimates range between ***\$0.87 billion*** and

⁷³ See Comments of the National Association of State Utility Consumer Advocates, the Pennsylvania Office of Consumer Advocate, the Public Utility Law Project of New York, Inc., the Massachusetts Office of Attorney General, the Virginia Office of Attorney General, the Maryland Office of People's Counsel, the New Jersey Division of Rate Counsel, the New Hampshire Office of Consumer Advocate and the Connecticut Office of Consumer Counsel, WC Docket No. 06-172, (filed Mar. 5, 2007), at 23.

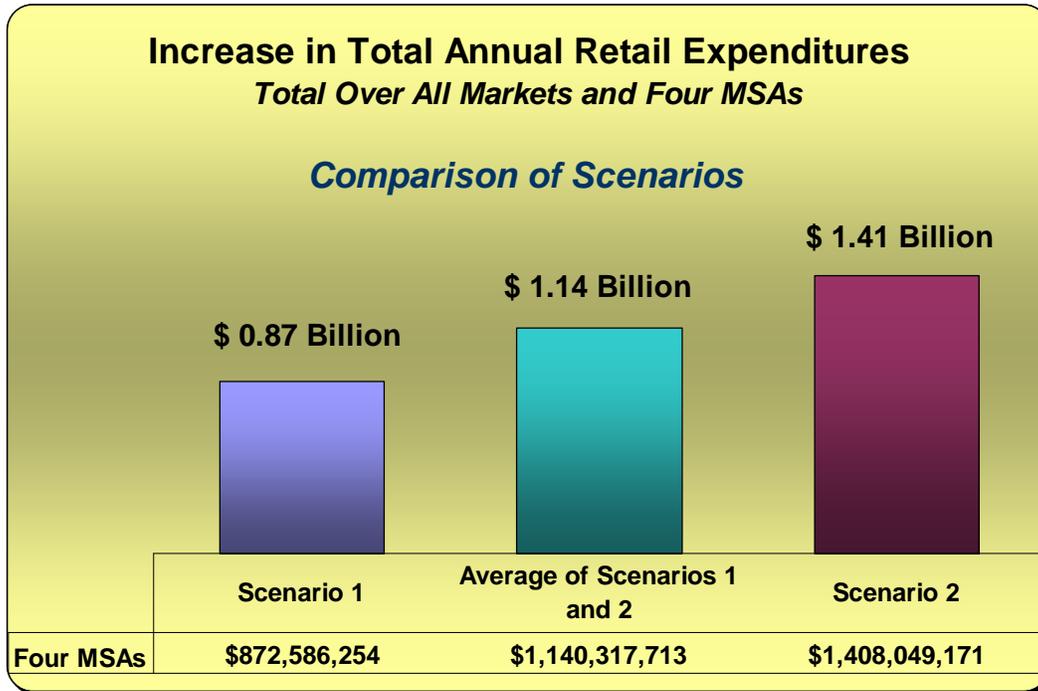
⁷⁴ See Kimberly S. Johnson, "Qwest opposes state's control. Phone company wants law loosened to allow it to raise basic rate," *Denver Post* (Apr. 10, 2008).

⁷⁵ Jeff Smith, "Panel OKs possible 32% hike in basic Qwest phone rate," *Rocky Mountain News* (Apr. 15, 2008).

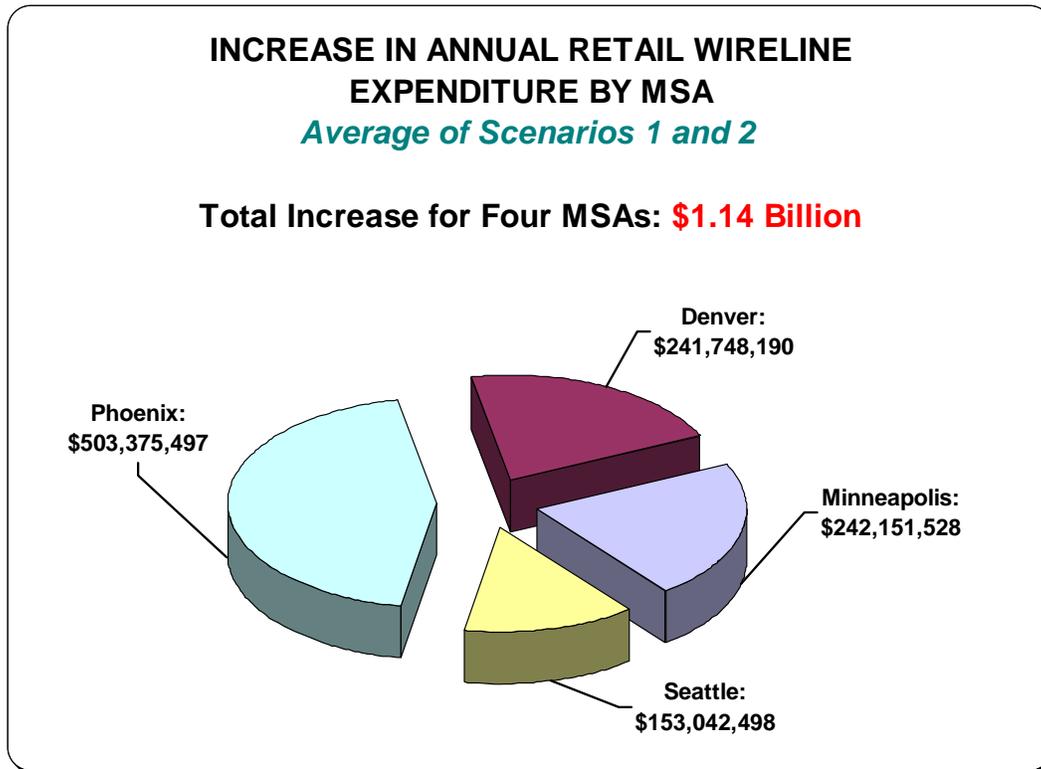
⁷⁶ To the extent the decrease in demand is caused by substitution to other services such as wireless telephony, end users continue to incur telecommunications expenditures. The *QSI* analysis, which measures a change in wireline retail expenditures, conservatively excludes "substitute" expenditures from the impact calculations.

⁷⁷ As noted above, the *QSI Study* reasonably assumes that retail demand volumes would go down in response to price increases. This reduction in market demand causes a societal welfare loss known in economics as a *deadweight loss* to society. QSI's estimated impact did not include this effect.

\$1.41 billion annually (which is on average *\$1.14 billion*) *for the four MSAs at issue.*
The chart below illustrates this result:



The following chart provides a breakdown of the average estimate by MSA:



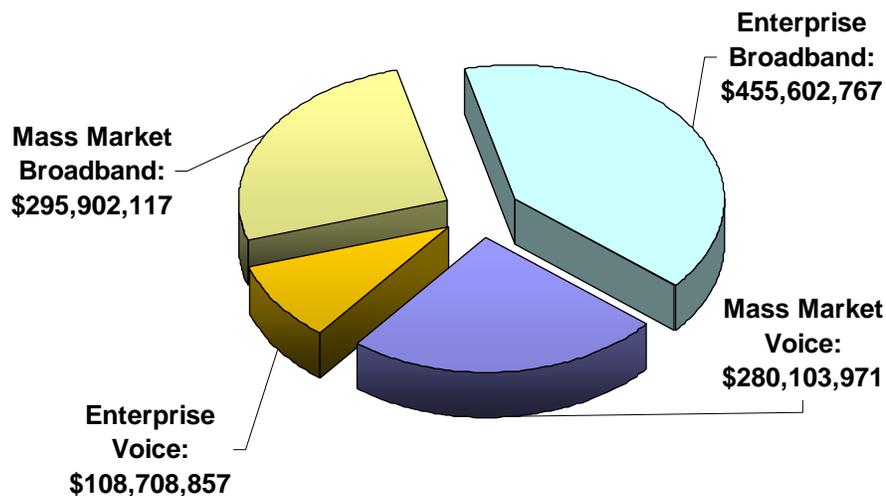
As seen in the above chart, the Phoenix MSA accounts for over 40 percent of the total impact (\$0.50 billion over \$1.14 billion), which is driven mostly by the relative size of the Phoenix wire centers at issue.⁷⁸

The following chart breaks down the total estimated average annual impact of \$1.14 billion into market segments – mass market voice, enterprise, and broadband Internet:

⁷⁸ For example, based on Qwest's ICONN database, 36 percent of Qwest's retail business and residential lines in the wire centers at issue are located in wire centers in the Phoenix MSA.

**INCREASE IN ANNUAL RETAIL WIRELINE
 EXPENDITURE BY MARKET**
Average of Scenarios 1 and 2

Total Increase for Four MSAs: \$1.14 Billion



As seen from the above chart, the expected average annual impact is distributed almost evenly between mass market and enterprise sectors (mass market voice (at \$0.28 billion) and mass market broadband (at \$0.3 billion) amount for approximately 51 percent of the total impact.

The following table places this estimate in context by comparing the projected increase in residential household expenditures to the current residential household wireline expenditures.⁷⁹

⁷⁹ Current household wireline expenditures are based on the 2005 data from the FCC's "Reference Book of Rates, Telephone Indices, and Household Expenditures for Telephone Services" (2007), Tab 2.6 and Bureau of Labor Statistics 2005 Consumer Expenditure Survey.

Relative Increase in Residential Annual Retail Expenditures

Average of Scenarios 1 and 2

MSA	Residential Voice and Broadband Internet	
	Annual Increase per Household	% Residential Wireline Expenditure
Phoenix	\$ 131	28%
Denver	\$ 100	21%
Minneapolis	\$ 117	26%
Seattle	\$ 96	20%
Combined 4 MSAs	\$ 115	25%

Finally, the following table provides an additional context for the total impact across all markets. It lists the total impact as a percentage of total wireline end user revenue in each MSA.

Relative Increase in Total Annual Retail Expenditures

Average of Scenarios 1 and 2

MSA	Total Voice and Broadband as % Total Retail Wireline Revenues
Phoenix	29%
Denver	16%
Minneapolis	18%
Seattle	15%
Combined 4 MSAs	20%

V. CONCLUSION

Based on our analysis, we estimate that Qwest's Petitions – if granted – would result in an increase in retail telecommunications expenditures that ranges between ***\$0.87 billion*** and ***\$1.41 billion annually*** (which is on average ***\$1.14 billion***) in the Phoenix, Denver, Minneapolis, and Seattle MSAs, including a 25 percent increase in residential household wireline bills on average (which equals \$115 per household annually). This increase would result from the qualitative change in retail telecommunications markets in these MSAs, where the pricing discipline provided by CLECs who currently obtain network elements at TELRIC rates would be diminished or eliminated.