

**BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION**

QWEST CORPORATION,

Complainant,

v.

**LEVEL 3 COMMUNICATIONS, LLC;
PAC-WEST TELECOMM, INC.;
NORTHWEST TELEPHONE INC.; TCG-
SEATTLE; ELECTRIC LIGHTWAVE, INC.;
ADVANCED TELCOM GROUP, INC. D/B/A
ESCHELON TELECOM, INC.;
BROADWING COMMUNICATIONS, LLC;
GLOBAL CROSSING LOCAL SERVICES
INC; AND, MCIMETRO ACCESS
TRANSMISSION SERVICES LLC D/B/A
VERIZON ACCESS TRANSMISSION
SERVICES**

DOCKET NO. UT-063038

**DIRECT TESTIMONY
OF DR. WILLIAM L. FITZSIMMONS
ON BEHALF OF
QWEST CORPORATION**

NOVEMBER 20, 2006

1

I. IDENTIFICATION OF WITNESS

2 **Q. PLEASE STATE YOUR NAME AND POSITION.**

3 A. My name is William Fitzsimmons. I am a Director at LECG, LLC; my business
4 address is 2000 Powell Street, Suite 600, Emeryville, CA 94608.

5 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS.**

6 A. I hold a Ph.D. in Resource Economics from the University of Massachusetts,
7 Amherst. My industry experience prior to joining LECG in 1994 includes two
8 years of modeling demand for private line services for AT&T in New Jersey and
9 six years as a financial modeler for BellSouth in Atlanta. At LECG, my work is
10 focused on the economic analysis and financial modeling of telecommunications
11 issues. I have testified numerous times on cost models and economic issues. My
12 curriculum vitae is attached as Exhibit WLF-2.

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 A. The purpose of this testimony is to provide guidance from the perspective of
15 proper economic reasoning for how to consider cost causation and incentives as
16 they relate to efficient and beneficial competitive markets.

17

II. COST CAUSATION

18 **Q. FROM AN ECONOMIC PERSPECTIVE, IS THE PRINCIPLE OF COST**
19 **CAUSATION THE PROPER CONSIDERATION FOR DETERMINING**
20 **THE RESPONSIBILITY FOR COSTS?**

21 A. Yes, cost causation is the proper consideration for determining the responsibility
22 for costs. Although I understand that each party will make legal arguments in

1 their briefs with regard to the appropriate treatment for the traffic at issue in this
2 proceeding, I am not here to make a legal argument. I am here to provide the
3 proper economic context for making the determination within the stated economic
4 goals of the Telecommunications Act of 1996 (Telecom Act). As stated in the
5 preamble, it is “An Act to promote competition and reduce regulation in order to
6 secure lower prices and higher quality services for American telecommunications
7 consumers and encourage the rapid deployment of new telecommunications
8 technologies.”¹ Within the context of achieving these long-term economic goals,
9 cost causation is the proper guiding principle for determining which firm is
10 responsible for costs.

11 In competitive markets, cost responsibility follows cost causation. This is a key
12 reason why competitive markets produce efficient outcomes, and it is a key
13 reason why we are making the transition from regulated to competitive markets,
14 as directed by the Telecom Act.² Now, ten years after the signing of the Telecom
15 Act, it is increasingly important to adopt cost causation in decisions regarding
16 pricing issues. Any other solution is contrary to the operation of efficient
17 competitive markets and maximizing long run benefits to consumers. Perhaps
18 more than any other factor, forcing cost causers to face the responsibility of
19 recovering the costs from end users is what drives efficient outcomes in
20 competitive markets.

21 For example, if Firm A causes the costs incurred by Firm B, it is appropriate for
22 Firm A to: (1) compensate Firm B for the costs it incurs; and (2) attempt to

¹ Telecommunications Act of 1996, Pub. LA. No. 104-104, 110 Stat.56 (1996).

² *Id.*, Preamble.

1 recover from its own customers the costs that it causes. In this way, a firm that
2 causes costs is responsible for earning the revenues to recover the costs, and the
3 firm will only undertake investments that are valued sufficiently by customers. If
4 Firm A, in this example, considers a marketing initiative that (if successful) will
5 use current capacity in telecommunications infrastructure or require investment in
6 additional telecommunications capacity, the efficient solution is for Firm A to
7 proceed only if it expects to earn revenues sufficient to recover the cost of this
8 capacity.

9 If Firm A is allowed to shift the costs that it causes onto another firm, then Firm
10 A can proceed with its marketing initiative, even if the overall cost caused by the
11 initiative is greater than the amount that consumers are expected to value the
12 additional service. Totally aside from the question of fairness, this is an
13 inefficient use of resources that is, for the most part, avoided in competitive
14 markets. Firm A, in this example, would receive the revenue from the capacity,
15 and Firm B would incur the cost. Such an imbalance between revenues and costs
16 (and risks and rewards) would distort the market. It would benefit one competitor
17 at the expense of the broader and longer term benefits expected from efficient
18 competition. This is the outcome that results from allowing VNXX routing for
19 traffic that would otherwise be subject to toll or access charges.

20 **Q. WHAT COST CAUSATION AND COMPENSATION DO YOU FOCUS ON**
21 **IN THIS SECTION OF YOUR TESTIMONY?**

22 A. I focus on costs that arise when CLECs' customers are internet service providers
23 (ISPs) and CLECs interconnect with Qwest to collect and transport Internet
24 traffic. The expected result of such an arrangement is that virtually all traffic

1 exchanged between Qwest and CLECs is dial-up traffic destined for the Internet.

2 As observed by the FCC in its *ISP Remand Order*:

3 “The regulatory arbitrage opportunities associated with intercarrier
4 payments are particularly apparent with respect to ISP-bound
5 traffic...because ISPs typically generate large volumes of traffic that
6 is virtually all one-way – that is delivered to the ISP.”³

7 Often, the end users who originate ISP traffic are not in the same local calling
8 areas as their ISPs. When this occurs, the traffic travels on Qwest’s facilities
9 from the originating end user to the CLEC’s points of interconnection in another
10 local calling area, and Qwest incurs costs related to switching and transporting
11 this interexchange traffic. There is nothing new about this concept. When the
12 end points of a call are in separate local calling areas, the call is an interexchange
13 call. When interexchange calls travel over facilities owned by local exchange
14 carriers (LECs), there are well defined rules for how LECs are compensated for
15 the use of their facilities. Specifically, there are “access” charges that compensate
16 LECs for costs related to the “local” portions of the call and for costs related to
17 transporting traffic between local calling areas.

18 Finally, the focus of my analysis is on costs and compensation that are related to
19 VNXX Internet traffic. However, the same analysis applies generally to all
20 VNXX traffic and is not limited to whether the traffic is Internet traffic or not.
21 VNXX is typically defined as the situation where a telephone number with an
22 NPA-NXX associated with one local calling area is assigned by a CLEC to a
23 customer physically located outside of the local calling area to which the NPA-

³ Order on Remand and Report and Order, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, and Intercarrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98, 99-68, ¶2 (FCC. 2001) (hereafter “*ISP Remand Order*”).

1 NXX is associated. Thus, while the calling party appears to be making a local
2 call, the call is actually transported to and terminated in another local calling area
3 (or perhaps even in a different state).

4 **Q. WHEN AN END USER ESTABLISHES AN INTERNET CONNECTION**
5 **WITH AN ISP, IS THE END USER A CUSTOMER OF THE ISP?**

6 A. Yes. Before describing the chain of cost causation for the traffic at issue, it is
7 helpful to establish that end users who purchase Internet access service from ISPs
8 are customers of the ISPs, and that the ISPs are customers of CLECs. ISPs are
9 commercial enterprises that provide Internet connections and information to their
10 customers across these Internet connections. For this purpose, end users establish
11 customer relationships with ISPs. Even on ISP home pages, customers have
12 ready access to information that is generated around the globe. The purpose of
13 establishing an Internet connection is to access this and other information, and
14 when an end user establishes the connection with its ISP, the end user is acting as
15 a customer of the services offered by the ISP. It is not necessary to belabor this
16 point, since it is a point that is quite obvious and which has already been
17 explained and established by multiple regulatory commissions.

18 **Q. HAVE REGULATORS RECOGNIZED THAT A CUSTOMER THAT**
19 **CONNECTS TO AN ISP THROUGH A CLEC'S NETWORK IS ACTING**
20 **PRIMARILY AS A CUSTOMER OF THE ISP?**

21 A. Yes, regulators have recognized that an end user who originates an Internet call is
22 acting as a customer of the ISP. The Public Utilities Commission of Colorado, in
23 an arbitration decision involving Qwest and Level 3, directly addressed this issue:

24 "We find Qwest's ILEC/IXC analogy for the transport of ISP-bound
25 calls more persuasive than the ILEC/CLEC analogy advanced by

1 Level 3. We continue to believe that in transporting an ISP-bound
2 call, the ISP plays a role similar to that of an IXC in the transmission
3 of an interstate long distance call. *We believe that the originator of*
4 *either call, the ILEC end-user, acts primarily as the customer of the*
5 *ISP or IXC, not as the customer of the ILEC.”*⁴

6 An arbitrator for the Vermont commission, in referring to VNXX traffic, reached
7 a similar conclusion:

8 “In effect, a CLEC using VNXX offers the equivalent of incoming
9 1-800 service, without having to pay any of the costs associated with
10 deploying that service and instead relying upon [the ILEC] to
11 transport the traffic without charge simply because the VNXX says
12 the call is ‘local.’”⁵

13 **Q. IS TRAFFIC TO ISPS SIMILAR TO LONG DISTANCE TRAFFIC THAT**
14 **ILECS ORIGINATE AND TERMINATE FOR INTEREXCHANGE**
15 **CARRIERS?**

16 A. Yes. The quotation from the Colorado Commission cited above uses that precise
17 analogy. The FCC made a similar observation:

18 “ISP service is analogous, though not identical, to long distance
19 calling service... The analogy is...used merely to bolster...the
20 reasonableness of not characterizing an ISP as the destination of a
21 call, *but as a facilitator of communication.*”⁶

22 As “facilitators of communication” for their customers, long distance carriers and
23 ISPs cause local exchange carriers to incur costs (both within the local exchange
24 and to transport the traffic to another local calling area), and the principle of cost
25 causation dictates that the cost causers should compensate the local exchange

⁴ Commission Decision, In the Matter of Petition of Level 3 Communications LLC, for Arbitration Pursuant to § 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Qwest Corporation, Decision No. C01-312, Docket No. 00B-601T, at 18 (Colo. PUC 2001) (emphasis added).

⁵ *Petition of Global NAPs, Inc. for Arbitration Pursuant to §252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Verizon New England*, Docket No. 6742, 2002 Vt. PUC LEXIS 272, at *41-*42 (Vt. PSB 2002) (hereafter “*Vermont Global NAPs Order*”).

⁶ *ISP Remand Order*, ¶160 (emphasis added).

1 carriers for these costs.

2 Earlier this year, the South Carolina Commission articulated a similar conclusion:

3 “The Commission’s and the FCC’s current intercarrier
4 compensation rules for wireline calls clearly exclude interexchange
5 calls from both reciprocal compensation and ISP intercarrier
6 compensation. These calls are subject to access charges. This is
7 also the case for Virtual NXX calls, which are no different from
8 standard dialed long distance toll or 1-800 calls.”⁷

9 The Colorado Commission has likewise addressed this issue in a case in which
10 Level 3 sought to interconnect with Centurytel (a rural independent carrier) for
11 the purpose of serving ISP customers located in Centurytel territory. The
12 Colorado Commission concluded that Level 3 had no right to interconnect with
13 Centurytel when the purpose of the agreement was for interexchange calling:

14 “Centurytel notes that the ISP customers that Level 3 seeks to serve
15 are not located in Centurytel’s local calling area. As such, calls by
16 Centurytel’s end-users to Level 3’s ISP customers would originate
17 and terminate in different calling areas, and, therefore, would be
18 interexchange calls. Section 252(c)(2) is clear that the duty to
19 interconnect under its provisions does not apply to interexchange
20 calling.”⁸

21 More than 20 years ago, when the Regional Bell Operating Companies were
22 created as separate entities from AT&T, end users became customers of at least
23 two separate firms, a local service provider and one or more long distance service
24 providers. Beginning in the 1980s, when customers used their phone lines to
25 make long distance calls, it was recognized that they were acting as customers of

⁷ Order Ruling on Arbitration, *In re Petition of MCI Metro Transmission Services, LLC for Arbitration of Certain Terms and Conditions of Proposed Agreement with Horry Telephone Cooperative*, 2006 S.C. PUC LEXIS 2, at *35 (S.C. PUC, January 11, 2006).

⁸ Decision Denying Exceptions, *In the Matter of the Petition of Level 3 Communications, LLC for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 with Centurytel of Eagle, Inc.*, Decision No. C03-0117, Docket No. 02B-408T ¶36 (Colo. PUC, January 30, 2003).

1 the long distance companies. There was no nonsensical conclusion that the end
2 user was acting as a customer of the local company up to the point of
3 interconnection with the interexchange carrier (IXC). When a customer wanted
4 to make a call to a local calling area in another local access and transport area
5 (LATA), he was acting as a customer of an IXC, and the costs associated with the
6 call were attributed to the IXC. To compensate the local companies for the use of
7 their facilities when users acted as long distance customers, the long distance
8 companies (such as AT&T, MCI, and Sprint) paid the local companies for those
9 costs through access charges. Not long after, intraLATA toll competition
10 emerged, and state commissions applied the same rationale for intraLATA calling
11 between local calling areas. From the perspective of cost causation, the rationale
12 is fundamentally the same for customers of ISPs.

13 **Q. IS A CLEC ACTING AS AN INTEREXCHANGE SERVICE PROVIDER**
14 **WHEN IT CONTRACTS WITH AN ISP AND DELIVERS DIAL-UP**
15 **INTERNET CALLS TO THE ISP ACROSS LOCAL CALLING**
16 **BOUNDARIES?**

17 A. Yes. When an end user in one local calling area initiates a connection with an
18 ISP that is in another local calling area, this call crosses exchange boundaries and
19 is, therefore, an interexchange call. This means that when an end user in
20 Washington dials the phone number for an ISP served by a CLEC, the call is
21 handed off at a POI to the CLEC, “answered” by the CLEC with its modem
22 functionality and handed off to an ISP. The end user who originates the call is
23 not ultimately trying to reach the POI; the end user is trying to reach the ISP,
24 wherever the ISP is physically located. These are the end points of the call for
25 intercarrier compensation purposes. If these end points are in different local

1 calling areas, then it is an interexchange call.

2 **Q. WOULD YOU PLEASE EXPAND UPON YOUR VIEWS OF THE PROPER**
3 **APPLICATION OF THE PRINCIPLE OF COST CAUSATION FOR THE**
4 **TRAFFIC AT ISSUE IN THIS PROCEEDING?**

5 A. Through their customer relationships with end users, ISPs cause the costs
6 associated with collecting Internet traffic from their customers throughout
7 Washington. ISPs are not, however, in a position to collect this traffic on their
8 own. As I understand it, an ISP cannot obtain local telephone numbers—it must
9 engage a local exchange carrier, which has the right to obtain local telephone
10 numbers from the North American Numbering Plan Administrator (NANPA).
11 To fulfill its part of the contract, the CLEC assumes the responsibility for
12 obtaining local telephone numbers, for collecting traffic from multiple local
13 calling areas in Washington, and for delivering traffic to the ISP's location. As
14 such, the CLEC incurs costs on behalf of its ISP clients.

15 As a profit seeking firm, the CLEC searches for the least costly way to fulfill this
16 responsibility. To this end, the CLEC contracts with Qwest to collect traffic, and
17 Qwest incurs costs to perform this service (thus incurring costs within its local
18 exchange areas to gather the traffic and costs to transport it to a POI). Clearly,
19 however, Qwest does not cause these costs. The CLEC and its ISP customers
20 cause the costs, and economic efficiency dictates that they should compensate
21 Qwest for the costs that Qwest incurs on their behalf.

22 To summarize, ISPs and their customers cause the costs associated with switching
23 and transporting the Internet traffic that Qwest delivers to the CLECs that serve
24 those ISPs. The CLECs take responsibility for these costs on behalf of the ISPs,

1 and Qwest incurs the costs. The proper chain of payments is determined by the
2 chain of cost, but in reverse – back to the ultimate cost causer, the ISP end-user.
3 In this way, every entity is responsible for the costs that it causes, and every entity
4 can properly weigh its costs against the expected benefits or revenues that it
5 expects to receive. This is compensation pattern that drives the efficient use of
6 resources in competitive markets. If CLECs can sidestep costs that they cause,
7 and the chain of payments that forces the responsibility of costs back to the cost
8 causers will be broken. If this occurs, Qwest and its customers that do not
9 employ dial-up Internet access will face costs that they do not cause, and the
10 power of cost causation to produce efficient decisions will be lost. As observed
11 by the FCC: “There is no public policy rationale to support a subsidy running
12 from all users of basic telephone service to those end-users who employ dial-up
13 Internet access.”⁹

14 **Q. DID ARBITRATORS ALSO RECOGNIZE NEGATIVE IMPACTS ON**
15 **ECONOMIC INCENTIVES FROM THE COMPENSATION SCHEMES**
16 **SUCH AS THE CURRENT SCHEME IN WASHINGTON?**

17 A. Yes. The arbitrator in Vermont observed correctly that a CLEC’s use of VNXX
18 to avoid paying for the cost of transporting traffic on the incumbent’s network
19 “sends inappropriate signals to competitors and discourages the deployment or
20 purchase of facilities that may provide more efficient service to customers.”¹⁰ An
21 arbitrator in Massachusetts also concluded that the use of VNXX to avoid
22 compensating the incumbent for costs it incurs:

⁹ *ISP Remand Order*, ¶87.

¹⁰ *Vermont Global NAPs Order* at *45.

1 “[W]ould artificially shield [the CLEC] from the true cost of
2 offering the service and will give [the CLEC] an economic incentive
3 to deploy as few facilities as possible. By artificially reducing the
4 cost of offering the service, [the CLEC] will be able to offer an
5 artificially low price to ISPs and other customers who experience
6 heavy inbound calling...The result would be a considerable market
7 distortion...”¹¹

8 In these cases, the decision-makers properly identified the cost causers and
9 determined financial responsibility based on the proper application of the
10 principle of cost causation.

11 **Q. WOULD YOU PLEASE PROVIDE AN ILLUSTRATIVE EXAMPLE TO**
12 **DEMONSTRATE THAT QWEST DOES NOT CAUSE THE COSTS AT**
13 **ISSUE IN THIS PROCEEDING?**

14 A. An illustrative example helps demonstrate the point that Qwest does not cause the
15 switching and transport costs associated with Internet traffic that is at issue in this
16 proceeding. Assume for purposes of this example that the modems used by a
17 CLEC and its ISP customers to provide Internet access are in Seattle. Suppose an
18 ISP runs a successful marketing campaign and doubles the amount of Internet
19 traffic that is originated by its customers in Olympia. Assume further that this
20 forces Qwest to add switching and transport capacity. Clearly, the increase in
21 traffic was caused by the ISP’s marketing efforts, as was the incremental cost
22 incurred by Qwest to carry the increased traffic. Just as clearly, the revenue to
23 pay for this increase in cost should come from customers of the ISP. The result is
24 the same if a CLEC runs a successful marketing campaign and attracts additional
25 ISPs to its network. To the extent that this places more traffic on Qwest’s

¹¹ *Petition of Global NAPs, Inc., Pursuant to Section to §252(b) of the Telecommunications Act of 1996, for arbitration to Establish an Interconnection Agreement with Verizon New England, D.T.E. 02-45, 2002 Mass. PUC LEXIS 56, at *56 (Mass. Dep’t of Tel. and Energy 2002).*

1 network, the CLEC causes additional costs for Qwest.

2 **Q. WHAT IS YOUR BASIC CONCERN WITH THE CURRENT**
3 **COMPENSATION SCHEME FOR VNXX TRAFFIC?**

4 A. My basic concern with the current situation is that CLECs are not compensating
5 Qwest for the costs associated with traffic that the CLECs deliver to non-local
6 ISPs. Dial-up Internet access represents a significant portion of traffic across
7 Qwest's network and causes a significant portion of Qwest's traffic sensitive
8 costs. It is understandable that the CLECs oppose to a change that will force
9 them to bear responsibility for costs they cause. As observed by the FCC:

10 "[G]iven the opportunity, carriers always will prefer to recover their
11 costs from other carriers rather than their own end-users in order to
12 gain competitive advantage. Thus carriers have every incentive to
13 compete, not on basis of quality and efficiency, but on the basis of
14 their ability to shift costs to other carriers, a troubling distortion that
15 prevents market forces from distributing limited investment
16 resources to their most efficient uses.

17 We believe that this situation is particularly acute in the case of
18 carriers delivering traffic to ISPs because these customers generate
19 extremely high traffic volumes that are entirely one-directional."¹²

20 From the perspective of cost recovery, costs associated with non-local traffic are
21 distinct from costs associated with local traffic. Specifically, Qwest's local
22 service prices are not designed to recover costs associated with non-local traffic.
23 Qwest recovers costs associated with non-local traffic from non-local services,
24 including revenues from transport and switched access services. Traffic between
25 different local calling areas is not local traffic.

26 **Q. ARE QWEST'S LOCAL SERVICE PRICES DESIGNED TO**

¹² *ISP Remand Order*, ¶¶4-5.

1 **COMPENSATE QWEST FOR ALL SWITCHED TRAFFIC THAT IS**
2 **PICKED UP IN THE LOCAL CALLING AREA?**

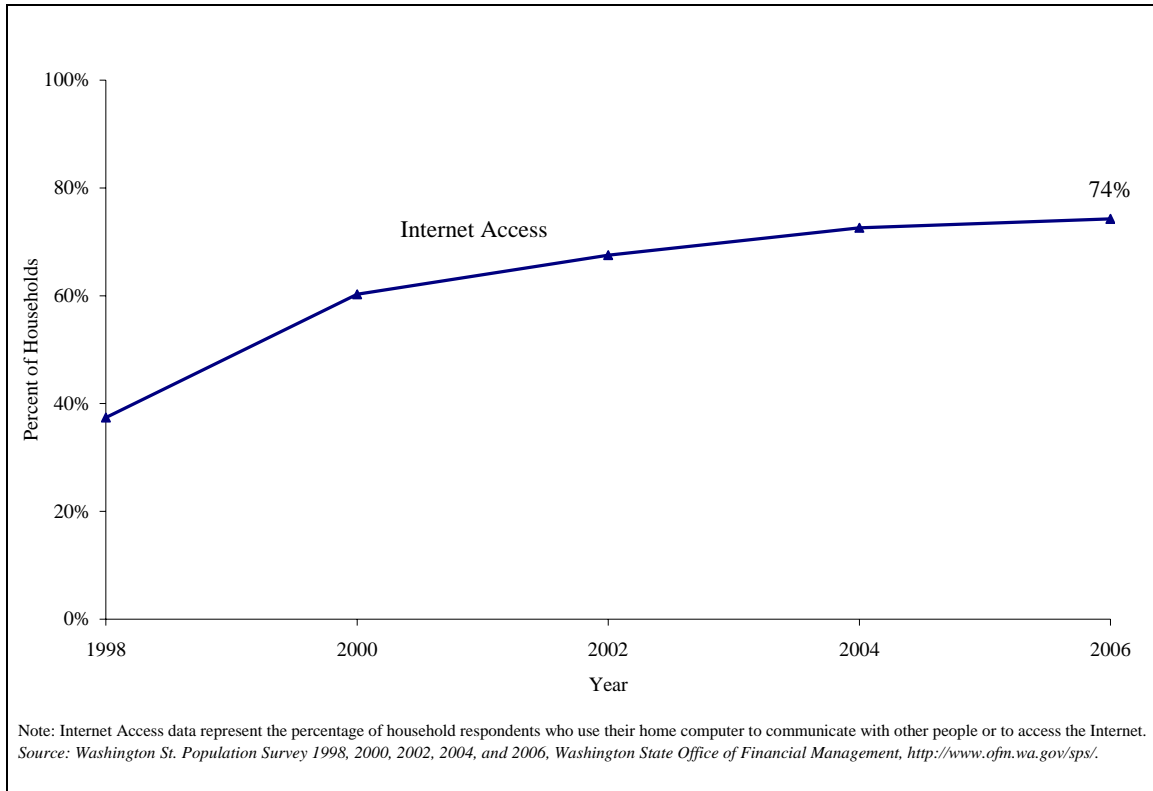
3 A. No. Based upon the fact that switching costs are caused by the different
4 categories of traffic that use switching, only a portion of switching costs are
5 designated for recovery in prices for local services. That is, local service prices
6 are designed to recover the portion of switching costs attributed to local traffic.
7 Local service prices are not designed to recover the portion of switching costs
8 attributed to non-local calls. Firms that use Qwest’s switches to provide
9 interexchange calls are responsible for contributing to the recovery of a distinct
10 portion of switching costs. As observed by Level 3 in its comments to the FCC:
11 “the interexchange carrier is left to recover its costs for originating and
12 terminating the call from its customers.”¹³ No matter where an interexchange
13 carrier picks up traffic, it is responsible for the switching costs associated with
14 this traffic.

15 **Q. HAS THE RAPID RISE OF INTERNET ACCESS MADE THE**
16 **CLASSIFICATION OF THIS TRAFFIC AN IMPORTANT ISSUE?**

17 A. Yes. The rapid rise of Internet access rivals the wireless phone revolution as the
18 most dramatic change in communications over the last ten years. As shown in
19 Figure 1, the portion of the households in Washington connected to the Internet
20 nearly doubled from 37 percent in 1998 to 73 percent in 2004.

21 **Figure 1. Percent of Households in Washington with Internet Access**

¹³ Comments of Level 3 Communications, LLC, *In the Matter of Developing a Unified Inter-carrier Compensation Regime*, CC Docket No. 01-92, (FCC August 21, 2001), p. 10.



1

2 As shown, by 2004 the majority of households in Washington already had
3 Internet access.

4 Although over half of Internet households in Qwest's service territory in
5 Washington now use broadband connections to access the Internet, dial-up traffic
6 remains substantial.¹⁴

7 **Q. DOES THE FUTURE OF INTERNET ACCESS IN WASHINGTON**
8 **DEPEND ON THE CONTINUED USE OF VNXX?**

9 A. No. The continued use and proliferation of dial-up Internet access does not
10 depend upon allowing CLECs to avoid costs that they cause. By 2004, most

¹⁴ According to a recent survey, approximately three-quarters of the households in Qwest's service area in Washington have Internet access. "Internet Access Method Penetration: Qwest Footprint - Washington," TNS Telecoms ReQuest® Consumer Survey, 2006.

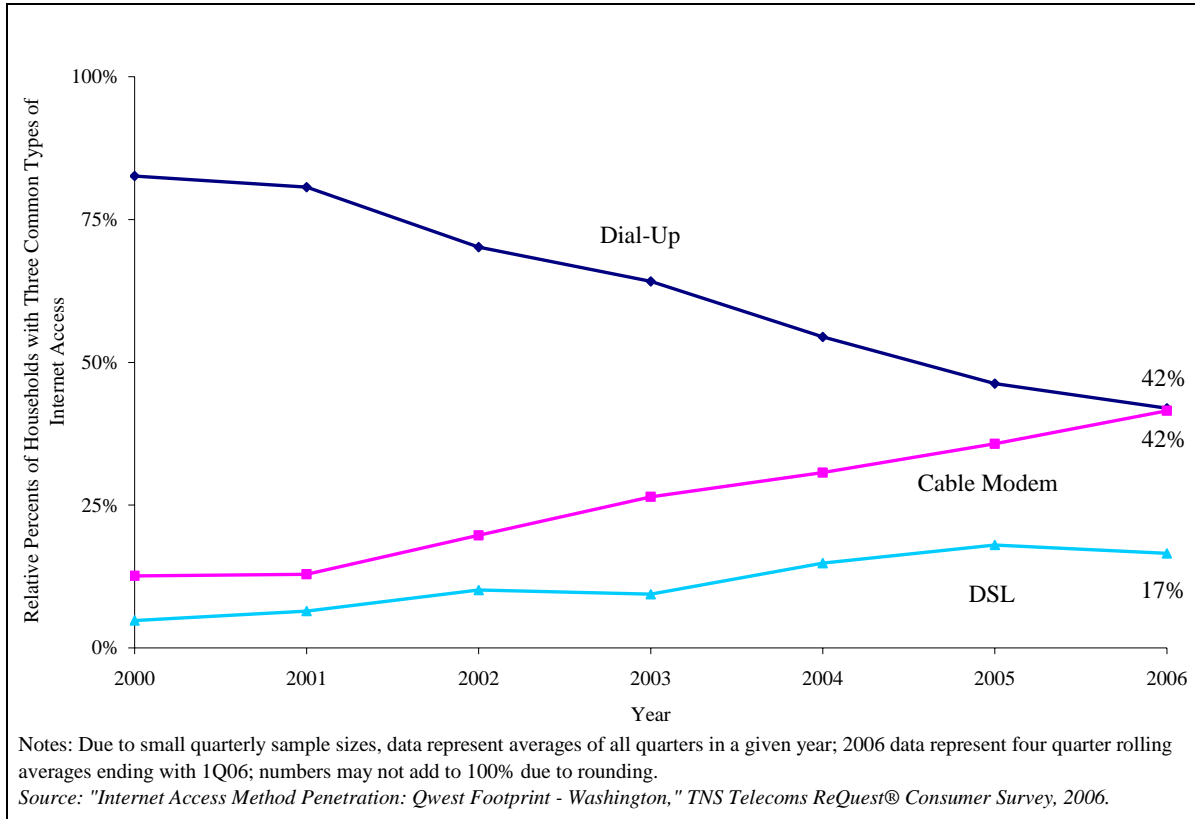
1 households in Washington with home computers were connected to the Internet.
2 Since that time, the gap between households with computers and households with
3 an Internet connection has remained relatively stable.¹⁵ We have reached a point
4 where future increases in Internet access are limited by the numbers of computer-
5 households, and the decision in this proceeding is not likely to have a material
6 impact on the numbers of households with computers. It may, however, have an
7 impact on the continued development of efficient and beneficial
8 telecommunications markets in Washington.

9 Furthermore, in Washington and across the nation, the portion of Internet-
10 households using broadband connections continues to rise. As shown in Figure 2,
11 in the first quarter of this year, over one-half of the Internet households in
12 Qwest's service area in Washington were already using broadband connections.

¹⁵ More recent TNS research reveals that the gap between household computer ownership and Internet access has remained relatively unchanged. See "Internet Access Method Penetration: Qwest Footprint - Washington," TNS Telecoms ReQuest® Consumer Survey, 2006.

1

Figure 2. Composition of Internet Access in Washington



2

3 To summarize, the future of Internet access depends upon policies that promote
4 efficient competition among firms using a range of technologies, including
5 wireline, cable-based assets, wireless, and others. Efficient competition occurs
6 when firms pay for the assets that they use and the costs that they cause.
7 Requiring CLECs to pay for the costs they cause is in the best long term interest
8 of the citizens of Washington.

9 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

10 A. Yes.