

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

**In The Matter Of**

**Level 3 Communications, LLC'S Petition for  
Arbitration Pursuant to Section 252(B) of the  
Communications Act of 1934, as Amended by  
The Telecommunications Act Of 1996, and the  
Applicable State Laws for Rates, Terms, and  
Conditions of Interconnection with Qwest  
Corporation**

**DOCKET NO. UT-063006**

**REPLY TESTIMONY OF  
DR. WILLIAM FITZSIMMONS  
ON BEHALF OF  
QWEST CORPORATION**

**SEPTEMBER 15, 2006**

1                   **I.       INTRODUCTION AND PURPOSE OF TESTIMONY**

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

6   **Q.   ARE YOU THE SAME WILLIAM FITZSIMMONS WHO FILED DIRECT**  
7       **TESTIMONY IN THIS PROCEEDING?**

8   A.   Yes.

9

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

11   A.   The purpose of this testimony is to respond to statements by Level 3 witness Mack D.  
12       Greene.

13                   **II.       LEVEL 3 IMPOSES COSTS IT SEEKS TO AVOID**

14   **Q.   WHAT IS YOUR BASIC CONCERN REGARDING MR. GREENE’S**  
15       **TESTIMONY?**

16   A.   My basic concern with Mr. Greene’s testimony is with his claim that Level 3 need not  
17       compensate Qwest for the costs associated with traffic that Level 3 delivers to non-  
18       local ISPs. Dial-up Internet access represents a significant portion of traffic across  
19       Qwest’s network and causes a significant portion of Qwest’s traffic sensitive costs. It  
20       is understandable that Level 3 is opposed to a change that will force it to bear  
21       responsibility for costs that it causes. As observed by the FCC:

22                   “[G]iven the opportunity, carriers always will prefer to recover  
23                   their costs from other carriers rather than their own end-users

1 in order to gain competitive advantage. Thus carriers have  
2 every incentive to compete, not on basis of quality and  
3 efficiency, but on the basis of their ability to shift costs to  
4 other carriers, a troubling distortion that prevents market  
5 forces from distributing limited investment resources to their  
6 most efficient uses.

7 We believe that this situation is particularly acute in the case  
8 of carriers delivering traffic to ISPs because these customers  
9 generate extremely high traffic volumes that are entirely one-  
10 directional.”<sup>1</sup>

11 From the perspective of cost recovery, costs associated with non-local traffic are  
12 distinct from costs associated with local traffic. Specifically, Qwest’s local service  
13 prices are not designed to recover costs associated with non-local traffic. Qwest  
14 recovers costs associated with non-local traffic from non-local services, including  
15 revenues from transport and switched access services. Traffic between different local  
16 calling areas is not local traffic.

17

18 **Q. DOES MR. GREENE MAKE THE IMPLICIT ASSUMPTION THAT**  
19 **QWEST’S LOCAL SERVICE PRICES ARE DESIGNED TO COMPENSATE**  
20 **QWEST FOR SWITCHING ALL INTERNET TRAFFIC?**

21 A. Yes. Mr. Greene states that “...customers are paying for local calling area service  
22 from Qwest. If Level 3 picks up traffic within the local calling area, there is no  
23 additional cost imposed upon Qwest because the call simply leaves their network in  
24 that LCA.” [Greene Direct, pp. 18-19] The assumption embodied in these statements

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<sup>1</sup> 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, ¶¶ 4-5 (FCC. 2001) (*hereafter* “ISP Remand Order”).

1 is that local service prices are designed to compensate Qwest for all switched traffic  
2 that other service providers pick up in the local calling area. This is false.

3  
4 **Q. ARE QWEST'S LOCAL SERVICE PRICES DESIGNED TO COMPENSATE**  
5 **QWEST FOR ALL SWITCHED TRAFFIC THAT IS PICKED UP IN THE**  
6 **LOCAL CALLING AREA?**

7 A. No. Based upon the fact that switching costs are caused by the different categories of  
8 traffic that use switching, only a portion of switching costs are designated for recovery  
9 in prices for local services. That is, local service prices are designed to recover the  
10 portion of switching costs attributed to local traffic. Local service prices are not  
11 designed to recover the portion of switching costs attributed to non-local calls. Firms  
12 that use Qwest's switches to provide interexchange calls are responsible for  
13 contributing to the recovery of a distinct portion of switching costs. As observed by  
14 Level 3 in its comments to the FCC: "the interexchange carrier is left to recover its  
15 costs for originating and terminating the call from its customers."<sup>2</sup> Contrary to Mr.  
16 Greene's claims, no matter where an interexchange carrier picks up traffic, it is  
17 responsible for switching costs associated with this traffic.

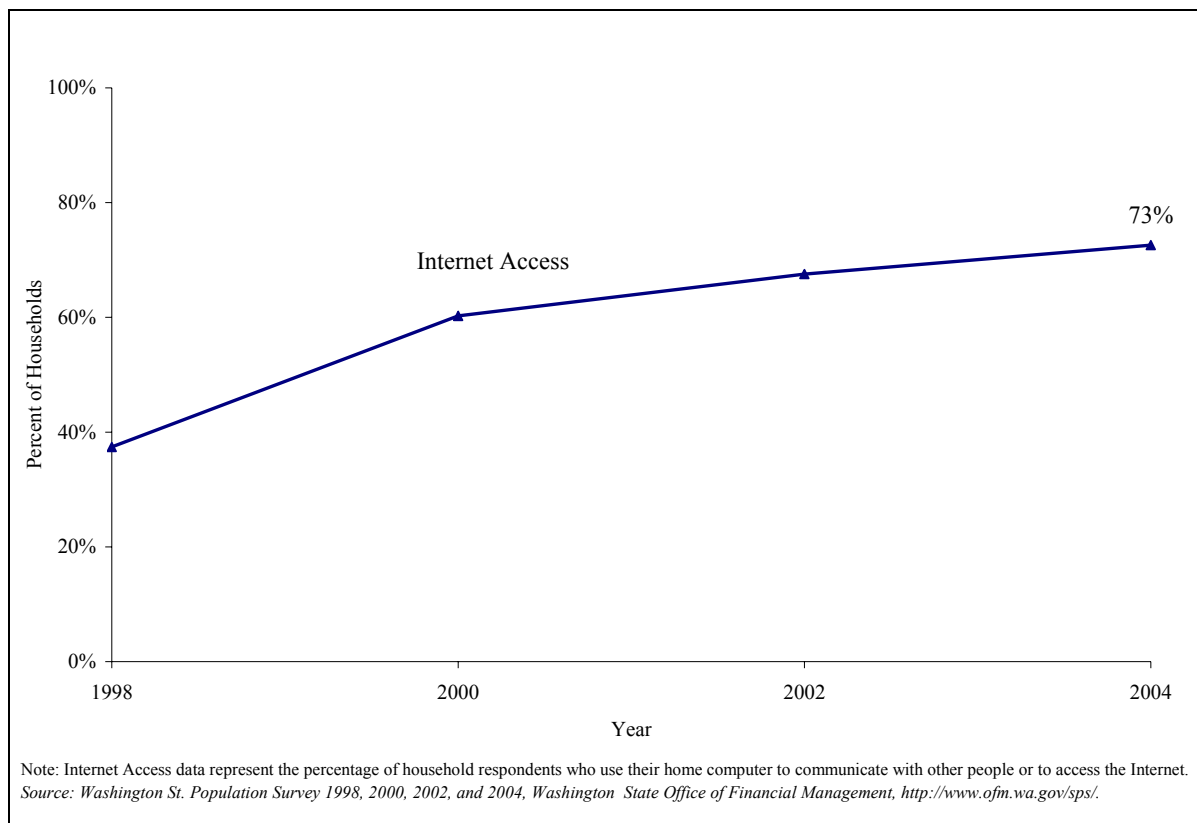
18  
19 **Q. HAS THE RAPID RISE OF INTERNET ACCESS MADE THE**  
20 **CLASSIFICATION OF THIS TRAFFIC AN IMPORTANT ISSUE?**

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<sup>2</sup> 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 A. Yes. The rapid rise of Internet access rivals the wireless phone revolution as the most  
2 dramatic change in communications over the last ten years. As shown in Figure 1, the  
3 portion of the households in Washington connected to the Internet nearly doubled from  
4 37 percent in 1998 to 73 percent in 2004.

5 **Figure 1. Percent of Households in Washington with Internet Access**  
6



7

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

9 Although over half of Internet households in Qwest's service territory in Washington  
10 now use broadband connections to access the Internet, dial-up traffic remains  
11 substantial.<sup>3</sup>

<sup>3</sup> 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

1 **Q. WOULD ALLOWING LEVEL 3 TO AVOID SWITCHING AND TRANSPORT**  
2 **COSTS DISCRIMINATE AGAINST QWEST?**

3 A. Yes. Allowing Level 3 to avoid switching and transport costs discriminates against  
4 Qwest. As Mr. Greene acknowledges, Qwest Corporation (QC) and Qwest  
5 Communications Corporation (QCC) are “both wholly-owned subsidiaries of Qwest  
6 Communications International, which is the publicly traded entity.” [Greene Direct, p.  
7 14] This combined entity incurs the full cost of investing, operating and maintaining  
8 switching and transport for local and non-local calls. Albeit in an imperfect manner  
9 governed by regulation, Qwest is left to recover the local portion of these costs from  
10 local services and the non-local portion from non-local services.

11

12 **Q. WHAT IMPLICATIONS DOES THIS HAVE ON COMPARING THE COSTS**  
13 **THAT QWEST INCURS VERSUS THE COSTS THAT LEVEL 3 BELIEVES**  
14 **IT SHOULD INCUR?**

15 A. Mr. Greene points out that QCC provides connections to ISPs in much the same way  
16 as Level 3. He ignores the fact, however, that when Qwest provides service to an ISP,  
17 the “publicly traded entity” described by Mr. Greene incurs the full cost of originating,  
18 transporting and terminating the calls from the ISPs’ end users. As a firm subject to  
19 regulatory oversight, Qwest cannot ignore these costs in the prices that it charges the  
20 ISPs that it serves.

21

1 In contrast, under Level 3's proposal in this proceeding, it would not pay for  
2 originating calls, and it would receive payment from Qwest for terminating calls, even  
3 though ISPs served by Level 3 (and ultimately their end user customers) cause these  
4 costs. Since it would avoid responsibility for these costs, Level 3 would presumably  
5 not include them in the prices that it charges ISPs. As explained in my direct  
6 testimony:

7 The proper chain of payments is determined by the chain of  
8 cost, but in reverse – back to the cost causer. Level 3 causes  
9 Qwest to incur costs in switching and transporting the traffic  
10 to Level 3, so Level 3 should compensate Qwest. The ISP  
11 causes Level 3 to incur costs, so the ISP should compensate  
12 Level 3. The end user customers of the ISP cause the ISP to  
13 incur costs, so the end users should compensate the ISP. In  
14 this way, every entity is responsible for the costs that it causes,  
15 and every entity can properly weigh its costs against the  
16 expected benefits or revenues that it expects to receive. As  
17 stated above, this leads to an efficient use of resources. [p. 11]

18  
19 If Level 3 can convince this Commission to force Qwest to assume responsibility for  
20 switching costs, Level 3 can sidestep costs that it causes, and the chain of payments  
21 that forces the responsibility of costs back to the cost causers will be broken. If this  
22 occurs, Qwest will face costs that it does not cause, and the power of cost causation to  
23 produce efficient decisions will be lost.

24 The fallacy in Mr. Greene's argument is illustrated by Table 1 in Mr. Greene's  
25 testimony, which compares the network components used by Level 3 and Qwest. That  
26 chart ignores switching and some transport provided by Qwest prior to the point of  
27 interconnection with Level 3. Both QCC and Level 3 use this switching and transport  
28 for dial-up Internet traffic, and, from the perspective of creating an efficient and

1 equitable economic environment, it is appropriate that each take responsibility for  
2 recovering the costs related to the use of these assets from its ISP customers. It is my  
3 understanding that QCC pays retail prices for the assets that it uses and charges its ISP  
4 customers prices that include the recovery of these payments. Level 3, however, wants  
5 the Commission to require Qwest to: (1) provide these assets free of charge; and (2)  
6 compensate Level 3 for terminating traffic (even though Qwest does not have the  
7 business relationship with Level 3's ISP customers). Level 3's proposal is inefficient,  
8 inequitable, and contrary to the economic underpinnings of the *ISP Remand Order*.

9  
10 **III. THE FUTURE OF INTERNET ACCESS IN WASHINGTON**  
11 **DOES NOT DEPEND UPON LEVEL 3 AVOIDING COSTS**

12 **Q. DOES THE FUTURE OF INTERNET ACCESS IN WASHINGTON DEPEND**  
13 **ON LEVEL 3'S SUCCESS IN THIS PROCEEDING?**

14 A. No. Mr. Greene overreaches when he portrays Level 3 as critical to the past  
15 development and future success of the Internet. [Greene Direct, pp. 3-5] Level 3  
16 cannot take credit for the dramatic adoption of the Internet over the last decade, and  
17 the continued use and proliferation of dial-up Internet access does not depend upon  
18 allowing Level 3 to avoid costs that it causes.

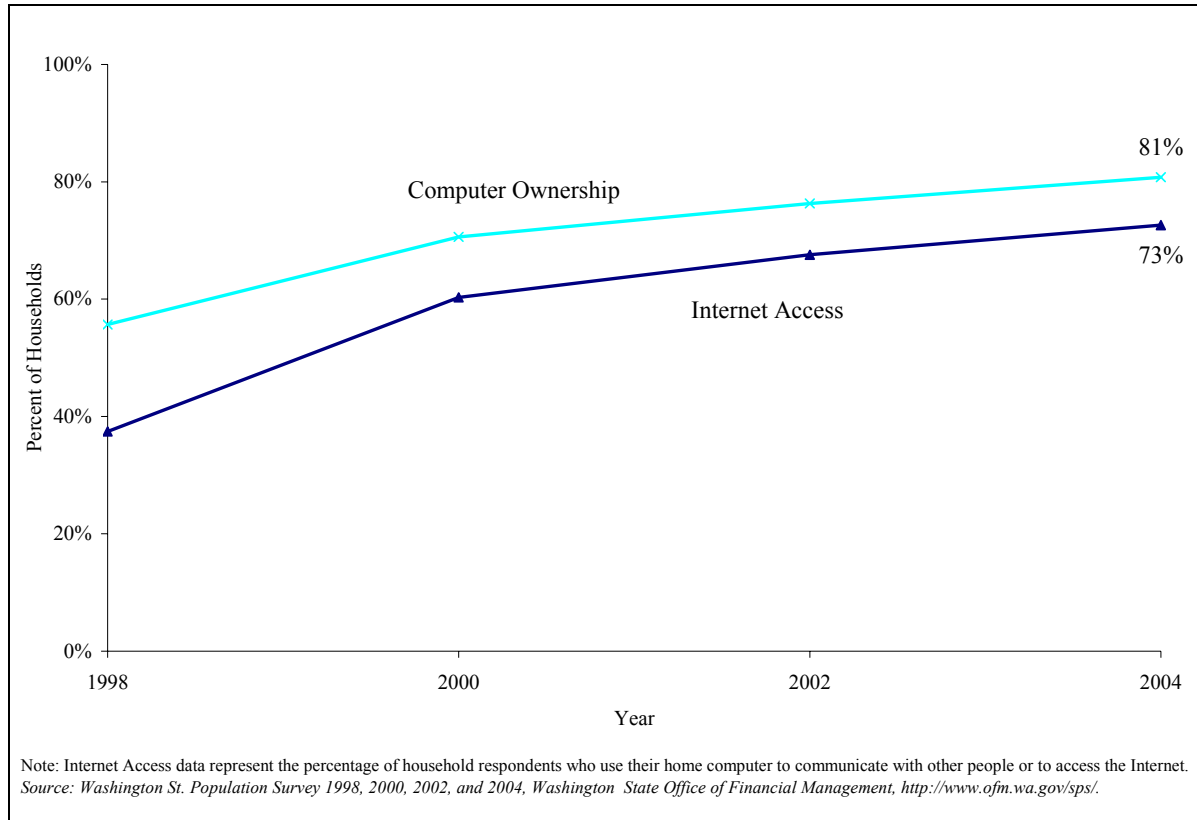
19  
20 **Q. IS THE GROWTH RATE OF INTERNET ACCESS LEVELING OFF?**

21 A. Yes, the growth rate of Internet access is leveling off as we approach the point where  
22 the vast majority of households with computers have Internet access. This is



1 demonstrated in Figure 2, which shows the relative household penetrations of Internet  
2 access and home computers.

3 **Figure 2. Percent of Households in Washington with**  
4 **Computer Ownership and Internet Access**



5  
6 By 2004, most households in Washington with home computers were connected to the  
7 Internet. Since that time, the gap between households with computers and households  
8 with an Internet connection has remained relatively stable.<sup>4</sup>

9  
10 We have reached a point where future increases in Internet access are limited by the  
11 numbers of computer-households, and the decision in this proceeding is not likely to

<sup>4</sup> 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 have a material impact on the numbers of households with computers. It may,  
2 however, have an impact on the continued development of efficient and beneficial  
3 telecommunications markets in Washington.

4  
5 **Q. WHAT IS THE CURRENT TREND IN INTERNET ACCESS?**

6 A. As shown above in Figures 2 and 3, although the penetration of Internet access has  
7 approached the level of computer ownership for households, there is a strong trend for  
8 the replacement of dial-up connections with broadband connections. This natural  
9 progression is supported by our national telecommunications policy. As described by  
10 FCC Chairman Kevin Martin:

11 “Creating a policy that speeds the deployment of broadband  
12 throughout the U.S. is my highest priority as the new chairman  
13 of the FCC...Most Americans today can choose between  
14 several competing broadband service providers and service  
15 packages...These proliferating service providers are  
16 increasingly competing with each other, and that holds down  
17 prices, increases consumer choice, and creates a vast array of  
18 services.”<sup>5</sup>

19  
20 In Washington and across the nation, the portion of Internet-households using  
21 broadband connections continues to rise. As shown in Figure 3, in the first quarter of  
22 this year, over one-half of the Internet households in Qwest’s service area in  
23 Washington were already using broadband connections.

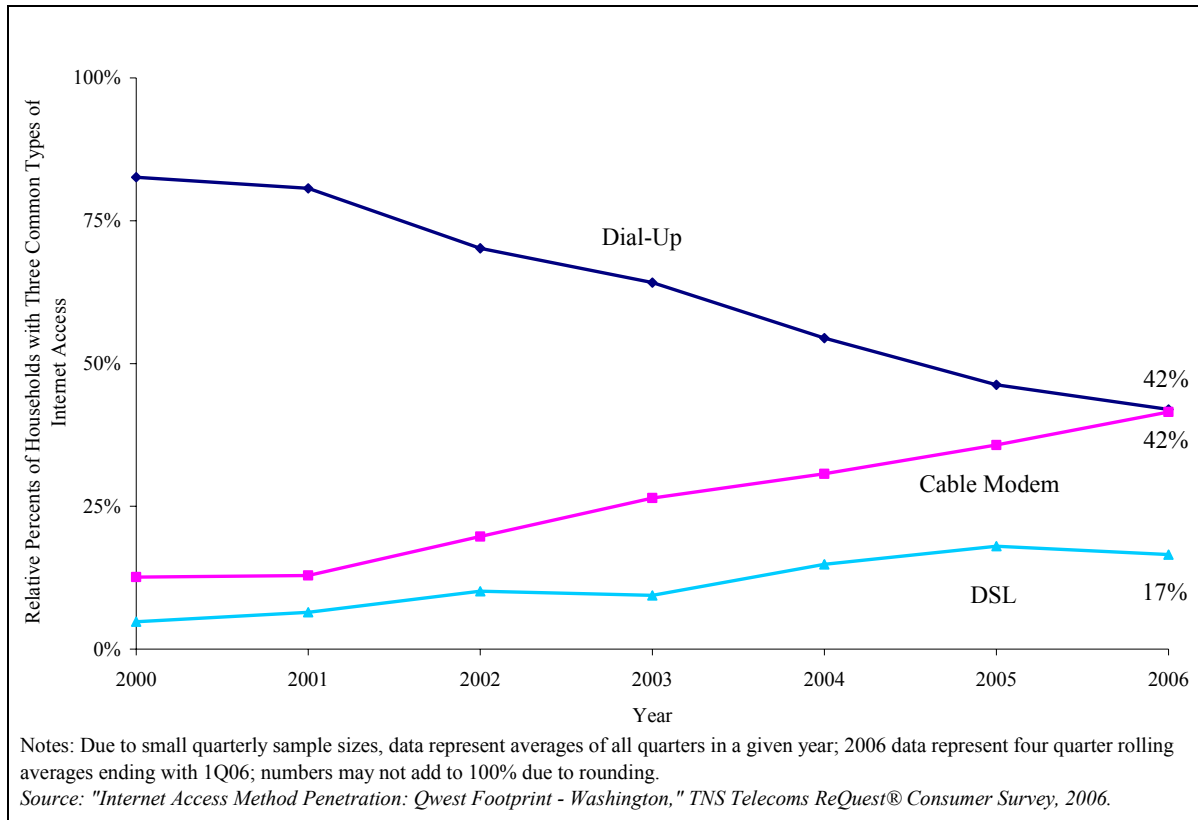
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<sup>5</sup> “Broadband,” Martin, Kevin, Wall Street Journal, July 7, 2005.

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**Figure 3. Composition of Internet Access in Washington**



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To summarize, Level 3 is not responsible for the dramatic growth of Internet access, and the future of Internet access in Washington does not depend upon allowing Level 3 to avoid paying for the costs it causes. It is my understanding that Level 3 did not even serve Qwest with a request to negotiate an interconnection agreement in Washington until 1999. By that time the rapid adoption of Internet access was well underway, and approximately 40 percent of the households in Washington already had access. Since then, broadband has overtaken dial-up as the predominant form of access to the Internet.

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

6

7   **Q.   DOES THIS CONCLUDE YOUR TESTIMONY?**

8   A.   Yes.