

August 14, 2008

**VIA ECFS**

Ms. Marlene H. Dortch  
Secretary, Federal Communications Commission  
445 12th Street, S.W.  
Washington, DC 20554

Re: ***Ex Parte Presentation*** in CC Docket No. 99-68, *Intercarrier Compensation for ISP-Bound Traffic*; CC Docket No. 01-92, *Developing a Unified Intercarrier Compensation Regime*

Dear Ms. Dortch:

This *ex parte* letter is submitted on behalf of EarthLink, Inc. (“EarthLink”) in the above-referenced proceedings. EarthLink is one of the nation’s leading Internet Service Providers (“ISPs”) and providers of Internet Protocol (“IP”)-enabled services. As such, EarthLink has an interest in ensuring that intercarrier compensation reform promotes innovative Internet access and IP-enabled services and does not limit or skew customer choice and service deployment by perpetuating uncertainty or inefficiency.

**I. There Is no Sound Basis to Differentiate Between ISP-Bound Traffic and Other “Telecommunications” for Purposes of Intercarrier Compensation.**

The Commission’s prior efforts to distinguish ISP-bound traffic from other kinds of traffic for intercarrier compensation purposes have failed to withstand judicial scrutiny.<sup>1</sup> These prior failures, together with the extraordinary writ of mandamus recently issued by the United States Court of Appeals for the District of Columbia Circuit,<sup>2</sup> make clear that disparate treatment of ISP-bound traffic can no longer stand.

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<sup>1</sup> See *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Intercarrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98, 99-68, Declaratory Ruling and Notice of Proposed Rulemaking, 14 FCC Rcd. 3689 (1999), *vacated and remanded*, *Bell Atlantic Tel. Cos. v. FCC*, 206 F.3d 1 (D.C. Cir. 2000) (“*ISP Declaratory Ruling*”); *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Intercarrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98, 99-68, Order on Remand and Report and Order, 16 FCC Rcd 9151 (2001), *remanded*, *WorldCom v. FCC*, 288 F.3d 429 (D.C. Cir. 2002), cert. den. 538 U.S. 1012 (2003) (“*ISP Remand Order*”).

<sup>2</sup> See *In re Core Communications, Inc.*, 531 F.3d 849, 861-62 (D.C. Cir. 2008) (requiring the Commission’s response to be “in the form of a final, appealable order that explains the legal authority for the Commission’s interim intercarrier compensation rules that exclude ISP-bound traffic from the reciprocal compensation requirement of § 251(b)(5)).

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With a response to the writ due in the next few months, the Commission therefore has both the justification and the impetus to rationalize intercarrier compensation for this category of “telecommunications” under the Communications Act of 1934, as amended (the “Act”).<sup>3</sup>

EarthLink supports Chairman Martin’s call for “comprehensive” intercarrier compensation reform that will harmonize the multiple, often conflicting, policies that currently determine compensation.<sup>4</sup> The central tenants of comprehensive reform include an end to the discriminatory treatment of any particular type of telecommunications traffic and a policy that creates uniform rates, terms and conditions. Isolating ISP-bound traffic and attempting once again to establish a compensation regime distinct from other types of Section 251(b)(5) “telecommunications” traffic, either with a lower rate or forced “bill and keep,” will not only result in another rejection by the courts, but such a policy will remove much of the political and policy incentive of many parties to achieve the uniform rate structure necessary for comprehensive reform.

As an initial matter, treating ISP-bound traffic the same as all other “telecommunications” under the Act is good policy. In its prior decisions, the Commission’s primary policy focus has been to address cries of perceived “arbitrage” or complaints of transaction costs from incumbent local exchange carriers (“ILECs”). It is therefore no surprise that some are raising the same arguments again now to justify a results-oriented analysis and preserve the discriminatory treatment of ISP-bound traffic. Qwest, for example, raises tired old arguments about “arbitrage” arising from the exchange of ISP-bound traffic, and claims that the Commission should avoid applying reciprocal compensation to such traffic.<sup>5</sup> But even assuming *arguendo* that such claims were plausible and credible seven years ago when the Commission first adopted a nationwide ISP-bound traffic compensation structure, circumstances have changed significantly since that time and there is no reason for the Commission to accept such pleas as it did in 2001. Dial-up subscriptions have fallen dramatically, and high-volume users have largely migrated to broadband access.<sup>6</sup> The remaining dial-up customers are typically either low-volume users and/or located in areas where broadband access remains unavailable or unaffordable. Thus, baseless siren calls of “arbitrage” and

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<sup>3</sup> See 47 U.S.C. § 251(b)(5).

<sup>4</sup> See *In re Core Communications*, 531 F.3d at 861.

<sup>5</sup> *Ex Parte* Presentation of Qwest Communications International, Inc., CC Dockets Nos. 96-98 and 99-68, dated April 25, 2008 (“Qwest April 25 *Ex Parte*”), at 3-5.

<sup>6</sup> See, e.g., “Home Broadband Adoption 2008,” Pew Internet & American Life Project, July 2008 (attached hereto); *Ex Parte* Presentation of Level 3 Communications, LLC, CC Docket No. 99-68 and WC Docket No. 01-92, dated May 1, 2008, at presentation pg. 2.

uneconomic incentives provide no basis to sustain a discriminatory intercarrier compensation structure with respect to ISP-bound traffic.

To the contrary, including ISP-bound traffic within the statutory reciprocal compensation structure again would serve several sound policy and economic objectives. For example, even as uncertainty surrounding ISP-bound traffic has generated litigation and transaction costs for over a decade, one could argue that the ISP-bound traffic debate has ironically led to *increased accuracy* in establishing cost-based rates pursuant to Section 251(b)(5) for *non-ISP-bound* traffic. The Commission will of course recall that when the 1996 Act was first passed, ILECs proposed (successfully) to set inflated reciprocal compensation rates that were substantially higher than those in place today. Only once they recognized the growing phenomenon of the Internet and realized that competitors were terminating significant volumes of traffic as well did the ILECs push (successfully) to reduce reciprocal compensation rates. Today, reciprocal compensation rates are a fraction of what they once were, and this can largely be attributed to the ILECs' reversal of course on ratesetting once they recognized the impact of ISP-bound traffic on their relative payments and receipts pursuant to the reciprocal compensation framework. With the entire industry now acutely aware of the presence of ISP-bound traffic in the "telecommunications" traffic mix, state commissions and interconnected carriers are quite capable of assessing the "additional costs" of terminating this traffic and setting "just and reasonable" rates for such termination.<sup>7</sup> Thus, once the uncertainty is finally eliminated and it is clear that ISP-bound traffic is in fact a portion of the traffic to be included in setting reciprocal compensation rates, the state commissions can take this traffic into account in setting such rates and thereby encourage efficient decisions by both carriers and ISPs for *all* telecommunications traffic.

Confirming that ISP-bound traffic falls within the statutory reciprocal compensation structure would stimulate broadband deployment as well. Unlike a decade ago, where an ILEC may have had little choice in attempting to stem the flow of ISP-bound traffic, an ILEC today who truly believes that it is paying too much in reciprocal compensation associated with ISP-bound traffic can accelerate deployment of broadband and/or offer even more competitive plans for existing broadband access to encourage dial-up users to migrate. Thus, establishing a cost-based reciprocal compensation rate for ISP-bound traffic would not only satisfy Sections 251 and 252 of the Act, but would also serve the Commission's objective of promoting broadband deployment under Section 706.<sup>8</sup>

Treating ISP-bound traffic the same as other telecommunications traffic for intercarrier compensation purposes would also serve other important policy objectives.

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<sup>7</sup> See 47 U.S.C. § 252(d)(2).

<sup>8</sup> See 47 U.S.C. § 157 nt.

For example, the Commission has devoted significant attention recently to questions surrounding “network management” and the larger issue of “net neutrality.”<sup>9</sup> This letter does not delve into the numerous complex policy and economic considerations arising in this debate, but it is clear that providing consumers with multiple alternatives for Internet access can serve an important role as a market-based factor in addressing such questions. Specifically, avoiding discrimination and ensuring that traffic destined for ISPs is on equal footing with other telecommunications traffic for compensation purposes could help stimulate -- or would at least avoid artificially discouraging -- the deployment of alternative Internet access services, particularly in areas where broadband is unavailable or unaffordable.

The statutory framework dovetails with these policy objectives. Although ILECs raise “policy” concerns about arbitrage and uneconomic incentives to support perpetuating a discriminatory intercarrier compensation mechanism for ISP-bound traffic, the *Bell Atlantic* and *WorldCom* decisions confirm that the proper manner in which to address such concerns -- assuming *arguendo* that they are legitimate (which they are not) -- is not through overly creative interpretations of the Act. Rather, as discussed further herein, parties’ complaints about rate levels and incentives can be addressed by setting cost-based rates consistent with the Act. Indeed, although prior efforts at establishing different intercarrier compensation mechanisms for ISP-bound traffic have been rejected by the courts, these prior decisions by the Commission and the applicable court decisions have helped to narrow the remaining questions considerably and frame the requisite statutory analysis.

Specifically, these decisions all now lead to the conclusion that Section 251(b)(5) of the Act applies to compensation for the transport and termination of “telecommunications,” and that there is no geographic or jurisdictional limit to the traffic covered by this statute. In drafting Section 251(b)(5), Congress deliberately chose the broad statutory term “telecommunications” and *not* “local traffic” or the much narrower term “telephone exchange service” to describe the scope of a carrier’s termination and intercarrier compensation obligations. Likewise, Congress could have limited the scope of Section 251(b)(5) to the transport and termination of communications originating and terminating within the same local calling area -- but it chose not to. The Commission’s current interpretation of Section 251(b)(5)<sup>10</sup> -- which was not questioned or vacated by

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<sup>9</sup> See, e.g., *Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications; Broadband Industry Practices, Petition of Free Press et al. for Declaratory Ruling that Degrading an Internet Application Violates the FCC’s Internet Policy Statement and Does Not Meet an Exception for “Reasonable Network Management,”* File No. EB-08-IH-1518, WC Docket No. 07-52, Memorandum Opinion and Order.

<sup>10</sup> “Unless subject to further limitation, section 251(b)(5) would require reciprocal compensation for transport and termination of all telecommunications traffic, -- i.e., whenever a local exchange carrier exchanges telecommunications traffic with another carrier. ... [W]e

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*WorldCom* -- exempts from this section only those categories of traffic that qualify under Section 251(g)<sup>11</sup> of the Act.<sup>12</sup> Section 251(g), in turn, covers only compensation arrangements that existed and were regulated prior to enactment of the Telecommunications Act of 1996 (“1996 Act”). Because intercarrier arrangements for the exchange of ISP-bound traffic did not exist prior to the 1996 Act, the *WorldCom* court concluded that Section 251(g) cannot apply to ISP-bound traffic.<sup>13</sup> This traffic must by definition therefore fall within the scope of Section 251(b)(5).<sup>14</sup>

## **II. The Fact that ISP-Bound Traffic Is Jurisdictionally Interstate Does Not Remove It From the Scope of Section 251(b)(5).**

Regardless of substantive positions on the policy and legal bases for applying various compensation mechanisms, there is general consensus among commenters in support of the Commission’s interstate classification of ISP-bound traffic.<sup>15</sup> Judicial rejection of the Commission’s prior orders on this topic was not based upon, and does not

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interpret subsection (g) as a carve-out provision [to 251(b)(5)].” *ISP Remand Order*, 16 FCC Rcd at 9166-67, ¶¶ 32-34.

<sup>11</sup> 47 U.S.C. § 251(g).

<sup>12</sup> *WorldCom*, 288 F.3d at 432-33. The court’s remand was based not upon any flaw in the Commission’s statutory interpretation with respect to Sections 251(b)(5) and 251(g), but rather upon the fact that ISP-bound traffic did not fit within the scope of Section 251(g).

<sup>13</sup> *Id.* at 433; *see also Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 15 FCC Rcd 385, 407, at ¶ 47 (1999) (Section 251(g) “is merely a continuation of the equal access and nondiscrimination provisions of the Consent Decree”).

<sup>14</sup> Some may also contend that moving to reciprocal compensation for ISP-bound traffic immediately upon issuance of a Commission order could result in “rate shock,” even if they have some ability to encourage migration of customers to broadband access over time. Even if this were true, such a policy concern could not justify departing from the language of the statute. Rather, if such concerns were deemed legitimate, the Commission may be able to address them as discussed in Section IV, *infra*, through more reasonable means than complete departure from the application of Section 251(b)(5) to all “telecommunications.”

<sup>15</sup> *See, e.g., Ex Parte* Presentation of Embarq, CC Dockets Nos. 96-98, and 99-68, dated May 1, 2008, at 8; *Ex Parte* Presentation of AT&T Services, Inc., CC Dockets Nos. 01-92, 96-98, and 99-68, dated May 9, 2008 (“AT&T May 9 *Ex Parte*”), at 2; *Ex Parte* Presentation of Level 3 Communications, LLC, CC Docket No. 99-68 and WC Docket No. 01-92, dated May 7, 2008, at 1.

call into question, the Commission's *jurisdictional* analysis.<sup>16</sup> But it is also clear under the Act and as a result of the court rulings that consensus on jurisdictional classification does nothing to resolve, and ultimately has no relation to, the determination of proper intercarrier compensation.

As a point of comparison, since the early 1980's, the Commission has consistently treated ISPs as end users, and allowed them to pay state-tariffed rates for local exchange services, even though the services they provide may very well be interstate in nature.<sup>17</sup> Moreover, even if the end-to-end communication is deemed interstate in nature, the call to an ISP terminates at the ISP's (*i.e.*, the called party's) premise *from the perspective of the burden on the public switched telephone network*. Thus, from a "network cost" perspective as between interconnected local exchange carriers, there is a sound economic basis for treating ISP-bound traffic just like any other calls exchanged between interconnected local exchange carriers. Finally, the mere fact that some may characterize calls to ISPs as going in only one direction provides no basis for carving ISP-bound traffic out of Section 251(b)(5); paging traffic, for example, is one-way, but is and always has been subject to reciprocal compensation.<sup>18</sup>

In the end, however, jurisdictional and other considerations are secondary to the requirement that the Commission faithfully consider and implement the underlying statutory framework. Just as the regulatory classification of ISPs (as end users) has long been established independent of their jurisdictional classification as providers of interstate services, intercarrier compensation questions relating to ISP-bound traffic must be considered by reference to the specific terms of the statute rather than by narrow

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<sup>16</sup> *WorldCom*, 288 F.3d at 434 ("Having found that § 251(g) does not provide a basis for the Commission's action, we make no further determinations."); *Bell Atlantic*, 206 F.3d at 7 ("However sound the end-to-end analysis may be for jurisdictional purposes, the Commission has not explained why viewing these linked telecommunications as continuous works for purposes of reciprocal compensation.").

<sup>17</sup> *See, e.g., MTS and WATS Market Structure*, CC Docket No. 78-72, Memorandum Opinion and Order, 97 FCC 2d 682, 715 (1983); *Amendments of Part 69 of the Commission's Rules Relating to Enhanced Service Providers*, CC Docket 87-215, Order, 3 FCC Rcd 2631, 2633 (1988); *Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing End User Common Line Charges*, First Report and Order, 12 FCC Rcd. 15982, 16133-35 (1997).

<sup>18</sup> *TSR Wireless, LLC v. U.S. West Communications, Inc.*, 15 FCC Rcd 11166, 11178, at ¶ 21 (2000) (holding that the Commission's reciprocal compensation rules "draw[] no distinction between one-way and two-way carriers"). Indeed, ISP-bound traffic should not even be considered "one-way." Unlike paging traffic which transmits data in a single direction, ISP-bound calls result in the return of data to the caller in the form of Internet websites, emails, etc. rendered from the distant server.

reference to the jurisdictional nature of the traffic.<sup>19</sup> Because ISP-bound traffic meets the definition of “telecommunications” under Section 251(b)(5) and does *not* qualify for the limited carve-out established by Section 251(g), the reciprocal compensation obligations of Section 251(b)(5) must apply to ISP-bound traffic even if it is jurisdictionally interstate.<sup>20</sup>

### **III. With Rejection of Section 251(g)’s Carve-Out, There Is No Statutory Basis to Remove ISP-Bound Traffic from the Scope of Section 251(b)(5).**

Because arrangements for the exchange of ISP-bound traffic between competing local exchange carriers did not exist prior to the 1996 Act, the *WorldCom* decision precludes any creative reliance on Section 251(g) to find that ISP-bound traffic is not subject to reciprocal compensation. This has not, however, deterred some parties from developing new and creative arguments in their unrelenting quest to extract ISP-bound traffic from Section 251(b)(5) and perpetuate discriminatory treatment of such traffic. For example, because ISP-bound traffic is interstate in nature, some parties assert that Section 201 of the Act applies to such traffic, and that therefore the Commission can establish a compensation regime pursuant to that statutory provision (and independent of Section 251(b)(5)).<sup>21</sup> Some also contend that, even if Section 251(b)(5) applies to ISP-bound traffic, the Commission is not compelled to subject such traffic to the same

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<sup>19</sup> See *Bell Atlantic*, 206 F.3d at 7-8. The Commission recognized this in the *ISP Remand Order*: “Upon further review, we find that the Commission erred in focusing on the nature of the service (*i.e.*, local or long distance) . . . for purposes of interpreting the relevant scope of Section 251(b)(5).” *ISP Remand Order*, 16 FCC Rcd at 9164, ¶ 26. In fact, because its use of the term “local” “created unnecessary ambiguities,” the Commission deleted the term “local” from its rules implementing Section 251(b)(5). *Id.* at 9173, ¶ 46, and at 9210, App. B. Oddly, somehow overlooking the *Bell Atlantic* and *WorldCom* decisions that have put this question back before the Commission, Qwest urges the Commission to find that ISP-bound traffic is “not local” and that Section 251(b)(5) therefore does not apply. Qwest April 25 *Ex Parte* at 7.

<sup>20</sup> If the Commission were to conclude that locally-dialed calls to ISPs are not “telecommunications” within the scope of Section 251(b)(5), it would also need to consider the risk that this could undermine or call into question the classification of ESPs as end users. For example, if the call to an ISP is not a local call, what kind of call is it under the Act? (It must have some basis in the statute.) If the ISP’s equipment is not viewed as the termination point of a local call, could someone argue that the ISP is instead helping to provide “telecommunications” and that the ISP’s role in transporting a call to the Internet is itself subject to Title II jurisdiction? Although EarthLink doubts that the Commission intends such implications, the Commission cannot take lightly the potential consequences on the long-standing “ESP exemption” of a finding that calls to ISPs are not “telecommunications” or that telecommunications does not terminate at the ISP.

<sup>21</sup> See, *e.g.*, AT&T May 9 *Ex Parte* at 1.

reciprocal compensation regime as other “telecommunications.”<sup>22</sup> Both contentions are wrong.

First, even if Section 201 has some application to ISP-bound traffic (as discussed further herein), those who argue that Section 201 governs *in lieu of* Section 251(b)(5) only perpetuate the conflation of *jurisdiction* and *regulatory treatment* that led to the *Bell Atlantic* court’s remand of the *ISP Declaratory Ruling*. The Commission should avoid yet another foray into reliance upon jurisdictional classification to justify an intercarrier compensation structure. Rather, the Commission should stay true to its statutory analysis from the *ISP Remand Order* -- an analysis that was not called into question by the *WorldCom* court -- and find that if traffic is not subject to the carve-out in Section 251(g), it must by definition fall within the scope of Section 251(b)(5) and thus reciprocal compensation must apply.

In an effort to find any possible escape hatch from Section 251(b)(5), AT&T asserts that Section 251(i) provides a basis for the Commission to adopt and apply something other than a reciprocal compensation regime to ISP-bound traffic. In particular, AT&T contends that Section 251(i), which provides that nothing in Section 251 “shall be construed to limit or otherwise affect the Commission’s authority under Section 201,”<sup>23</sup> provides adequate authority for the Commission “to continue setting rates it deems ‘just and reasonable’ under its traditional Section 201 authority for jurisdictionally interstate traffic . . . .”<sup>24</sup> The Commission has previously rejected this very argument, however, and there is no reason to depart from this reasoning and take it up again. Indeed, in its brief to the court in *WorldCom*, the Commission expressly dismissed Section 251(i) as a basis for establishing rates for the exchange of ISP-bound traffic: “The Commission relies upon section 251(i) solely for its continued authority to regulate Internet-bound traffic (which *otherwise* is exempted from section 251(b)(5) pursuant to section 251(g)) under its general regulatory jurisdiction over interstate communications set forth in section 201.”<sup>25</sup>

The Commission’s statement about the limitations of Section 251(i) in its *WorldCom* brief is consistent with the structure of the Act as a whole. Contrary to AT&T’s assertions, the Commission’s “traditional authority to continue setting rates”

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<sup>22</sup> See, e.g., *id.*; Qwest April 25 *Ex Parte* at 8-9.

<sup>23</sup> 47 U.S.C. § 251(i).

<sup>24</sup> AT&T May 9 *Ex Parte* at 1 (quoting 47 U.S.C. § 201).

<sup>25</sup> Brief of the Federal Communications Commission, Case No. 01-1218, *et al.*, United States Court of Appeals for the District of Columbia Circuit (filed Nov. 15, 2001), at 45 (underlined emphasis added; italicized emphasis in original).

does *not* arise under Section 201. Section 201 merely provides for the Commission to ensure that “charges, practices, classifications, and regulations” are “just and reasonable.”<sup>26</sup> By contrast, the Commission’s *rate-setting authority* arises from Section 205<sup>27</sup> -- and nothing in Section 251(i) indicates that the Commission’s authority under *Section 205* is somehow preserved in the face of Section 251(b)(5). Thus, AT&T’s reliance upon Section 251(i) to preserve the Commission’s “ratemaking authority” is misplaced, and this section provides no basis or authority for the Commission to override Section 251(b)(5) and adopt different rates pursuant to Section 205.

Finally, as discussed in Section I of this letter, results-oriented arguments that the Commission should adopt a different reciprocal compensation structure for ISP-bound traffic *even if it is within the scope of Section 251(b)(5)* likewise fail. As the *Bell Atlantic and WorldCom* decisions make clear, cries regarding perceived “arbitrage” (even if legitimate) do not and cannot justify overly creative interpretations of the plain statutory text or the adoption of different rates under a single statutory pricing standard. In this regard, the comments of Commissioner Furchtgott-Roth seven years ago are notable for their prescience in warning against results-driven outcomes and in advocating strict focus on the statutory framework:

My colleagues some time ago decided on their general objective - asserting section 201(b) jurisdiction over ISP-bound traffic and permitting incumbent carriers to ramp down the payments that they make to competitive ones. The delay in producing an order is attributable to the difficulty the Commission has had in putting together a legal analysis to support this result, which is at odds with the agency's own precedent as well as the plain language of the statute. . . . The Commission would act far more responsibly if it simply recognized that ISP-bound traffic comes within section 251(b)(5). To be sure, this conclusion would mean that the Commission . . . would be forced to work within the confines of sections 251(b)(5) and 252(d)(2), which, among other things, grant authority to State commissions to decide on "just and reasonable" rates for reciprocal compensation. 47 U.S.C. § 252(d)(2). But the Commission surely could issue “rules to guide the state-commission judgments”

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<sup>26</sup> 47 U.S.C. § 201(b).

<sup>27</sup> *Id.* at § 205 (“[T]he Commission is authorized and empowered to determine and prescribe what will be the just and reasonable charge . . .”)

regarding reciprocal compensation (Iowa Utilities Bd.,  
525 U.S. at 385) . . . <sup>28</sup>

To avoid yet another seven years of delay, uncertainty, and litigation, the Commission should take heed of these comments in considering the proposals of AT&T, Qwest, and others as described above.

#### **IV. The Act Vests Authority to Set Reciprocal Compensation Rates in the *State Commissions*.**

As discussed above, the preceding decisions of the Commission and courts all point to the singular conclusion that ISP-bound traffic falls within the reciprocal compensation structure required by Section 251(b)(5). Section 252(d)(2) of the Act,<sup>29</sup> in turn, authorizes the *state commissions* to set rates for transport and termination provided by incumbent local exchange carriers (“ILECs”) under Section 251(b)(5). The Commission is only permitted to set rates under Section 252(e)(5) where a state commission fails to act under Section 252, and in such cases, the Commission is required to apply the same pricing standards that the state commission would have under the Act.<sup>30</sup> Finally, in contrast to Section 251’s “savings clause” that preserves Commission authority under Section 201, there is no “savings clause” in Section 252 with respect to the Commission’s ratemaking authority under Section 205.

Although the Commission cannot set rates for reciprocal compensation under Section 251(b)(5), it has ample authority to establish a *methodology* for state commissions to follow in setting rates consistent with the Act’s pricing standards. Indeed, the United States Supreme Court has confirmed that “the Commission has jurisdiction to design a pricing methodology” with respect to Section 252(d).<sup>31</sup> This being said, a “methodology” that states *under what circumstances* a specific rate applies (*e.g.*, the mirroring rule) is not a pricing methodology.<sup>32</sup> Nor is it clear how the

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<sup>28</sup> *ISP Remand Order*, 16 FCC Rcd at 9215-16.

<sup>29</sup> 47 U.S.C. § 252(d)(2).

<sup>30</sup> *Id.* at § 252(e)(5).

<sup>31</sup> *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 385 (1999).

<sup>32</sup> Any rule that sets a cap on recovery of costs or requires the application of a particular rate under a specified set of criteria clearly goes beyond the scope of a ratesetting “methodology” because it achieves the effect of defining an applicable rate. *See Iowa Utils. Bd. v. FCC*, 219 F.3d 744, 757 (8th Cir. 2000). (“[W]e now agree with the FCC that its role is to resolve ‘general methodological issues,’ and it is the state commission’s role to exercise its discretion in establishing rates.”)

Commission could possibly justify (or explain pursuant to the pending writ of mandamus) a methodology that interprets Sections 251(b)(5) and 252(d)(2) in one manner as to ISP-bound traffic and in an entirely different manner with respect to other “telecommunications.” The Commission should be consistent and permit the state commissions to set rates for *all* traffic covered by Section 251(b)(5) that is not excluded by Section 251(g), including but not limited to jurisdictionally interstate traffic such as intraMTA CMRS and ISP-bound traffic.

Assertions by AT&T and Qwest that the Commission could adopt a “bill-and-keep” mechanism pursuant to Section 252(d)(2)(A)(i) solely for ISP-bound traffic<sup>33</sup> fail because of this same concern about adopting two entirely different compensation rates pursuant to the same statutory provision. Moreover, because this statutory provision expressly requires the consideration of “costs” in adopting any alternative arrangement -- and because only state commissions are authorized pursuant to Section 252(d) to consider such costs and determine the appropriate rates and mechanism for reciprocal compensation -- the Commission could not grant the “bill-and-keep” relief that AT&T and Qwest seek pursuant to Section 252(d)(2)(A)(i).<sup>34</sup>

Rather, as discussed above, under the Act and *Iowa Utilities Board*, the Commission’s proper role is to establish the methodology by which the state commissions can, pursuant to Section 252(d), consider the relevant costs and either set the applicable rates *or* determine that some other mechanism (such as bill-and-keep) is appropriate for compensation based upon the “mutual” nature of the costs at issue.<sup>35</sup> For

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<sup>33</sup> AT&T May 9 *Ex Parte* at 1; Qwest April 25 *Ex Parte* at 7-8, 10.

<sup>34</sup> It is also clear from this statutory analysis that the Commission could not adopt even *interim* mandatory rate caps to address any cries of “rate shock” associated with applying reciprocal compensation to ISP-bound traffic. See footnote 13, *supra*; see also *Iowa Utils. Bd.*, 219 F.3d at 756-57 (rejecting the claim that proxy TELRIC prices were “optional” since the Commission’s rules mandated their use pending state commission establishment of TELRIC prices consistent with the Commission’s methodology). This being said, it is possible that the Commission might be able to propose *truly optional* rate caps as part of a methodology that transitions ISP-bound traffic from \$0.0007 to Section 251(b)(5) rates set by the state commissions. For example, the Commission could state that it would not be unjust, unreasonable, or otherwise inconsistent with Section 252(d) if a state commission *affirmatively chose* to implement an *interim* rate cap of, for example, \$0.0015 for a brief period of time pending further review of reciprocal compensation rates pursuant to Sections 251(b)(5) and 252(d)(2) if (and only after) that state commission specifically found “rate shock” to be a justifiable and legitimate concern.

<sup>35</sup> To be clear, EarthLink is not arguing that the Commission does not have any jurisdiction over ISP-bound traffic pursuant to Section 201 and 251(i). To the contrary, Section 251(i) preserves the Commission’s Section 201 authority to impose rights and obligations and to consider whether “charges, practices, classifications, and regulations” are “just and reasonable,” but this Section 201 authority does not include within it the authority to set rates in the first instance.

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example, the Commission could establish a rule that it is “just and reasonable” for a state commission to adopt a “bill-and-keep compensation” arrangement pursuant to Section 252(d)(2)(A)(i) if that state commission determines that the “mutual recovery of costs” is achieved through a certain range of relative traffic flows. At the same time, the Commission could (and should) also consider adopting several other aspects of a pricing methodology that would be applicable to a state commission’s examination of costs and setting of rates under Sections 251(b)(5) and 252(d):

- Use of terms such as “mutual,” “reciprocal,” and “offsetting” in Sections 251 and 252 make clear that the statute requires recovery of costs from interconnected carriers. Thus, the statutory provisions cannot be interpreted to mandate that interconnected carriers must recover termination costs from ISP end users.
- The Commission’s classification of ISPs as ESPs did not and does not rest on the theory that the serving local exchange carrier must recover termination costs from its ESP customer.
- The ISP is no more a cost causer than the local pizzeria or taxicab company that solicits telephone calls and receives an economic benefit from receiving such calls. The mere fact that calls to ISPs may be placed in only one direction (as they mostly are for pizzerias or taxicab companies) does not support the conclusion that the serving local exchange carrier must recover the costs of terminating those calls from the ISP.
- Use of the term “waive” in Section 252(d)(2)(A)(i) implies a choice.<sup>36</sup> Thus, a state commission may not mandate bill-and-keep where that commission has not first determined that the relative balance of traffic results in the offsetting of carrier costs.

With adoption of a *methodology* that encapsulates these criteria, the Commission would act consistent with Section 251(b)(5), give adequate direction to the state commissions regarding how to implement this section and Section 252(d)(2), and take an important step toward rationalizing intercarrier compensation under the Act.

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(Footnote continued from Previous Page.)

Rather, as discussed above, the Act makes clear that *rate setting authority in particular* with respect to all “telecommunications” (save those categories of traffic excepted by Section 251(g)) is vested in the state commissions.

<sup>36</sup> Merriam Webster’s Online Dictionary defines “waive” as “to relinquish voluntarily (as a legal right)” or “to refrain from pressing or enforcing (as a claim or rule).”

August 14, 2008  
Page 13

EarthLink therefore urges the Commission to confirm that: (1) both the statute and policy considerations support a finding that ISP-bound traffic is subject to Section 251(b)(5); (2) this statutory provision and Section 252(d)(2) prohibit adoption of an intercarrier compensation regime that differentiates between ISP-bound traffic and other “telecommunications” traffic; and (3) the state commissions are to set the rates pursuant to these statutory provisions for all such traffic, including ISP-bound traffic, subject to the methodology established by the Commission.

Sincerely,

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Enclosure

cc: Paul Kenefick, Esq.

# Home Broadband Adoption 2008

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**Adoption stalls for low-income Americans even  
as many broadband users opt for premium  
services that give them more speed**

July 2008

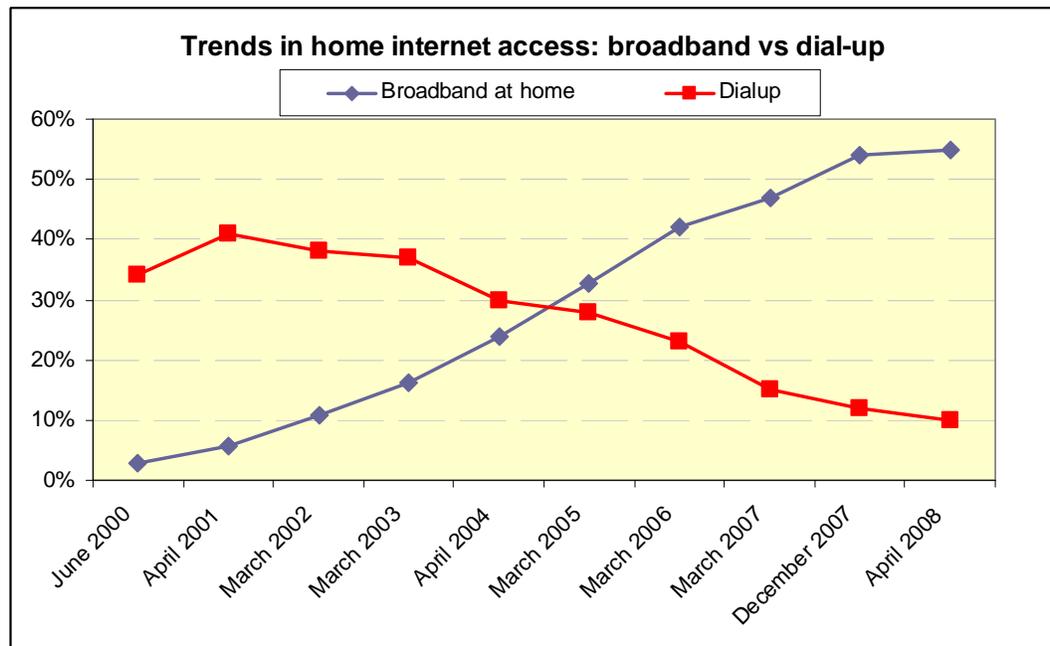
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**John B. Horrigan, Associate Director for Research**

# Summary of Findings

## Home broadband adoption increased from 47% from March 2007 to 55% in April 2008.

Some 55% of adult Americans now have broadband internet connections at home, up from 47% who had high-speed access at home last year at this time. From the March 2006 to March 2007 timeframe, home broadband adoption grew from 42% of Americans to 47%.



The rate from March 2007 to April 2008 was 17%; this compares to the 12% growth rate from March 2006 to March 2007. It is also worth noting that the April 2008 number for broadband adoption at home is little changed from the 54% figure from the Pew Internet Project's December 2007 survey. With growth in broadband at home, now just 10% of Americans have dial-up internet connections at home.

This Pew Internet & American Life Project report is based on the findings of a daily tracking survey on Americans' use of the internet and broadband connections. It was conducted from April 8, 2008 to May 11, 2008 among 2,251 number of American adults, 1,553 of whom number are internet users. The number of home broadband users in the survey was 1,153. The margin of error for the overall sample is +/- 2%. For results based internet users, the margin of sampling error is +/- 3% and for results based on home broadband users the margin of error is +/- 3%.

---

### **Growth in broadband adoption was flat among the poor and African Americans.**

- 25% of low-income Americans – those whose household incomes are \$20,000 annually or less – reported having broadband at home in April 2008. This compares to the 28% figure reported in March 2007 among those living in households whose annual incomes are \$20,000 or less.
- African Americans showed slow growth as well, with 43% saying they had broadband at home in April 2008 versus 40% who said this in March 2007.

---

### **Broadband growth was strong among older and lower-middle income Americans, as well as rural Americans.**

- Among older Americans – those age 50 and over – the growth rate in home broadband adoption from 2007 to 2008 was 26%. Half of Americans between the ages of 50 and 64 have broadband at home. Some 19% of those 65 and older had home broadband access as of April 2008.
- Americans with household incomes between \$20,000 and \$40,000 annually saw broadband penetration grow by 24% from 2007 to 2008. Some 45% of those in that income range reported having broadband at home in April 2008.
- 38% of those living in rural American now have broadband at home, compared with 31% who said this in 2007, or a growth rate of 23% from 2007 to 2008. By comparison, 57% of urban residents have high-speed connections at home now and 60% of suburban residents have such connections.

---

### **Nearly one-third of home broadband users have a premium broadband service that gives them a faster connection to the internet.**

- When asked whether they subscribe to a premium service that gives them a faster broadband connection or have basic service, here is what home broadband users say:
  - 54% of home high-speed users have basic broadband service.
  - 29% of say they have a premium service that offers faster speed.
  - 16% responded that they do not know.

---

### **Monthly broadband bills are 4% lower in May 2008 than at the end of 2005, but monthly dial-up bills have risen.**

- Broadband users reported an average monthly bill of \$34.50 in April 2008, down from \$36 in December 2005.
- The 4% decline is half the decline reported over the February 2004 to December 2005 time interval.

## Summary of Findings

- Dial-up users reported monthly bills of \$19.70, up 9% from the \$18 figure from December 2005.
- The reported average cost of digital subscriber line (DSL) service (\$31.50) continues to be less than cable modem service (\$37.50). However, the \$6 difference in April 2008 is smaller than the \$9 difference in December 2005.

---

### **Non-broadband users cite a number of reasons for not using the service – including availability, price, and lack of interest.**

- 62% of dial-up users say they are not interested in giving up their current connection for broadband.

When asked specifically what it would take them to get them to switch to broadband:

- 35% of dial-up users say that the price of broadband service would have to fall.
- 19% of dial-up users said nothing would convince them to get broadband.
- 14% of dial-up users – and 24% of dial-up users in rural America – say that broadband service would have to become available where they live.

Attitudes about the relevance of information technology also shape the broadband decision for dial-up users, separate and apart from issues such as the price of service. Dial-up users are about half as likely as broadband users to say that information technology helps their personal productivity.

- When asked if they think electronic devices make them more productive, 35% of broadband users strongly agreed that it did compared with 19% of dial-up users.

---

### **Non-internet users represent a large pool of potential broadband users, but many are just not interested in getting online.**

Roughly one-quarter (27%) of adult Americans are not internet users, and they tend to be older (the median age is 61) and have lower-incomes than online users (non-internet users are more than twice as likely as users to live in low-income households). Some 18% of non-internet users have used the internet in the past, but just 10% of non-internet users say they would be interested in joining the ranks of online users.

When asked why they don't use the internet:

- 33% of non-users say they are not interested.
- 12% say they don't have access.
- 9% say it is too difficult or frustrating.
- 7% say it is too expensive.
- 7% say it is a waste of time.

---

### **One-third (34%) of all internet users have connected to the internet using a WiFi connection at someplace other than home or work.**

Some 34% of internet users have gone online via a wireless connection away from their home or office. This group of “on the go” WiFi users overwhelmingly have broadband at home; some 95% of those who have gone online this way have a high-speed internet connection at home.

Among internet users who have gone online “on the go” from some place other than home or work:

- 58% say they use WiFi at public places such as airports, coffee shops, or restaurants.
- 64% say they generally use free WiFi connections when they connect on the go,
- 32% say their on the go Wifi access is a mix of paid and free access.
- 4% mostly use paid services.

---

### **As broadband access becomes differentiated – by either premium service or WiFi access on the go – so does user behavior.**

The 34% of online users who have taken advantage of “on the go” access and the 29% broadband subscribers who subscribe to faster premium services are more active online than typical broadband users. When looking across a range of 14 different online activities:

- Premium broadband users do an average 19% more online tasks on the typical day than the average broadband user.
- “On the go” internet users do an average of 26% more online tasks on a typical day than the average broadband user.

It is not too surprising that additional on-ramps to the internet are associated with heavier use. Nonetheless, particularly with respect to “on the go,” the results show that a WiFi-enabled laptop has added “always connected” wireless access to the “always on” broadband connection.

## Summary of Findings

<b>Home Broadband Adoption 2008: Summary of Findings at a Glance</b>
Home broadband adoption grew by 17% from May 2007 to May 2008, slightly faster than the growth rate of the year before.
Growth in broadband adoption was flat among the poor and African Americans.
Broadband growth was strong among older and lower-middle income Americans, as well as rural Americans.
Nearly one-third of home broadband users have a premium broadband service that gives them a faster connection to the internet.
Monthly broadband bills are 4% lower in May 2008 than at the end of 2005, but monthly dial-up bills have risen.
Non-internet users represent a large pool of potential broadband users, but many are just not interested in getting online.
One-third (34%) of all internet users have connected to the internet using a WiFi connection at someplace other than home or work.
People get broadband for the speed, but a lot of dial-up users say they are not interested in upgrading to high-speed at home.
As broadband access becomes differentiated – by either premium service or WiFi access on the go – so does user behavior.
Source: John B. Horrigan. <i>Home Broadband Adoption 2008</i> . Washington, DC: Pew Internet & American Life Project, July, 2008.

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**Acknowledgements**

**Part 1. Broadband Adoption in the United States**

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**Methodology**

# Acknowledgements

About the Pew Internet & American Life Project: The Pew Internet Project is an initiative of the Pew Research Center, a nonprofit “fact tank” that provides information on the issues, attitudes and trends shaping America and the world. Pew Internet explores the impact of the internet on children, families, communities, the work place, schools, health care and civic/political life. The Project is nonpartisan and takes no position on policy issues. Support for the project is provided by The Pew Charitable Trusts. The Project's Web site: <http://www.pewinternet.org>

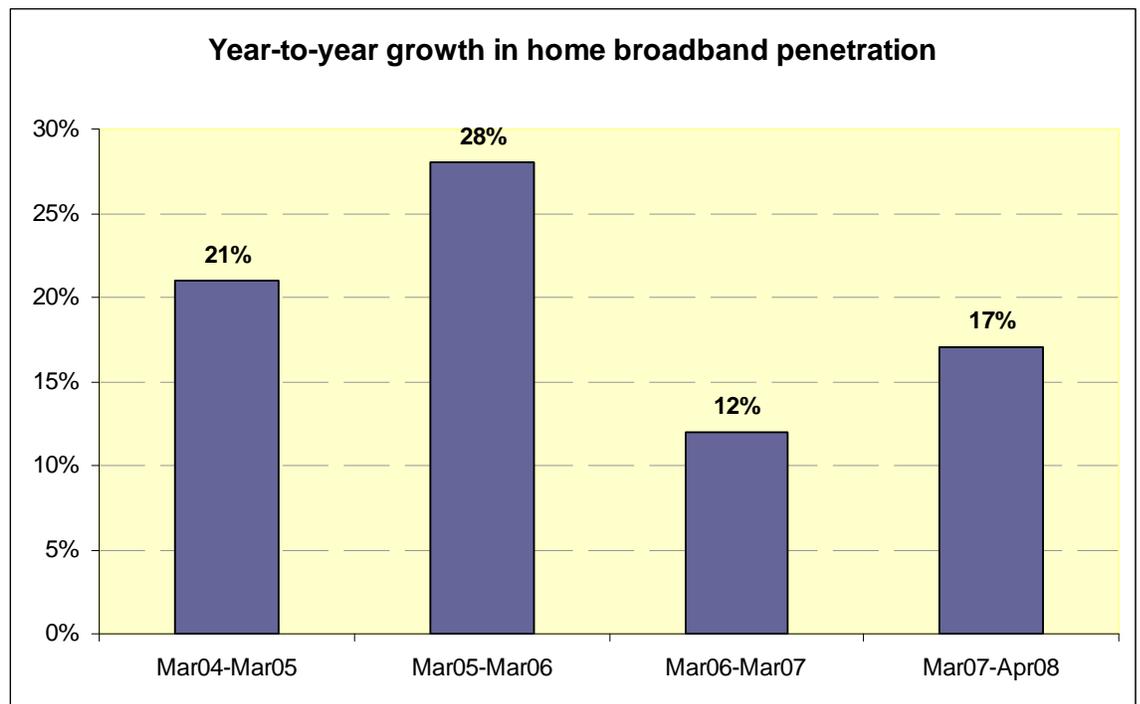
About Princeton Survey Research Associates: PSRA conducted the surveys that are covered in this report. It is an independent research company specializing in social and policy work. The firm designs, conducts, and analyzes surveys worldwide. Its expertise also includes qualitative research and content analysis. With offices in Princeton, New Jersey, and Washington, D.C., PSRA serves the needs of clients around the nation and the world. The firm can be reached at 911 Commons Way, Princeton, NJ 08540, by telephone at 609-924-9204, by fax at 609-924-7499, or by email at [ResearchNJ@PSRA.com](mailto:ResearchNJ@PSRA.com)

# Part 1.

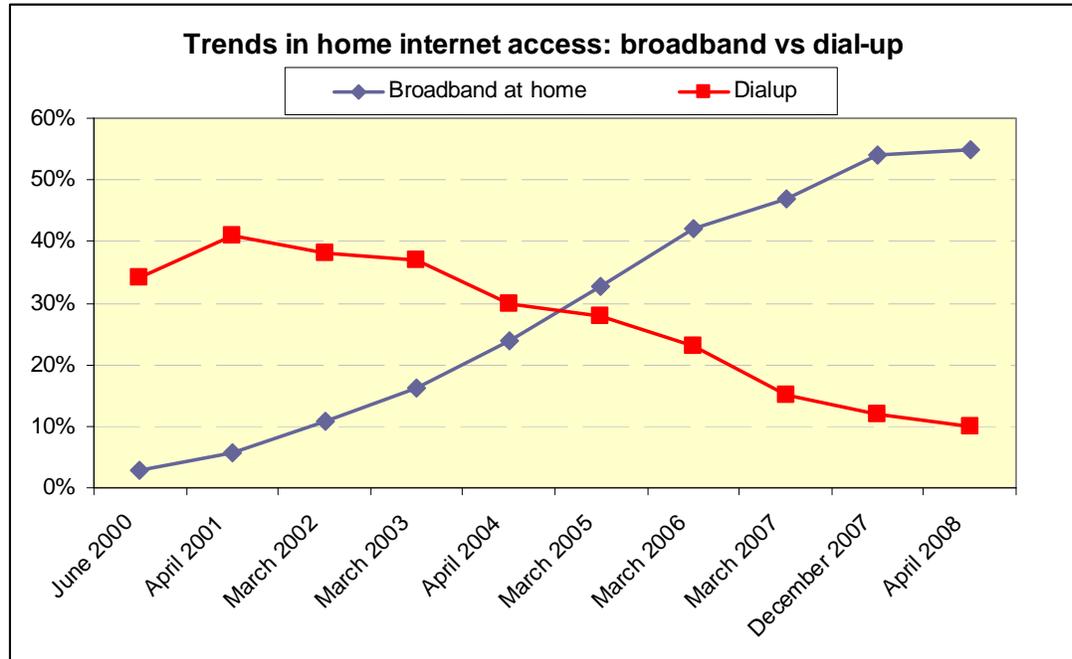
## Broadband Adoption in the United States

Broadband adoption in the United States continues to exhibit steady growth, with 17% more American adults having broadband at home in April 2008 than was the case roughly a year earlier. Fully 55% of Americans reported having a high-speed internet connection at home in our April survey, up from 47% in March 2007. The share of Americans with broadband at home in our April 2008 survey is little changed from the 54% of Americans who said they had broadband at home in our December 2007 survey.

The chart below shows growth rates in broadband adoption in recent years.



This highpoint in our surveys for home broadband adoption also marks a low in the use of dial-up as a way to access the internet. Just 10% of American adults say they use dial-up internet connections at home to go online.



Although growth in broadband adoption from 2007 to 2008 was comparable to the 2006-2007 timeframe, the sources of recent growth differ from prior years. Over the past year, growth in broadband adoption at home was strong among lower-middle income Americans, and those over the age of 50. However, several groups that had shown strong rates of broadband uptake in past years slowed in the 2007-2008 timeframe. Specifically:

- **Low-income Americans** – defined as those who say their annual household incomes are \$20,000 or below. This group showed a change in adoption from 28% in 2007 to 25% in 2008. This recorded decline in broadband adoption is within the margin of error for the surveys, suggesting that adoption was basically flat in this group. Some 14% of the sample reported having an annual household income at \$20,000 or less.
- **African Americans:** The share of African-Americans with broadband at home increased from 40% to 43% from 2007 to 2008. This change is also within the margin of error for the surveys, suggesting little or no growth in broadband adoption for African Americans from 2007 to 2008.
- **Urban dwellers:** Although 57% of those in urban areas have broadband at home, this represented a growth of 10% from the 2007 level.
- **Upper-income Americans:** Among those living in households with annual incomes in excess of \$100,000, broadband adoption grew from 82% to 85% from 2007 to 2008. This is a modest 4% growth rate at penetration levels nearing saturation.

<b>Trends home broadband adoption by group</b>				
( % in each group with broadband at home)				
	% with broadband at home (2005)	% with broadband at home (2006)	% with broadband at home (2007)	% with broadband at home (2008)
<b>Yearly adoption</b>				
All adults	33%	42%	47%	55%
<b>Gender</b>				
Male	31	45	50	58
Female	27	38	44	53
<b>Age</b>				
18-29	38	55	63	70
30-49	36	50	59	69
50-64	27	38	40	50
65+	8	13	15	19
<b>Race /ethnicity</b>				
White (not Hispanic)	31	42	48	57
Black (not Hispanic)	14	31	40	43
Hispanic (English speaking)	28	41	47	56
<b>Educational attainment</b>				
Less than high school	10	17	21	28
High school grad	20	31	34	40
Some college	35	47	58	66
College +	47	62	70	79
<b>Household income</b>				
Under \$20K	13	18	28	25
\$20K-\$30K	19	27	34	42
\$30K-\$40K	26	40	40	49
\$40K-\$50K	28	47	52	60
\$50K-\$75K	35	48	58	67
\$75K-\$100K	51	67	70	82
Over \$100K	62	68	82	85
<b>Community type</b>				
Urban	31	44	52	57
Suburban	33	46	49	60
Rural	18	25	31	38

**Sources:** 2005 data come from the Pew Internet Project's combined January-March tracking survey of 4,402 adults; 1,265 were home broadband users.

2006 data come from the Pew Internet Project's February 15 through April 6 survey of 4,001 adults; 1,562 were home broadband users.

2007 data are drawn from our March survey of 2,200 adults; 966 were home broadband users.

2008 data are from our April-May of 2008 survey of 2,251 adults; 1,153 were home broadband users.

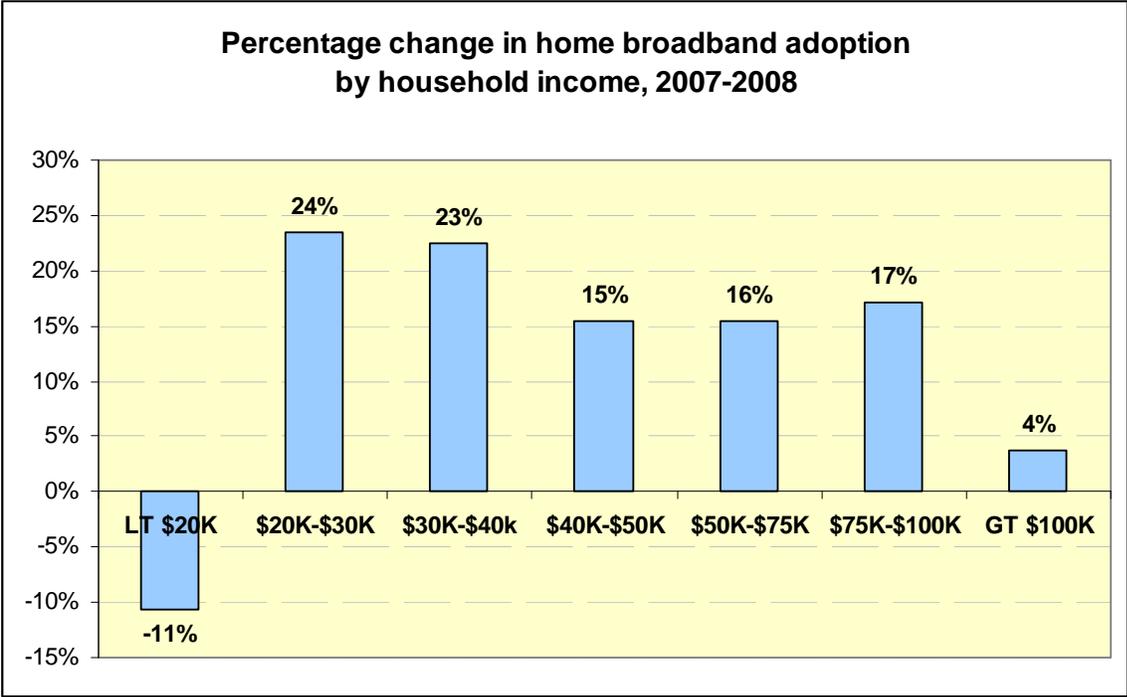
These slow or flat growth rates were compensated by faster growth in broadband adoption in two sizable (and not mutually exclusive) groups of Americans:

- **Older Americans:** Respondents age 50 and over, which make up 43% of the entire sample, reported a 26% growth in broadband adoption from 2007 to 2008. Half (50%) of those in the 50 through 64 age bracket had broadband at home by April 2008 and 19% of senior citizens (those 65 and older) did.
- **Suburban and Rural Americans:** These two regions – two-thirds of the adult population – registered a 22% increase in broadband adoption from 2007 to 2008. Fully 60% of suburbanites and 38% of rural residents reported having broadband at home in our 2008 survey.

It is also worth noting that some 28% of respondents who have not completed high school said they have broadband at home in 2008, a 33% increase relative to 2007. This growth rate applies to a group that made up 13% of the sample.

<b>Year-to-year changes, 2007-2008</b>		
	percentage point change, 2007-2008	percent change, 2007-2008
<b>Gender</b>		
Male	+8	16%
Female	+9	20%
<b>Age</b>		
18-29	+7	11%
30-49	+10	17%
50-64	+10	25%
65+	+4	27%
<b>Race/ethnicity</b>		
White (not Hispanic)	+9	19%
Black (not Hispanic)	+3	8%
Hispanic (English speaking)	+9	19%
<b>Education</b>		
Less than high school	+7	33%
High school grad	+6	18%
Some college	+8	14%
College +	+9	13%
<b>Household income</b>		
Under \$20K	-3	-11%
\$20K-\$30K	+8	24
\$30K-\$40K	+9	23
\$40K-\$50K	+8	15
\$50K-\$75K	+9	16
\$75K-\$100K	+12	17
Over \$100K	+3	4
<b>Region</b>		
Urban	+5	10%
Suburban	+11	22%
Rural	+7	23%
<i>Source: Pew Internet &amp; American Life Project Surveys.</i>		

The chart below displays the growth rates from 2007 to 2008 across the disaggregated income categories. The figures at either end of the income distribution show poor performance among low income Americans and little growth among upper income Americans; broadband adoption grew from 82% to 85% from 2007 to 2008 in households with annual incomes above \$100,000. Broadband adoption is approaching a saturation point for upper income Americans.

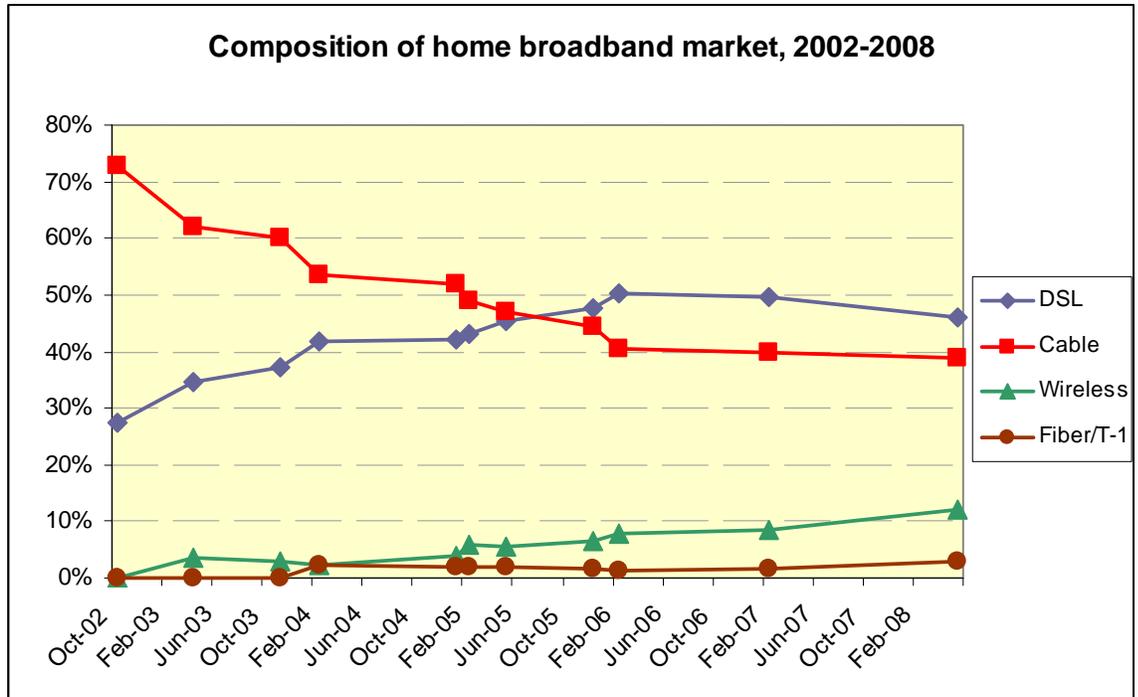


Many respondents do not tell us what their income is, but they do share whether they have high-speed connections at home. Among the roughly 20% of respondents who refuse to answer the income question, 34% had broadband connections at home in 2007; for respondents from our 2008 survey who did not provide information on income 41% had broadband at home. This is a growth rate of 21% from 2007 to 2008.<sup>1</sup>

**Fixed wireless has greater role in the home broadband market.**

When asking people about their online connection speed, the survey question reads: “Does the computer you use at home connect to the internet through a dial-up telephone line, or do you have some other type of connection, such as a DSL-enabled phone line, a cable TV modem, a wireless connection, or a T-1 or fiber optic connection?” This yields not only whether people have broadband connections at home, but also the type of connection they use.

<sup>1</sup> Although it is hard to precisely impute the income levels of those who refuse to answer our survey question on income, the relatively low level of broadband adoption in this group, suggests a sizeable share is in the lower income ranges.



DSL providers maintain an edge in the home broadband market, with 46% of home broadband users saying they subscribe to DSL and 39% saying they have cable modem service. As a home high-speed connection, wireless has also increased its presence – from next to nothing in 2002 up to 12% of the home broadband market as of May 2008.

A handful (2%) of home broadband users has fiber optic connections.

Our May 2008 survey marked the first time respondents were asked whether they have fiber optic connections to the internet in their homes. Providers such as Verizon, with its FiOS service, have been marketing such connections that promise much faster upload and download speeds than DSL or cable. In the April 2008 survey, 2% of home broadband users said they had a fiber optic connection to the internet.

**A few suburban broadband users are starting to get fiber at home, while some rural broadband users rely on satellite for broadband.**

When comparing the type of broadband connections users choose by the kinds of places people live, some rural users rely on satellite – perhaps because they lack wired infrastructure where they live. By contrast, 4% of suburban broadband users say they have fiber to the home – and this makes up the strong majority of all fiber connections at home reported by respondents in this survey.

<b>Broadband connection and places people live</b> (% of those with broadband at home)				
	DSL	Cable	Fixed wireless or satellite	Fiber
<b>Urban</b>	45%	37%	10%	1%
<b>Suburban</b>	42	37	10	4
<b>Rural</b>	42	32	16	*
<i>Source: Pew Internet &amp; American Life Project Surveys.</i>				

Note that in the chart with aggregate trends in connection type, the lowest line combines T-1 and fiber optic connections reported by users. In the “fiber” column in the table above, figures show only the percentage in each category who specifically said they have a fiber optic connection at home.

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### **Broadband is 4% cheaper than in 2005.**

In the past, our surveys have asked what people pay per month for internet access; we last did this in December 2005. The April 2008 survey had different question wording to reflect that some people have internet service bundled with phone or cable service and, if so, most likely have a single bill for several services. Thus, the question wording in the April 2008 survey was:

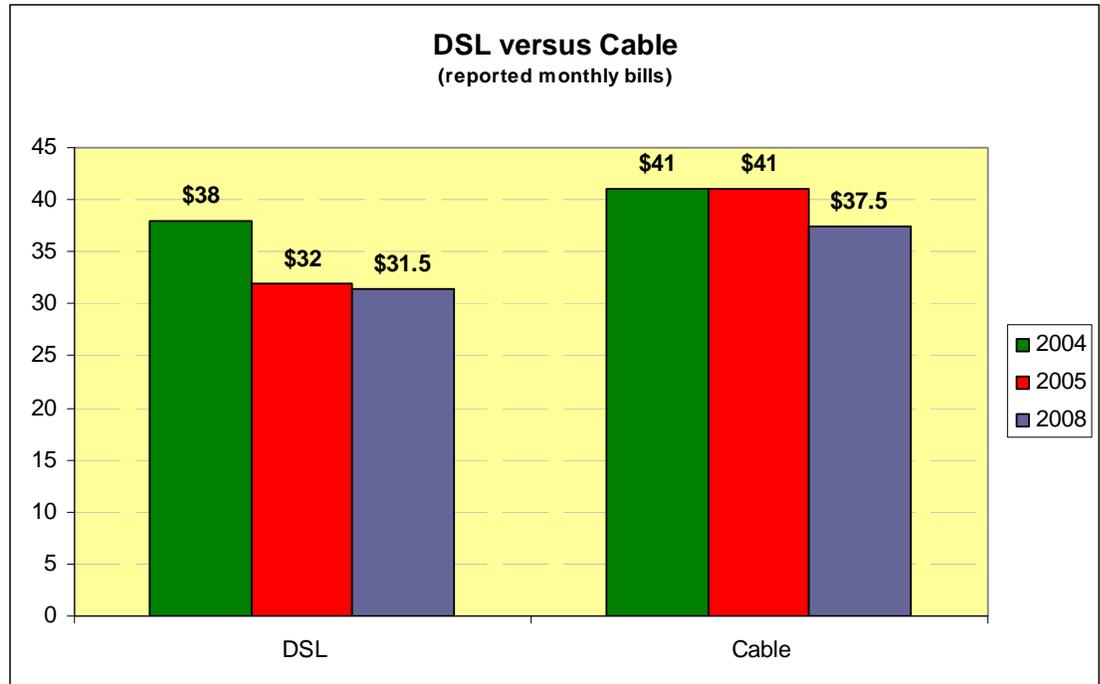
“To the nearest dollar, about how much do you pay each month for internet access at home? If your internet access is combined with television or other services, I would like to know just the amount you pay for internet service.”

Overall, home broadband users reported that their monthly payment for internet service was \$34.50 – 4% less than the figure of \$36 per month reported in December 2005.<sup>2</sup> This decline in monthly broadband bills is half the rate (8%) reported over the February 2004 to December 2005 timeframe.

As in 2005, there is a gap in what people pay for cable modem service compared to DSL, although it is narrower today than a few years ago. In December 2005, cable modem users reported monthly bills of \$41 for service, while DSL users said they paid \$32 per month for service. In May 2008, DSL users reported monthly internet access bills of \$31.5 and cable modem users said they paid \$37.5 for service, or an average difference of \$6.

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<sup>2</sup> The difference in average monthly broadband bills reported in the December 2005 and April 2008 surveys is statistically significant.



For dial-up users, the story was different. Their monthly access bill was \$19.70 – 9% higher than the figure of \$18 that dial-up users reported in December 2005.

---

### Some broadband users pay for premium services.

One possible reason that users' monthly broadband bills did not fall as fast from 2005 to 2008 as was the case in the 2004-05 interval is the existence of pricier premium service. Most (54%) of broadband users say they subscribe to basic broadband service, but nearly one-third (29%) say they subscribe to a premium service at a higher price. The survey specifically asked users whether they subscribe to a basic broadband service or if they pay extra for a premium service that promises faster speed.<sup>3</sup>

Here is how monthly costs differ for premium versus non-premium services:

- Subscribers to a premium broadband service report a monthly bill of \$38 for their internet service.
- Subscribers to basic home broadband service report a monthly bill of \$33 for their internet service.

---

### People are likely to cite faster access speeds as the thing they like most about broadband, but few people actually know the speed of their connections.

<sup>3</sup> Note that this survey did not ask whether respondents subscribe to a “triple play” of services, i.e., phone, internet, and premium TV from the same vendor.

Broadband users clearly like the faster access to content on the internet that their home high-speed connection affords them. When asked what they like *most* about having a broadband connection, 75% of home high-speed users cited faster access or greater speed. Other uses cited as the feature valued most included the “always on” connection (cited by 6% of broadband users), convenience (5%), job-related tasks (4%), downloading files of all types (3%), and finding educational materials (2%).

This is not to say that broadband users don’t value specific applications listed above (and others such as gaming and entertainment) that a high-speed connection enables. It is just that the broad notion of faster access speeds came to mind most often for respondents.

## Part 2.

### Analysis of Non-Broadband Users

With more than half of Americans now with broadband and the number of dial-up users dwindling, it is worth asking those still going without broadband at home. The reasons why many Americans don't have broadband fall into several non-mutually exclusive categories:

- They don't want broadband.
- They can't afford broadband.
- They can't get broadband where they live.
- They aren't internet users.
- They don't see the upside to modern information technology.

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#### Some 62% of dial-up users say they aren't interested in switching to broadband.

The April 2008 survey repeated a question posed several times in the past that asked dial-up user if they would like to have a faster broadband connection – or whether that is something they are not interested in. Just more than one-third (36%) say they would be interested in a switch, with 62% saying they would not be interested in changing to broadband. This figure hasn't changed much since October 2002.

Interest in switching to broadband (% of dial-up users)				
	October 2002	February 2004	December 2005	May 2008
<b>Yes, interested in broadband</b>	38%	40%	39%	36%
<b>No, not interested</b>	57	58	60	62
<b>% of all Americans with dial-up at home</b>	38	30	25	10
<i>Source: Pew Internet &amp; American Life Project Surveys.</i>				

The roughly 60% of dial-up users consistently saying they are not interested in broadband, in the face of the shrinking pool of dial-up users, suggests that the preferences of dial-up users change over time. That is, assuming that many of those interested in getting broadband switched over to it from December 2005 to May 2008, some of those who said they were *not interested* in broadband in 2005 replenished the supply of “yes,

interested in broadband” responses in order to maintain the 40-60 ratio of those interested in broadband versus the uninterested.

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### **Many dial-up users say that they can’t afford broadband.**

When pressed as to what might lure them into the ranks of home high-speed users, a plurality of dial-up respondents cited price. One-third (35%) of dial-up users said that they would switch to broadband if the price became more affordable and, as noted above, there remains a sizable gap in what dial-up users pay monthly for online access and what broadband users pay.

<p><b>Affordability matters:</b> 35% of dial-up users say they would switch to broadband if the price fell.</p>
---

Dial-up users, as a group, are older and less well-off economically than their broadband counterparts: 29% of dial-up users live in households with annual incomes below \$30,000 compared to 14% of broadband users in that income range. Some 43% of dial-up users are age 50 or older versus 29% for broadband users.

Finally, it is worth noting that dial-up users are disproportionately female and inhabitants of rural areas. Some 61% of dial-up users are women and 30% live in rural areas (compared to 13% of all broadband users in rural America).

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### **Lack of broadband availability looms in the mind of some dial-up users.**

Some dial-up users cite lack of availability as a reason they don’t switch to broadband. When asked what it would take to switch to broadband, one in seven (14%) dial-up users said they would make the change if it became available where they live or if their cable or phone company offered the service.

When both dial-up and non-internet users are asked generally whether “high-speed internet service is available in your neighborhood from a telephone company, cable company or any other company,” one-quarter (24%) say “no” and 13% respond that they do not know if it is available.

Whether framed in general terms to all non-broadband users or more narrowly only to dial-up users about whether availability is a barrier to switching, users’ respondents must be interpreted in the proper context. Users may report incorrectly about whether broadband is available where they live; in fact, broadband service is available everywhere a home can receive a satellite signal, although such service is typically more costly than and not as fast as DSL or cable service. Non-internet users in particular may be unreliable sources for information about the availability of a technology they do not use.

Nonetheless, the fact that rural residents are more likely to report that broadband isn't available where they live indicates that infrastructure availability comes into play in broadband adoption. Some 28% of rural adult Americans without home high-speed say broadband isn't available where they live, in contrast to 22% of non-rural Americans without broadband who say this.

Moreover, 24% of dial-up users in rural areas say having the service available where they live would prompt a switch to broadband; this compares to the 14% figure for all respondents.

---

### **Non-internet users – one-quarter of adults – represent the largest group of those without broadband.**

Our April 2008 survey recorded 73% of American adults as internet users, meaning 27% of adults in the United States do not use the internet. Age and income are two factors that stand out when looking at non-internet users.

- 43% of non-internet users are over the age of 65 or, put differently, 65% of senior citizens do not use the internet.
- 43% of non-internet users have household incomes under \$30,000 per year.

Although these demographic and socio-economic factors are powerful forces keeping some people off the net, many non-users are not completely disconnected from cyberspace.<sup>4</sup> Some 21% of non-users say that someone in their household uses the internet at home. And one-fifth of non-users at one time use the internet; 18% of non-users said they had been in the past, and 10% of non-users said they would be interested in using the internet again.

33% of non-internet users say they are not interested in the internet.
--

Still, one-third (33%) of non-internet users say they are simply not interested in the internet, with another 12% saying they don't have access. Some 9% of non-users say the internet is too difficult or frustrating for them and just 7% say it is too expensive.

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### **Attitudes about information technology shape the broadband choice.**

As the preceding discussion shows, socio-economic and demographic factors play large roles in explaining whether someone has broadband or not. Upper-income Americans are more than three times more likely to have broadband than low-income Americans to have broadband at home. Similarly, young adults are far more likely than senior citizens to have broadband at home.

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<sup>4</sup> Data reported in this paragraph and the next come from the Pew Internet Project's November 2007 survey of 2,054 Americans.

The following table presents a demographic profile of online users versus non-internet users and clearly shows difference among these groups, as non-users are older and less wealthy than home dial-up or broadband users.

<b>Demographic profiles: home broadband, dial-up, and non-internet users</b>			
The proportion of internet users who have certain demographic traits			
	Home Broadband	Home Dial-up	Non-internet users
<b>Gender</b>			
Male	50%	39%	47%
Female	50	61	52
<b>Age</b>			
18-29	23	21	7
30-49	46	35	21
50-64	23	28	29
65+	6	16	43
<b>Median Age</b>	<b>40</b>	<b>45</b>	<b>61</b>
<b>Race/ethnicity</b>			
White (not Hispanic)	73	75	68
Black (not Hispanic)	8	9	17
Hispanic (English speaking)	10	14	7
<b>Education</b>			
Less than high school	7	7	28
High school grad	26	44	49
Some college	28	30	14
College +	40	19	9
<b>Income</b>			
Under \$20K	9	13	29
\$20K-\$30K	8	16	14
\$30K-\$40K	8	15	9
\$40K-\$50K	9	9	6
\$50K-\$75K	15	14	7
\$75K-\$100K	17	9	2
Over \$100K	22	9	3
<b>Community type</b>			
Urban	13	23	29
Suburban	56	47	45
Rural	31	30	26
Number of cases	1,153	249	698
<i>Source: Pew Internet &amp; American Life Project Survey, May 2008.</i>			

As powerful as these associations are, they are not the only things at play in broadband adoption decisions. People’s attitudes about information technology are also important. An older person may love to tinker with technology and enjoy the “always on” information pipeline that broadband offers. A person in a low-income household may be willing to allocate scarce discretionary funds to broadband – if he feels the connectivity offers something of value.

A question asked in a November 2007 survey about how people view the benefits to personal productivity from information technology shows the role attitude can play in connection choices. The survey asked respondents to say how strongly they agree with the following statement: “I believe I am more productive because of all of my electronic devices.”

Personal Productivity and Gadgets				
	Very well	Somewhat well	Not too well	Not well at all
<b>Broadband at home</b>	35%	32%	12%	20%
<b>Dial-up at home</b>	19	27	22	32

*Source: Pew Internet & American Life Project Survey, November 2007.*

A majority (67%) of broadband users view electronic devices, to some extent, as an aid to personal productivity, while a minority of dial-up users (46%) sees modern gadgetry in this way.

This is not to say that views on information and communication technology are the sole, or even primary, driver of the broadband choice. Some dial-up respondents may have lifestyles for which information technology might not have much to do with personal productivity. Nonetheless, even when controlling for the number of information devices a person may have and other factors, there is a significant correlation between attitudes about information technology and people’s choice of connection speed.<sup>5</sup>

This suggests that people’s age and income are not the only things behind the broadband choice. How people view the productive potential of information technology is also relevant – and not everyone sees this potential in the same way.

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### **Few dial-up users take advantage of high-speed wireless connections to the internet.**

With just more than one-third of broadband users saying they would like to get broadband, one might expect some to look for ways to connect via high-speed outside the house. As noted, 25% of all adults (or 34% of internet users) have gotten online away from home or work using a laptop and a WiFi wireless connection.

However, the practice of using WiFi connections away from home or work for online access is mainly the province of home broadband users. Some 40% of home broadband users have done this compared with 12% of those who use dial-up to go online from home. Put differently, 95% of those who say they have used a WiFi connection to go online are home broadband users.

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<sup>5</sup> A logistic regression model was used to estimate, from the sample of internet users, the probability that a respondent was a broadband or dial-up user. The expected socio-economic factors, such as age and income, were strongly associated with having broadband. However, people’s attitudes about electronic devices and personal productivity were also significantly correlated with having broadband. That is, those who view gadgets as contributing to their productivity were more likely to have broadband, even when controlling for demographic factors and other measures of technology assets (e.g., having a cell phone, MP3 player, a laptop computer, and other gadgets).

WiFi is not the only wireless means of accessing the internet. Increasingly, handheld devices such as cell phones or personal digital assistants (such as Blackberries or iPhones) offer a pathway to the web. Some 39% of internet users say they have used a handheld device to go online – the figure is 41% for home broadband users and 36% for home dial-up users. Given the dwindling number of home dial-up users, this means that some 86% of those who use a handheld to access the internet are broadband users.

Although some cell phone networks today are capable of transmission rates of 200 kilobits per second (the FCC-defined threshold for a “first generation” broadband), it is difficult, if not impossible, to determine how many.<sup>6</sup> And even 3G services that might reach 700 kps are below the threshold for “basic broadband” service.<sup>7</sup> These figures suggest that the few dial-up users who do connect to the internet with a handheld device are experiencing fast speeds, so that handheld online access cannot be seen as a substitute for having a high-speed internet connection at home.

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<sup>6</sup> The current 2.5 generation mobile network, known as EDGE, can receive data at up to 230 kps. The 3G successor, currently being rolled out, has speeds between 400 kps and 700 kps. See “Ripe for Picking” on *The Economist’s* Tech View blog at: [http://www.economist.com/research/articlesbysubject/displaystory.cfm?subjectid=7933610&story\\_id=11559971](http://www.economist.com/research/articlesbysubject/displaystory.cfm?subjectid=7933610&story_id=11559971)

<sup>7</sup> See “FCC redefines ‘broadband’ to mean 768Kps,” Engadget, March 19, 2008. Available online at: <http://www.engadget.com/2008/03/19/fcc-redefines-broadband-to-mean-768kbps-fast-to-mean-kinda/>.

## Part 3.

### The Online Behavior of Broadband Users

Research by the Pew Internet Project in 2002 showed how the “always on” broadband connection at home opens the door to deeper engagement with the internet.<sup>8</sup> Early broadband adopters did a wider range of activities online and more frequently than the then-majority of dial-up users. This was to be expected from upscale early adopters, as many no doubt got broadband at home because they had high demand for digital information.

However, this pattern of more intense of online resources among broadband users continued as the technology disseminated more widely. For news consumption, for instance, high-speed connections tend to draw users (especially young ones) away from traditional as print newspapers and to the internet for news.<sup>9</sup> The broadband pull, in other words, runs both ways. Those with high demand for internet applications get fast connections and do more with them. It is also true that many who get broadband at home are drawn to online alternatives available with their “always on” connection, sometimes as a substitute for offline resources.

The technology to access the internet has evolved since broadband first began to make inroads among consumers. WiFi technology allows users high-speed wireless access to the internet, typically using a laptop computer, although a range of handheld devices increasingly can connect to cyberspace using WiFi. Additionally, broadband providers no longer simply offer a fast online connection. Premium services offer higher speeds for those willing to pay.

This section examines the online behaviors of those who pay for premium broadband services at home or use laptops to connect to the internet with WiFi. Whereas having a broadband connection was once the marker of deeper engagement with cyberspace, now other access options are associated with heavier use of cyberspace.

#### Premium services

The April 2008 survey asked whether home broadband users “pay extra for a premium service that promises faster speed.” Here’s what home broadband users said:

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<sup>8</sup> John B. Horrigan, *The Broadband Difference: How online Americans' behavior changes with high-speed Internet connections at home*. Pew Internet & American Life Project, June 2002. Available online at: [http://www.pewinternet.org/PPF/r/63/report\\_display.asp](http://www.pewinternet.org/PPF/r/63/report_display.asp).

<sup>9</sup> John B. Horrigan, *Online News: For many home broadband users, the internet is a primary news source*. Pew Internet & American Life Project, March 2006. Available online at: [http://www.pewinternet.org/report\\_display.asp?r=178](http://www.pewinternet.org/report_display.asp?r=178).

- 54% of home broadband users say they subscribe to basic service.
- 29% subscribe to a premium service at a higher price.
- 16% say they don't know.

### **“On the go” access**

Our report “Mobile Access to Data and Information” found that, as of December 2007, 41% of adult Americans had accessed the internet from someplace other than home or work using a wireless laptop connection or a handheld device such as a cell phone or personal digital assistant.<sup>10</sup> Narrowing the set of “on the go” users only to those who have accessed the internet using a laptop computer and a wireless connection, the December 2007 survey showed that 27% of American adults had used this means to go online.

Our April 2008 survey shows a similar level of wireless online access using a laptop computer, with 25% of Americans saying they had done this – statistically indistinguishable from the December survey. This comes to 34% of internet users who have logged on using a WiFi connection and a laptop away from home or work.

Most of the time, this wireless access occurs in public places; some 58% of those who have connected to the internet in a place other than home or work using a wireless laptop connection say they use access points in airports, coffee shops, or restaurants. Among those using WiFi in public places, 64% say they mostly use free WiFi services, 4% say they mostly pay for such services, with the remainder (32%) saying they use a mix of free and paid services.

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### **Those who subscribe to premium services or use WiFi away from home or work to access the internet do more online.**

Similar to the technique employed in past reports on broadband adoption, the analysis below examines whether intensity of online use differs for “on the go” and premium service users relative to all broadband users. The survey queried online users about 14 different online activities and the analysis below examines whether the different classes of users do a greater range of online activities than home broadband users as a whole.

Although home broadband and dial-up users are mutually exclusive, there is overlap between those who have connected to the internet “on the go” with a WiFi-enabled laptop and those who pay for premium broadband service at home. Some 13% of home broadband users say they have both logged on “on the go” with using WiFi and a laptop and pay for premium broadband service at home.

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<sup>10</sup> John B. Horrigan, *Mobile Access to Data and Information..* Pew Internet & American Life Project, March 2008. Available online at: [http://www.pewinternet.org/PPF/r/244/report\\_display.asp](http://www.pewinternet.org/PPF/r/244/report_display.asp).

<b>Online Activities: Share of users in each category who have ever done listed activity</b>					
	All internet users	Dial-up at home	Broadband at home (all respondents)	Accessed internet away from home or work using WiFi on laptop computer	Pays for premium home broadband services
Use an online search engine	89%	80%	94%	95%	95%
Check weather reports and forecasts	80	75	84	88	84
Get news online	73	61	80	86	88
Visit a state or local government website	66	55	72	78	76
Look online for information about the 2008 election	55	37	62	70	70
Watch a video on a video-sharing site like YouTube or GoogleVideo	52	29	60	69	67
Look online for information about a job	47	36	50	59	56
Send instant messages	40	38	44	53	48
Read someone else's blog	33	15	40	42	45
Use a social networking site like MySpace, Facebook, or LinkedIn.com	29	21	33	38	41
Make a donation to charity online	20	9	23	28	27
Downloaded a podcast	19	8	22	31	28
Download or share files using peer-to-peer networks such as BitTorrent or LiveWire	15	15	17	21	20
Create or work on your own blog	12	8	15	19	19
Number of cases	1,553	249	1,138	504	306
<i>Source: Pew Internet &amp; American Life Project Survey, April 2008.</i>					

The following table reports responses to questions that ask respondents if they “yesterday” did a specific activity. This yields a portrait of what users in a specific category do on a typical day online.

<b>Online Activities: Share of users in each category who do listed activity on the <u>typical</u> day</b>					
	All internet users	Dial-up at home	Broadband at home (all respondents)	Accessed internet away from home or work using WiFi on laptop computer	Pays for premium home broadband services
Use an online search engine	49	26%	57%	68%	61%
Check weather reports and forecasts	30	14	36	44	42
Get news online	39	18	47	54	33
Visit a state or local government website	13	4	16	20	19
Look online for information about the 2008 election	23	10	27	33	34
Watch a video on a video-sharing site like YouTube or GoogleVideo	16	5	20	28	23
Look online for information about a job	6	4	6	10	5
Send instant messages	13	6	16	23	19
Read someone else's blog	11	3	15	17	16
Use a social networking site like MySpace, Facebook, or LinkedIn.com	13	7	16	20	21
Make a donation to charity online	1	0	2	2	1
Downloaded a podcast	3	1	4	6	6
Download or share files using peer-to-peer networks such as BitTorrent or LiveWire	3	2	3	4	5
Create or work on your own blog	5	3	6	9	8
Number of cases	1,553	249	1,138	504	306
<i>Source: Pew Internet &amp; American Life Project Survey, April 2008.</i>					

The following table summarizes the relative intensity of the different classes of users based using the average and median for the total number of activities users do out of the 14 listed – both for the total ever done and the total done on the typical day.

Summary of online activities across user classes					
	All internet users	Dial-up at home	Broadband at home (all respondents)	Accessed internet away from home or work using WiFi on laptop computer	Pays for premium home broadband services
Mean number of activities ( <u>ever</u> )	6.2	4.8	6.7	7.6	7.4
Median number of activities ( <u>ever</u> )	6	5	7	8	7
Mean number of activities ( <u>typical day</u> )	2.2	1.0	2.6	3.3	3.1
Median number of activities ( <u>typical day</u> )	2	0	2	3	3
Number of cases	1,553	249	1,138	504	306

**Source:** *Pew Internet & American Life Project Survey, April 2008.*

Premium service and “on the go” users are more intense users of the internet, as measured by scope of online activities ever done or engaged in on the typical day. When focusing on the mean number of online activities people do on the average day, “on the go” users are 26% more active than the average for broadband users. Those who have a premium service at home are 19% more active than the average for home broadband users. The higher levels of “typical day” use as measured by the median (or middle user) suggests the differences are broadly important.<sup>11</sup>

None of this is a surprise; in one instance, users have an additional on ramp to the internet with a wireless connection and in the other they have a faster one, as they say they pay for faster premium service.

At the same time, the results are evidence of a link between new ways of access and deeper engagement with the internet. In particular, the sizable share of internet users who have connected to the internet with a WiFi-enabled laptop have added “always connected” wireless access to their “always on” broadband connection.

As to the demographic profiles of these two classes of internet users, the table below shows that they are younger and better educated than average.

<sup>11</sup> The higher median values indicates that the larger mean (or average) values for the “typical day” activities is not due to a small number of premium or “on the go” users doing far more online than other users. If, for instance, a few premium users were doing a lot more than other broadband users, the average may be higher, but the “middle user” might not be different across groups.

<b>Demographic profiles</b>		
	Those who use WiFi away from home or work	Those who pay for premium broadband service
<b>Gender</b>		
Male	53%	52%
Female	47	48
<b>Age</b>		
18-29	28	25
30-49	48	50
50-64	20	22
65+	4	4
<b>Median age</b>	<b>38</b>	<b>39</b>
<b>Race/ethnicity</b>		
White (not Hispanic)	74	71
Black (not Hispanic)	9	11
Hispanic (English speaking)	11	12
<b>Educational attainment</b>		
Less than high school	6	7
High school grad	19	22
Some college	26	27
College +	49	44
<b>Income</b>		
Under \$20K	6	2
\$20K-\$30K	6	9
\$30K-\$40K	6	6
\$40K-\$50K	8	11
\$50K-\$75K	15	16
\$75K-\$100K	17	19
Over \$100K	25	25
<b>Community type</b>		
Urban	32	32
Suburban	54	57
Rural	15	11
Number of cases	504	306
<i>Source: Pew Internet &amp; American Life Project Survey, April 2008.</i>		

# Methodology

This report is based on the findings of a daily tracking survey on Americans' use of the Internet. The results in this report are based on data from telephone interviews conducted by Princeton Survey Research Associates International between April 8 to May 11, 2008, among a sample of 2,251 adults, 18 and older. For results based on the total sample, one can say with 95% confidence that the error attributable to sampling and other random effects is plus or minus 2.4 percentage points. For results based Internet users (n=1,553), the margin of sampling error is plus or minus 2.8 percentage points. In addition to sampling error, question wording and practical difficulties in conducting telephone surveys may introduce some error or bias into the findings of opinion polls.

The sample for this survey is a random digit sample of telephone numbers selected from telephone exchanges in the continental United States. The random digit aspect of the sample is used to avoid "listing" bias and provides representation of both listed and unlisted numbers (including not-yet-listed numbers). The design of the sample achieves this representation by random generation of the last two digits of telephone numbers selected on the basis of their area code, telephone exchange, and bank number.

New sample was released daily and was kept in the field for at least five days. The sample was released in replicates, which are representative subsamples of the larger population. This ensures that complete call procedures were followed for the entire sample. At least 10 attempts were made to complete an interview at sampled households. The calls were staggered over times of day and days of the week to maximize the chances of making contact with a potential respondent. Each household received at least one daytime call in an attempt to find someone at home. In each contacted household, interviewers asked to speak with the youngest male currently at home. If no male was available, interviewers asked to speak with the youngest female at home. This systematic respondent selection technique has been shown to produce samples that closely mirror the population in terms of age and gender. All interviews completed on any given day were considered to be the final sample for that day.

Non-response in telephone interviews produces some known biases in survey-derived estimates because participation tends to vary for different subgroups of the population, and these subgroups are likely to vary also on questions of substantive interest. In order to compensate for these known biases, the sample data are weighted in analysis. The demographic weighting parameters are derived from a special analysis of the most recently available Census Bureau's March 2007 Annual Social and Economic Supplement. This analysis produces population parameters for the demographic characteristics of adults age 18 or older, living in households that contain a telephone. These parameters are then compared with the sample characteristics to construct sample weights. The weights are derived using an iterative technique that simultaneously balances the distribution of all weighting parameters.

Following is the full disposition of all sampled telephone numbers:

<b>Table 1: Sample Disposition</b>	
22,996	Total Numbers Dialed
1,396	Business / Government
1,250	Computer/Fax
8	Cell phone
8,577	Other Not-Working
1,595	Additional projected NW
10,171	Working numbers
44.2%	Working Rate
474	No Answer
58	Busy
821	Answering Machine
100	Other Non-Contact
8,718	Contacted numbers
85.7%	Contact Rate
209	Callback
5,610	Refusal 1 - Refusal before eligibility status known
2,899	Cooperating numbers
33.3%	Cooperation Rate
356	Language Barrier
2,543	Eligible numbers
87.7%	Eligibility Rate
292	Incomplete
2,251	Complete
88.5%	Completion Rate
25.2%	Response Rate

PSRAI calculates a response rate as the product of three individual rates: the contact rate, the cooperation rate, and the completion rate. Of the residential numbers in the sample, 86 percent were contacted by an interviewer and 33 percent agreed to participate in the survey. Eighty-eight percent were found eligible for the interview. Furthermore, 89 percent of eligible respondents completed the interview. Therefore, the final response rate is 25 percent.