

**Before the  
COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF TELECOMMUNICATIONS AND CABLE**

No. D.T.C 11-16

**PETITION OF REIPIENTS OF COLLECT CALLS FROM  
PRISONERS AT CORRECTIOANL INSTITUTIONS IN MASSACHUSETTS  
SEEKING RELIEF FROM  
THE UNUST AND UNREASONABLE COST OF SUCH CALLS**

---

**SECOND AFFIDAVIT OF DOUGLAS A. DAWSON**

**I. INTRODUCTION**

1. My name is Douglas A. Dawson, and I am President of CCG Consulting, Inc. ("CCG"), located at 7712 Stanmore Drive, Beltsville, Maryland, 20705. CCG is a general telephone consulting firm that works for competitive local exchange companies (CLECs), local telephone companies, cable TV providers, electric companies, wireless providers, wireless companies, municipalities and governments and internet service providers. I filed an affidavit previously in this proceeding and will not repeat a description of my credentials.

2. The purpose of this affidavit is to challenge the DTC Hearing Officer Interlocutory Ruling that the usage component of prison calling rates should not be investigated. I explain why a charge of \$.10 per-minute is unreasonably high, relying in part and endorsing a Declaration from Coleman Bazelon that was filed in FCC Docket 12-375 that investigated the per-minute rates for prison calling.

3. I will also discuss the difference between prison calling rates and pay phone rates, which are the basis for the per-minute charges in Massachusetts jails and prisons.

## II. THE FCC DOCKET ON ICS RATES

4. I first want to introduce a Declaration made by Coleman Bazelon in FCC WC Docket No. 12-375<sup>1</sup>, attached as Exhibit A to this affidavit. In that Declaration Mr. Bazelon updated an estimate of the cost of prison calling based upon an affidavit that I had made in the earlier Docket to that case in 2003 and 2007.<sup>2</sup> In this declaration Mr. Bazelon estimates the cost of prison calling for both debit and collect calling to be no more than \$0.07 per minute. To make that estimate he updated the assumptions I had made about the cost of calling in 2003 and 2007.

5. I agree with the estimates made and the conclusions reached by Mr. Bazelon. As he points out, the cost of providing inmate calling services (ICS) has plummeted in the last decade. Calling has continued to get even cheaper since Mr. Bazelon's declaration and I can find dozens of vendors in 2013 that will terminate a long distance call anywhere nationwide for under a penny per minute. As Mr. Bazelon points out, there also have been numerous changes in the ICS industry whereby there are automated pre-pay systems that have eliminated most of the uncollectibles, which were the largest individual component of my cost estimates in 2003 and 2007.

6. Mr. Bazelon's conclusions are clearly applicable to Massachusetts. As I detailed in my earlier declaration, there is no significant difference in costs across states within the United States, largely due to advances in technology and the centralization of ICS service provision. Mr. Bazelon's calculation that ICS can profitably be provided for \$0.07 per minute is an indication that

---

<sup>1</sup> "Declaration of Coleman Bazelon," Federal Communications Commission. In the Matter of Rates for Interstate Inmate Calling Services, WC Docket No. 12-375.

<sup>2</sup> "Affidavit of Douglas A. Dawson," Federal Communications Commission. In the Matter of: Martha Wright, et al., Petition for Rulemaking or, in the Alternative, Petition to Address Referral Issues in Pending Rulemaking (October 29, 2003), ¶ 43 (Hereinafter "Dawson 2003"); see also "Declaration of Douglas A. Dawson in Support of Petitioners' Alternative Proposal," Federal Communications Commission, In the Matter of Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996; Petition for Rulemaking or, in the Alternative, Petition to Address Referral Issues In Pending Rulemaking, CC Docket No. 96-128, DA 03-4027 (February 16, 2007).

Massachusetts' usage rate cap of \$0.10 per minute, or \$1.50 for a fifteen minute call, is higher than necessary to permit recovery of costs and a reasonable profit.

7. Mr. Bazelon's declaration also demonstrates, in the Table on page 16, that there are nine states which provide ICS for \$0.10 or less, after accounting for commissions. These state rates include all unique ICS costs, and are therefore lower than the Massachusetts rate of \$0.10 plus an additional charge for ICS costs. This Table also shows that states provide service as cheaply as \$0.4, \$0.5 and \$0.7 per minute, including all ICS costs. Given the lack in variability of costs, this is another indication that the Massachusetts usage rate should be investigated.

### **III. THE DIFFERENCE BETWEEN PAYPHONE AND ICS CALLING**

8. ICS in Massachusetts has been pegged to ordinary payphone rates since 1998, and the current rate cap of \$0.10 per minute of \$1.50 for a fifteen minute call was set in 2004 based upon Verizon's rate for payphones. The usage rate does not include unique ICS-related costs, and since the 1998 Order providers have been permitted an additional surcharge to recover those costs (which the Hearing Officer agreed should be further investigated). There are a number of reasons why it no longer makes sense to peg ICS usage rates to ordinary payphone rates.

9. First, public payphones provided by the regulated telcos have rapidly gone the way of buggy whips and are almost non-existent. Most telcos have gotten completely out of the payphone business, and where they still have payphones the phones do not collect coins. New York City recently put free WiFi hotspots in all of the empty spots left from the vacated public payphones. Cell phones have largely supplanted the need for payphones. At the end of 2012 it was estimated that there were 326 million active cell phones and related devices in the US with a population estimated at 216 million. Where there are still payphones they are largely provided by competitive payphone providers and not by the incumbent telcos. And generally the competitive providers share revenues

with the locations that house their phones, such as hotels or restaurants. The payphone industry has changed drastically since 1998.

10. In addition, the cost to provide payphone service was never directly comparable to the cost of providing ICS calling. In 1998 most payphones still had coin slots and a large portion of the charge for payphone calling was to compensate for the cost of collecting and counting the coins and the resultant vandalism from people trying to steal the coins. Certainly there are extra costs associated with providing the penological functions for prison calling. But there is no way to draw any direct analogy between the cost of maintaining coin-based payphones and the cost of maintaining prison phones. Certainly both prison calling and coin-based payphone calling incur some extra costs beyond calling from a home or business, but I have never seen any evidence filed in any Commission docket that these two sets of costs were similar in any fashion. It was always a stretch to equate the cost of prison calling to payphone calling and the ICS providers were somehow successful in making that link without ever making any showing that the two universes of costs were at all similar.

11. Public payphones are also used very differently than prison and jail phones. In numerous complaints about the availability of prison phones to make calls inmates assert that prison phones are used more or less continuously during hours when calling is made available to inmates. While there may have historically been a small percentage of public payphones that were used in such a continuous manner, the vast majority of public payphones were used intermittently. The reason this is significant is that the heavy and nearly continuous calling on prison payphones creates a situation in economic terms of economy of scale. Any given phone or phone system in a prison is getting maximum utilization and thus being far more efficiently used (and thus cheaper per minute) than a public payphone that is used less often.

**IV. SUMMARY**

12. There are two reasons why the per-minute usage rates of calling ought to be investigated. First, as pointed out by Mr. Bazelon, the cost of providing prison calling is no greater than \$0.07 per minute, and still falling. This alone warrants an investigation of the rates. Mr. Bazelon points out that nine states had all-inclusive ICS rates, after site commissions, lower than the Massachusetts per-minute usage charge, which is not all-inclusive. Second, Massachusetts ICS rates ought to be investigated because they are tied to payphone rate structure set in 1998 and last revised in 2004. Those rates, by definition are largely obsolete and should not be used as the regulatory basis for any rates. It is time for the record to be updated and for costs to be examined again. If the ICS providers want to collect rates higher than the \$0.07 rate that Mr. Bazelon has calculated then they should open their books and show the DTC that such rates would not yield a reasonable profit.

Date: 10/11/13

  
DOUGLAS A. DAWSON

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of                    )  
  )  
Rates for Interstate Inmate        )  
Calling Services                    )

WC Docket No. 12-375

**DECLARATION OF COLEMAN BAZELON**

Coleman Bazelon, being duly sworn, declares as follows:

**I. EXPERIENCE AND QUALIFICATIONS**

1. My name is Coleman Bazelon. I am a Principal in the Washington, D.C. office of *The Brattle Group, Inc.* (“*Brattle*”). *Brattle* is an economic consulting firm providing expertise in a range of economic, litigation, and regulatory matters. More specifically, I am part of the Telecommunications and Media practice.

2. I have expertise in regulation and strategy in the wireless, wireline, and video industry sectors. Much of my practice involves valuation of complex telecommunications assets. I have consulted and testified on behalf of clients in numerous telecommunications matters, ranging from wireless license auctions, spectrum management, and competition policy, to patent infringement, wireless reselling, and broadband deployment. I also frequently advise regulatory and legislative bodies, including the U.S. Federal Communications Commission (“*FCC*”) and the U.S. Congress.

3. Prior to joining *Brattle*, I served as a Vice President with Analysis Group, an economic and strategy consulting firm. I have also served as a Principal Analyst in the Microeconomic and Financial Studies Division of the Congressional Budget Office (“*CBO*”) where I researched reforms of radio spectrum management, estimated the budgetary and private sector impacts of spectrum-related legislative proposals, and advised on auction design and privatization issues for all research at the CBO.

4. I received my Ph.D. and M.S. in Agricultural and Resource Economics from the University of California at Berkeley. I also hold a Diploma in Economics from the London School of Economics and Political Science and a B.A. from Wesleyan University. My curricula vitae is attached as Attachment A.

## II. OVERVIEW

5. This is a case about “fair,”<sup>1</sup> “just and reasonable”<sup>2</sup> rates for collect and debit calls made from prisons in the United States.<sup>3</sup> I have been asked to provide economic analysis of what a just and reasonable rate would be. To do so I perform three broad analyses in this Declaration. First, I update the analysis of Douglas A. Dawson previously submitted to the FCC in support of regulated prison calling rates of \$0.15 to \$0.20 per minute for debit calls and \$0.20 to \$0.25 per minute for collect calls.<sup>4</sup> Given continuing downward cost trends and developments in the national telecommunications network since the last Dawson Declaration, I find that a fixed rate no greater than \$0.07 per minute for both debit and collect calls—and probably less than that amount—would meet the “just and reasonable” standard set forth in the Telecommunications Act

---

<sup>1</sup> “(b)(1) the Commission shall take all actions necessary (including any reconsideration) to prescribe regulations that—(A) establish a per call compensation plan to ensure that all payphone service providers are fairly compensated for each and every completed intrastate and interstate call using their payphone.” 47 U.S.C. 276(b).

<sup>2</sup> “(b) All charges, practices, classifications, and regulations for and in connection with such communication service, shall be just and reasonable, and any such charge, practice, classification, or regulation that is unjust or unreasonable is hereby declared to be unlawful...” 47 U.S.C. § 201(b). See also Federal Communications Commission, “Notice of Proposed Rulemaking,” In the Matter of Rates for Interstate Inmate Calling Services, WC Docket No. 12-375 (Adopted: December 24, 2012), Section III “Ensuring ICS Rates are Just and Reasonable.” (Hereinafter “Inmate Calling NPRM 2012”.)

<sup>3</sup> Prisoners make calls from federal, state and local facilities. The FCC has jurisdiction over interstate calling, regardless of the type of institution the call is coming from.

<sup>4</sup> “Affidavit of Douglas A. Dawson,” Federal Communications Commission, In the Matter of: Martha Wright, Dorothy Wade, Annette Wade, Ethel Peoples, Mattie Lucas, Laurie Nelson, Winston Bliss, Sheila Taylor, Gaffney & Schember, M. Elizabeth Kent, Katharine Goray, Ulandis Forte, Charles Wade, Earl Peoples, Darrell Nelson, Melvin Taylor, Jackie Lucas, Peter Bliss, David Hernandez, Lisa Hernandez, and Vandella F. Oura, Petition for Rulemaking or, in the Alternative, Petition to Address Referral Issues in Pending Rulemaking (October 29, 2003), ¶ 43 (Hereinafter “Dawson 2003”); see also “Declaration of Douglas A. Dawson in Support of Petitioners’ Alternative Proposal,” Federal Communications Commission, In the Matter of Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996; Petition for Rulemaking or, in the Alternative, Petition to Address Referral Issues in Pending Rulemaking, CC Docket No. 96-128, DA 03-4027 (February 16, 2007), ¶¶ 38, 41 and 43. (Hereinafter “Dawson 2007”.)

of 1996. Second, I address some of the costs and benefits of implementing a national maximum rate for debit and collect calls and conclude that benefits likely far outweigh the costs. Third, I discuss the Marginal Location Methodology used in public payphone rate setting and explain its inapplicability to the prison payphone marketplace.

6. Before delving into these analyses, it is helpful to discuss some of the economic and policy drivers that created the current prison payphone marketplace. Prior to 1984, AT&T was the only provider of prison payphone services as it was the only provider of operator assisted (the only kind then) collect calling services.<sup>5</sup> At that time, rates for prison services were similar to rates for other like services provided outside the prison setting.<sup>6</sup> The breakup of AT&T in 1984 and subsequent introduction of competition in providing prison payphone services coincided with a rapid increase in the U.S. prison population.<sup>7</sup> Along with a growing population, prisoners were being incarcerated further from their homes, increasing the reliance on phone calls to stay connected with family and friends.<sup>8</sup> Prisons began to impose additional penal requirements, such as call monitoring and recording, on prisoner phone services, which along with the growing prison population and increased importance of calling created a differentiated product—prison payphone services.<sup>9</sup>

7. Normally, the introduction of competition into a previously monopolized telecommunications service would be expected to benefit the users of that service. In fact, the main thrust of the Telecommunications Act of 1996 was to introduce market forces in the telecommunications sector, thereby replacing regulators with competition in allocating resources

---

<sup>5</sup> Steven J. Jackson, "Ex-Communication: Competition and Collusion in the U.S. Prison Telephone Industry," *Critical Studies in Media Communications*, Vol. 22, No 4 (October 2005), p. 268. (Hereinafter "Jackson 2005".)

<sup>6</sup> Jackson 2005, p. 268.

<sup>7</sup> Justice Policy Institute, "The Punishing Decade: Prison and Jail Estimates at the Millennium," (May 2000), p. 1, available at: [http://www.justicepolicy.org/images/upload/00-05\\_rep\\_punishingdecade\\_ac.pdf](http://www.justicepolicy.org/images/upload/00-05_rep_punishingdecade_ac.pdf) (last accessed March 21, 2013).

<sup>8</sup> Jackson 2005, pp. 266-267.

<sup>9</sup> Ben Iddings, "The Big Disconnect: Will Anyone Answer the Call to Lower Excessive Prisoner Telephone Rates?," *North Carolina Journal of Law & Technology*, Vol. 8, Issue 1 (Fall 2006), p. 173. See also, Jackson 2005, p. 267.

and promoting efficient provision of services.<sup>10</sup> The prison payphone market, however, has some unique characteristics—market failures—that the thoughtful observer would realize undermines this usual presumption of competition. Specifically, given that penal institutions allow only one carrier to operate, that one carrier is a monopoly provider within a given prison.<sup>11</sup> Competition between alternative service providers, then, occurs at the level of obtaining the (usually multi-year) monopoly right to serve the prisoners in a given institution. Unsurprisingly, once a service provider is accepted, its incentives are to maximize the amount of profit it can extract from an institution where it has a contract. This is essentially equivalent to maximizing revenue, because incremental costs are small and stable. The service provider then shares those profits with the prison as an incentive to be chosen as the monopoly provider. Since the prison or prison system also selects the carrier, competition for the carrier is essentially competition for the provider that can create the most profit from a given prison or prison system.<sup>12</sup>

8. Before prison payphones became their own market segment with competitors vying to win contracts, AT&T provided the service, but priced it as part of the then much larger collect calling market. At the time, regulation of collect calling tariffs did not break out the prison market as a separately tariffed market.<sup>13</sup> Consequently, AT&T did not set rates so as to maximize the profits it could earn from the prison payphone market. Only when the prison payphone industry became its own market *and* competition for exclusive contracts was introduced was there the incentive and ability to price services so as to extract monopoly profits.

---

<sup>10</sup> As the FCC describes, “The Telecommunications Act of 1996 is the first major overhaul of telecommunications law in almost 62 years. The goal of this new law is to let anyone enter any communications business—to let any communications business compete in any market against any other.” See “Telecommunications Act of 1996,” available at <http://transition.fcc.gov/telecom.html> (last accessed January 13, 2013).

<sup>11</sup> One solution, offered by the original Wright Petition, would be to introduce competition in providing phone services in the prison. As discussed below, this approach alone will not assure competitive prices. See, Petitioners for Rulemaking by Martha Wright, *et al.*, “Petitioners’ Alternative Rulemaking Proposal,” Federal Communications Commission, In the Matter of Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996; Petition for Rulemaking or, in the Alternative, Petition to Address Referral Issues In Pending Rulemaking, CC Docket No. 96-128, DA 03-4027 (March 1, 2007), p. 4. (Hereinafter “Wright 2007”.)

<sup>12</sup> Although such a procurement structure is used when assigning a monopoly franchise the point here is to overcome the extraction of monopoly profits from prisoners and their families in the first place.

<sup>13</sup> Jackson 2005, p. 268.

9. Given this market failure of the prison payphone market—that individual prisoners face no competitive choices—competition is not sufficient to police prices. One approach suggested in the original Wright Petition would be to provide an open access platform so that multiple providers could offer services to individual prisoners.<sup>14</sup> This would allow choice of service providers and create incentives for service providers to offer attractive service offerings to prisoners in an attempt to win their business. Such competition would likely discipline prices to some extent. The problem is that the open platform only narrows the point of monopoly power; it does not in itself eliminate it. The cost of the open platform and the continuing scope for commissions to be built into the rates it charges could still create an incentive to extract some excess profits or revenues from the prison payphone market. An open platform approach would still require regulatory intervention to set the prices for the bottleneck access platform. Consequently, it is more straightforward to simply regulate the rates charged prisoners.

10. In regulating prison payphone rates, a simple benchmark rate—which sets a maximum allowed rate, but not a minimum or required rate, for all service providers—is appropriate. As explained in greater detail below, technical innovations in the provision of prison phone services imply that variation in costs at different facilities has largely been eliminated. Consequently, facility specific rates are unneeded and the costs of adjudicating such facility-specific rates would greatly outweigh any potential benefits of recognizing small variations in the costs of providing services to individual facilities.

11. Just and reasonable rates are ones that at a minimum do not allow for excessive profits. Market failures occur when market forces do not create efficient competition, implying that market forces are not able to fulfill the mandate contained in the Communications Act of 1934, as amended, for “just and reasonable” rates. Because market forces do not spur efficient competition in the prison payphone market, regulated maximum rates are an appropriate remedy for this specific market failure. As noted above, those rates should be set no greater than \$0.07 per minute for debit and collect calls, and possibly lower. Details of the analysis supporting these rates are provided in the next section. Following that is an analysis of costs and benefits of

---

<sup>14</sup> Wright 2007, p. 5-6. See also, Dawson 2003, ¶¶ 3-5.

regulating prison payphone rates, followed by a discussion of the inapplicability of the Marginal Location Methodology.

### III. COSTS OF PROVIDING PRISON PAYPHONE SERVICES

12. The prices paid by prisoners and those they call can be broken down into four separate cost components:

1. Cost of the call
2. Added billing and collection costs associated with collect calling
3. Excess profit for carrier
4. Commission for prison

The last two components, excess profits for the service providers and the prisons' commissions, are not legitimate costs under a just and reasonable standard.<sup>15</sup> Those cost components would be competed away but for the market failures associated with the prison calling market. Therefore, to identify a "just and reasonable" rate, the analysis below focuses on the first two cost components.

#### DAWSON DECLARATION ANALYSIS

13. In his 2007 Declaration, Mr. Dawson concludes that a "reasonable inmate long distance calling rate[]" would be "\$0.15 to \$0.20 per minute for debit calling and \$0.20 to \$0.25 per minute for collect calling...."<sup>16</sup> These per minute rates are suggested "with no per-call charge."<sup>17</sup> In this subsection I will explain his basis for concluding in 2007 those rates were reasonable. The next subsection will update his analysis.

14. Mr. Dawson starts by referencing his analysis of costs from his 2003 Testimony.<sup>18</sup> In that earlier analysis, he notes that analysis of the Inmate Calling Service Providers Coalition ("Coalition") shows underlying costs, including reasonable service provider profits but excluding

---

<sup>15</sup> See *Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996*, Order on Remand, 17 FCC Rcd 3248, 3262 (2002).

<sup>16</sup> Dawson 2007, ¶ 43.

<sup>17</sup> Dawson 2007, ¶ 33 and 42.

<sup>18</sup> Dawson 2007, ¶ 25.

commissions, of \$0.126 per minute for a local call.<sup>19</sup> Substituting long distance transportation and termination costs of \$0.027 per minute for estimated local transportation and termination costs of \$0.020 per minute raised the cost of long distance inmate calling to \$0.133 per minute.<sup>20</sup> In his 2007 Declaration, he updates the long distance transportation and termination cost to \$0.0125 per minute, reducing the total cost of a long distance inmate call to \$0.121 per minute.<sup>21</sup> Mr. Dawson observed that this estimated cost includes about \$0.06 per minute of costs associated with billing and uncollectable revenue, suggesting that the cost of debit calls—which do not have added billing or collections costs—is about \$0.06 per minute.<sup>22</sup>

15. Mr. Dawson then compares those debit and collect calling costs to other inmate service rates and to commercial debit and collect calling rates. In his 2007 analysis, he notes that the Federal Bureau of Prisons Inmate Telephone System charged \$0.23 per minute, but only \$0.17 of that amount was attributable to providing the debit phone service, with the remaining \$0.06 profit of the system used to fund prisoner services.<sup>23</sup> The profit is analogous to commissions charged in state systems and, therefore, is not considered a cost of providing the service. Mr. Dawson then notes that this \$0.17 per minute prison debit rate is reasonable when compared to the rates charged net of commissions by several state systems, including Vermont (\$0.135 per minute for a 20 minute call), Maryland (\$0.12 per minute) and Missouri (\$0.10 per minute).<sup>24</sup> It is worth noting that these rates from the 2007 analysis of \$0.10 to \$0.135 per minute were provided by private companies and included an allowance for profits in them.

16. Mr. Dawson then analyzed comparable commercial debit calling rates. He noted that to perform an apples-to-apples comparison “a comparable rate for prison debit calling would be the price for commercial pre-paid calling cards plus the added cost of the prison telephone system,

---

<sup>19</sup> Dawson 2003, ¶ 72.

<sup>20</sup> Dawson 2003, ¶ 72.

<sup>21</sup> Dawson 2007, ¶ 26. Note that Mr. Dawson appears to have made an arithmetic error in this calculation. Reducing per minute long distance costs from \$0.027 to \$0.0125 is a net reduction of \$0.0145.  $\$0.133 - \$0.0145 = \$0.1185$ , not \$0.121 as Mr. Dawson reported. Both of these rates, however, round to twelve cents, so this error does not have any material impact on any of his analyses or conclusions.

<sup>22</sup> “(\$0.121 total cost less the cost of billing and uncollectibles).” See Dawson 2007, ¶ 26.

<sup>23</sup> Dawson 2007, ¶ 30.

<sup>24</sup> Dawson 2007, ¶ 32.

expressed on a usage basis.”<sup>25</sup> He noted that AT&T offered a rate of \$0.05 per minute, with other lower rates available.<sup>26</sup> His earlier 2003 analysis indicated that the added cost of a prison payphone system would be between \$0.044 and \$0.059 per minute, but in his 2007 analysis noted that costs have likely come down since then.<sup>27</sup> He also noted that an earlier MCI analysis suggested underlying costs of \$0.066 per minute.<sup>28</sup> Taking prison phone system costs conservatively as \$0.07 per minute, Mr. Dawson estimated total costs of debit calls as \$0.12 per minute.<sup>29</sup> Mr. Dawson concluded that the prison calling rates reported above and the commercial debit call rates adjusted for the cost of the prison phone system both support the debit rate he proffered of \$0.15 to \$0.20 per minute as reasonable.<sup>30</sup>

17. To derive his estimate of the cost of collect calling, Mr. Dawson estimated the added costs associated with collect calls that are not included in his estimates for debit calls. These additional costs include the cost of billing the calls and of bad debt in collecting payment.<sup>31</sup> He reported a Coalition estimate of \$0.029 per minute for billing and \$0.034 per minute for uncollectables, but noted that the uncollectables estimate is based on much higher prison phone rates than he was advocating and, therefore, the uncollectables would be less if the amount charged was less.<sup>32</sup> He concluded that \$0.05 per minute was a reasonable total incremental cost of collect calls over debit calls from prison.<sup>33</sup> Consequently, his suggested rate of \$0.20 to \$0.25 per minute for collect calls from prisons is supported as the debit rate of \$0.15 to \$0.20 per minute plus the \$0.05 per minute added costs associated with collect calls.

---

<sup>25</sup> Dawson 2007, ¶ 34.

<sup>26</sup> Dawson 2007, ¶ 36.

<sup>27</sup> Dawson 2007, ¶ 37.

<sup>28</sup> Dawson 2007, ¶ 38.

<sup>29</sup> “(the \$0.05 AT&T calling card rate plus \$0.07 for the prison phone system).” See Dawson 2007, ¶ 38.

<sup>30</sup> Dawson 2007, ¶ 38.

<sup>31</sup> Dawson 2007, ¶ 40.

<sup>32</sup> Dawson 2007, ¶¶ 40-41.

<sup>33</sup> Dawson 2007, ¶¶ 40-41.

## UPDATED DAWSON ANALYSIS

18. In this subsection I will update the Dawson analysis, taking account of developments in the telecommunications sector in the intervening years. I begin by examining commercial rates for debit and collect calling, recognizing the need to add prison specific costs. Then I examine some of the lower actual prison rates. Combining the results of both of these analyses, I estimate that a reasonable regulated rate is no higher than \$0.07 per minute for both prison debit and collect calls and possibly lower.

19. Pre-paid domestic phone calls—so called calling card calls—are very inexpensive. Rates are easily found as low as \$0.01 per minute with a \$0.49 connection charge.<sup>34</sup> AT&T offers pre-paid interstate calling as low as \$0.04 per minute with no connection charge.<sup>35</sup> Many other cards can be found with per minute rates under \$0.02.<sup>36</sup> Given that these commercial rates are retail rates sold to individuals, any wholesale contract offering calling services to an entire prison or prison system would be able to implement volume discounts, suggesting lower commercially offered rates. Such a rate would have to be lower than AT&T's rate offered to individual customers of \$0.04 per minute. Taken together, a reasonable estimate of commercial pre-paid calling rates is easily no greater than \$0.03 per minute and likely much lower than that amount.

20. The underlying costs to deliver prison phone service, as expressed in some contracts and RFPs, seem consistent with these commercial rates. One estimate of the base rate per minute with no per call connection charges from a Michigan contract is less than \$0.04 per minute.<sup>37</sup>

---

<sup>34</sup> See, for example, PennyTalk, "Explore our Low Rates" available at: <http://www.pennytalk.com/rates/?CallingFrom=US&CallingTo=US> (last accessed March 22, 2013). PennyTalk also charges \$0.99 per month account service charge.

<sup>35</sup> 1,000 minutes for \$40.00. See AT&T, "Product Selection," available at: <https://att.ecustomersupport.com/ATTLDEExternalWeb/loadProductsForDisplay.do?ProductLineID=2> (last accessed March 21, 2013). Some intrastate rates may be higher.

<sup>36</sup> See domestic rates found at Callingcards.com, "International Calling Cards," available at [http://callingcards.com/shopping/rate\\_table1.asp?GUID=70704D38391E14409F45EFABDF358E70](http://callingcards.com/shopping/rate_table1.asp?GUID=70704D38391E14409F45EFABDF358E70) (last accessed March 22, 2013). Some of these rates include other small costs such as 3 minute rounding or payphone specific connection charges.

<sup>37</sup> "The firm fixed price for performing services" is \$0.0393 per minute for interstate collect calls and \$0.0343 per minute for interstate debit calls. See "Notice of Contract No. 071B1300298 between The State of Michigan and Public Communications Services, Inc" (March 18, 2011) p. 94. (Hereinafter "Michigan Contract".)

Another example that is consistent with underlying phone service costs of about \$0.03 per minute is Talk Telio's bid in Missouri of total price to inmates of \$0.05 per minute with no set-up fee.<sup>38</sup>

21. As noted above, Mr. Dawson's 2003 analysis suggested prison phone system costs between \$0.044 and \$0.059 per minute. His estimate of these costs consists of depreciation, maintenance and administrative and sales expenses, spread out over a prison with 1,743 prisoners<sup>39</sup> who call 1.0 hour (for the \$0.059 estimate) or 1.5 hrs (for the \$0.044 estimate) per week.<sup>40</sup> About one-quarter of those prison phone system costs were for hardware, the vast majority of that for the switching equipment.<sup>41</sup> Although all costs associated with providing prison phone systems have likely come down in the last decade, these hardware costs have certainly come down in the interim for at least two reasons. First, telephone switches are like computers, and their price decreases with the cost of computing power—the so-called Moore's Law effect. For example, the ongoing debates about inter carrier compensation around “bill and keep”—where the per minute cost of completing a call (including the cost of switching) has fallen so much that carriers would generally no longer compensate each other for completing calls—suggest that costs such as switching have fallen dramatically over the past decade.

22. Second, and perhaps more significantly, modern prison payphone systems use centralized switches, spreading the cost of switching, call recording and other fixed costs over more users.<sup>42</sup>

---

<sup>38</sup> Letter to Marlene H. Dortch, Secretary, Federal Communications Commission, from Lee G. Petro, Drinker Biddle & Reath, LLP, February 15, 2012, p. 2 and Exhibit A, p. 11. (Hereinafter “Petro Letter”).

<sup>39</sup> 1,743 prisoners per prison is the average of three privately owned prisons Mr. Dawson uses in his original analysis. See Dawson 2003, ¶ 57.

<sup>40</sup> Dawson 2003, ¶¶ 68-71. This example also demonstrates how quickly fixed costs fall as they are spread out over more usages. In this example, a 50% increase in usage reduced the per-minute cost by 25%.

<sup>41</sup> \$69,000 in annual hardware costs/\$249,000 in total system costs = 28%. See Dawson 2003, ¶ 68, and footnote 48.

<sup>42</sup> “Today there is very little capital investment made by prison telephone provider at each prison. All of the brains of the prison calling network are housed now at large centralized locations. Today a prison calling system consists primarily of telephones, an Ethernet pipe to the outside world and some sort of small data router. Everything else is done at the centralized hubs in the network.” See “Affidavit of Douglas A. Dawson,” Before the Commonwealth of Massachusetts, Department of Telecommunications and Cable, No. D.T.C. 11-16, Petition of Recipients of Collect Calls from Prisoners at Correctional Institutions in Massachusetts Seeking Relief from the Unjust and Unreasonable Cost of Such Calls, ¶ 24. (Hereinafter

Larger, centralized switches are cheaper per unit of functionality than smaller switching equipment that would be installed at a prison facility to serve just that facility. (The per 'switch' costs are lower for a properly utilized larger switch.) Sharing these costs over many prisons spreads these fixed costs over more users, reducing the contribution of these fixed systems costs to the per minute cost of a call, irrespective of the number of prisoners at the facilities.<sup>43</sup>

23. Although I do not have an estimate of just how much lower these system costs are today compared with the estimates Mr. Dawson made in 2003, they have come down significantly. Mr. Dawson suggests the reduction is at least half of what they were, suggesting a total prison specific cost structure, including switching and other capital costs and overhead, of no more than \$0.03 per minute.<sup>44</sup> Of course, the base \$0.03 per minute commercial debit rate already has switching and other costs embedded. Here we are interested in the *added* costs associated with providing prison phone service, not the total costs. Only a fraction of the revised Dawson cost estimate of \$0.03 per minute represents the costs associated with a prison pay phone system that are incremental to the cost of providing commercial debit calling. For example, the commercial debit calling rate already accounts for switching costs. Consequently, a per minute cost of \$0.02 for the specific prison phone related costs would seem conservative.

24. Mr. Dawson estimated the difference between debit and collect calls as about \$0.05.<sup>45</sup> This cost differential is driven by the added billing and collections cost of collect calls that do not exist for debit calls.<sup>46</sup> This differential has likely come down in the intervening years. Industry players have responded to bad debt, for example by limiting the amount of debt that can be accumulated. Furthermore, 3<sup>rd</sup> party payment processors also help manage payment risk, presumably leading to lower bad debt for prison phone service providers.

---

"Dawson 2012".) See also Notice of Award, State of Missouri Office of Administration Division of Purchasing and Materials Management (June 28, 2011) Securus RFP, pp. 12-16.

<sup>43</sup> Dawson 2012, ¶ 22.

<sup>44</sup> Dawson 2012, ¶ 27.

<sup>45</sup> Dawson 2007, ¶ 41.

<sup>46</sup> Dawson 2007, ¶ 40.

25. More recent experience over the past few years confirms that the difference between debit and collect calls has, in fact, come down. Several jurisdictions do not charge differential rates for collect and debit calls.<sup>47</sup> Although the underlying economic cost difference may be greater than zero, it is unlikely to be very large if many jurisdictions do not build this cost difference into their rates. In other cases the difference between collect and debit calls is very small. For example, it was just \$0.02 per minute in a 2011 Michigan contract,<sup>48</sup> \$0.01 per minute in Global Tel\*Link's 2008 RFP response in Wisconsin,<sup>49</sup> and \$0.005 per minute for a 20 minute call in PCS's 2008 RFP response in Wisconsin<sup>50</sup> and as the base rate difference in the contract awarded in Michigan in 2011.<sup>51</sup> The differential is higher in other jurisdictions with significantly higher overall rates, but it is very unlikely that underlying costs vary as much in these states as the cost differential implies. It is more likely that the higher price differentials are an artifact of price discrimination rather than underlying cost differentials.<sup>52</sup> This view is supported by Mr. Dawson, who said, "Generally it seems like prison telephone providers will charge as much for calls as they can get away with in each jurisdiction."<sup>53</sup> Consequently, I conservatively take the cost difference between collect and debit calls as no more than \$0.02 per minute, especially since there are several prison payphone contracts that reflect a differential of this size or smaller.

---

<sup>47</sup> See, New Jersey and Texas rates as reported in Government Accountability Office, "Bureau of Prisons, Improved Evaluations and Increased Coordination Could Improve Cell Phone Detection," GAO-11-893 (September 2011), p. 13. (Hereinafter "GAO 2011".)

<sup>48</sup> Michigan Contract, Exhibit 2, "Summary of the per Minute Rates."

<sup>49</sup> "Global Tel\*Link's State of Wisconsin Department of Corrections, Request for Proposal SM-1752, Inmate Telephone Services, Volume II – Cost and Revenue Proposal" (October 16, 2008), p. 3.

<sup>50</sup> PCS RFP Response, State of Wisconsin, Department of Corrections, RFP Number SM-1752, Inmate Telephone Services, p. E-2.

<sup>51</sup> "The firm fixed price for performing services" is \$0.0393 per minute for interstate collect calls and \$0.0343 per minute for interstate debit calls. Michigan Contract, p. 94.

<sup>52</sup> If demand for collect services is more inelastic than the demand for debit services, then a profit maximizing strategy is to charge relatively more for the inelastic collect services than for the relatively more elastic debit services. This is as an example of Ramsey pricing. See, F. P. Ramsey, "A Contribution to the Theory of Taxation," *The Economic Journal*, Vol. 37, No. 145 (March, 1927), pp. 47-61. Given that a prisoner who has the option (and means) to place a debit call always has the option to place a collect call, but the reverse is not necessarily true, implies that demand for debit calls is likely more elastic than the demand for collect calls.

<sup>53</sup> Dawson 2012, ¶ 16.

26. Taken together, the above analysis suggests that a reasonable rate for a debit call would be no greater than \$0.05 per minute<sup>54</sup> and no more than \$0.07 per minute for collect calls.<sup>55</sup> *I proffer \$0.07 per minute for both debit and collect calls, with no set up or per call fixed fees, as a just and reasonable benchmark rate for inmate calling services.* This rate is clearly economic for a commercial provider to offer—it is greater than commercial rates adjusted for prison specific costs and, as noted below, it is greater than the rate already charged in some states—and provides a buffer of additional revenue to continue to fund modest commissions. In fact, this is a conservative estimate and the analysis above could justify even lower rates. The section below on the costs and benefits of reform discusses this issue in more detail.

27. The suggested rate of \$0.07 per minute with no per-call fees will cover the costs of the calls and it is unnecessary to create a 2-part tariff approach with a fixed per-call component plus a variable per-minute component. There are very few cost components that change with the number of call initiations and that do not vary with the length of the call. The infrastructure components such as handsets and transport are not impacted by the number of calls, but are driven by the total number of call-minutes. The capacity of a switch is determined by the total number of simultaneous calls it must handle, but once installed this very small cost component of a call does not vary. Billing costs, where it takes the same effort to bill a one-minute call as it does to bill a ten-minute call, is roughly fixed per call, but represents only a small part of a call's costs.

28. Only if the new lower rates induced the average length of a call to drop significantly, which is counterintuitive, would the elimination of the per-call fee and recovering all costs based on a per-minute charge potentially cause concerns. (The concern is only 'potential' because it would only arise *if* there were significant per call costs.) Lower prison calling prices would be expected to increase the demand for calls made from prisons. Increased demand could be expressed as more calls and/or longer calls. Only if the additional calls induced by lower prices were much shorter than current call lengths would they bring down the average length of calls. Given that the average length of existing calls would be expected to increase at lower prices, it

---

<sup>54</sup> The \$0.03 per minute cost of the call based on commercial rates plus \$0.02 per minute added cost of the prison phone system components.

<sup>55</sup> The \$0.05 per minute cost of debit calling plus \$0.02 per minute cost differential for collect calls.

seems very unlikely that the net effect of lower prices would be shorter average call length. There is only limited evidence of what happens when prison calling rates are dramatically reduced, but New York provides one relevant experience. In 2007, New York reduced the price of prison calls by 57.5% and saw a 35% increase in the number of call and a 36% increase in the total call volume.<sup>56</sup> In this example, lower prices *increased* the length of calls as well as the number of calls. Consequently, there is very little reason to believe there will be any concerns with recovering all costs—regardless of how much are generated on a per-call basis versus on a per-minute basis—through a per-minute charge alone.

29. Per minute calling rates have other advantages. Foremost, they are simple to understand. This reduces confusion over actual or expected call costs by prisoners and those they call. An additional advantage of flat per minute calling rates is that they eliminate billing issues associated with dropped calls. Reinitiating a dropped call will no longer incur inappropriate excess call initiation fees.

30. Now I turn to other calling rates as a validation of the rates calculated above. First I examine actual prison calling rates. I follow Mr. Dawson's convention of estimating net calling rates after removing the portion of charges that go to commissions to penal institutions. These commissions are not related to the provision of phone service and, as argued more extensively in the next section of this Declaration, should not be an explicit component of a regulated prisoner phone rate.

31. Since prisoner calling rates are often priced as what is referred to as two-part tariffs, to make rates from different states comparable, it is helpful to express them on a per minute basis. However, to do so, it is necessary to assume an average length of a prison call. Throughout my analysis I use 15 minutes per call. This is well within the range of currently observed call lengths. For instance, in 2010 in California, the average length of all inmate calls was 12.3 minutes, or 12.1 minutes for interstate calls alone.<sup>57</sup> In July 2000 the average length of an inmate

---

<sup>56</sup> See New York State, "Department of Corrections and Community Supervision," (December 13, 2007) available at: <http://www.doocs.ny.gov/PressRel/2007/phoneratereduction.html> (last accessed March 21, 2013).

<sup>57</sup> California Telephone Agency. *Inmate Ward Telephone System/Managed Access System Services*, "Attachment 1." Received from Lee Petro via email, March 8, 2013.

call in New York was 18 minutes for an interstate call and 17.5 minutes for an intrastate call.<sup>58</sup> 15 minutes is also the convention for average call length used by the Petitioners in this matter.<sup>59</sup> However, the results reported below are not very sensitive to call length, and my conclusions would not change if a little bit longer or shorter call length were used.

32. Table 1, below, is based on the collect call rates reported by Prison Legal News based on their own research.<sup>60</sup> For the states with data available, I calculated the total cost of a 15 minute call (including both set-up and per minute fees), deducted the estimated commissions, and then divided by 15 to express the costs on a per minute basis. This amount represents the fees that are collected by the underlying service provider and are comparable to the \$0.07 per minute rate for collect calls calculated above. The underlying costs of providing prison phone service may vary somewhat state by state, but nothing that would support the variation reported in Table 1.

---

<sup>58</sup> MCI Telecommunications. "Check Summary: Report 8/99-7/00," September 18, 2000. Received from Lee Petro via email, March 8, 2013.

<sup>59</sup> *Petitioners Comments*, p.18.

<sup>60</sup> See Appendix A.

**Table 1: Interstate Collect Call Rates Less Commission for State Prisons, 2012**

State	15 minute Call Less Commission (\$/Minute)	State (Continued)	15 minute Call Less Commission (\$/Minute)
New Mexico	0.04	North Dakota	0.24
New York	0.05	Wyoming	0.25
Oklahoma	0.05	Texas	0.26
South Carolina	0.07	Arizona	0.26
Florida	0.09	West Virginia	0.30
North Carolina	0.10	Kansas	0.30
Nebraska	0.10	Utah	0.33
Connecticut	0.10	Maine	0.36
Montana	0.10	Nevada	0.36
Louisiana	0.11	Mississippi	0.38
Missouri	0.12	Virginia	0.38
Massachusetts	0.12	Rhode Island	0.39
Wisconsin	0.13	Arkansas	0.39
Indiana	0.14	South Dakota	0.41
Vermont	0.15	Pennsylvania*	0.41
Illinois	0.17	Tennessee	0.43
Colorado	0.18	Georgia	0.46
New Jersey	0.19	Delaware	0.46
Kentucky	0.20	Minnesota	0.47
Maryland	0.22	Idaho	0.99
Michigan	0.23	Alaska	1.07

Source: *The Brattle Group* Analysis. See Appendix A.

Notes:

\*Pennsylvania figure calculated with commission data that may be incomplete. Refer to Appendix A.

Commission data for Alabama, Hawaii, Washington and Iowa were not available.

Commission data for California, New Hampshire, Ohio and Oregon were available, but there was not enough information to calculate these figures. Refer to Appendix A for state specific footnotes.

33. As the table above indicates, the New Mexico rate, based on a 15 minute call, is only \$0.04 per minute and lower than the \$0.07 per minute suggested above as an upper bound on prison calling rates. In New York, where the state abolished commissions and made a concerted

effort to lower prison calling rates,<sup>61</sup> and Oklahoma the per-minute cost of a collect call is only \$0.05 per minute. These examples suggest that it is commercially viable to provide prison phone service for only \$0.05 per minute. South Carolina charges an average of \$0.07 per minute—right in line with the estimated costs provided above. Florida, North Carolina, Nebraska, Connecticut and Montana all have average rates less commissions based on 15 minute calls of \$0.10 or less. All of these rates are commercially provided and demonstrate that it is possible, absent commissions, to provide prison phone service for far less than the rates currently charged in most states today.

34. The reasonableness of the above analysis is also supported by bids of service providers to provide prison calling services in many states. For example, in its 2008 bid in Wisconsin, service provider GTL offered a rate of \$0.089 per minute with no connection fee for debit calling and a rate of \$0.099 per minute with no connection fee for collect calling.<sup>62</sup> In a Missouri bid from 2011 that it narrowly lost, Talk Telio offered a flat rate of \$0.05 per minute for both debit and collect calls with no per call fees.<sup>63</sup> And, of course, the effective realized rates in New Mexico, New York, Oklahoma and South Carolina indicate that \$0.07 per minute is feasible. As these examples demonstrate, \$0.07 per minute for both debit and collect calls is greater than several commercially offered rates.

35. *Taking all of the above information together, I proffer \$0.07 per minute for both debit and collect calls, with no set up or per call fixed fees, as a just and reasonable rate for inmate calling services.* This rate is clearly economic—it is greater than commercial rates adjusted for prison specific costs and, as noted below, it is greater than the rate already charged in some states—and provides a buffer of additional revenue to continue to fund modest commissions. It will not, however, allow for excessive profits for service providers or penal institutions. The section below on the costs and benefits of reform discusses this issue in more detail.

---

<sup>61</sup> New York eliminated commissions (sometimes referred to as ‘kickbacks’) in 2007. See, [http://www.salon.com/2012/10/01/prisoners\\_crippling\\_phone\\_bills/](http://www.salon.com/2012/10/01/prisoners_crippling_phone_bills/) (last visited March 22, 2013).

<sup>62</sup> “Global Tel\*Link’s State of Wisconsin Department of Corrections, Request for Proposal SM-1752, Inmate Telephone Services, Volume II – Cost and Revenue Proposal” (October 16, 2008), p. 3.

<sup>63</sup> Petro Letter, p. 2 and Exhibit A. It is worth noting that Talk Telio received the maximum points allowable for scoring the price component of their bid, but price accounted for less than half the total points used to evaluate the bid. Nevertheless, Talk Telio only narrowly lost the bid to Securus.

#### IV. COSTS AND BENEFITS OF REFORMING PRISON PAYPHONE RATES

36. The market failures of the prison payphone market—that prisoners' lack of choice in a service provider results in no mechanism to moderate rates—means that the prices charged are almost certainly not efficient and social welfare could be improved with alternative rates. This section will evaluate the costs and benefits of setting a maximum benchmark rate for prison phone calls. As explained below, the benefits of the proposed benchmark maximum calling rate likely greatly exceed the associated costs.

37. As an initial matter, it is worth observing that from an economic perspective, reducing prison phone rates would be expected to improve welfare. Absent competitive pressures, the current price of most prison calling is far above the costs of providing the call. Consequently, the price does not properly signal the costs of the resources used when making a phone call from a prison.<sup>64</sup> If the prison phone market was a well-working market, the higher price would suggest that the resources employed to produce the good in question are more valuable than for an alternative lower priced good.<sup>65</sup> Only if the prices of goods and services were related to their

---

<sup>64</sup> The benefits of prison phone calls, discussed below, are also not reflected in the price of calls, further distorting economic efficiency.

<sup>65</sup> Economic efficiency is achieved because activities in an economy are coordinated through these price signals, rather than through central coordination or administration. "Fundamentally, in a system where the knowledge of the relevant facts is dispersed among many people, prices can act to coordinate the separate actions of different people in the same way as subjective values help the individual to coordinate the parts of his plan. It is worth contemplating for a moment a very simple and commonplace instance of the action of the price system to see what precisely it accomplishes. Assume that somewhere in the world a new opportunity for the use of some raw material, say tin, has arisen, or that one of the sources of supply of tin has been eliminated. It does not matter for our purpose—and it is very significant that it does not matter—which of these two causes has made tin more scarce. All that the users of tin need to know is that some of the tin they used to consume is now more profitably employed elsewhere, and that in consequence they must economize tin. There is no need for the great majority of them even to know where the more urgent need has arisen, or in favor of what other needs they ought to husband the supply. If only some of them know directly of the new demand, and switch resources over to it, and if the people who are aware of the new gap thus created in turn fill it from still other sources, the effect will rapidly spread throughout the whole economic system and influence not only all the uses of tin, but also those of its substitutes and the substitutes of these substitutes, the supply of all the things made of tin, and their substitutes, and so on; and all this without the great majority of those instrumental in bringing about these substitutions knowing anything at all about the original cause of these changes. The whole acts as one market, not because any of its members survey the whole field, but because their limited individual fields of vision sufficiently overlap so that through many intermediaries the relevant information is communicated to all. The mere fact that there is one price for any commodity—or rather that local prices are connected in a manner determined by the cost of transport, etc.—brings about the solution which (it is just conceptually possible) might have been arrived at by one single mind possessing all the information which is in fact dispersed

costs—broadly defined to include all costs, including competitive profits and any non-market externalities—then they would send the right signals that encourage resources to be used efficiently.

38. The problem with inefficient prices, such as those in the prison phone market, is that they waste resources—what economists call a dead weight loss. A phone call that is priced greater than it would be if it was provided in a competitive market sends the signal that these calls use more resources than they in fact do. This creates a situation where some consumers (prisoners and their families) value the services more than they cost to produce, but are unable to purchase them. This creates unrealized gains from trade. When prisoners and their families pay a price that covers the costs of the call, both they and the providers of the call can be made better off, at least in theory.<sup>66</sup> The reason economists argue for efficient prices is that through the elimination of the dead weight loss, the gain to the benefitting party exceeds the loss to the losing party.<sup>67</sup> Because the excessive prices charged for prison calls imply a dead weight loss, a regulated rate that reduces that dead weight loss would be expected to improve total welfare.<sup>68</sup>

#### THE COSTS OF THE CURRENT SYSTEM/THE BENEFITS OF REFORM

39. The costs of the current system and, consequently, the benefits from reforming it, are two-fold. First, any reduction in costs of calls from prisons would directly benefit prisoners and those they call in the form of lower phone bills. Second, to the extent the savings in these expenses lead to additional phone calling (more and/or longer calls), the prisoners and their families will certainly benefit, but so will society overall through the positive externality of the reduced recidivism that results from keeping prisoners connected to their families and communities.

---

among all the people involved in the process.” F. A. Hayek, “The Use of Knowledge in Society,” *The American Economic Review*, Vol. XXXV, No. 4 (September 1945), p. 526.

<sup>66</sup> In practice, the reforms proposed here would also result in a transfer from prisons and service providers to prisoners and their families, separate from creating a net benefit to society.

<sup>67</sup> At least in theory the winner could compensate the loser and still be better off. This meets the so called Pareto Efficiency criteria.

<sup>68</sup> An reduction in rates that does not overshoot the efficient level is expected to improve welfare.

40. Costs of Prison Calls. As the analysis of Section III, above, indicates, the cost of providing prison phone services is certainly less than \$0.07 per minute. Yet, most prisoners pay more—often much more—than this amount. Table 2, below, reports the per-minute rates for a 15-minute collect call from a Prison Legal News survey. There are at least 6 states where the cost of a 15 minute interstate collect call, inclusive of commissions, is more than \$1 per minute. A call in an additional 15 states is more than \$0.50 per minute and in another 11 states the cost is more than \$0.25 per minute. Together, of the states surveyed by Prison Legal News, *at least 32 states charged \$0.25 per minute or more for a 15-minute interstate collect call.*

Table 2: Collect Call Rates for State Prisons, 2012

State	15 minute Call (\$/Minute)	State (Continued)	15 minute Call (\$/Minute)
New Mexico*	0.04	Kentucky	0.43
New York	0.05	California	0.44
South Carolina	0.07	Maryland	0.47
Nebraska	0.10	Kansas	0.51
Missouri	0.12	West Virginia	0.56
Montana	0.14	Arizona	0.56
Florida	0.14	Virginia	0.59
Massachusetts	0.16	South Dakota	0.64
Oregon	0.16	Utah	0.65
Wisconsin	0.18	Arkansas	0.71
New Hampshire	0.18	Pennsylvania	0.73
Oklahoma	0.20	Washington	0.73
North Carolina	0.23	Wyoming	0.74
Michigan	0.23	Delaware	0.77
Vermont	0.23	Nevada	0.79
Indiana	0.24	Tennessee	0.85
Connecticut	0.32	Maine	0.89
New Jersey	0.33	Mississippi	0.97
Colorado	0.35	Idaho	1.10
Louisiana	0.36	Ohio	1.14
Rhode Island	0.39	Georgia	1.15
Illinois	0.39	Minnesota	1.15
North Dakota	0.40	Alabama	1.15
Texas	0.43	Alaska	1.15

Source: *The Brattle Group* Analysis. See Appendix A.

Notes:

\*The calling rate for New Mexico is listed as a flat rate of \$.65 for a 20 minute call. Assuming the rate for a 15 minute call would be the same or less, I used the flat rate of \$.65 rate for the calculation. Thus .04 dollars per minute can be seen as an upper limit.

Collect call rates were not available for Hawaii or Iowa.

41. More recent evidence of rates from prisons suggests charges remain well above costs. Phone bill evidence from Virginia suggests collect calls to Washington, DC are billed at a \$2.50

per-call fee plus \$0.20 per minute.<sup>69</sup> Another phone bill with charges from Florida to Alabama suggests per-call charges of \$3.50 plus \$0.89 per minute.<sup>70</sup>

42. As the analysis above indicates, prisons in most states charge significantly more to prisoners to make phone calls than the underlying cost of those calls. Any maximum allowed rate pegged to a benchmark that reduces these charges will directly benefit prisoners and those they call.

43. Economic benefits of lower rates. From a purely economic perspective, the first order effect of lower rates for calls that would have been placed at higher rates is simply a transfer from service providers and the penal institutions they contract with, to prisoners, their families and others they call. The additional calls that will be made if rates are lower (but do not happen with today's higher rates) provide a net benefit to society. This net benefit arises through the elimination of the distortion in the use of resources that were referred to above as a dead weight loss. Part of this efficiency benefit will go to consumers of prison phone services and part will go to the service providers and, possibly, the institutions they serve.

44. The net economic benefit to consumers of prison phone services is the difference they would have been willing to pay for the additional calls made, less the new cost of those calls. This willingness to pay is distributed between the old rate paid (because additional calls could have been purchased at that rate prior to the rate reduction) and the new rate. The amount of additional calling will depend on how responsive calling volumes are to a change in its price—what economists call the elasticity of demand—for prison phone services. The elasticity of demand for prison phone services is expected to be inelastic—that is, the amount of calls made is not very responsive to prices. This inelastic demand is expected because prisoners have fewer

---

<sup>69</sup> Securus Account Statement, dated 9/26/2012. Received from Deborah Golden via email, February 5, 2013. The bill includes a 3 minute call billed at \$3.10 and a 10 minute call billed at \$4.50. This implies a pricing structure where the Call Cost = \$2.50 plus \$0.20 times the number of minutes of the call. Examination of other charges on the same bill confirms this pricing structure.

<sup>70</sup> Global Tel Link. Billing Summary for Southern Poverty Law Center, October 31, 2012. Received from Lee Petro via email, February 4, 2013. The bill includes a 1 minute call billed at \$4.84 and a 2 minute call billed at \$5.73. This implies a pricing structure where the Call Cost = \$3.95 plus \$0.89 times the number of minutes of the call. This rate structure is consistent with another invoice from GTL dated September 29, 2012. Global Tel Link, Billing Summary for Account Number 2023191000, September 29, 2012. Received from Deborah Golden via email February 5, 2013.

alternatives to making phone calls. They mostly cannot see people in person and do not have access to e-mail. In New York, when prices fell by 57.5%, total usage increased by 36%, suggesting an elasticity of demand of -0.63.<sup>71</sup>

45. When rates are reduced and demand is inelastic, there will be less revenue generated from prison calling services. To the extent the reduced revenue forces a reduction in commissions, prisons will lose revenues. Service providers will also lose through reduced revenues from services. But lower prices will induce an increase in the amount of prison calls made, leading to a partial offset for service providers, and possibly prisons. The above elasticity estimate suggests that a 10% reduction in price will lead to a 6.3% increase in call volumes.

46. Social benefits of lower rates. There are at least 2 social externalities associated with prison calling. The first is through the benefits of reduced recidivism from greater contact between prisoners and their family and community. The second is more effective prisoner management, including reduced use of contraband cell phones in prisons. Although exact pecuniary levels of these added benefits from lower calling rates are not quantified here, they are nonetheless real.

47. Prisoners making phone calls to their family and community have a well-documented social externality—namely, that better family and community contacts reduce recidivism rates. Many studies find that maintaining family and community contacts is an important predictor of recidivism.<sup>72</sup> Furthermore, the GAO found that “BOP extends telephone privileges to inmates and asserts that telephone privileges help inmates maintain family and community ties and facilitate the reintegration of inmates into society upon release from prison.”<sup>73</sup>

48. This social benefit of reductions in recidivism rates is difficult to quantify accurately, but it must be large. In 2011, the average U.S. state and federal prison population was 1.6 million

---

<sup>71</sup> <http://www.doccs.ny.gov/PressRel/2007/phoneratereduction.html>.

<sup>72</sup> See the discussion in Jackson 2005, pp. 272-273.

<sup>73</sup> GAO 2011, p. 6.

inmates and 688,384 were released in that year.<sup>74</sup> According to one study, in 2010 each prisoner in a state institution cost taxpayers an average of \$31,286.<sup>75</sup> A conservative estimate of recidivism rates would suggest 40% of prisoners return to prison within 3 years.<sup>76</sup> With almost 700,000 prisoners released each year, these numbers suggest 280,000 will return to prison within 3 years. Consequently, a reduction of just 1% in the number of reincarcerated prisoners would imply 2,800 prisoners not returning to prison and annual savings of almost \$90 million.<sup>77</sup> Reductions in the next year's 'class' of returning prisoners generate additional savings of about the same amount. If the average prisoner serves 3 years,<sup>78</sup> then a 1% reduction in recidivism would save more than \$250 million per year, year after year.<sup>79</sup>

49. Yet another benefit of lower prison calling rates relates to inmate management issues. Contraband cell phones are a threat to prisons, both in facilitating additional criminal activity and threatening institutional safety.<sup>80</sup> Any substitution away from cell phones to prison provided calling services brings more prisoner communications under monitoring and reduces these threats. Making prison calling more cost competitive with cellular rates will inevitably create some substitution in usage toward the calling services provided by the institution.

---

<sup>74</sup> E. Ann Carson & William J. Sabol, "Prisoners in 2011," U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Bulletin (December 2012), p. 1, available at: <http://bjs.ojp.usdoj.gov/content/pub/pdf/pl11.pdf>.

<sup>75</sup> Christian Henrichson & Ruth Delaney, "The Price of Prisons, What Incarceration Costs Taxpayers," VERA Institute of Justice (July 20, 2012), p. 10, available at: [http://www.vera.org/sites/default/files/resources/downloads/Price\\_of\\_Prisons\\_updated\\_version\\_072512.pdf](http://www.vera.org/sites/default/files/resources/downloads/Price_of_Prisons_updated_version_072512.pdf).

<sup>76</sup> "When excluding California, whose size skews the national picture, recidivism rates between 1994 and 2007 have consistently remained around 40 percent." The PEW Center on the States, "State of Recidivism, The Revolving Door of America's Prisons" (April 2011), p. 2, available at: [http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/sentencing\\_and\\_corrections/State\\_Recidivism\\_Revolving\\_Door\\_America\\_Prisons%20.pdf](http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/sentencing_and_corrections/State_Recidivism_Revolving_Door_America_Prisons%20.pdf). Including California would have made the rate higher. Furthermore, the Department of Justice estimated a 3-year recidivism rate of prisoners released in 1994 of 67.5%. U.S. Department of Justice, Office of Justice Programs, "Recidivism of Prisoners Released in 1994," Bureau of Justice Statistics Special Report (June 2002), p. 1, available at: <http://bjs.ojp.usdoj.gov/content/pub/pdf/rpr94.pdf>.

<sup>77</sup>  $1\% * 280,000 = 2,800$  prisoners \* \$31,286 per prisoner = \$87,600,800.

<sup>78</sup> [http://www.nytimes.com/2012/06/06/us/average-prison-stay-grew-36-percent-in-two-decades.html?\\_r=0](http://www.nytimes.com/2012/06/06/us/average-prison-stay-grew-36-percent-in-two-decades.html?_r=0).

<sup>79</sup>  $\$87,600,800 * 3 = \$262,802,400$ .

<sup>80</sup> GAO 2011, p. 19.

50. Although the exact values of these externalities—lower recidivism and better prisoner management—are not estimated here, they do provide further justification for lowering prison calling rates. In fact, they provide an argument for subsidizing prisoner calling rates. The efficient level of rates based on market costs does not account for these other positive externalities. If the added benefits arising from lower rates were actually considered during the rate-setting process, rates would be set lower than the rate suggested by the analysis in the previous section.

#### THE COSTS OF REFORM/BENEFITS OF THE CURRENT SYSTEM

51. The only beneficiaries of the current high rates are the current service providers and the penal institutions that receive commissions from the service providers they contract with. However, any lost revenues to service providers result in a direct benefit to prisoners and those they call. The impact on the service providers may also be offset from any increased volume of calls placed.<sup>81</sup>

52. A significant portion of the rates charged in many states go to the penal institutions in the form of commissions. Prison Legal News estimated that total commissions nationwide were more than \$100 million in 2012.<sup>82</sup> As the FCC has previously found, these commissions are not economic costs of providing prison calling services.<sup>83</sup> Rather, they are more akin to a tax. As noted above, some of the revenues from commissions ultimately paid by prisoners and their families currently may be put to good uses, but because they distort the calling market, they come with added costs. A more straightforward funding source for these prisoner benefits, such as from general tax revenues, would distort economic resources less than taxing prison phone calls as a source of revenue.

53. Since the proposed benchmark maximum rate of \$0.07 per minute is still above reasonable estimates of costs, including a competitive profit, there could still be some room for

---

<sup>81</sup> How much the increase in calling volumes offsets service provider losses will depend on how the elasticity of demand for calling services (to determine the amount of increase in inmate calling) and on what happens with commissions.

<sup>82</sup> Human Rights Defense Center, “Comment in the Matter of Rates for Inmate Calling Services, WC Docket No. 12-375,” (March 25, 2013), Exhibit C.

<sup>83</sup> Inmate Calling NPRM 2012, ¶ 37.

small commissions. In fact, with a fixed maximum rate, the competition for contracts would induce efficient provision of prison phone service.<sup>84</sup> If commissions are still allowed, then it is likely that service providers would still compete on the basis of commissions in trying to secure the contracts for given facilities. The amount of money available to offer in commissions would be the difference between the benchmark maximum rate and the costs of providing service. The firms that could offer the highest commissions would be the ones that could provide the underlying service at least cost, for a given set level of service quality.<sup>85</sup> In the absence of commissions, competition for contracts would focus on other areas, such as providing better service to prisoners.

#### **THE NET BENEFITS OF A BENCHMARK MAXIMUM RATE**

54. It is well beyond the scope of the current analysis to provide a full accounting of the net benefits of regulating prison phone rates by establishing a maximum benchmark. Nevertheless, those net benefits are expected to be positive. Through the elimination of a dead weight loss we expect the gains to prisoners and those they call to exceed the loss in revenues to service providers and prisons. Some of benefits will be in the form of transfers from service providers and prisons to prisoners and those they call. The transfer of provider profits to the consumers of prison phone services should be seen a good thing from the social perspective, largely because it is only excess profits that would be transferred while those receiving the monetary benefits tend to be low income and can disproportionately benefit from the increased income.

55. A secondary concern is the loss in commissions to prisons. But it is very likely that through reduced recidivism rates prisons systems will not lose any money from reduced phone rates and associated commissions. As noted above, one estimate of the commissions earned by prisons is about \$100 million per year. A less-than-one percent reduction in recidivism would offset that lost revenue in lower prisoner costs. We do not know what the reduced recidivism rates would be from lower calling rates, but a 1% reduction does not seem an aggressive

---

<sup>84</sup> As with any regulated price, the quality of the service must be specified or lower quality service could result from cost cutting measures.

<sup>85</sup> The winning bidder would be expected to earn above competitive profits by the difference between how efficiently it could provide the service and the next most efficient provider.

estimate.<sup>86</sup> Although the savings from reduced recidivism may not exactly match the lost commission revenues at each facility or in every budget line, the prison system in the U.S. would save enough to offset the lost commission revenues.

## V. INAPPLICABILITY OF MARGINAL LOCATION METHODOLOGY TO THE PRISON PHONE MARKET

56. Marginal Location Methodology—as adopted by the FCC for calculating public payphone rates<sup>87</sup>—is not applicable to the prison payphone marketplace. The reasons used to justify this methodology in the public payphone market do not hold today for prison phone calling. Applying such a methodology here would be unnecessarily complicated and would over compensate most prison phone service providers.

57. The idea behind the Marginal Location Methodology is to estimate a rate where the marginal location just breaks even. As the FCC said in its 1999 Order, “A marginal payphone location is a location where the payphone operator is able to just recoup its costs, including earning a normal rate of return on the asset, but is unable to make payments to the location owner.”<sup>88</sup> It is the average call volume at that marginal location that would be used along with cost analysis to set the appropriate rate. Applying this methodology to prison phone systems would be to set a benchmark rate for all prisons based on the call volume at a marginal prison that just barely breaks even without paying commissions (if commissions are taken as analogous to payments to the location owner.)

58. This methodology has been criticized when applied to payphones.<sup>89</sup> Among other defects, it guarantees overpayments at most (non marginal) locations. In the case of prison calling services, costs are less facility specific than for payphones. The centralized nature of

---

<sup>86</sup> If the impact of better family and community ties induced by lower calling rates was actually less than 1% it seems unlikely that multiple studies would have identified the importance of this predictor of recidivism.

<sup>87</sup> See, Federal Communications Commission, “Third Report and Order, and Order on Reconsideration of the Second Report and Order,” In the Matter of Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, CC Docket No. 96-128 (Adopted: January 28, 1999). (Hereinafter “1999 Payphone Order”.)

<sup>88</sup> 1999 Payphone Order, ¶ 139.

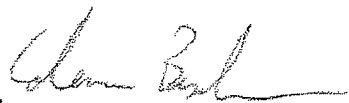
<sup>89</sup> There was some dissent in the applicability of this methodology to payphones. 1999 Payphone Order, ¶ 140.

providing prison calling services implies that costs are shared over multiple facilities. Consequently, this methodology is less relevant for prison calling rates than for payphone rates.

59. The Marginal Location Methodology is also inapplicable because it is a cost-based methodology. The justification for regulating prison calling rates is that the market fails to set just and reasonable rates. Cost-based rate regulation is a second-best attempt to approximate the outcome of a competitive market. As the analysis above indicates, most of the components of providing prison phone services can be priced in reference to competitively determined service components. Consequently, there is no need to apply a regulated cost of service approach to determining a just and reasonable rate. In fact, if a cost-based methodology produces a rate significantly higher than the \$0.07 per minute proposed here, it must be in error because it would imply paying more for a service, or component of service, that could be purchased more inexpensively in the competitive marketplace, thereby undermining the rationale for using cost-based regulation in the first place.

Respectfully submitted,

By:



Coleman Bazelon  
**THE BRATTLE GROUP, INC.**  
1850 M Street, NW  
Suite 1200  
Washington, DC 20036

March 25, 2013

## Appendix A: Underlying Data for Interstate Collect Call Calculations

State		Interstate Collect Call Base Rate	Interstate Collect Call Minute Rate	Commissions
Alabama		\$3.95	\$0.89	Missing
Alaska		\$3.95	\$0.89	7.0%
Arizona		\$2.40	\$0.40	53.7%
Arkansas		\$3.95	\$0.45	45.0%
California	[1]	\$0.00	\$0.44	Missing
Colorado	[2]	\$3.00	\$0.15	49.0%
Connecticut		\$0.00	\$0.32	68.8%
Delaware		\$1.71	\$0.66	40.0%
Florida	[3]	\$1.20	\$0.06	35.0%
Georgia		\$3.95	\$0.89	60.0%
Hawaii		Missing	Missing	Missing
Idaho	[4]	\$3.80	\$0.85	10.6%
Illinois	[5]	\$2.50	\$0.23	56.0%
Indiana		\$0.00	\$0.24	43.5%
Iowa	[6]	Missing	Missing	Missing
Kansas	[7]	\$1.70	\$0.40	41.3%
Kentucky		\$2.00	\$0.30	54.0%
Louisiana		\$2.15	\$0.22	70.0%
Maine	[8]	\$3.00	\$0.69	60.0%
Maryland	[9]	\$2.85	\$0.30	54.0%
Massachusetts		\$0.86	\$0.10	22.5%
Michigan		\$0.00	\$0.23	0.0%
Minnesota		\$3.95	\$0.89	59.0%
Mississippi	[10]	\$3.30	\$0.75	60.5%
Missouri		\$1.00	\$0.05	0.0%
Montana		\$0.24	\$0.12	25.0%
Nebraska		\$0.70	\$0.05	0.0%
Nevada		\$3.00	\$0.59	54.2%
New Hampshire	[11]	\$1.20	\$0.10	Missing
New Jersey		\$0.00	\$0.33	41.0%
New Mexico	[12]	\$0.65	\$0.00	0.0%
New York		\$0.00	\$0.05	0.0%
North Carolina	[13]	\$3.40	\$0.00	58.0%
North Dakota	[14]	\$2.40	\$0.24	40.0%
Ohio	[15]	\$3.94	\$0.88	Missing
Oklahoma	[16]	\$3.00	\$0.00	76.6%
Oregon	[17]	\$0.00	\$0.16	Missing
Pennsylvania	[18]	\$3.50	\$0.50	44.4%
Rhode Island		\$1.30	\$0.30	0.0%
South Carolina	[19]	\$0.99	\$0.00	0.0%
South Dakota	[20]	\$3.15	\$0.43	35.5%
Tennessee	[21]	\$3.54	\$0.62	50.1%
Texas	[22]	\$0.00	\$0.43	40.0%
Utah	[23]	\$3.00	\$0.45	50.0%

State		Interstate Collect Call Base Rate	Interstate Collect Call Minute Rate	Commissions
Vermont		\$1.25	\$0.15	37.0%
Virginia	[24]	\$2.40	\$0.43	35.0%
Washington		\$3.50	\$0.50	Missing
West Virginia	[25]	\$0.85	\$0.50	46.0%
Wisconsin		\$0.00	\$0.18	30.0%
Wyoming	[26]	\$2.80	\$0.55	65.5%

Source: Prison Legal News, 2013.

Notes: Compiled by Prison Legal News.

- [1] No commissions, but California Technology Agency receives an \$800,000 annual fee from GTL.
- [2] FY2012 commission amount is for 10 months of the FY.
- [3] FY2009 commission amount is only for January through June 2009.
- [4] No commission percentage; the commission is \$2.25 per debit call, \$2.00 per pre-paid collect call and \$1.75 per collect call. Community Work Centers have a 20% commission.
- [5] FY2012 commission amount is through April 2012.
- [6] Not called "commissions," but the Iowa DOC receives payments from its ICS provider.
- [7] FY2012 commission amount is through May 2012.
- [8] Uses a calendar year, not fiscal; 2012 amount is through November 2012.
- [9] Rates per email from MD DOC; no per-minute charge for first minute of collect interstate calls. ICS contract changed to GTL in March 2013, resulting in reduced rates.
- [10] Collect rate is per call to GTL on 3/8/13.
- [11] Commission is \$27,000/month + 20%, starting September 2012.
- [12] All flat rates are for 20-minute calls.
- [13] FY2012 commission amount is through October 2012.
- [14] \$.30 for the first minute for collect interstate calls, then \$.24/min. thereafter.
- [15] Ohio DOC receives a flat/fixed annual commission of \$15 million. Collect rate is per call to GTL on 3/8/13.
- [16] Commission is a flat rate of \$2.30 per call, which equates to 76% based on a flat rate cost of \$3.00 per call.
- [17] \$750,000/quarter plus 50% commission if profit is over \$1.5 million.
- [18] FY2012 commission data is incomplete.
- [19] All flat rates are for 15-minute calls.
- [20] 33-38% on collect calls (varies by distance); \$1.00 commission per debit call (all distances).
- [21] Actual rates are \$3.53525 + .61755/min. collect and \$3.181735 +.555795/min. debit.
- [22] FY2012 ended on August 31; commission amount is as of August 5, 2012.
- [23] Rates are per call to VAC on 3/8/13.
- [24] FY2012 commission amount is for 11 months.
- [25] FY2012 commission amount is through September 2012.
- [26] FY2012 commission amount is from January through August 2012.

# **Attachment A**

Office: Washington, DC \* Phone: +1.202.955.5050 \*Email: Coleman.Bazelon@brattle.com

**Dr. Coleman Bazelon** is a principal in the Washington, DC office of *The Brattle Group*. He is an expert in regulation and strategy in the wireless, wireline, and video sectors. He has consulted and testified on behalf of clients in numerous telecommunications matters, ranging from wireless license auctions, spectrum management, and competition policy, to patent infringement, wireless reselling, and broadband deployment.

Dr. Bazelon frequently advises regulatory and legislative bodies, including the U.S. Federal Communications Commission and the U.S. Congress. He also has expertise in the federal government's use of discount rates for policy and regulatory analysis, intellectual property valuation, economic impact analysis, and antitrust and damages analysis.

Throughout his career, Dr. Bazelon has had extensive experience with spectrum license auctions. He advises on and evaluates numerous auction designs and regularly serves as an auction advisor for bidders in spectrum license auctions.

Prior to joining *Brattle*, Dr. Bazelon was a vice president with Analysis Group, an economic and strategy consulting firm. During that time, he expanded the firm's telecommunications practice area. He also served as a principal analyst in the Microeconomic and Financial Studies Division of the Congressional Budget Office where he researched reforms of radio spectrum management; estimated the budgetary and private sector impacts of spectrum-related legislative proposals; and advised on auction design and privatization issues for all research at the CBO.

Dr. Bazelon received his Ph.D. and M.S. in Agricultural and Resource Economics from the University of California at Berkeley. He also holds a Diploma in Economics from the London School of Economics and Political Science and a B.A. from Wesleyan University.

## SELECTED CONSULTING PROJECTS

### *Litigation*

- ◆ Assessed commercial viability of full text searching of books business model.
- ◆ Assessed Domestic Industry requirement in ITC 337 case.
- ◆ Estimated value of satellite assets in bankruptcy.
- ◆ Estimated damages from denial of pole attachments.
- ◆ Provided written testimony evaluating the performance of a numbering resource administrator.
- ◆ Provided written testimony on the ability to estimate damages for a class of satellite phone users.
- ◆ Provided written testimony on the economic value of Rights-of-Ways in Massachusetts.
- ◆ Estimated damages for a broadcast tower permit revocation.
- ◆ Provided oral testimony on the proprietary nature of specific information contained in a statewide public safety network bid.
- ◆ Provided written testimony on economic value associated with items provided in a labor neutrality agreement.
- ◆ Estimated damages associated with USF and other telephone taxes paid by a calling card reseller.
- ◆ Assessed the damages associated with the infringement of patents related to VoIP technology and the likely impact of a permanent injunction.
- ◆ Estimated recoverable data costs for two pesticides.
- ◆ Estimated cost of delay in granting local cable franchise.
- ◆ Analyzed the economic underpinnings of an exclusivity clause of a mobile phone affiliation agreement.
- ◆ Assessed commonality issues of physicians for class certification of RICO action against a set of health insurance companies.
- ◆ Estimated "Loss of Use" damages for a severed fibre optic cable.
- ◆ Provided written testimony estimating the value of a surety bond in a contract dispute involving toll free phone numbers used in an enhanced service application.
- ◆ Assessed damages associated with infringement of patents used to provide Voice over Internet Protocol (VoIP).
- ◆ Assessed basis for guidance of a large telecommunications firm in a 10-b securities litigation.
- ◆ Valued digital television radio spectrum in St. Louis in the pre-litigation phase of a breach of contract dispute.
- ◆ Estimated damages in a breach of contract case involving the sale of a fibre optic network.
- ◆ Researched the basis for generally optimistic forecasts of broadband deployment in the later 1990s and early 2000s in an anti-trust litigation.
- ◆ Researched the basis for generally optimistic beliefs about the telecommunications sector in the late 1990s in a 10-b securities litigation.

- ◆ Assessed the market for Competitive Local Exchange Carriers in an SEC fraud case.
- ◆ Assessed a bankruptcy sale proposal for a national tier 1 broadband backbone provider.
- ◆ Examined the business case asserted for a small wireless reseller in a breach of contract litigation.
- ◆ Assessed damages associated with infringement of patents used in DNA fingerprinting applications.
- ◆ Assessed changes in contributions to the Cable Royalty Fund on behalf of Sports Claimants in a Copyright Arbitration Royalty Panel (CARP) proceeding.
- ◆ Assessed the capital adequacy of the U.S. branch of a foreign bank.

### *Regulatory Proceedings*

- ◆ Estimated economic impact of LNP on RLECs.
- ◆ Assessed relevance of U.S. UNE-L experience for New Zealand benchmarking proceeding.
- ◆ Authored analysis of harm from revoking LightSquared's ATC authorization .
- ◆ Estimated value of pairing Upper 700 MHz A Block with public safety.
- ◆ Estimated impact of increased regulatory uncertainty on spectrum value.
- ◆ Estimated value of government provision of GPS service to private industry.
- ◆ Coauthored analysis of feasibility of reallocating broadcast television through the use of incentive auctions.
- ◆ Analyzed impact on spectrum value of pairing AWS III spectrum.
- ◆ Coauthored analysis of the merits of licensed versus unlicensed allocation of the TV White Spaces.
- ◆ Estimated the value of TV White Spaces.
- ◆ Provided written testimony on the economic harm of using proprietary information in retention marketing.
- ◆ Provided written testimony on the economics of pole attachment rates.
- ◆ Estimated the value of the PCS H-Block spectrum band.
- ◆ Estimated the economic impact of ITC Exclusion Order on cell phone handsets.
- ◆ Authored several reports on the 700 MHz auction rules.
- ◆ Analyzed the relationship between the size of cable systems and the economics of the programming market.
- ◆ Presented analysis on pricing differentials in overlapping cable markets.
- ◆ Assessed proposed regulation of mobile phone roaming rates.
- ◆ Analyzed impact of local franchise requirements on competition in the video marketplace.
- ◆ Developed and assessed Indian spectrum management proposals.
- ◆ Analyzed economic ramifications of à la carte cable channel pricing on consumers and the cable and television programming industries.

- ♦ Examined the relative merits of licensed versus unlicensed radio spectrum and the effects of “underlay” licenses on existing commercial licensees.
- ♦ Examined federalism issues related to mobile telephony regulation.
- ♦ Examined and refuted arguments suggesting that the California Telecommunications Consumer Bill of Rights was an appropriate response to market failures.
- ♦ Assessed the impact on consumers of California’s Telecommunications Consumer Bill of Rights proposal.
- ♦ Provided written testimony refuting analysis purporting to show a positive relationship between UNE-P and telecom network investment.
- ♦ Provided written testimony examining the effects of unbundling regulations on capital spending in the telecommunications sector.
- ♦ Estimated the adjustment to the TELRIC pricing formula to account for irreversible investment in the local telephone network.
- ♦ Examined the impact of irreversible investments in the local telephone network on the TELRIC pricing methodology.
- ♦ Assessed the degree of market overlap of two food service firms for purposes of merger review.
- ♦ Provided written testimony that assessed the validity of an analysis of the costs of a DTV tuner mandate.
- ♦ Provided written testimony of a forecast of toll free number demand for the toll free number administrator, SMS/800, in a rate case proceeding.

#### *Other*

- ♦ Assessed business case and value of HF license holder.
- ♦ Analyzed likely auction outcomes for TV broadcaster participating in incentive auction.
- ♦ Assessed value of commercial mobile spectrum bands.
- ♦ Analyzed economic impacts of the commercial casino industry.
- ♦ Evaluated impact of digitization on copyright industries.
- ♦ Analyzed economic and employment effects of Dutch gas hub.
- ♦ Advised bidder in Indian 3G spectrum license auction.
- ♦ Estimated economic and employment effects of network neutrality regulation.
- ♦ Analyzed relative costs of wireless and wireline deployments in rural areas.
- ♦ Analyzed potential harms from Internet gambling.
- ♦ Estimated economic value of reallocating TV spectrum for wireless broadband.
- ♦ Estimated economic and employment effects of electric power transmission construction in support of new wind generation facilities.
- ♦ Estimated economic and employment effects of broadband stimulus grant applications.

- ◆ Estimated employment effects of an ATC-mobile satellite network deployment.
- ◆ Analyzed the impact of reducing international mobile phone roaming charges.
- ◆ Developed an auction platform for an electricity procurement auction.
- ◆ Analyzed the economic impacts of reduced mobile phone taxes in Africa and the Middle East.
- ◆ Evaluated the impact of reducing ethanol requirements on gasoline prices.
- ◆ Analyzed FRAND licensing requirements for intellectual property in the DTV standard.
- ◆ Advised bidder in Canadian AWS spectrum license auction.
- ◆ Advised bidder in FCC 700 MHz spectrum license auction.
- ◆ Evaluated a business plan for proposed dam removals.
- ◆ Assessed a business plan involving the WiMAX market.
- ◆ Estimated the value of a portfolio of spectrum licenses.
- ◆ Assessed the budgetary impacts of legislation to license TV white spaces.
- ◆ Analyzed the economics of the military's build versus buy decision for broadband satellite communications capacity.
- ◆ Advised bidder in FCC AWS spectrum license auction.
- ◆ Provided framework to estimate impact of the effect of designation of TV white spaces as unlicensed on 700 MHz auction receipts.
- ◆ Analyzed Universal Service Fund expenditures.
- ◆ Analyzed cable franchising requirements.
- ◆ Valued proposals to re-band the Upper 700 MHz Band of radio spectrum.
- ◆ Analyzed proposed accelerated digital television transition impacts on society and the federal budget.
- ◆ Coauthored a report on the value of a portfolio of patents used to provide Voice over Internet Protocol (VoIP).
- ◆ Coauthored a report to the U.S. Chamber of Commerce on the economic effects of telecommunications deregulation.
- ◆ Assessed the business cases for IRU swaps of a large international fibre optic network owner.
- ◆ Examined the effects of unbundling regulations on broadband penetration internationally.

## PUBLICATIONS

### *Articles and Book Chapters*

John Jarosz, Robin Heider, Coleman Bazelon, Christine Bieri and Peter Hess, "Patent Auctions: How Far Have We Come?" *les Nouvelles*, March 2010, pp. 11-30.

"Too Many Goals: Problems with the 700 MHz Auction," *Information Economics and Policy*, June 2009, pp. 115-127.

"Licensed or Unlicensed: The Economic Considerations in Incremental Spectrum Allocations," *IEEE Communications Magazine*, March 2009, pp. 110-116.

Michael H. Rothkopf and Coleman Bazelon, "Interlicense Competition: Spectrum Deregulation Without Confiscation or Giveaways," in *OBTAINING THE BEST FROM REGULATION AND COMPETITION*, Michael A. Crew and Menahem Spiegel, eds., Kluwer Academic Publishers (2005), pp. 135-159.

"Next Generation Frequency Coordinator," *Telecommunications Policy* 27 (2003), pp. 517-525.

Coleman Bazelon and Kent Smetters, "Discounting in the Long Term," *Loyola of Los Angeles Law Review*, Vol. 35, Issue 1, November 2002.

Coleman Bazelon and Kent Smetters, "Discounting Inside the Washington DC Beltway," *Journal of Economic Perspectives*, Fall 1999.

"The Movement of Markets," *Wesleyan Economic Journal*, Spring 1986.

"Is the Psychogenic Theory of History Scientific?" *Journal of Psychohistory*, Fall 1985.

#### *White Papers, Reports, Studies, and Reviews*

Robert A. Rogowsky, Pallavi Seth, and Coleman D. Bazelon, "An Economic View Of ITC 337 Cases and the Public Interest," *Law360*, November 21, 2012.

Coleman Bazelon and Giulia McHenry, "Spectrum Value," *Telecommunications Policy Research Conference*, 2012.

Robert A. Rogowsky, Pallavi Seth, and Coleman D. Bazelon, "An Economic View Of The ITC's Domestic Industry," *Law360*, June 18, 2012.

Coleman Bazelon and Greg Duncan, "The Status of UNE-L in the United States," Prepared for the Commerce Commission of New Zealand, April 12, 2012.

"Implications of Regulatory Inefficiency for Innovative Wireless Investments," Sponsored by LightSquared, March 15, 2012.

Coleman Bazelon, Kevin Neels and Pallavi Seth, "Beyond the Casino Floor: Economic Impacts of the Commercial Casino Industry," sponsored by the American Gaming Association, 2012.

Coleman Bazelon, Charles Jackson and Giulia McHenry, "An Engineering and Economic Analysis of the Prospects of Reallocating Radio Spectrum from the Broadcast Band through the Use of Voluntary Incentive Auctions," *Telecommunications Policy Research Conference*, 2011.

"Cost of Regulatory Risk for Wireless Spectrum Values," sponsored by LightSquared, August 23, 2011.

"Expected Receipts from Proposed Spectrum Auctions," sponsored by the Wireless Broadband Coalition, July 28, 2011.

"GPS Interference: Implicit Subsidy to the GPS Industry and Cost to LightSquared of Accommodation," sponsored by LightSquared, June 22, 2011.

Lisa Cameron and Coleman Bazelon, "The Impact of Digitization on Business Models in Copyright-Driven Industries: A Review of the Economic Issues," National Research Council (NRC) Committee on the Impact of Copyright Policy on Innovation in the Digital Era, June 7, 2011.

"The Economic Basis of Spectrum Value: Pairing AWS-3 with the 1755 MHz Band is More Valuable than Pairing it with Frequencies from the 1690 MHz Band," sponsored by T-Mobile and CTIA, April 11, 2011.

"Economists Letter to Obama Regarding Incentive Auctions," April 6, 2011.

"The Indian 3G and BWA Auctions," Telecommunications Policy Research Conference, 2010.

"Economic Impact of the Dutch Gas Hub Strategy on the Netherlands," by Dan Harris, Coleman D. Bazelon, Brad Humphreys, and Penelope Dickson, *Netherlands Ministry of Economic Affairs, Agriculture and Innovation*, September 2010.

"The Employment and Economic Impacts of Network Neutrality Regulation: An Empirical Analysis," sponsored by Mobile Future, 2010.

"The Benefits of Wireless Broadband for Rural Deployments," sponsored by Qualcomm, Inc, 2010.

Malcolm K. Sparrow, Coleman Bazelon and Charles Jackson, "Can Internet Gambling Be Effectively Regulated? Managing the Risks," sponsored by Wired Safety, 2009.

"The Need for Additional Spectrum for Wireless Broadband: The Economic Benefits and Costs of Reallocations," sponsored by Consumer Electronics Association, 2009.

Coleman Bazelon and William Zarakas, "Measuring Concentration in Radio Spectrum License Holdings," Telecommunications Policy Research Conference, 2009.

"Licensed or Unlicensed: The Economic Considerations in Incremental Spectrum Allocations," in *New Frontiers in Dynamic Spectrum Access Networks, 2008*, DySPAN 2008.

"Overreaching: The Policy Failures of the 700 MHz Auction," Telecommunications Policy Research Conference, 2008.

"Cream Skimming," Telecommunications Policy Research Conference, 2007.

Thomas W. Hazlett and Coleman Bazelon, "Market Allocation for Radio Spectrum," prepared for the International Telecommunications Union Workshop on Market Mechanisms for Spectrum Management, Geneva, Switzerland, January, 2007.

"Licensed or Unlicensed: The Economics of Incremental Spectrum Allocations," Telecommunications Policy Research Conference, 2006.

"Analysis of an Accelerated Digital Television Transition," sponsored by Intel Corporation, 2005.

Thomas W. Hazlett and Coleman Bazelon, "Regulated Unbundling of Telecommunications Networks: A Stepping Stone to Facilities-Based Competition?" Telecommunications Policy Research Conference, 2005.

Thomas W. Hazlett, Coleman Bazelon, John Rutledge, and Deborah Allen Hewitt, *Sending the Right Signals: Promoting Competition Through Telecommunications Reform: A Report to the U.S. Chamber of Commerce*, September 22, 2004.

Thomas W. Hazlett, Arthur M. Havenner, and Coleman Bazelon, "Regulation and Investment in Local Telecommunications Networks," Working Paper, January 2004.

Michael H. Rothkopf and Coleman Bazelon, "Interlicense Competition: Spectrum Deregulation Without Confiscation or Giveaways," New America Foundation, Spectrum Series Working Paper #8, August, 2003.

"Review of Discounting and Intergenerational Equity," by Paul Portney and John Weyant, *Resources for the Future* (1999), in the *Society of Government Economists Newsletter*, Volume 34, No. 10, November 2002.

"Completing the Transition to Digital Television," Congressional Budget Office, September 1999.\*

"Two Approaches for Increasing Spectrum Fees," Congressional Budget Office, November 1998 (Coauthored with David Moore\*).

"Where Do We Go From Here? The FCC Auctions and the Future of Radio Spectrum Management," Congressional Budget Office, April 1997 (Coauthored with Perry Beider and David Moore\*).

\* CBO publications do not cite authors' names.

### *Federal Communications Commission Filings*

"Unlicensed Use of the TV White Spaces: Wasteful and Harmful," FCC Filing, with Charles L. Jackson and Dorothy Robyn, *Ex Parte* Comments, ET Docket No. 04-186, ET Docket No. 02-380, August 20, 2008 (benefits of licensed over unlicensed allocation of the TV White Spaces).

"Comments of Charles L. Jackson, Dorothy Robyn and Coleman Bazelon," Comments, WC Docket No. 06-150, PS Docket No. 06-229, June 20, 2008 (value of TV White Spaces).

"Comments of Coleman Bazelon," Comments, WC Docket No. 06-150, PS Docket No. 06-229, WT Docket No. 96-86, June 20, 2008 (700 MHz D Block).

"Declaration of Coleman Bazelon," Reply Comments, WC Docket No. 07-245, April 22, 2008 (economics of pole attachment rates).

"Why the Exclusive Use of Large Licenses in the Upper or Lower 700 MHz Bands Would Reduce the Efficiency of the 700 MHz Auction," Comments, WT Docket No. 06-150, April 20, 2007.

"Principles for Choosing 700 MHz Block License Sizes," *Ex Parte* Comments, WT Docket No. 06-150, March 6, 2007.

"The Economics of License Sizes in the FCC's 700 MHz Band Auction," *Ex Parte* Comments, WT Docket No. 06-150, January 2007.

"Declaration of Thomas W. Hazlett, Ph.D., Prof. Arthur M. Havenner, and Coleman Bazelon, Ph.D.," Comments, WC Docket No. 03-173, December 16, 2003.

"Declaration of Thomas W. Hazlett, Ph.D., Arthur M. Havenner, Ph.D., and Coleman Bazelon, Ph.D.," Comments, WC Docket No. 03-157, September 2, 2003.

"Spectrum Deregulation Without Confiscation or Giveaways," with Michael Rothkopf, Comment, ET Docket No. 02-135, January 9, 2003.

Thomas W. Hazlett, Coleman Bazelon and Arthur Havenner, "Forecast of Toll Free Number Demand: 2002-2004," Attachment A, SMS/800 Transmittal No. 22, F.C.C. Tariff No. 1, November 15, 2002.

"Comments of Coleman D. Bazelon and T. Christopher Borek Relating to Arthur D. Little, Inc.'s Assessment of the Impact of DTV on the Cost of Consumer Television Receivers," *Ex Parte* Comments MM Docket 00-39, August 1, 2002.

"Use Administrative Law Judges to Adjudicate Interference Disputes Between Licensees," Comment, ET Docket No. 02-135, July 8, 2002.

### REVIEWER

- ◆ *American Journal of Agricultural Economics*
- ◆ *Congressional Budget Office Reports*

- ◆ *Telecommunications Policy*
- ◆ *Telecommunications Policy Research Conference Program Committee*

## SEMINARS AND PRESENTATIONS

*Mobile Impact on Economic Growth and Job Creation*, Consumer Electronics Show, LIT Program Innovation Policy Summit, Las Vegas, NV, January 8, 2013.

*Incentive Auctions: What Broadcasters Need to Know*, Crossfire Media Webinar, December 19, 2012.

*Spectrum Value*, 40th Annual Telecommunications Policy Research Conference (TPRC), Arlington, VA, September 22, 2012.

*FCBA Seminar: Getting from Here to There: The Road Ahead for Spectrum Auctions*, Washington, DC, June 6, 2012.

*Incentive Auctions*, 39th Annual Telecommunications Policy Research Conference (TPRC), Arlington, VA, September 24, 2011.

*Competition in the Wireless Environment: How to Get More Handsets or More Networks*, Broadband Breakfast Club, Washington, DC, February 15, 2011.

*Introducing TV White Spaces*, Spectrum Bridge webinar, October 28, 2010.

*The Indian 3G and BWA Auctions*, 38th Annual Telecommunications Policy Research Conference (TPRC), Arlington, VA, October 2, 2010.

*How Smart Public Policies Can Drive the Mobile Broadband Transformation*, Information Technology and Innovation Foundation's The Emerging Mobile Broadband Economy and its New Business Models, Washington, DC, September 14, 2010.

*Community Broadband-A Blessing or Curse?*, K&L Gates LLP Municipal Broadband Webcast, July 29, 2010.

*Towards A Sustainable Spectrum Policy: Rethinking Federal Spectrum*, Public Knowledge, Washington, DC, June 3, 2010.

*Unraveling Net Neutrality: Should the FCC Regulate Broadband*, Independence Institute, Denver, CO, May 26, 2010.

*CQ-Roll Call Policy Breakfast on the Future of Wireless Broadband*, Washington, DC, May 20, 2010.

*Congressional Staff Briefings on "The Need for Additional Spectrum for Wireless Broadband: The Economic Benefit and Costs of Reallocations"*, Washington, DC, December 8, 2009.

*The Progress and Freedom Foundation's "Let's Make a Deal: Broadcasters, Mobile Broadband, and a Market in Spectrum"*, Washington, DC, December 1, 2009.

*FCBA's Intellectual Property Practice Committee Brown Bag Lunch*, Washington, DC, November 30, 2009.

*FCC Broadband Spectrum Workshop*, Washington, DC, September 17, 2009.

*Measuring Concentration in Radio Spectrum License Holdings*, 37th Annual Telecommunications Policy Research Conference (TPRC), Arlington, VA, September 26, 2009.

*Broadband Stimulus Plan*, 2009 FLATOA-FCBA Conference, Tampa, FL, June 26, 2009.

- Leveraging the Broadband Stimulus and Licensed Spectrum*, Webinar, April 29, 2009.
- Keynote Address*, Enterprise Wireless08, Scottsdale, AZ, November 6, 2008.
- Licensed or Unlicensed: The Economic Considerations in Incremental Spectrum Allocations*, DySPAN, Chicago, IL, October 16, 2008.
- Overreaching: The Policy Failures of the 700 MHz Auction*, 36th Annual Telecommunications Policy Research Conference (TPRC), Arlington, VA, September 27, 2008.
- Cream Skimming*, 35th Annual Telecommunications Policy Research Conference (TPRC), Arlington, VA, September 29, 2007.
- Auction Revenues are not the Only Revenues that Should Drive Spectrum Policy*, Law Seminars International: Spectrum Management, Washington, DC, September 17, 2007.
- Market Allocation for Radio Spectrum*, International Telecommunications Union Workshop on Market Mechanisms for Spectrum Management, Geneva, Switzerland, January 2007.
- Licensed vs. Unlicensed Spectrum: A New Economic Model for Determining the Trade-offs*, 34th Annual Telecommunications Policy Research Conference (TPRC), Arlington, VA, September 30, 2006.
- Decoding the Future of IP-TV*, Northern California Chapter of the Federal Communications Bar Association, San Francisco, February 2006.
- Accelerating the Digital Television Transition*, COMPTTEL Executive Business & Policy Summit, Washington, DC, December 2005.
- Regulated Unbundling of Telecommunications Networks: A Stepping Stone to Facilities Based Competition?* Telecommunications Policy Research Conference, Arlington, VA, September 2005.
- Sending the Right Signals: Promoting Competition Through Telecommunications Reform: A Report to the U.S. Chamber of Commerce*, presentation of report to the US Chamber of Commerce, October 6, 2004.
- Telecommunications Reform*, presentation to the U.S. Chamber of Commerce's Technology Policy Committee, April 29, 2004.
- Interlicense Competition*, Telecommunications Policy Research Conference, Arlington, VA, September 2003.
- Marketing & Legal Strategies: Hope, Hype & Crash Landings*, WCAI 2003, Washington, DC, July 10, 2003.
- Spectrum Policy Task Force Interference Recommendations*, Manhattan Institute Conference, Washington, DC, February 13, 2002.
- FCC License Auctions*, Society of Government Economists Conference, Washington, DC, November 22, 2002.
- Spectrum Management Panel*, CTIA Wireless 2002, Orlando, FL, March 18, 2002.
- A Note on Correlation*, ASSA Annual Meetings, Atlanta, GA, January 6, 2002.
- Regulatory Forbearance*, Powerline Communications Conference, Washington, DC, December 13, 2001.
- Spectrum License Valuations*, CTIA Wireless Agenda 2001, Dallas, TX, May 2001.
- Old Spectrum in the New Economy*, with David Moore, invited paper, Society of Government Economists Conference "The New 'Economy': What Has Changed and Challenges for Economic Policy," Washington, DC, November 2000.

*Discounting Inside the Washington DC Beltway*, Energy Information Agency Seminar Series, Washington, DC, March 2000.

*Discounting Inside the Washington DC Beltway*, Congressional Budget Office Seminar Series, Washington, DC, November 1999.

*Completing the Transition to Digital Television*, Telecommunications Policy Research Conference, Arlington, VA, September 1999.

*Digital Television Transition*, Congressional Budget Office Seminar Series, Washington, DC, April 1999.

*The Budgetary Treatment of Asset Sales*, briefing for the staff of the Senate Budget Committee, Washington, DC, February 1997.

*The Value Added from Multilateral Bargaining Theory for Applied Research*, with Greg Adams, Selected Paper, AAEA Annual Meeting, Baltimore, MD, August 1992.

*The Importance of Political Markets in Formulating Economic Policy Recommendations*, Selected Paper, AAEA Annual Meeting, Manhattan, KS, August 1991.

*L.D.C. Debt and Policy Linkages in the Determination of World Commodity Prices*, with Gordon Rausser, Selected Paper, AAEA Annual Meeting, Vancouver, B.C., Canada, August 1990.

#### TESTIMONY, DECLARATIONS, AND AFFIDAVITS

"Rebuttal Testimony of Coleman Bazelon," In re: Petition for Suspension or Modification of Application of the Requirements of 47 U.S.C. § 251(b) and (c), pursuant to 47 U.S.C. § 251(f)(2) regarding Time Warner Cable Information Services (Maine) LLC's Request, State of Maine Public Utilities Commission, Docket No. 2012-198, Docket No. 2012-218, Docket No. 2012-219, Docket No. 2012-220, Docket No. 2012-221, October 12, 2012.

"Testimony of Coleman Bazelon, Ph.D.," In re: Petition for Suspension or Modification of Application of the Requirements of 47 U.S.C. § 251(b) and (c), pursuant to 47 U.S.C. § 251(f)(2) regarding Time Warner Cable Information Services (Maine) LLC's Request, State of Maine Public Utilities Commission, Docket No. 2012-198, Docket No. 2012-218, Docket No. 2012-219, Docket No. 2012-220, Docket No. 2012-221, August 20, 2012.

"Expert Report of Dr. Coleman Bazelon," *Salsgiver Communications, Inc., Salsgiver Telecom, Inc., and Salsgiver Inc. v. Consolidated Communications Holdings, Inc., North Pittsburgh Systems, Inc., and North Pittsburgh Telephone Company, Inc.*, Court of Common Pleas, Allegheny County, Pennsylvania, Civil Division, No. GD 08-7616, May 10, 2012.

"Oral Testimony of Coleman Bazelon, The Brattle Group, Inc. before the U.S. House of Representatives, Committee on Energy and Commerce Subcommittee on Communication and Technology," April 12, 2011. (spectrum)

"Testimony of Coleman Bazelon, Principal, *The Brattle Group*, before the U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Communications, Technology, and the Internet," June 17, 2010 (spectrum valuation).

"Supplemental Expert Report of Coleman Bazelon," *Gemalto PTE LTD and Gemplus S.A. v. Telecommunications Industry Association*, United States District Court for the Eastern District of Virginia, Alexandria Division, Case 1:08-cv-00776-LMB-TRJ, December 16, 2008.

"Expert Report of Coleman Bazelon," *Gemalto PTE LTD and Gemplus S.A. v. Telecommunications Industry Association*, United States District Court for the Eastern District of Virginia, Alexandria Division, Case 1:08-cv-00776-LMB-TRJ, November 6, 2008.

"Prefiled Rebuttal Testimony of Coleman D. Bazelon," In re: Complaint and request for emergency relief against Verizon Florida LLC for anticompetitive behavior in violation of Sections 364.01(4), 364.3381, and 364.10, F.S., and for failure to facilitate transfer of customers' numbers to Bright House Networks Information Services (Florida) LLC, and its affiliate, Bright House Networks, LLC, Florida Public Service Commission, Docket No. 070691-TP, July 25, 2008.

"Prefiled Direct Testimony of Coleman D. Bazelon," In re: Complaint and request for emergency relief against Verizon Florida LLC for anticompetitive behavior in violation of Sections 364.01(4), 364.3381, and 364.10, F.S., and for failure to facilitate transfer of customers' numbers to Bright House Networks Information Services (Florida) LLC, and its affiliate, Bright House Networks, LLC, Florida Public Service Commission, Docket No. 070691-TP, May 30, 2008.

"Declaration of Coleman Bazelon in Support of Plaintiffs' Motion for Class Certification," *Kenneth Stickrath, et al v. Globalstar, Inc.*, United States District Court for the Northern District of California, San Francisco Division, Case No. 07-CV-01941 TEH, April 25, 2008.

"Testimony of Coleman Bazelon, Principal, *The Brattle Group*, before the U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Telecommunications and the Internet," April 15, 2008 (reviewing the 700 MHz auction).

"Concerning the Meaning of 'Fair and Reasonable Compensation' in Section 253(c) of the Telecommunications Act of 1996 and the Comparability of the Rights-of-Way Fees Paid by Level 3 in Massachusetts and Elsewhere," *The Massachusetts Turnpike Authority v. Level 3 Communications, LLC, et al.*, The United States District Court for the District of Massachusetts, Civ. Act. No. 06-11816, December 17, 2007.

"Concerning the Effects of the Fixed Rent Charged for Access to the Massachusetts Turnpike," *The Massachusetts Turnpike Authority v. Level 3 Communications, LLC, et al.*, The United States District Court for the District of Massachusetts, Civ. Act. No. 06-11816, November 12, 2007.

"Affidavit of Dr. Coleman Bazelon," *Gulfside Casino Partnership v. Mississippi Riverboat Council, et al.*, United States District Court for the Southern District of Mississippi, Southern Division, Cause No. 1:07-CV-110-LG-JMR, May 4, 2007.

"Rebuttal Report of Dr. Coleman Bazelon," *Level 3 Communications, LLC, v. City of St. Louis, Missouri*, United States District Court for the Eastern District of Missouri, Eastern Division, Consolidated Case No. 4:04-CV-871 CAS, June 17, 2005.

"Affidavit of Dr. Coleman Bazelon," *Informed Communications Systems, Inc. v. Intelogistics Corp., d/b/a Prosodie Interactive*, United States District Court, Southern District of Florida, Miami Division, Case No.: 04-61245 CIV Huck/Turnoff (October 12, 2004).

## EXPERT DESIGNATIONS

- ◆ *Touch America, Inc. v. Qwest Communications International, Inc.*  
- Designated as an expert in Arbitration (June 2003)

- ◆ *Informed Communications Systems, Inc. v. Intelogistics Corp., d/b/a Prosodie Interactive*, United States District Court, Southern District of Florida, Miami Division, Case No.: 04-61245 CIV Huck/Turnoff
  - Filed affidavit (October 12, 2004)
- ◆ *Level 3 Communications, LLC v. City of St. Louis, Missouri*, United States District Court for the Eastern District of Missouri, Eastern Division, Consolidated Case No. 4:04-CV-871 CAS
  - Filed Rebuttal Report (June 17, 2005)
  - Deposition (July 14, 2005)
- ◆ *Cable Merger before the FTC*
  - Presented analysis to FTC staff (March 20, 2007)
- ◆ *Gulfside Casino Partnership v. Mississippi Riverboat Council, et al.*, United States District Court for the Southern District of Mississippi, Southern Division, Cause No. 1:07-CV-110-LG-JMR
  - Filed affidavit (May 4, 2007)
- ◆ *Motorola, Inc. v. State of Mississippi Department of Information Technology Services and M/ACom, Inc., Chancery Court of Hinds County, Mississippi, Cause No. G2006-2179 S/2*
  - Testified (May 23, 2007)
- ◆ *American Towers, Inc. v. Jackson & Campbell, P.C., et al.*, DC Superior Court, No. 003277-06
  - Deposition (March 19, 2009)
  - Filed Affidavit (May 22, 2009)
- ◆ *The Massachusetts Turnpike Authority v. Level 3 Communications, LLC, et al.*, The United States District Court for the District of Massachusetts, Civ. Act. No. 06-11816
  - Filed Expert Report (November 12, 2007)
  - Filed Rebuttal Report (December 17, 2007)
  - Deposition (January 21, 2008)
- ◆ *Kenneth Stickrath, et al v. Globalstar, Inc.*, United States District Court for the Northern District of California, San Francisco Division, Case No. 07-CV-01941 THE
  - Filed Declaration (April 25, 2008)
  - Deposition (June 11, 2008)
- ◆ *In re: Complaint and request for emergency relief against Verizon Florida LLC for anticompetitive behavior in violation of Sections 364.01(4), 364.3381, and 364.10, F.S., and for failure to facilitate transfer of customers' numbers to Bright House Networks Information Services (Florida) LLC, and its affiliate, Bright House Networks, LLC*, Florida Public Service Commission, Docket No. 070691-TP
  - Filed Direct Testimony (May 30, 2008)
  - Filed Rebuttal Testimony (July 25, 2008)
  - Deposition (August 13, 2008)
- ◆ *Gemalto PTE LTD and Gemplus S.A. v. Telecommunications Industry Association*, United States District Court for the Eastern District of Virginia, Alexandria Division, Case 1:08-cv-00776- LMB-TRJ
  - Filed Expert Report (November 6, 2008)
  - Deposition (December 2, 2008)
  - Filed Supplemental Expert Report (December 16, 2008)
- ◆ *Salsgiver Communications, Inc., Salsgiver Telecom, Inc., and Salsgiver Inc. v. Consolidated Communications Holdings, Inc., North Pittsburgh Systems, Inc., and North Pittsburgh Telephone*

*Company, Inc.*, Court of Common Pleas, Allegheny County, Pennsylvania, Civil Division, No. GD 08-7616

- Filed Damages Analysis (February 27, 2009)
- Deposition (April 3, 2012)
- Filed Expert Report (May 10, 2012)

◆ *Certain Products Containing Interactive Program Guide and Parental Control Technology* (Inv. No. 337-TA-820)

- Designated as an expert (June 8, 2012)

◆ *In re: Petition for Suspension or Modification of Application of the Requirements of 47 U.S.C. § 251(b) and (c), pursuant to 47 U.S.C. § 251(f)(2) regarding Time Warner Cable Information Services (Maine) LLC's Request, State of Maine Public Utilities Commission, Docket No. 2012-198, Docket No. 2012-218, Docket No. 2012-219, Docket No. 2012-220, Docket No. 2012-221*

- Filed Direct Testimony (August 20, 2012)
- Filed Rebuttal Testimony (October 12, 2012)
- Testified (October 23, 2012)

January 18, 2013