



**MCI Telecommunications Corporation**

1801 Pennsylvania Avenue, NW  
Washington, DC 20006  
202 887 2048

Leonard S. Sawicki  
Director  
FCC Affairs

DOCKET FILE COPY ORIGINAL

RECEIVED

OCT - 6 1997

EXHIBIT DATE FILED

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

October 6, 1997

EX-PARTE

Mr. William F. Caton  
Secretary  
Federal Communications Commission  
Room 222  
1919 M Street NW  
Washington, D.C. 20554

Re: CC Docket 96-128; Payphone Compensation

Dear Mr. Caton:

The FCC's payphone compensation plan results in rates that are too high and costs consumers far more than any benefits that may occur from increased availability of payphones. The FCC's reliance on the deregulated coin rate is misplaced, even as a starting point for computing a lesser dial-around compensation rate. High compensation amounts reduce consumer welfare and provide the means for payphone providers to raise the cost of competing dial around products to the detriment of competition.

The attached study, Economic Effects of Excessive Compensation Rates to Pay Telephone Providers makes three major conclusions about the FCC's payphone compensation plan:

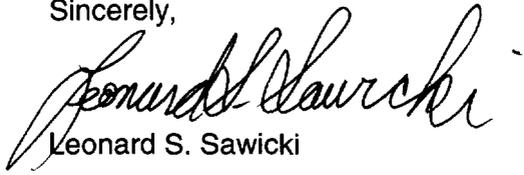
1. The deregulated coin rate is not a competitive price. The Commission's conclusion that the deregulated coin rate is a reasonable surrogate for payphone costs is inappropriate and completely ignores the nature of competition in the payphone industry. Competition in the payphone industry involves multiple payphone providers attempting to offer the highest bid to a premise owner in an effort to secure the exclusive right to provide payphone services from that location. The highest bid is provided by the fees each bidder is able to fund from locational profits. Maximizing profits is accomplished by setting the monopoly price, not the competitive price.
2. The per call compensation scheme is an enormously expensive and ineffective means by which to increase the number of payphones. Per call compensation raises the prices at over two million existing payphones for only a few new phones. A ten percent increase in the per call rate results in about a 1.3 percent increase in the number of phones while creating a net welfare loss of about \$5,500 per new payphone.
3. Per call compensation rates that are substantially above cost reduce competition for toll calls originated at payphones.

No. of Copies rec'd 022  
DATE FILED



Please add this letter and the enclosed copy to the record of this proceeding.

Sincerely,

A handwritten signature in cursive script, appearing to read "Leonard S. Sawicki".

Leonard S. Sawicki

Attachment

cc: Mr. DeGraba  
Mr. Riordan  
Mr. Wimmer  
Mr. Boasberg  
Mr. Casserly  
Ms. Franco  
Mr. Gallant  
Mr. Metzger  
Mr. Muleta

# ECONOMIC EFFECTS OF EXCESSIVE COMPENSATION RATES TO PAY TELEPHONE PROVIDERS

## E GROUP

*Economic and Econometric Research Consultants*  
404 Blake Street, Auburn, Alabama 36830  
(334) 821-1404 FAX (334) 844-4615

### I. INTRODUCTION

Section 276(b)(1)(A) of the 1996 *Telecommunications Act* requires the Federal Communications Commission (FCC) to "ensure that all payphone providers are fairly compensated for each and every completed intrastate and interstate call" from their payphones.<sup>1</sup> This requirement is one element of a Congressional plan to "promote competition among payphone service providers and promote the widespread deployment of payphone services to the benefit of the general public (Section 276(b)(1))."

The Commission's focus on implementing Section 276(b)(1)(A) of the *Act* is on the compensation mechanism for access code (e.g., 10XXX and 1-800-COLLECT) and subscriber-800 calls (e.g., 1-800-FLOWERS).<sup>2</sup> In its first attempt to prescribe compensation for access code and 800 calls, the FCC adopted what it termed a "market-based" approach. Contending that the "deregulated" coin rate is an appropriate proxy for per call costs, the Commission chose a \$0.35 per call compensation rate which, due to the inability to track calls, was implemented as a \$45.85 monthly compensation per payphone.<sup>3</sup> However, the D.C. Circuit Court struck down the FCC's compensation scheme, noting that there was no rational

---

<sup>1</sup> 47 U.S.C. § 276(b)(1)(A).

<sup>2</sup> While payphone operators have been compensated for access code calls since 1992 (at a flat rate of \$6 per phone), payphone operators have not been compensated for subscriber-800 calls. The FCC chose not to address the compensation amount for coin calls: "The issue of fair compensation arises only in cases where a caller uses a [payphone service providers'] equipment to dial around the payphone operator's presubscribed IXC, because the PSP does not receive any revenue to cover its marginal cost in originating the call ... (In the Matter of Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, CC Docket No. 96-128, Notice Of Proposed Rulemaking, June 6, 1996 (NPRM), at ft. 54)."

<sup>3</sup> Per call compensation is presently possible for most payphones though not all. The fixed fee of \$45.85 was based on an average of 131 access code calls per payphone per month.

basis for the Commission's conclusion that the deregulated coin rate was a reasonable proxy for the cost of originating a coinless (access code or 800) call.<sup>4</sup>

The purpose of this study is three fold. First, we describe why the Commission's conclusion that the deregulated coin rate is a reasonable surrogate for payphone costs is inappropriate and ignores the nature of competition in the payphone industry.<sup>5</sup> Competition, as commonly construed, results in prices being bid down to marginal costs as well as providing consumers with better quality and service. We argue that competition in the payphone industry is a bidding contest for the exclusive right to sell for some specified time period at some specific location so that the observed "market price" is more akin to a profit maximizing, monopolistic price and not the price that would obtain in a competitive market for payphone services.<sup>6</sup>

Second, this study contends, using both a model of "ordered entry" and an empirical test, that increasing compensation rates for access code and 800+ numbers to payphone providers will create a substantial redistribution of welfare and wealth from consumers of payphone services to payphone operators and property owners of locations where pay telephones are placed. The preliminary results presented here indicate that a per-call compensation scheme is an enormously expensive and ineffective means by which to increase the number of payphones. We show that a 10 percent increase in the per call rate results in about 1.3 percent increase in the number of payphones and creates a net welfare loss of about \$5,500 per new payphone.

Third, we briefly discuss how per-call compensation rates that are substantially above cost reduce rather than "promote competition" in the payphone services industry. Payphone operators have often engaged in anticompetitive acts designed to limit the ability of consumers to choose their

---

<sup>4</sup> The FCC proposed that "fairly compensated" implies that payphone operators should be "compensated for their costs in originating the types of calls for which ... compensation is appropriate [emphasis supplied]" and not their revenues. NPRM, at ¶ 38. Peoples Telephone Company, the nation's largest independent payphone operator, noted that "there was little dispute among the commenting parties over the Commission's conclusion "that [payphone service providers] should be compensated for their costs..." (Peoples Reply Comments, Docket No. 96-128, July 15, 1996, at 13)."

<sup>5</sup> The Commission concluded that "deregulated coin rates are the best available surrogates for payphone costs... (Report and Order, 11 FCC Rcd at 20577)."

<sup>6</sup> In other words, consumers do not engage in costly search to find the lowest or lower priced payphone services.

own interexchange carrier for payphone-originated long distance calls.<sup>7</sup> High per-call compensation rates for access code calls is simply one more strategy by which payphone operators can reduce competition in the payphone-originated long distance industry and increase their market power.

## II. COMPETITION IN THE PAYPHONE INDUSTRY

The spatial nature of payphone placement creates an important anomaly in dealing with the market structure of payphone provision.<sup>8</sup> It is alleged by some, for example, that the payphone coin rate is the competitive rate for placing a call. That is, it is argued that local coin rates resulting in some states that have "deregulated" payphone providers is a market-determined and thus competitive rate for making a call.<sup>9</sup> This belief and others like it reflect a misunderstanding of the nature of competition in such spatial markets. In the traditional textbook notion of competition, the process involves a rivalry among equally situated firms to attract customers'. With multiple suppliers of products or services to consumers, the efforts of firms to increase their own profits leads to lower prices, higher quality, and innovation. In other words, competitive firms cater to the needs of their potential customers.

But "competition" may be looked at in another way entirely - a process which in actual practice is much (possibly very much) older than the textbook competitive model.<sup>10</sup> Competition may be viewed as a rivalrous process to

---

<sup>7</sup> See, e.g., *In the Matter of Policies and Rules Concerning Operator Service Access and Pay Telephone Compensation, Report and Order and Further Notice of Proposed Rule Making*, 6 FCC Rcd. 4736, 1991 WL 638196.

<sup>8</sup> A given payphone's services can only be "consumed" at the specific geographic location at which the payphone is placed. Whether or not a payphone is placed at a given location is determined by the expected net revenue of that location alone.

<sup>9</sup> The FCC concluded that \$0.35 is the "market-determined" rate for local coin calls. However, only four states have approved the \$0.35 rate (Illinois, Iowa, Wisconsin, and Wyoming). Most states maintain a maximum rate of \$0.25 per call though New Hampshire and Vermont maintain a maximum rate of \$0.10 per call. See S. Alexander, "Coin Rate Update," Perspectives on Public Communication, December 1995 or NPRM at ft. 59.

<sup>10</sup> The evidence that the pharaohs of ancient Egypt (Dynastic Period) used "franchise bidding" is, for example, fairly persuasive. More modern incarnations of this notion of "competition" to obtain exclusive rights to a prize date to the writings of the great legal philosopher Jeremy Bentham (1748-1832) and, most especially, to Bentham's protégé Edwin Chadwick (1800-1890), the most influential economic policymaker of nineteenth-century England. Contract bidding has, of course, been a common feature in the United States, especially in defense industries. (See R. B. Ekelund, Jr. and Robert F. Hébert, "The Proto-History of Franchise Bidding," Southern Economic Journal, Vol. 48, October 1981, pp. 464-74.)

obtain the exclusive right to sell for some specified time period at some specified location.<sup>11</sup> The competition to obtain that right, if vigorous enough, transfers all potential profits to the holder of the right. The "competitor" that offers the holder of the right the largest bid (i.e., the largest profit) acquires the exclusive right to sell at the specified location.<sup>12</sup> As noted by Peoples Telephone Company, the nation's largest independent payphone operator, commissions "are necessary because, if they were not paid, a [payphone service provider] simply could not place a public payphone at that location."<sup>13</sup>

It is this latter form of competition, where entities compete for an exclusive right to serve, that characterizes the payphone industry. Payphone providers do not own the property upon which their payphones are located, and they generally must pay a rental (termed "commissions" in the payphone industry) to the property owner. The size of this rental payment will be determined by the payphone operators' knowledge of the revenues obtainable at a particular location.<sup>14</sup> In the presence of payphone operator competition to obtain the exclusive right to some location, the rental is actually a payment for a temporal monopoly.<sup>15</sup> With perfect knowledge and low or negligible information costs, the full monopoly profit will be transferred to the property owner from the payphone operator. This mechanism of rent transfers, so often thought to represent some kind of competitive outcome, actually produces a monopoly rent capitalization.

---

<sup>11</sup> This kind of "competition" actually produces a temporal *monopoly right* as in an exclusive franchise. An example would be the local provision of cable television. Cable operators in effect bid for the *exclusive* right (held by the local government) to serve customers for a specified period of time. In this case, revenues are estimable, but costs remain uncertain.

<sup>12</sup> See G. Tullock, "The Welfare Costs of Tariffs, Monopolies, and Theft," Western Economic Journal, Vol. 5, June (1967), pp. 224-232.

<sup>13</sup> Peoples Reply Comments, at 18. For a practical description of the nature of payphone competition and commission payments, see The Guide to Payphone Ownership, published by Payphones Plus, Madison, WI (1996), especially Ch. 10 ("What the Site Owner Expects").

<sup>14</sup> These commission payments are non-trivial percentage of revenue. For example, Peoples Telephone Company asserts that its commission payments average about \$62 per payphone, which is about one-quarter of the average revenue per phone (\$280). According to Peoples, this \$62 payment exceeds the monthly cost for LEC Line Service. Note that commissions will make up much larger percentages for heavily used payphones and smaller percentages for payphones of less than average use.

<sup>15</sup> Given variations in the demand for payphone services at different locations, it is possible that payphone locations may "compete" in a manner consistent with the theoretical model of monopolistic competition.

A monopoly profit is acquired by charging monopoly prices not competitive ones.<sup>16</sup> Thus, the prices set by payphone operators are much more likely to represent "monopoly-determined" rates than some kind of "competitively determined" rate.<sup>17</sup> While the FCC is correct in stating that the deregulated coin rate is a "market-determined" rate, since monopoly prices are determined by the market, they are incorrect in concluding that this "market-determined" rate is a competitive rate.<sup>18</sup>

### III. PAYPHONE RATES AND THE PUBLIC BENEFIT

As noted above, Section 276(b)(1)(A) of the 1996 *Telecommunications Act* requires the Federal Communications Commission (FCC) to "ensure that all payphone providers are fairly compensated for each and every completed intrastate and interstate call" from their payphones.<sup>19</sup> This requirement is one element of a Congressional plan to "promote competition among payphone service providers and promote the widespread deployment of payphone services to the benefit of the general public (Section 276(b)(1))." As described in the previous section, it is unclear that the type of competition observed in the payphone industry, that is competition that serves to promote "monopolistic" not "competitive prices," is beneficial to the public. Furthermore, the notion that high per-call compensation rates for access code and 800 calls serves the goal of increasing consumer welfare

---

<sup>16</sup> Oddly, the FCC has recognized in earlier proceedings the peculiar nature of competition in the payphone industry. In a 1992 FCC Report, the Commission observed "[s]ome aggregators may be more concerned with collecting commissions than they are with securing reasonable rates for the customer." Federal Communications Commission, *Final Report on Telephone Customer Services Improvement Act of 1990* (November 13, 1992), Attachment N. Oncor Communications, a provider of long distance service to about one million payphones and hotel rooms, claims it high rates for long distance services (nearly \$2 per minute) are necessary due to the excessive commissions it had to pay payphone operators and hotels. See "FCC Orders Carrier to Lower Rates," *Telecommunications Alert*, Vol. 12, No. 83, April 28, 1995.

<sup>17</sup> Competition in the payphone industry will produce a zero-profit equilibrium for payphone operators, since all supranormal profits will be extracted from the payphone operator by the premise owner. The zero profit equilibrium is not, however, the result of vigorous, downward price competition by payphone operators.

<sup>18</sup> The textbook model of competition concludes that prices will be driven to costs. Evidence presented in response to the FCC NPRM suggests that the cost for a coin call is less than \$0.25 per call. For example, Sprint-United, a payphone operator with about 50,000 phones, estimates a coin call costs of \$0.24. A study by NYNEX estimates the costs of a coin call to be \$0.167. AT&T, in a detailed cost study, estimates a coin cost of \$0.20 per call.

<sup>19</sup> 47 U.S.C. § 276(b)(1)(A).

by stimulating the addition of new payphones is, as described below, equally as dubious.

Payphone providers clearly make a rational choice in the placement of phones, placing phones sequentially in ordered fashion from the most profitable to the "marginally" profitable locations.<sup>20</sup> The last payphone placed, i.e., the marginal phone, occurs where the present value of the expected revenue stream from the services is just sufficient to cover all future costs (in present value terms). Thus, payphones in higher revenue areas are placed first, with the marginal or last phone placed just covering its costs. For every existing payphone, the condition that revenue equals or exceeds cost is fulfilled.

If increasing the charge for (certain types of) calls placed at payphones increases payphone revenues, the wherewithal to provide new phones will be provided (up to a new margin where revenue equals cost).<sup>21</sup> These additional payphones will, no doubt, lead to an increase in consumer welfare as Congress intended. However, this is not the only impact of a rate increase. Higher prices for payphone services at existing, or *inframarginal*, locations (approximately 2 million phones) will, no doubt, diminish consumer welfare. The correct consumer welfare or "public benefit" calculation, therefore, must include the *diminution* of welfare at these *inframarginal* locations.<sup>22</sup>

The *net* welfare change to consumers thus depends on two effects: (a) the *increase* in welfare attending the expansion of new payphones and (b) the welfare *reduction* that will accompany the increase in rates to consumers on *inframarginal* payphones.<sup>23</sup> Two aspects of the *net* welfare change are important. The first is the an estimation of the potential net gain from the addition of new

---

<sup>20</sup> GTE and Sprint both note that payphone providers "[place] payphones generally where they are likely to prove commercially viable and profitable (GTE Comments, Docket No. 96-128, July 2, 1996, at 4; Sprint Comments, Docket No. 96-128, July 2, 1996, at 18)."

<sup>21</sup> In order for a price increase to increase revenue, the demand for the payphone service must be inelastic.

<sup>22</sup> Higher revenues at existing locations are simply higher profits. Assuming competitive conditions exist among bidders (i.e., payphone operators) for prime locations (for example), the entire rent may be collected by the property owner rather than the payphone operator (see Harold Demsetz, "Why Regulate Utilities," *Journal of Law and Economics*, April, 1968, 11:55-65).

<sup>23</sup> Rather than paying "high" per call compensation rates, it may be possible for long distance carriers to block access code and 800 calls from payphones. It would be inappropriate to view the inability to make such calls as an improvement in consumer welfare.

phones and the loss from rising rates on long-distance calls made from payphones.

### A. A Model of Payphone Operation

Entry by payphone operators into a market involves a spatial element which does not arise in typical entry or supply analyses. Because of the inherited geographic distribution of population and travel, it is apparent that some payphone locations are clearly better than others, "better" meaning "having larger demands" at any prices. Airports, bus stops, and truck stops are obvious examples of potentially good locations for payphone installations. The geographic element is quite important in the specification and interpretation of empirical models of payphone supply. Further, the fact that entry occurs in a specific order, from best to worse locations, implies that the effects of price changes on payphone supply will differ than a simple model would suggest.

To illustrate the implications of "ordered entry", we consider the following scenario. Given some state  $i$ , let:

- $X$  = demand characteristics for state  $i$ ;
- $N$  = number of payphones in state  $i$ ;
- $n$  = indicator of the  $n^{\text{th}}$  phone;
- $p$  = price of a call (coin) in state  $i$ ;
- $q(p,n; N,X)$  = demand for calls at the  $n^{\text{th}}$  phone, a function of  $p$ ,  $n$ ,  $N$ ,  $X$ .
- $c(Z)$  = production cost of a phone installation in state  $i$  given cost characteristics  $Z$ .
- $\{n\}$  = a set of payphone locations from best to worst.

Thus, in general we expect  $\partial q/\partial p < 0$ ,  $\partial q/\partial n < 0$ ,  $\partial q/\partial N < 0$ : higher prices, a worse location, and more total phones lower any given  $n^{\text{th}}$  phone's demand.

In this model equilibrium is defined as follows. Assume, first, that the ordering  $\{n\}$  is independent of  $N$ : the third best location ( $n = 3$ ), for example, is third best for any global configuration  $N$ . Second, any phone that is profitable will be installed in a free entry equilibrium. These profits are, of course, divided between the operator and the "landlord", or owner of the geographic monopoly right. In the payphone industry, these profits are distributed to the landlord as commissions. This distribution is not the focus of the model.

The profit of phone  $n$ , if installed, is

$$pq(p, N^*; N^*, X) - c(Z). \quad (1)$$

If all profitable phones are installed, then we obtain the equilibrium condition on entry, given by

$$pq(p, N^*; N^*, X) - c(Z) = 0 \quad (2)$$

where  $n = N^*$ . Thus (2) implicitly defines an equilibrium condition on payphone entry given by

$$N^* = N^*(p, X, Z) \quad (3)$$

Expression (3), given a correct specification of the model components, is an estimable, typically nonlinear condition. Further, equation (3) forms the basis for entry elasticity and welfare estimation. In particular, the term  $\partial N / \partial p$  allows an equilibrium inference on the effect of regulation induced price changes on the number of payphones installed. The consumer surplus (CS) associated with entry can be approximately calculated for a change in the number of phones  $N$  as

$$CS \cong \Delta N \int_p^{\infty} q(s, N + \frac{\Delta N}{2}; N + \frac{\Delta N}{2}, X) ds \quad (4)$$

Expression (4) clearly shows that, given ordered entry, surplus associated with additional phones will be less than average surplus of existing phones since new phones must occupy inferior locations.

Many possible specifications of the model functions are possible. A simple and useful illustration is

$$q = Ke^{-n} e^{-Ln} e^{\beta X} pop \quad (5)$$

$$c = e^{c(Z)} \quad (6)$$

where  $pop$  is population. Given equation (5) the revenue generated by the  $n^{th}$  payphone can be written as

$$pq = pKe^{-r} e^{-Lp} e^{\beta X} pop. \quad (7)$$

Imposing the equilibrium condition defined in equation (2) from equations (6) and (7) we have

$$pq = pKe^{-r} e^{-Lp} e^{\beta X} pop - e^{\epsilon(Z)} = 0. \quad (8)$$

Taking the log of equation (8) and solving for  $N^*$  we have

$$N^* = -\frac{1}{L}(\ln s + \gamma Z - \ln K) + \frac{1}{L} \ln p + \frac{1}{L} pop - \frac{r}{L} p + \frac{\beta}{L} X \quad (9)$$

where  $K$  and  $s$  are constants greater than zero,  $pop$  is state population, and  $\beta$ ,  $\alpha$ , and  $\gamma$  are parameters of unknown sign and  $Z$  and  $X$  are vectors of state cost and demand characteristics respectively. A model such as (9) leads to a log linear regression of the form

$$N^* = \alpha_0 + \beta_1 \ln pop + \beta_1 \ln p + \beta_2 p + \beta_3 X + \gamma_1 Z + \epsilon \quad (10)$$

where  $\beta_1 > 0$  and  $\beta_2 > 0$ . Demand characteristics ( $X$ ) included in the regression include population density per mile and the percent of poor families in a state. Cost variables ( $Z$ ) include the monthly rate and monthly subscriber line charge for a payphone line.

Using state level data for the number of local exchange carrier payphones and the coin rate over the time period 1988 to 1995, equation (10) was estimated yielding the relevant results:<sup>24</sup>

$$N^* = -12864 + 6171 \ln pop + 6171 \ln p - 11164 p \quad (11)$$

(-0.58) (3.55) (3.55) (-0.34)

$R^2 = 0.75$

with t-values given in parentheses.<sup>25</sup> We note the following results. First, price elasticity of demand is given by  $-pr$  where  $r$  and  $L$  are solved implicitly from (9).

<sup>24</sup> Number of payphones is provided by the FCC Common Carrier Statistics, Table 2.5, 1988-1996. The source for the coin rate is NARUC Compilation of Utility Regulatory Policy, Table 161-Coin Telephone Rates For Major Telephone Companies, Year End 1988-1995.

<sup>25</sup> Both demand and cost variables were statistically significant. Increases in population significantly increase the equilibrium number of payphones, as does population density (*pop/mile*) and numbers of poor families. The subscriber line charge variable, which represents subscriber line charges per payphone and is a cost item, reduces equilibrium numbers of payphones as expected.

This calculation yields  $r = 1.78$  and  $L = 0.00016$ . Thus the price elasticity of demand for calls is  $-0.31$  at mean coin prices.<sup>26</sup>

Because demand is price inelastic, price increases raise revenues and as a result the equilibrium number of payphones. To quantify this effect, consider a 10% price increase for an "average" state having about 4,500,00 people and about 29,700 payphones (both are sample means). In this case, a 10% price increase generates an increase of 393 payphones, for an elasticity of entry of about 0.13. Thus per-call price increases are relatively ineffective in inducing large entry or "promoting the widespread deployment of payphone services." This result is no surprise: increases in per-call charges would not substantially increase revenues at marginal locations due to low call volume (i.e., lower demand).<sup>27</sup> This fact has been recognized by the FCC which noted a per-call compensation mechanism "would create greater incentives for [private payphone operators] to place their payphones in locations that generate the most traffic (NPRM, ¶ 10)."<sup>28</sup>

### B. Consumer Welfare Effects of High Per Call Rates

The estimated entry elasticity implies that higher per call rates will not lead to substantial increases in the number of payphones. Whether this small number of new payphones "benefits the general public" remains an open question to which we now turn. To calculate the welfare effect of a price increase, it is important to recognize that the effect stems from two sources. First, price increases cause entry, so new phones generate new consumer surplus although marginal phones have lower demands than older phones due to their poorer locations. Second, price increases reduce consumer benefits at existing phones.

---

The local rate had a positive sign when the local rate and subscriber line charge entered the regression separately. When the local rate and subscriber line charge were summed creating a single variable, the sign on the variable was negative and statistically significant. The other coefficients were not much affected by this change in specification.

<sup>26</sup> According to Taylor, no other studies on the demand elasticities for coin calls exist. See Lester Taylor, *Telecommunications Demand in Theory and Practice*. Kluwer Academic Publishers, Dordrecht (1994).

<sup>27</sup> Importantly, local coin calls make up about 70-80 percent of total payphone call volume (Peoples Reply Comments at 13; NPRM at ft. 58). Peoples asserts that a very large percentage of revenues are also derived from coin calls (Peoples Reply Comments at 13).

<sup>28</sup> The FCC made this same conclusion in its 1992 Second Report and Order. See *Policies and Rules Concerning Operator Service Access and Pay Telephone Compensation, Second Report and Order*, 7 FCC Rcd 3251 (1992).

We are able to use the model results to simulate these effects in combination with other external data. Because both the revenue and cost components generate constants in the regression, it is not possible to directly use only model output to calculate welfare. We therefore take the following approach. Using an average U.S. figure of 8,400 calls per phone, we can simulate the welfare effects of a 10% price increase on an average state.<sup>29</sup> This hypothetical state has 4,500,000 residents and 29,705 payphones initially. All other variables are set at appropriate mean values. As before, the 10% price increase causes entry of approximately 400 new phones. At the state's "mean phone" ( $n=15,000$ ), demand as a function of  $n$  and  $p$  only is

$$q = 67,800e^{-Ln}e^{-rp} \quad (12)$$

for  $n = 15,000$ , or

$$q = 6150e^{-rp} \quad (13)$$

for  $r=1.78$ . For marginal phones, demand is only

$$q = 557e^{-rp} \quad (14)$$

due to the decreased demand at marginal payphone locations.

Calculating consumer surplus using equation (4), we obtain the following. A 10% price increase causes entry of 400 new payphones. Each new payphone generates annual surpluses of \$222.39 at the higher price. For existing phones, consumer surplus lost due to the price increase is calculated as \$77.60 per payphone per year. Totaling, the net effect on consumers of the price increase is a loss of \$2,221,200 per year in this state. This amounts to a consumer welfare subsidy per new payphone of about \$5,500 annually.

#### IV. ABOVE COST COMPENSATION RATES ARE ANTICOMPETITIVE

Congress makes clear in Section 276(b)(1) of the 1996 Telecommunications Act that FCC action regarding payphones should "promote competition among payphone service providers..." As described in Section II of this report, competition in the payphone industry more likely produces "monopolistic"

---

<sup>29</sup> This amounts to 700 calls per month (see APCC Comments, filed July 1, 1996, Docket No. 96-128).

rather than "competitive" rates. During the past few years, however, there has been an increasing level of real competition, i.e., the kind of competition that benefits consumers, in the payphone-originated long distance market. This increased level of competition is due to the expanded use of dial around long distance services, debit cards, and 800 access calls. As recognized by the FCC, the increased use of alternative long distance services from payphones is a consequence of price gouging by payphone operators.<sup>30</sup> Even the APCC recognizes this fact noting that implementation of 800 number portability has led to "vigorous competition" among IXCs for payphone-originated long distance calls.<sup>31</sup>

Alternative long distance carriers compete directly with the long distance services offered by the payphone operators chosen interexchange carrier. Under current rules, private payphone operators can receive commissions from their chosen interexchange carrier. These commissions often lead to per-minute long distance charges substantially in excess of costs, approaching upwards of \$2.00 per minute.<sup>32</sup> If a consumer chooses to pay lower toll charges using an alternative carrier, the profits of the payphone operator are diminished and its chances of offering the highest bid to the location owner reduced. It is no surprise, therefore, that numerous payphone operators have attempted to restrict the ability of consumers to choose alternative carriers by blocking and re-routing calls. While such acts are blatantly anticompetitive and discouraged by regulators, an alternative to these more obvious anticompetitive acts has been a concern of economists and courts for decades.

Rather than simply blocking access to alternative carriers, payphone operators could disadvantage their rivals by raising their costs.<sup>33</sup> By "raising rivals' costs," payphone operators can increase their own market share of payphone-originated long distance revenues without lowering their own costs or prices. It is not difficult to see that high compensation rates for access code calls has exactly this effect. While the bulk of the cost studies submitted to the FCC and other regulatory agencies suggest that the cost of a coin call does not

---

<sup>30</sup> Policies and Rules Concerning Operator Service Access and Pay Telephone Compensation, Report and Order, 6 FCC Rcd 4736, 4737 (1991).

<sup>31</sup> Ex Parte Letter of Albert Kramer, Counsel, APCC to William Caton, Acting Secretary, FCC (August 17, 1995) at 1-5.

<sup>32</sup> See "FCC Orders Carrier to Lower Rates," Telecommunications Alert, Vol. 12, No. 83, April 28, 1995.

<sup>33</sup> See S. Salop and D. Scheffman, "Cost-Raising Strategies," Journal of Industrial Economics, Vol. 36, pp. 19-34 (September 1987).

exceed \$0.25, some payphone operators have called for per-call compensation rates as high \$0.95 per call.<sup>34</sup> Clearly, raising the consumer's costs of choosing its own long distance carrier by nearly \$1.00 per call would greatly disadvantage the rivals of the payphone operators interexchange carrier. Thus, per-call compensation rates substantially in excess of costs are in direct contradiction to the stated goals of Congress.

## V. CONCLUSION

There are two important findings in this study. First, the FCC's use of the deregulated coin rate as a proxy for the cost of a coin call is misguided. Deregulated coin rates are more likely to represent a "monopolistic" price for coin calls and not a "competitive" price. Thus, compensating payphone operators for coinless calls at an amount equal to the price of a local coin call disregards the Commission's on conclusion that payphone operators should be "compensated for their costs in originating the types of calls for which ... compensation is appropriate" by is inappropriate (NPRM at ¶ 38)." Second, this study has shown that the FCC's implementation of Section 276 of the 1996 *Telecommunications Act* has important consumer welfare implications. Taking the nature of payphone supply into account, it is shown that an attempt to stimulate payphone entry by increasing per call charges in detrimental to the public benefit. While Congress clearly desires the Commission's implementation of Section 276 to "promote competition" and "promote the widespread deployment of payphone services," it is certainly not obvious that it was Congress's intent or the FCC's duty to have millions of dollars transferred to property owners via payphone providers from consumers. Excessive compensation, based on so-called "competitive rates" rather than cost-based rate would, however, have just that effect and little to no stimulation effect on the location of payphones at "marginal" locations.

---

<sup>34</sup> A review of cost estimates, as well as proposed compensation rates not based on costs, is provided in the NPRM at ¶¶ 35-40.