Before the
Federal Communications Commission
Washington, DC 20554

In the matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Establishing Just and Reasonable Rates for Local Exchange Carriers	))	WC Docket No. 07-135
	)	
High Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Developing a Unified Intercarrier Compensation Regime	))	CC Docket No. 01-92
	)	
Lifeline and Link-Up	)	WC Docket No. 03-109
	)	

REPLY COMMENTS OF COX COMMUNICATIONS, INC.

Cox Communications, Inc. ("Cox"), by its attorneys, hereby submits its reply comments on issues addressed in Part XV of the Commission's *Notice* in the above-captioned proceedings.[1]

Cox's initial comments focused primarily on the importance of a stable and measured transition to an interconnection scheme for Internet Protocol-based ("IP") telephony and the need for rules that maintain equal compensation for IP-based and Time Division Multiplexing ("TDM")-based services during a measured transition to unified intercarrier compensation rates and ubiquitous IP-based interconnection.[2] These reply comments respond to claims by other commenters that the Commission should adopt rules that would require companies that provide

[1] Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing a Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and Link-Up, *Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking*, WC Docket Nos., 10-90, 07-135, -5-337, 03-109, GN Docket No. 09-51, CC Docket Nos. 01-92, 96-45, FCC 11-13 (rel. Feb. 8, 2011) (the *"Notice"*). The comment dates for Part XV of the *Notice* were announced on March 2, 2011. *See* Connect America Fund; Developing a Unified Intercarrier Compensation, 76 Fed. Reg. 11,632, 11,657 (Mar. 2, 2011).

[2] *See* Cox Comments at 4-8.

IP-based retail services to charge less for access or local termination than companies that provide TDM-based retail services. The Commission should reject these arguments.

A fatal flaw in the call for different access charges is that these commenters assume that there is a simple, reliable way to distinguish between traffic that originates or terminates as IP-based traffic and traffic that is transmitted entirely in TDM format.[3] This assumption is incorrect and, as shown below, adopting this erroneous assumption will lead only to new forms of destructive arbitrage based on claims of "IP-somewhere" in the exchange of voice calls over the public switched telephone network. Moreover, *even if* there were a way to identify the use of IP somewhere in the path of a voice call, or to create yet another set of "IP factors," establishing a separate rate design or structure for IP-based calls would inevitably result in further disputes and wasted resources.[4]

Cox has significant experience in this area as a company that provides retail interconnected voice service using both TDM and voice over IP technologies. As described in Cox's comments, all of Cox's intercarrier traffic is delivered and received in TDM format, consistent with industry interconnection standards and requirements.[5] At the point where traffic enters and leaves Cox's network, there is no way to distinguish traffic that may have once been in IP format from traffic that always was in TDM format. Consequently, Cox pays the applicable local termination charge (if any), switched access rate, transport or transit rate to the provider taking Cox's traffic without differentiating that traffic based on the technology Cox used at the customer end of the network. Similarly, Cox expects to be paid the contract rate for

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[3] *See, e.g.,* Comments of XO Communications ("XO Comments") at 33 (arguing that IP-based traffic can be distinguished by setting the JIP field or via "factors" similar to the ones used to designate percentages of interstate and intrastate use).
[4] Cox Comments at 6-8.
[5] *Id.* at 5-6.

local termination (if any) or the relevant switched access rates based on its interconnection agreements and access tariffs when another carrier delivers traffic to Cox for termination.

Further, Cox has no way at present to differentiate traffic that is sent and received in IP format from traffic that is sent and received in TDM format in real time. In fact, Cox has spent months attempting to undertake such a separation on a backward-looking basis – or at least make a reasonable estimate of what percentage of its traffic is IP-based and what percentage is TDM-based – as part of an effort to address a dispute.

In this context, assertions by carriers that it would not be difficult to bill different rates for IP-based traffic than for TDM-based traffic should be viewed skeptically. In fact, the solutions suggested by these companies are unworkable and demonstrate why it would be unwise to attempt to set rates based on the technology used to originate, terminate or transport voice traffic.

For instance, XO's suggestion to use the Jurisdiction Information Parameter ("JIP") field or some other field in the Signaling System 7 messaging stream to indicate when traffic is IP-based ignores the obvious incentive that interexchange carriers (or, for that matter, originating carriers that obtain long distance connectivity from interexchange carriers) would have to set the relevant field to indicate that traffic was IP-based whether or not it was, just to obtain lower rates.[6] Such false signaling information already is common, as the Commission has recognized in its analysis of the phantom traffic problem.[7] Given the significant financial benefits that would accrue from creating a false setting and the difficulty of proving that a setting is false, there would be every reason to expect widespread abuse.

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[6] XO Comments at 33.
[7] *Notice,* ¶ 623.

XO's alternative suggestion that allocation factors could be used to determine the mix of TDM and IP traffic also is flawed. [8] As a practical matter, it would be difficult to create a reliable methodology for traffic studies to determine appropriate allocation factors, as the Commission's experience with universal service contribution traffic studies has shown.[9] Allocation factors face the same kinds of issues, and also are susceptible to manipulation that would be difficult to detect, a significant concern when even small shifts in an allocation factor could have large effects on the amounts paid for intercarrier compensation. Moreover, there are constant shifts in the percentage of traffic transmitted using IP and TDM technologies. For instance, Cox's experience is that its mix of TDM and voice over IP traffic changes daily. Hence, it would be impractical to require carriers to update their allocation factors or traffic studies that frequently, or even on a month-to-month basis. Because traffic volumes and ratios are highly dynamic, any calculated factor would have a very short shelf life.

While these considerations are more than sufficient reason to reject proposals to require separation of IP-based and TDM-based traffic, a more basic concern remains: Proponents of differential rates fail to address the financial incentives that service providers would have to engage in arbitrage schemes if differential rates were adopted. Thus, differential rates would only exacerbate the current (and increasingly bold) efforts of carriers to engage in rate arbitrage by simply claiming that all traffic is IP-based and requiring other interconnected providers to prove they are wrong.

This is not an exaggeration: Verizon recently disputed and rerated Cox's switched access and local termination charges on traffic that Verizon exchanged with Cox. Verizon's rationale for the dispute was that Cox allegedly served some of its end user customers via voice over IP or

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[8] XO Comments at 33.

[9] Universal Service Contribution Methodology, *Report and Order and Notice of Proposed Rulemaking,* 21 FCC Rcd 7518, 7547 (2006).

Verizon used voice over IP to service its own customer. Therefore, Verizon argued, a different rate should apply to the traffic-exchange services of local termination and switched access. At the same time, Verizon's local exchange operations are nearly all TDM-based, and would continue to demand full access charge payments through the entire transition. If the Commission were to reverse its historical position and adopt different compensation for different types of carriers as federal policy, this example would be multiplied time and again, with carriers claiming that all payments should be at the presumably lower IP-based rate.[10]

Finally, reliance on the Commission's *Vonage Order* to support theories that intercarrier compensation for IP-based services should be set at a rate lower than for TDM-based services is misplaced.[11] The *Vonage Order* addressed the regulatory treatment of retail, over-the-top interconnected voice over IP services.[12] It did not address non-nomadic services, access services or the appropriate rates for intercarrier compensation. A more reliable model for Commission action in this proceeding is the *IP-in-the-Middle Order,* which determined that the technology at the core of a network does not determine how a service should be treated for regulatory purposes.[13] Here, the Commission can and should adopt a policy that recognizes that all traffic exchanged in TDM format should be subject to the same intercarrier compensation rules, regardless of the technologies used to bring that traffic to the point where it is exchanged.

This analysis demonstrates that Cox's initial comments, like those of other carriers, are correct, and that interconnected voice over IP providers should be subject to the same glide path

[10] Any suggestion that "commercial negotiations" can resolve such obvious differences in compensation could be equally damaging to competition in the voice services market. Smaller carriers are still at an enormous disadvantage in an arms-length negotiation for interconnection with a provider with the market power of Verizon.
[11] XO Comments at 14-19; Comments of Verizon and Verizon Wireless at 19-31.
[12] Vonage Holdings Corp. Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission, *Memorandum Opinion and Order*, 19 FCC Rcd 22404 (2004) ("Vonage Order"), *pet'ns for review denied Minn. Pub. Utils. Comm'n v. FCC*, 483 F.3d 570 (8th Cir. 2007).
[13] Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services Are Exempt from Access Charges, *Order*, 19 FCC Rcd 7457 (2004).

as TDM-based providers in the measured transition to a regime of unified rates and IP-based interconnection.[14] This is a matter of fundamental fairness and sound economics. Any other approach will increase intercarrier arbitrage and conflict and will discourage the transition to IP interconnection, exacerbating problems that the Commission seeks to avoid in this very proceeding. The only fair and viable solution is to continue the sound approach outlined in the National Broadband Plan, to step down all intercarrier compensation rates equally and not give special preference to the technology choice of any particular group of providers. Thus, the Commission should reject proposals for differential compensation and insist upon equal compensation for all providers, regardless of the technologies they use to reach their customers.

For all of these reasons, the Commission should adopt rules consistent with these reply comments.

Respectfully submitted,

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[14] *See, e.g.*, Comments of AT&T Inc. at 29; Comments of Time Warner Cable Inc. at 5-8; Comments of Cablevision Systems Corporation and Charter Communications at 2-13.

Certificate of Service

I, Michelle Holly, certify that on this 18th day of April 2011, I caused a copy of the foregoing Comments of Cox Communications, Inc. to be served on the following by hand delivery.

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