Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of)	
Protecting and Promoting the Open Internet)	GN Docket No. 14-28
Notice of Public Information Collection(s))	OMB Control No. 3060-1158
Being Reviewed by the Federal)	
Communications Commission)	

COMMENTS OF CTIA – THE WIRELESS ASSOCIATION® ON PROPOSED INFORMATION COLLECTION REQUIREMENTS

Thomas C. Power Senior Vice President, General Counsel

Scott K. Bergmann Vice President, Regulatory Affairs

Krista L. Witanowski Assistant Vice President, Regulatory Affairs

Kara D. Romagnino Director, Regulatory Affairs

CTIA – The Wireless Association® Expanding the Wireless Frontier 1400 Sixteenth Street, NW, Suite 600 Washington, DC 20036 (202) 785-0081

TABLE OF CONTENTS

I.	INTR	RODUCTION AND SUMMARY	2		
II.	THE	COMMISSION'S BURDEN ESTIMATES ARE FATALLY FLAWED	7		
	A.	The Burden Estimates in the PRA Notice Are Indefensibly Inaccurate	7		
	B.	The Draft Supporting Statement Does Not Remedy the Failings of the PRA Notice but Creates New Ones Instead	8		
	C.	The Commission Fails To Account for the Burdens of the Enhanced Transparency Requirements	11		
		1. The Existing Transparency Rule is Extremely Burdensome and the Commission Wrongly Downplays the Significance of the 2015 Enhancements to the Rule	11		
		2. The Commission's 4.5 Hour Burden Estimate for the Enhanced Transparency Requirements Is Absurd Given the Scope of the New Rules.	12		
III.		COMMISSION FAILS TO ACCOUNT FOR NEW REQUIREMENTS T NECESSITATE OMB APPROVAL	16		
	A.	The New Direct Customer Notification Requirement Cannot Go Into Effect Until the Commission Seeks OMB Approval.	18		
	В.	The New Point of Sale Disclosures Cannot Go Into Effect Until the Commission Seeks OMB Approval	18		
IV.		THE ENHANCED TRANSPARENCY RULE DOES NOT SATISFY OTHER PRA STANDARDS			
	A.	The Information Required by the Enhanced Disclosure Rules Will Have Little Practical Utility.	21		
	В.	The Disclosure Requirements are Ambiguous and Not Clearly Understandable.	23		
V.	CON	CLUSION	25		

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of)
Protecting and Promoting the Open Internet) GN Docket No. 14-28
Notice of Public Information Collection(s) Being Reviewed by the Federal) OMB Control No. 3060-1158
Communications Commission)

COMMENTS OF CTIA – THE WIRELESS ASSOCIATION® ON PROPOSED INFORMATION COLLECTION REQUIREMENTS

CTIA – The Wireless Association® ("CTIA") submits these comments in response to the Commission's Paperwork Reduction Act ("PRA") Notice regarding the information collections mandated by "enhancements" to the Open Internet transparency rule adopted in the above-captioned *2015 Open Internet Order*. ¹ The Commission has utterly failed to meet its obligations under the PRA² and should begin anew. By way of example:

- Despite vastly increasing the work involved in complying with the enhanced transparency rule, a review of estimated burdens in the PRA Notice (number of respondents, total annual cost, and total annual hours) implies a cost of just \$200.75 annually per broadband provider to comply with the enhanced transparency rule, with an average hourly wage well below the federal minimum wage.
- A separate document, apparently made available by the FCC to some parties on request, provides different but equally troubling estimates. It asserts that 2015 enhancements to the transparency rule will only require 4.5 hours annually per provider in order to comply. The Commission estimates lower in-house costs for compliance with the 2015 revised rule including its greater burdens than in-house costs associated with the 2010 version of the rule. The Commission assumes zero external costs for mobile broadband providers, although it estimates \$640,000 in external costs for 25 large wireline

-

Protecting and Promoting the Open Internet, Report and Order on Remand, 30 FCC Rcd 5601 (2015) ("2015 Open Internet Order"); Notice of Public Information Collection(s) Being Reviewed by the Federal Communications Commission, 80 Fed. Reg. 29000 (May 20, 2015) ("PRA Notice").

² 5 C.F.R. § 1320.8(a)(1), (4), and (5); see also 44 U.S.C. §§ 3501-3521.

broadband providers to comply with performance measurement testing. And it assumes zero costs related to outside consultants or outside counsel.

- The Commission did not include certain new requirements in its PRA review the new direct customer notification and the new point of sale obligations and these new rules thus cannot go into effect without Office of Management and Budget ("OMB") approval.
- The enhanced transparency rule does not satisfy other PRA standards as the Commission failed to minimize the burdens "to the extent practicable," show that the enhancements have "practical utility," or demonstrate that the enhancements are written in "coherent[] and unambiguous" language.

The Commission's Open Internet PRA effort is so flawed and riddled with unsustainable assumptions that the Commission should issue a new notice that provides the "specific, objectively supported estimate of burden" that the PRA requires.

I. INTRODUCTION AND SUMMARY.

According to the PRA, a federal agency that adopts a new "information collection," like the FCC's 2015 enhancements to the Open Internet transparency rule, is required to ensure that it has minimized the burden of complying with these new rules, and that the requirements are necessary and useful and clear and understandable. To that end, the agency is required to develop a "specific, objectively supported estimate of burden," consider whether the burden can be reduced, and evaluate the need for the information collection. The Commission does none of these with respect to the new transparency rule, which is intended to expand broadband providers' disclosures of network management practices, performance, and commercial terms.

_

³ 44 U.S.C. § 3502(3) ("[T]he term "collection of information"— (A) means the obtaining, causing to be obtained, soliciting, or requiring the transparency to third parties or the public, of facts or opinions by or for an agency, regardless of form or format. . . .").

⁴ See id. §§ 3501, 3506.

⁵ 5 C.F.R. § 1320.8(a)(1), (4), (5).

An agency must also secure the approval of OMB before a new information collection can become effective.⁶ Accordingly, the agency must certify to OMB that the new collection satisfies the rigorous standards set out in the PRA. OMB will then conduct an independent review and disapprove the new rules if they do not meet the basic PRA standards.⁷ As OMB has counseled agencies, an information collection will not be approved unless it is clearly justified and "[t]he burden on the public [is] completely accounted for and minimized to the extent practicable. . . ."⁸

To start with, the *existing* transparency rule is already extremely burdensome. Under the current rules, broadband providers must "publicly disclose accurate information regarding the network management practices, performance, and commercial terms of [their] broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings." Providers must make the requisite disclosures via "a publicly available, easily accessible website that is available to current and prospective end users and edge providers as well as to the Commission, and [to] disclose relevant information at the point of sale." 10

⁶ 44 U.S.C. § 3506(c)(3).

See Information Collection Regarding Emergency Backup Power for Commission Assets as Set Forth in the Commission's Rules (47 CFR 12.2), Notice of Office of Management and Budget Action, ICR 200802-3060-019 (Nov. 28, 2008) (disapproving FCC emergency backup power requirements); Sections 76.970, 76.971, 76.972, 76.975, and 76.978, Commercial Leased Access, Notice of Office of Management and Budget Action, ICR 200804-3060-012 (July 9, 2008) (disapproving FCC cable leased access rule amendments).

See OMB, Office of Information and Regulatory Affairs, Questions and Answers When Designing Surveys for Information Collections at 9 (Jan. 2006) ("OMB Guidance"), available at http://www.whitehouse.gov/omb/inforeg/pmc_survey_guidance_2006.pdf.

⁹ 47 C.F.R. § 8.3.

Preserving the Open Internet, Report and Order, 25 FCC Rcd 17905, 17940-41 \P 57 (2010) ("2010 Open Internet Order").

The 2015 Open Internet Order expands upon the existing rule by requiring broadband providers to disclose promotional rates, all fees and/or surcharges, and all data caps or data allowances; disclose detailed performance data that will now include information on "packet loss" in addition to speed and latency, that is measured in terms of average performance over a reasonable period of time and during times of peak usage, that is identified with respect to each technology (e.g., 3G and 4G), and that is disclosed at the level of geographic areas in which the consumer is purchasing service; disclose network practices that are applied to traffic associated with a particular user or user group, including any application-agnostic degradation of service to a particular end user, and these disclosures should include the purpose of the practice, which users or data plans may be affected, the triggers that activate the use of the practice, the types of traffic that are subject to the practice, and the practice's likely effects on end users' experiences; develop a mechanism for directly notifying end users if their individual use of a network will trigger a network practice that, based on their demand prior to a period of congestion, is likely to have a significant impact on the end user's use of the service; and the 2015 enhancements will bar providers from relying on links to their websites for point of sale disclosures. 11

As discussed herein, the Commission has failed to meet its PRA obligations. It has failed to adequately account for and minimize the burden on broadband providers. Indeed, the Commission's PRA effort is so flawed and riddled with unsustainable assumptions that the Commission cannot make the required certification to OMB. As a result, the Commission should start the process again, issuing a new notice that provides the "specific, objectively supported estimate of burden" that the PRA requires.

²⁰¹⁵ Open Internet Order, 30 FCC Rcd at 5672-5677.

The PRA Notice estimates, for example, the "Total Annual Burden" of complying with the transparency rule to be 92,133 hours at a "Total Annual Cost" of \$640,000. 12 It does not specify whether these estimates relate to compliance with all of the disclosure requirements (*i.e.*, the requirements established in 2010 plus the new requirements) or with the new requirements only. In either case, however, the estimate is wholly inadequate on its face. Given the total number of respondents (3,188) and average response time (28.9 hours) provided in the PRA Notice, 13 a "Total Annual Cost" estimate of \$640,000 implies a cost of \$200.75 annually per provider, or an hourly wage of \$6.95 – an amount *below the Federal minimum wage*.

Further confusing matters, following the release of the PRA Notice, the Commission, on an informal, *ad hoc* basis, provided to a least one entity (who then distributed to CTIA and other stakeholders) a document that appears to be a portion of the Commission's "Supporting Statement" to OMB ("Draft Supporting Statement"). This document offers up different yet equally irrational burden estimates: the 2015 enhancements will require only an additional 4.5 hours per year to comply with; an annual in-house cost estimate for each broadband provider to comply is \$1,545.22 (the costs of engineers, technical writers, staff administrators, web administrators, and attorneys); and, for 25 large wireline broadband providers only, annual external costs are \$640,000 (for equipment, operation, and management). The document provides for no outside costs for mobile broadband providers. How the separate estimates in the Draft Supporting Statement relate to the estimates in the PRA Notice is not explained. But either set of estimates is inadequate on its face, as discussed below.

. .

PRA Notice, 80 Fed. Reg. at 29001.

¹³ *Id*.

¹⁴ Copy appended hereto as Appendix A.

¹⁵ *Id*.

The Commission, moreover, has already demonstrated that potential liabilities for a failure to comply with the Open Internet transparency requirements are astronomical (as much as \$100,000,000 in a recent Notice of Apparent Liability). Given the magnitude of the risks facing broadband providers, it is absurd for the Commission to suggest that these providers will spend only an additional \$200.75 or 4.5 hours *per year* to ensure compliance with the "enhanced" transparency requirements. Nor is it credible to expect that providers will run the risk of trying to comply with the enhanced transparency requirements without substantial guidance from outside counsel or consultants.

The Commission also failed to include certain new requirements in its PRA review, *i.e.*, a new direct customer notification requirement and new point of sale obligations. These requirements are enhancements or changes to the existing transparency rules that require OMB approval and must be accounted for in the Commission's burden estimates.

In short, the Commission has failed to provide the "specific, objectively supported estimate of burden" required by the PRA and implementing rules. ¹⁷ Moreover, the new rules will have little practical utility, are ambiguous and lack the clarity required by the PRA. The Commission, therefore, cannot certify to OMB that "[t]he burden on the public [is] completely accounted for and minimized to the extent practicable" ¹⁸ and that the rule otherwise meets the PRA standards. Indeed, the Commission's efforts to comply with the PRA to date are so lacking that it should issue a new public notice and begin the review anew.

.

See, e.g., AT&T Mobility, LLC, Notice of Apparent Liability for Forfeiture and Order, FCC 15-63 (rel. June 17, 2015) ("AT&T Mobility") ("propos[ing] a forfeiture of \$100,000,000" for alleged violations of the transparency rules).

¹⁷ 5 C.F.R. § 1320.8(a)(1), (4), and (5); see also 44 U.S.C. §§ 3501, et seq.

See OMB Guidance, supra, note 8.

II. THE COMMISSION'S BURDEN ESTIMATES ARE FATALLY FLAWED.

Before the Commission submits the new enhanced transparency requirements to OMB, it is required to provide a "specific, objectively supported estimate of burden" imposed by the new rules. ¹⁹ The Commission fails to meet this standard. Indeed, the estimate of the burden provided in the PRA Notice (and separately described by the Draft Supporting Statement) is so lacking in specificity and objective support that the Commission should issue an entirely new notice and restart the PRA review process. We first analyze the PRA Notice and then examine the Draft Supporting Statement.

A. The Burden Estimates in the PRA Notice Are Indefensibly Inaccurate.

The PRA Notice provides the following estimates for the burden of complying with the Open Internet transparency rule:

- o 3,188 Respondents;
- o 3,188 Responses;
- o Average Time per Response: 28.9 hours;
- o Frequency of Response: On Occasion;
- o Total Annual Burden Hours: 92,133 hours per year; and
- o Total Annual Cost for All Respondents: \$640,000.²⁰

It offers no explanation for any of these estimates. For instance, it provides no guidance regarding whether the estimates cover the overall burdens of complying with the existing transparency rule plus the 2015 enhancements to that rule or just the burdens of complying with the 2015 enhancements. Nor does it describe whether the estimate for total annual costs includes both in-house and external costs.

In either event, however, these estimates are ludicrous. Taken on their face, these estimates imply that the Commission believes the cost of compliance per entity subject to the

...

¹⁹ 5 C.F.R. § 1320.8(a)(1), (4), (5).

²⁰ PRA Notice, 80 Fed. Reg. at 29001.

transparency rule will be \$200.75 on average annually per provider,²¹ which correlates to an average hourly wage of \$6.95, which is below the Federal minimum wage.²²

These figures defy credibility, regardless of whether they apply to the burdens of complying with the existing transparency rule plus the enhancements to that rule or the 2015 enhancements alone. The Commission cannot reasonably suggest that compliance with its Open Internet transparency requirements (or the 2015 enhancements to that rule) can be accomplished for an average of \$200.75 a year per provider. The information provided below shows just how burdensome the existing transparency requirements are, how significant the new burdens will be under the 2015 enhancements, and thus how truly absurd this cost estimate is. Consequently, based on the information available in the PRA Notice, the Commission simply cannot certify to OMB that "[t]he burden on the public [is] completely accounted for and minimized to the extent practicable."²³

B. The Draft Supporting Statement Does Not Remedy the Failings of the PRA Notice but Creates New Ones Instead.

As noted above, following the release of the PRA Notice, the Commission, informally and on an *ad hoc* basis, provided to at least one entity a document that appears to be a portion of the Commission's draft PRA supporting statement.²⁴ While a trade association made the Draft Supporting Statement available to CTIA and other stakeholders, this hardly constitutes the public notice mandated by the PRA.²⁵ CTIA nonetheless responds to the estimates therein – the only

²⁵ 44 U.S.C. § 3506(c)(2).

- 8 -

We divide \$640,000(the Total Annual Cost) by 3,188 (the number of Respondents) to produce a figure of \$200.75 per Respondent.

We divide the \$200.75 figure by 28.9 hours (the Average Time of Response per Respondent) to produce a figure of \$6.95 per hour.

See OMB Guidance, supra note 8.

See Appendix A.

See Append

explanations provided in support of the Commission's burden estimates for the enhanced transparency rule.

The Draft Supporting Statement does not adequately fill the gaps left by the PRA Notice, ²⁶ but rather triggers a host of new problems instead. The estimates presented in the Draft Supporting Statement do not easily correspond to the estimates presented the PRA Notice. For instance, while the PRA Notice provides a "Total Annual Cost" estimate of \$640,000, the Draft Supporting Statement provides two different cost estimates instead: an estimate for "Annual In-House Costs for each Respondent" (the costs of engineers, technical writers, staff administrators, web administrators, and attorneys) of \$1,545.22 per Respondent²⁷; and an estimate for "Annual External Costs" (the costs of equipment, operation, and management for performance measurement testing) limited only to 25 large wireline broadband providers of \$640,000.²⁸

In any event, the estimates in the Draft Supplemental Statement are also highly questionable. For instance, in the Draft Supporting Statement, the Commission estimates that all providers on average will incur 1,545.22 in "In-House Costs" for 28.9 hours of work – 24.4 hours to comply with the existing transparency rule and 4.5 hours to comply with the 2015 enhanced obligations rule.

First, it is absurd to assert that compliance with the enhancements to the transparency rule will only require 4.5 hours annually per Respondent. As discussed below, the "enhancements"

- 9 -

-

The Commission does not purport to explain how the separate estimates in the Draft Supporting Statement relate to the estimates in the PRA Notice. For instance, the Commission does not state whether the "Total Annual Cost" estimate of \$640,000 presented in the PRA Notice is the same as the \$640,000 "Annual External Costs" estimate of the Draft Supporting Statement. Nor does the Commission explain whether the \$1,545.22 "Annual In-House Costs" estimate in the Draft Supporting Statement is at all related to the \$640,000 "Total Annual Cost" estimate in the PRA Notice.

See Appendix A. This estimate appears to be based upon an assumed 28.9 hours of work.

See id.

²⁹ *Id*.

to the transparency rule will require providers to disclose detailed performance data, network practices, direct customer notifications, and point of sale disclosures that require significant time and resources to comply with. It is not credible for the Commission to suggest that all this can be accomplished in 4.5 hours per year.

Second, the \$1,545.22 figure is substantially *less* than the "In-House Costs" the Commission previously estimated for the *existing* transparency rule alone. In 2014, for instance, the Commission estimated "In-House Costs" of \$1,721.66 for a burden of 24.4 hours to comply with the 2010 transparency rule.³⁰ And, in 2011, the Commission estimated "In-House Costs" of \$1,704.66 for 24.4 hours in Year 3 (*i.e.*, 2014).³¹ Now, however, the Commission is estimating substantially less costs for *more work*. This does not make sense.

Equally troubling is the Draft Supporting Statement's estimate for "Annual External Costs." Specifically, the Commission estimates total costs of \$640,000 for equipment, operation, and management with regard to 25 wireline providers that the Commission expects to deploy their own performance measurement testing programs. It offers no explanation whether this burden estimate is for the existing transparency rule and the 2015 enhancements or just the 2015 enhancements alone. This means that the Commission is assuming *zero external costs in connection with mobile broadband providers* and deployment of their own performance measuring testing program (external costs that are included for 25 large wireline broadband providers). Further, it assumes zero external costs for outside consultants or outside counsel. In

Disclosure of Network Management Practices, Preserving the Open Internet and Broadband Industry Practices, FCC Supporting Statement, OMB 3060-1158 (July 2014) available at http://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201107-3060-002.

Disclosure of Network Management Practices, Preserving the Open Internet and Broadband Industry Practices, FCC Supporting Statement, OMB 3060-1158 (July 2011) ("FCC Supporting Statement") available at http://www.reginfo.gov/public/do/PRAViewDocument?ref nbr=201109-3060-014.

light of the Commission's extremely aggressive stance towards Open Internet transparency enforcement, this omission is ludicrous.³²

- C. The Commission Fails To Account for the Burdens of the Enhanced Transparency Requirements.
 - 1. The Existing Transparency Rule is Extremely Burdensome and the Commission Wrongly Downplays the Significance of the 2015 Enhancements to the Rule.

The *existing* transparency rule is already extremely burdensome, well beyond the 24.4 burden hours previously approved by OMB.³³ Under the current rules, broadband providers must "publicly disclose accurate information regarding the network management practices, performance, and commercial terms" of their broadband service sufficient for consumers to make informed choices and for edge providers to develop, market, and maintain Internet offerings.³⁴ These existing transparency rule obligations impose significant burdens and costs just for ongoing compliance. The market for mobile broadband is continuously evolving with new technologies and updated services and offers, leading to a constantly changing environment for transparency rule compliance. As but one example, mobile broadband providers must evaluate each new network management policy to determine whether any such changes trigger revised disclosures. This review requires input from management-level decision-makers, engineers, products specialists, marketing teams, website designers, legal counsel, and policy training personnel. Failing to take these steps creates the risk that a provider may be deemed to

- 11 -

See AT&T Mobility, supra note 16; 2015 Open Internet Order, 30 FCC Rcd at 5670-82; FCC Enforcement Bureau and Office of General Counsel Issue Advisory Guidance for Compliance with Open Internet Transparency Rule, Public Notice, 26 FCC Rcd 9411 (EB/OGC 2011) ("2011 Guidance"); FCC Enforcement Advisory, Open Internet Transparency Rule: Broadband Providers Must Disclose Accurate Information to Protect Consumers, Public Notice 29 FCC Rcd 8606 (EB/OGC 2014).

See http://www.reginfo.gov/public/do/PRAViewICR?ref nbr=201407-3060-003 (last viewed July 8, 2015).

³⁴ 47 C.F.R. § 8.3.

have inaccurate, incomplete, or insufficient information in its network disclosures. The enforcement risk of such a failing is extraordinary.

It is clear that the Commission underestimates the burdens of complying with the current transparency rule, and it compounds the problem by asserting in the Draft Supporting Statement that enhancements of the 2015 transparency rule are "incremental" and "will not be a significant extra burden," and claiming that many broadband providers already incorporate the enhanced obligations into their disclosure policies.³⁵ These claims are unfounded and serve only to limit the PRA burden estimate for the new rule.

2. The Commission's 4.5 Hour Burden Estimate for the Enhanced Transparency Requirements Is Absurd Given the Scope of the New Rules.

Despite Commission claims that the new requirements are merely "incremental," what follows shows just how burdensome they will be and how absurd the 4.5 hour burden estimate is.

a. Performance Characteristics. In connection with network performance characteristics, the enhanced rule will now require providers to disclose "packet loss" information in addition to information regarding speed and latency.³⁶ Further, all of this performance data must be measured in terms of average performance over a reasonable period of time and during times of peak usage; identified with respect to each technology (e.g., 3G and 4G); and disclosed by providers at the level of geographic areas in which the consumer is

- 12 -

See Appendix A. The Commission seeks comment on whether to make permanent the temporary exemption for providers with 100,000 or fewer subscribers. 2015 Open Internet Order, 29 FCC Rcd at 5609; see Consumer and Governmental Affairs Bureau Seeks Comment on Small Business Exemption From Open Internet Enhanced Transparency Requirements, GN Docket No. 14-28, Public Notice, DA 15-731 (June 22, 2015), 80 Fed. Reg. 38424, 38425 (July 6, 2015). The CGB Notice suggests that the enhanced transparency requirements are "modest in nature."

³⁶ 2015 Open Internet Order, 30 FCC Rcd at 5674.

purchasing service.³⁷ The record before the Commission made clear that such new collection and transparency requirements would impose significant burdens on broadband providers, particularly mobile broadband providers.

For instance, while Commission staff are continuing to refine the mobile Measuring Broadband for America ("MBA") program, at this time it may not be relied upon by wireless carriers as a safe harbor to meet network performance disclosure requirements. In contrast, wireline providers have the luxury of relying on their participation in the MBA program as a safe harbor in meeting the requirement to disclose actual network performance.³⁸ Thus, in addition to the more dynamic nature of managing wireless networks, the lack of a safe harbor places an extra burden on wireless carriers compared to their wireline counterparts.

Mobile broadband providers will thus have to develop performance metrics and testing to provide network performance data. For mobile providers, service qualities such as packet loss vary considerably from moment-to-moment based on spectrum congestion, fading, interference, propagation path loss, and a variety of other factors. ³⁹ These burdens are further compounded by the fact that such disclosures must be "reasonably related to the performance the consumer would likely experience in the geographic area in which the consumer is purchasing service." ⁴⁰ The meaning of this requirement, however, is fundamentally unclear in the context of mobile

2

Id. at 5673-74.

³⁸ *Id.* at 5674-75, n.411.

Comments of CTIA, GN Docket Nos. 14-28 & 10-27, at 36 (filed July 18, 2014) ("CTIA Comments"); *see also* Comments of AT&T, GN Docket Nos. 14-28 & 10-27, at 88 (citation omitted) (filed July 17, 2014) ("AT&T Comments") ("[F]ormal regulation requiring . . . 'information regarding the source, location, timing, speed, packet loss, and duration of network congestion,' would be impossible for [BIAS providers] to comply with given the broad array of external conditions that might affect broadband speed for an end user."); Comments of Bright House, GN Docket Nos. 14-28 & 10-27, at 11-12 (filed July 15, 2014); Reply Comments of Verizon and Verizon Wireless, GN Docket Nos. 14-28 & 10-27, at 16 (filed Sept. 15, 2014) ("Verizon Reply Comments").

²⁰¹⁵ Open Internet Order, 30 FCC Rcd at 5674.

services because consumers will utilize service across multiple geographic areas. Further, the costs associated with providing disclosures with such geographic specificity would dwarf the provided cost estimates, assuming they were possible at all. Indeed, in certain cases, "the monitoring and test equipment necessary to measure and report on a frequent or constant basis the effective download speeds, upload speeds, latency, packet loss, packet corruption, and/or jitter can cost as much at the underlying data transmission deployed to provide the broadband service."

The Commission's burden estimates, however, do not take these very real concerns into account. Indeed, based on the Draft Supporting Statement, it appears that the only costs for equipment (acquisition, operation, and maintenance) the Commission considered was in connection with 25 large wireline providers; the Commission apparently gave no consideration to such costs for wireless broadband providers at all.⁴² The PRA Notice, of course, provides no guidance as to the burdens behind the total annual cost estimate of \$640,000.

Finally, layered on top of these technical and reporting burdens, the new performance disclosures will require broadband providers to develop customer support systems and train customer service representatives to respond to questions from customers regarding the new disclosures. Yet there is no indication that the Commission gave thought to the training requirements: the "In-House" cost estimates are limited to the costs of engineers, technical writers, staff administrators, web administrators, and attorneys.⁴³

- 14 -

Comments of WTA – Advocates for Rural Broadband, GN Docket Nos. 14-28 & 10-27, at 8 (filed July 17, 2014); *see also* Reply Comments of the Wireless Internet Service Providers Association, GN Docket Nos. 14-28 & 10-27, at 9 (filed Sept. 15, 2014).

See Appendix A.

⁴³ *Id.*

b. Network Practices. The 2015 enhancements to the transparency rule require broadband providers to disclose network practices that are applied to traffic associated with a particular user or user group, including any application-agnostic degradation of service to a particular end user. ⁴⁴ Disclosures of user-based or application-based practices should include the purpose of the practice, which users or data plans may be affected, the triggers that activate the use of the practice, the types of traffic that are subject to the practice, and the practice's likely effects on end users' experiences. ⁴⁵

These network practice disclosures will be extremely onerous for mobile broadband providers, who require tremendous flexibility to manage their networks. As CTIA demonstrated to the Commission during the course of the proceeding, keeping disclosures up-to-date will be a significant challenge for mobile broadband providers because their network management practices evolve rapidly on a real-time basis to address changing threats and challenges to the network. Indeed, the vast differences among network technologies (*e.g.*, LTE and LTE-Advanced) means that network management must be even more agile as systems evolve. Further, there is the very real risk that detailed reporting of network management practices could significantly undermine providers' efforts to avert hacking, malware, and other threats. Again, however, there is no evidence that the Commission's burden estimate of 4.5 hours *in toto* per

⁴⁴ 2015 Open Internet Order, 30 FCC Rcd at 5676-77.

⁴⁵ *Id*.

See CTIA Comments at 36.

⁴⁷ *Id.* at n.92.

⁴⁸ *Id.*; see also Verizon Reply Comments at 15; Comments of AT&T at 80; Comments of CenturyLink, GN Docket Nos. 14-28 & 10-27, at 30 (filed July 17, 2014); Comments of AdTran, GN Docket Nos. 14-28 & 10-27, at 43 (filed July 15, 2014).

Respondent in any way accounts for the unique burdens the network disclosure requirements place on mobile broadband providers.

c. Direct Notification. The Commission also adopted a new requirement that broadband providers establish "a mechanism for directly notifying end users if their individual use of a network will trigger a network practice, based on their demand prior to a period of congestion that is likely to have a significant impact on the end user's use of the service."⁴⁹ This is an entirely new requirement and could well require mobile broadband providers to develop new computer systems, which could very well cost more than the industry-wide burden estimate announced in the PRA Notice.

* * *

In sum, the burden estimates presented in the PRA Notice simply are not realistic. They ignore or overlook the very real burdens that the new transparency requirements will impose on broadband providers, particularly mobile broadband providers.⁵⁰ The estimates presented in the PRA Notice and the Draft Supporting Statement are so patently out of line with the realities of the new transparency requirements that the Commission should recalculate its burden estimates and re-issue an entirely new PRA notice to get public input on more realistic burden estimates.

III. THE COMMISSION FAILS TO ACCOUNT FOR NEW REQUIREMENTS THAT NECESSITATE OMB APPROVAL.

The PRA Notice is further flawed in that it fails to identify for OMB approval several new requirements that trigger PRA approval. Absent Commission action to reverse course, these

_

⁴⁹ 2015 Open Internet Order, 30 FCC Rcd at 5677.

The 2015 enhancements also include new pricing disclosures, which must now include: (1) the full monthly service charge, with any promotional rates clearly noted and explained; (2) all additional one-time fees, recurring fees, and/or surcharges the consumer may incur either to initiate, maintain, or discontinue service; and (3) any data caps or allowances, as well as the consequences of exceeding the cap or allowance. *See 2015 Open Internet Order*, 30 FCC Rcd at 5672-73. These new pricing obligations only add to the compliance burden.

new obligations, which would impose significant burdens on mobile broadband providers, cannot go into effect.

In April 2015, the Commission announced that its new Open Internet rules would become effective June 12, 2015, except for the new transparency requirements set out "in paragraphs 164, 166, 167, 169, 173, 174, 179, 180, and 181" of the 2015 Open Internet Order. ⁵¹ The Commission appropriately stated that the requirements in these paragraphs would not become effective until approved by OMB. ⁵² Notably the Commission did not include paragraph 171 of the 2015 Open Internet Order, ⁵³ which contains two new requirements that necessitate OMB approval. First, according to the language of paragraph 171, the Commission "enhance[d] the [existing] rule to require a mechanism for directly notifying end users if their individual use of a network will trigger a network practice, based on their demand prior to a period of congestion, that is likely to have a significant impact on the end user's use of the service." ⁵⁴ And in footnote 424 in paragraph 171, the Commission stated that "providers must actually disclose information required for consumers to make an 'informed choice' regarding the purchase or use of broadband services at the point of sale. It is not sufficient for broadband providers simply to provide a link to their disclosures." ⁵⁵

By excluding paragraph 171 and footnote 424 from the list of paragraphs that will not become effective until after OMB approval, the Commission is improperly seeking to have these rules become effective without PRA approval. As discussed herein, both of these requirements

Preserving and Protecting the Open Internet, Final Rule Notice, 80 Fed. Reg. 19738 (Apr. 13, 2015) ("Final Rule Notice").

⁵³ 2015 Open Internet Order, 30 FCC Rcd at 5677.

⁵² *Id*.

⁵⁴ *Id*.

⁵⁵ *Id.* at n.424 (emphasis added).

are new collections of information that require OMB approval and must be accounted for in the Commission's burden estimates.

The New Direct Customer Notification Requirement Cannot Go Into A. Effect Until the Commission Seeks OMB Approval.

The Commission itself acknowledges that the direct customer notification requirement is an enhancement to the existing rule.⁵⁶ This requirement is clearly a "collection of information" covered by the PRA. 57 Thus, under the PRA, this requirement cannot be enforced until OMB reviews and approves the collection.⁵⁸ As discussed above, however, the Commission appears to take the position that this requirement will go into effect without PRA approval. Moreover, there is no indication that the Commission has made any attempt to account for the burden on mobile broadband providers associated with this requirement; it assumes that mobile broadband providers will have zero "External Costs" and thus will have no outside costs associated with new systems or processes for implementing this requirement. This assumption is indefensibly inaccurate.

В. The New Point of Sale Disclosures Cannot Go Into Effect Until the **Commission Seeks OMB Approval.**

The language of footnote 424 suggests that the Commission intends to bar broadband providers from relying on links to their websites to comply with the point of sale disclosure requirements. If so, this would be an entirely new and extremely burdensome requirement.

The Commission has never before barred providers from relying on their websites to satisfy the transparency requirements. In fact, it specifically allowed providers to do so. In response to claims that the existing transparency rule would impose undue burdens and costs, the

⁵⁶ *Id.* at 5677.

⁴⁴ U.S.C. § 3502(3).

See id. § 3506.

Commission in 2010 emphasized that the rule "gives broadband providers some flexibility to determine what information to disclose and how to disclose it." The 2011 Guidance stated more directly:

Broadband providers can comply with the point-of-sale requirement by, for instance, directing prospective customers at the point of sale, orally and/or prominently in writing, to a web address at which the required disclosures are clearly posted and appropriately updated.⁶⁰

The Commission reaffirmed this guidance in its previous statements to OMB. In its 2011 Supporting Statement, the Commission assured OMB that the existing transparency rule would not be unduly burdensome because providers could easily satisfy transparency requirements with a website:

[T]he *Open Internet Order* requires only that providers post disclosures on their websites, and direct consumers to such websites at the point of sale.⁶¹

In short, the Commission has never before implemented, and OMB has never reviewed, much less approved, a requirement that broadband providers' point of sale disclosures may not be met by a link to a website containing those disclosures. Thus, if the Commission now intends to reverse course and adopt such requirements, it must secure OMB approval and must evaluate the significant burdens caused by such a requirement.

The effort for all broadband providers to modify their systems and processes to provide all or a portion of the text of their Open Internet disclosures at the point of sale, rather than

²⁰¹⁰ Open Internet Order, 25 FCC Rcd at 17940-41 ¶ 60. The Commission also explicitly declined to mandate "transparency of information regarding technical, proprietary, and security-related management practices," 2010 Open Internet Order, 25 FCC Rcd at 17937-38 ¶ 55 n.173, and made clear that "[t]he rule does not require public transparency of competitively sensitive information or information that would compromise network security or undermine the efficacy of reasonable network management practices," *id.* at ¶ 55.

^{60 2011} Guidance, 26 FCC Rcd at 9414.

FCC Supporting Statement at 3.

providing a link to the website containing those disclosures, would take months of development, testing, and deployment and would impose huge costs. As but one example, changes to the point of sale disclosure requirements for prepaid wireless services would raise a unique set of concerns. There is little space available on the package containing the device and service purchased by a customer. Providers simply cannot reasonably be expected to present all or even a portion of the granular, detailed disclosures required by the Commission on that packaging. More broadly, broadband providers, particularly mobile broadband providers, often rely on multiple, distinct sales channels -e.g., online, in carrier stores, in big box stores and small retail shops, through call centers, and independent dealers. Each of these channels would likely have different systems and processes, each of which would need to be modified to comply with a new disclosure if providers may not satisfy the rule with a link to their disclosures at the point of sale.

The PRA Notice did not even attempt to account for the burden associated with this requirement. The Commission cannot credibly certify to OMB that "[t]he burden on the public [is] completely accounted for and minimized to the extent practicable. . . ."⁶² Thus, the fact that the Commission has omitted the requirements of paragraph 171 from its PRA review is yet another reason the Commission should issue a new PRA Notice.

IV. THE ENHANCED TRANSPARENCY RULE DOES NOT SATISFY OTHER PRA STANDARDS.

The PRA requires that the Commission certify to OMB that the enhanced transparency rule meets certain standards, including that the collection "reduces to the extent practicable and appropriate the burden," "is necessary for the proper performance of the functions of the agency, including that the information has practical utility," and "is written using plain, coherent, and

-

See OMB Guidance, supra note 8.

unambiguous terminology and is understandable to those who are to respond."⁶³ The above shows that the Commission cannot assure OMB that it minimized the burdens "to the extent practicable," that the enhanced transparency requirements have "practical utility," or that the enhanced requirements are written in "coherent[] and unambiguous" language. The Commission therefore cannot make the required certification to OMB.

A. The Information Required by the Enhanced Disclosure Rules Will Have Little Practical Utility.

The existing transparency rule effectively serves the interests of consumers and edge providers in the competitive mobile broadband market and will continue to do so in the absence of the Commission's so-called "enhancements." Absent substantial evidence that those rules do not adequately enable the Commission to protect consumers and edge providers, there is no basis to conclude that new, enhanced disclosures are warranted or will offer any practical utility.

Mobile broadband providers already disclose information regarding speeds (with appropriate disclaimers to account for the inherent variability of mobile service), prices, data caps (where applicable), and network management practices. Further, while the existing transparency rule has been in effect, mobile broadband providers voluntarily adopted a best practice of notifying wireless customers with data allowances when they approach and exceed their plans' allowance for data usage and will incur overage charges, without charge and without requiring sign-up to receive the notification. This best practice is now included in CTIA's Consumer Code for Wireless Service, to which all major U.S. wireless providers are signatories. ⁶⁴ The Consumer Code for Wireless Service also specifies that wireless providers

⁶³ 44 U.S.C. § 3506(c)(3)(A), (C), (D).

⁶³

⁶⁴ CTIA, Policy & Initiatives, *Consumer Code for Wireless Service*, http://www.ctia.org/policy-initiatives/voluntaryguidelines/consumer-code-for-wireless-service.

should clearly and conspicuously disclose tools or services that enable consumers to track, monitor, and set limits on data usage. 65

In light of mobile broadband providers' strong disclosure practices, there is no reason to believe that detailed disclosures containing additional complicated technical information about packet loss and corruption, latency, jitter, and upstream and downstream speeds, etc. will result in any material benefit to consumers. To the contrary, additional, detailed technical disclosures could easily obscure other more useful information and will not assist consumers comparing the performance of competing network. Taking the packet loss disclosures as an example, low packet loss does not necessarily correlate to better network performance for delay intolerant applications. Consequently, packet loss is not a reliable measure for evaluating the performance of a given network or for comparing the performance of difference networks.

Enhanced disclosures likewise will not have practical utility to edge providers. Mobile broadband providers have every reason to work with edge providers and others in the Internet ecosystem to ensure that their customers will have access to the best offerings available. It is what their customers demand, and a broadband provider whose network does not offer suitable access to particular content or a popular application will be less able to compete with providers that do offer such access. In the context of this competitive reality, the Commission's efforts to mandate specific, granular disclosures will not provide any significant additional utility for edge providers.

While there may be a superficial appeal to requiring broadband providers to display all or a portion of the text of their network disclosures at the point for sale, such a requirement would not significantly benefit consumers and likely may degrade the experience. Providing customers

- 22 -

65

⁶⁵ *Id.*

a bulky, multi-page disclosure document for review prior to sale or printing detailed disclosures on the packaging for pre-paid devices would impair the customer experience and make the purchase process unwieldy. Further, given that these disclosures would be provided to customers purchasing broadband Internet access service, it is reasonable to presume that such customers would have access to the complete disclosures through the company's website. And CTIA's Consumer Code for Wireless Service mandates that consumers have a minimum of 14 days in which to cancel service and return their device with no penalty.⁶⁶ This gives consumers more than enough time to review a provider's disclosures and decide whether to retain the service.

In short, all of this calls into question whether the Commission's enhanced transparency requirements will have any material utility for mobile broadband customers or edge providers. Indeed, the 2015 Open Internet Order offers little guidance regarding the perceived utility of the enhanced disclosures other than general observations that more information would be useful to consumers and edge providers.

B. The Disclosure Requirements are Ambiguous and Not Clearly Understandable.

There are many aspects of the enhanced transparency rule that are ambiguous and not readily understandable. As indicated above, the Commission in footnote 424 appears to bar broadband providers relying on a link to a website to satisfy the point of sale transparency requirements. However, the extent and nature of those point of sale disclosures is unclear.

For instance, with respect to network management practices, the 2010 *Open Internet*Order listed seven categories of information, "some or all" of which would "likely" be included

⁶⁶ *Id.*

in a compliant disclosure.⁶⁷ These included: (1) "descriptions of network management practices"; (2) "types of traffic subject to practices"; (3) "purposes served by practices"; (4) "practices' effects on end users' experience"; (5) "criteria used in practices, such as indicators of congestion that trigger a practice, and the typical frequency of congestion"; (6) "usage limits and the consequences of exceeding them"; and (7) "references to engineering standards, where appropriate."⁶⁸ Notwithstanding this list of information that might be included in a provider's disclosures, the *2010 Open Internet Order* expressly *rejected* calls for detailed, specific disclosure mandates, holding that "at this time the best approach is to allow flexibility in implementation of the transparency rule, while providing guidance regarding effective disclosure models."⁶⁹ This leaves significant uncertainty regarding what the Commission will require to be disclosed at the point of sale.

Another example is the requirement that network performance be measured "in terms of average performance over a reasonable period of time and during times of peak usage." The notion of "peak usage" is a very fluid concept on mobile networks and it is impossible to know exactly what the Commission intends that term to mean. For mobile networks, "peak usage" periods can vary substantially from location to location: in business-centric downtown areas, peak usage could be during the day; along commuter thorough fares, peak usage could occur during rush hours; and in residential areas, peak usage would likely be in the evening as people

_

⁶⁷ 2010 Open Internet Order, 25 FCC Rcd at 17938 ¶ 56 (emphasis added).

⁶⁸ *Id*.

⁶⁹ *Id*; see also 2011 Guidance, 26 FCC Rcd at 9412 ("Rather than providing an exhaustive list of topics that should be included in disclosures, the Commission concluded that 'the best approach is to allow flexibility in implementation of the transparency rule, while providing guidance concerning effective transparency models."").

⁷⁰ 2015 Open Internet Order, 30 FCC Rcd at 5674 ¶ 166.

use streaming video applications and connect to office networks from home. It is thus exceedingly difficult to assess peak usage for a mobile broadband network.

Further, the enhanced disclosure rules require disclosures of network performance data to be "reasonably related to the performance the consumer would likely experience in the geographic area in which the consumer is purchasing service." The meaning of this requirement, however, is particularly unclear in the context of mobile broadband because these services are, by definition, *mobile*, and consumers utilize networks across many different geographic areas. These are just some examples as to why the 2015 transparency rules enhancements are ambiguous and will be time- and resource-intensive to implement, far outstripping the Commission's burden estimates thus far.⁷²

V. CONCLUSION

As detailed above, the Commission cannot make the certifications to OMB required by the PRA. The Commission has not accurately accounted for the burdens that the new transparency requirements will impose on broadband providers and thus cannot provide the assurance that it has minimized those burdens to the extent practicable. Nor can the Commission assure OMB that the enhanced transparency rule has significant practical utility and is unambiguous and understandable. The Commission's PRA Notice is itself so flawed that the Commission should issue an entirely new notice and begin the PRA review process again.

⁷¹ *Id*.

The Commission now also requires separate disclosures for services with each technology (*e.g.*, 3G, 4G). This requirement too is highly unclear and ambiguous. For instance, for mobile broadband providers, there is no guidance with regard to how the rule will apply to channel bonding situations. Would channel bonding be considered a separate/new technology that requires a separate disclosure? If so, how would each component be labeled? *Id.* at 5673-74 ¶ 166.

Respectfully submitted,

CTIA – The Wireless Association®

By: <u>Krista L. Witanowski</u>
Krista L. Witanowski
Assistant Vice President, Regulatory Affairs

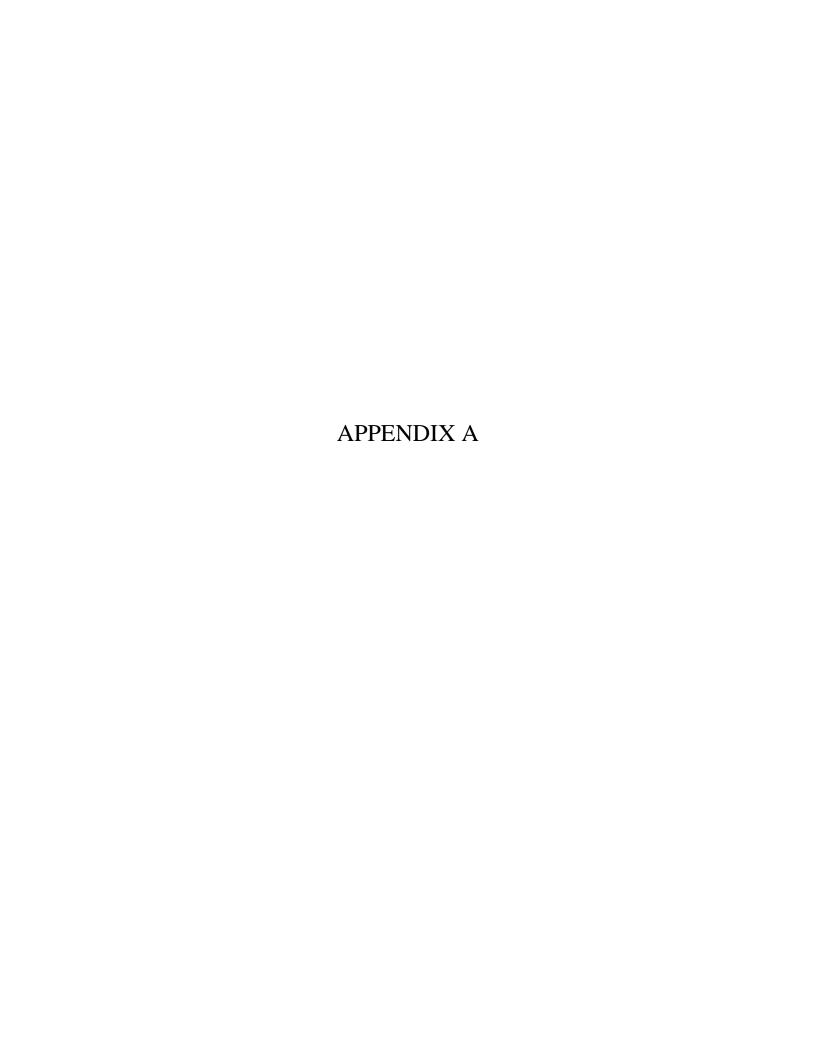
Thomas C. Power Senior Vice President, General Counsel

Scott K. Bergmann Vice President, Regulatory Affairs

Kara D. Romagnino Director, Regulatory Affairs

CTIA – The Wireless Association® Expanding the Wireless Frontier 1400 Sixteenth Street, NW, Suite 600 Washington, DC 20036 (202) 785-0081

July 20, 2015



Initial Paperwork Reduction Act Calculations for Transparency Rule Disclosures, *Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, GN Docket No. 14-28, FCC 15-24 (rel. Mar. 12, 2015)

12. Estimates of hour burden for the collection of information are as follows:

Information Collection Requirements:

The Commission currently has one approved information collection related to the transparency rule, OMB Control no. 3060-1158, which the Commission seeks to modify to reflect the enhancements to the transparency rule that were adopted by the 2015 Open Internet Order. The currently approved information collection covered fewer respondents than are reflected in the estimate below due to a change in the source of data used by the Commission to determine the number of respondents. Previously, the Commission used the number of providers listed in the Internet Access Services Report, which was based on the number of providers filing a Form 477. The Commission is now using information from the most recently available Economic Census.

In addition to updating the number of providers subject to the information collection, the Commission has increased slightly the estimated number of hours required for a provider to comply. The Commission is increasing the hourly estimate because the 2015 Open Internet Order adopted certain incremental enhancements and clarifications concerning what is required under the codified transparency rule. These enhancements include requiring disclosure of commercial terms such as fees and surcharges; disclosure of performance metrics, such as packet loss, which are reasonably related to the performance the consumer would likely experience in the geographic area in which the consumer is purchasing service; disclosure of network management practices such as data caps; and direct notification to consumers likely to be significantly affected by use of a network management practice. The 2015 Open Internet Order also removed the requirement to disclose the typical frequency of congestion. ² The disclosures required under this information collection will be updated on occasion.

The details of the modified collection for which the Commission seeks approval are set out below.

Annual Burden Hours Under the Enhanced Transparency Rule

Number of Respondents: 3,188

There are approximately 3,188 broadband providers that will be required to comply with the transparency rule as interpreted and applied in the 2015 Open Internet Order.

The smaller provider exemption in the 2015 Open Internet Order applies to the approximately 1,729 Respondents that have fewer than 100,000 subscribers according to their most recent FCC Form 477. The Commission expects that some of these providers already

¹ *See* Internet Access Services Report, Table 12, page 32 at: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-324884A1.pdf.

² See 80 Fed.Reg. 19759-64, para. 154-181 (discussing disclosures required by the transparency rule).

Initial Paperwork Reduction Act Calculations for Transparency Rule Disclosures, *Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, GN Docket No. 14-28, FCC 15-24 (rel. Mar. 12, 2015)

disclose at least some of the required information, but the information is not all currently and consistently available at a location, in a form, and at a level of detail, that serves the purposes of the transparency rule. It also expects that others will choose not to take advantage of the exemption and will bring themselves into compliance within a short time. The calculations below take this factor into consideration, as well as balancing whether the exemption will continue after December 15, 2015. Those providers that choose to take advantage of the exemption from the enhanced requirements are still required to comply with the transparency rule from the 2010 Order.

Annual Number of Responses: 3,188 Responses

3,188 respondents x 1 notification to consumers of relevant information at required places and times= **3,188 responses**

Annual Number of Burden Hours: 3,188 responses x 28.9 hours = **92,133 hours**

The Commission believes that most broadband providers already disclose most, and in some cases all, of the required information in some manner, and that the incremental enhancements of the 2015 transparency rule will not be a significant extra burden. The Commission, however, also believes that the information is not all currently and consistently available at a location, in a form, and at a level of detail, that serves the purposes of the transparency rule. The Commission therefore estimates that complying with the transparency requirement will require an average of 28.9 hours to make the required disclosures each year. The currently approved collection was for 24.4 hours per year, and the Commission is requesting an increase of 4.5 hours a year based on the enhancements. This average incorporates estimates for the largest broadband providers, who may incur greater burdens than the average to ensure compliance with the rule, as well as for smaller broadband providers, who may incur lesser burdens than the average. This is because larger entities serve more customers, are more likely to serve multiple geographic regions, and are not eligible to avail themselves of the temporary exemption from the enhancements granted to smaller providers.

Annual "In House" Cost Per Respondent: \$1,545.22

The Commission believes that the respondents will generally use "in-house" personnel whose pay is comparable to mid- to senior-level federal employees (GS12/5, GS14/5, and GS15/5). Therefore, the Commission estimates respondents' hourly costs to be \$41.48 for technical writers, staff administrators, and web administrators; \$58.28 for engineers; and \$68.56 for attorneys to gather and post network management practices on a website.

9.5 Engineer hrs x \$58.28/hr = \$553.66 3 Technical Writer hrs x \$41.48/hr = \$124.44 6 Staff Administrator hrs x \$41.48/hr = \$248.88 3.5 Web Administrator hrs x \$41.48/hr = \$145.18 6.9 Attorney hrs x \$68.56/hr = \$473.06 Total = \$1,545.22

Total Annual Number of Respondents: 3,188 respondents Total Annual Number of Annual Reponses: 3,188 responses Total Annual Burden Hours: 92,133 hours Initial Paperwork Reduction Act Calculations for Transparency Rule Disclosures, *Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, GN Docket No. 14-28, FCC 15-24 (rel. Mar. 12, 2015)

Total Annual "In-House" Costs Per Respondent: \$1,545.22

- 13. Although the Commission expects most reporting requirements will be met by respondents' "in-house" staff, some of the larger respondents may have external costs for deploying their own performance measurement testing program. The 2015 Open Internet Order interprets and applies the transparency rule to require disclosure of performance metrics, such as packet loss, which are reasonably related to the performance the consumer would likely experience in the geographic area in which the consumer is purchasing service. The Commission does not expect this to require additional measurement devices, but estimates that the cost of measurement devices has increased. The Commission makes the following estimate for external costs for large wireline broadband providers, which the Commission expects may choose to deploy their own performance measurement testing program using techniques similar to those used in the Commission's recent broadband performance measurement project (and 13 of whom participated in the broadband performance measurement project and may, for some period of time, choose to use the results of that project for disclosure of their actual performance):
 - (a) Total annualized capital/start-up costs for all respondents who will have these costs: \$130,000

The Commission estimates that some providers will invest in consumer premises testing equipment, such as home router measurement devices. (The Commission estimates that most respondents will not make such investments and will have no capital costs.)

400 measurement devices x \$65 per device = \$26,000 capital cost per respondent who will have this capital cost.

\$26,000 capital cost per respondent / 5 year lifespan of devices = \$5,200 in annualized costs per respondent who will have this capital cost.

\$5,200 capital costs per respondent x 25 respondents = \$130,000 in total annualized capital/start-up costs for all respondents who will have this capital cost.

(b) Total annual cost (Operation & Management) for all respondents who will have this annual cost: \$510,000

\$14,400 server lease costs + \$6,000 consumer panel maintenance costs = \$=\$20,400 annual costs per respondent who will have this annual cost \$20,400 annual costs per respondent x 25 respondents = \$510,000

(c) Total Annual External Cost for All Respondents: \$130,000 + \$510,000 = \$640,000