

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Special Access for Price Cap Local Exchange Carriers	)	WC Docket No. 05-25
	)	
AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Service	)	RM-10593
	)	

**JOINT REQUEST FOR FURTHER EXTENSION OF TIME  
OF THE UNITED STATES TELECOM ASSOCIATION AND  
ITTA – THE VOICE OF MID-SIZE COMMUNICATIONS COMPANIES**

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## SUMMARY

We commend the Commission for proceeding on a data-driven path to analyzing special access competition. The task is large – the Commission recently sized this business at approximately \$40 billion annually – and the data set the Commission has gathered is extraordinary in terms of its scale and its detail according to the Declaration of Dr. Glenn Woroch (attached). In addition, the business is complex, characterized by rapid technological change, entry and rapid growth by new competitors, differing service demands from a very broad range of purchasers, a complex regulatory overlay, geographical variations across the country, and an overarching need for massive investment in new facilities to meet the demands of businesses for fast, reliable connections to the Internet, to data centers and cloud computing facilities, and to customers and suppliers. The public interest requires a thoughtful and thorough review of the data the Commission has collected given the importance of these services and the crucial need to encourage more investment to serve these business customers.

Although the Wireline Competition Bureau (WCB) recently extended the comment schedule – with comments now due January 6, 2016, and reply comments due February 5, 2016 – the current schedule does not provide the opportunity for the careful and searching analysis that this proceeding requires. As clearly and carefully detailed in the Woroch Declaration, the current data set is not yet stable, and the necessary tools to fully analyze the data are not in place. Given the enormity of the data set, the complexity of the industry and the importance of it to our economy, once the data are stable and the necessary software and tools are available, twelve weeks will be necessary to provide the meaningful opportunity to analyze the data and prepare comments required by the Administrative Procedures Act.

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Although the Commission recently extended the time for comments and reply comments in this proceeding, additional facts concerning the readiness of the data and the adequacy of the tools available to assess the data in the special access rulemaking proceeding have come to light, and thus the United States Telecom Association (USTelecom)<sup>1</sup> and ITTA – the Voice of Mid-Size Communications Companies (ITTA)<sup>2</sup> (collectively “Petitioners”), respectfully request that the Federal Communications Commission (Commission) further extend the deadlines for submission of comments and reply comments until at least twelve weeks after the data set is stable and the remaining impediments to commenters’ ability to efficiently analyze the marketplace data collection are removed.

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<sup>1</sup> USTelecom is the premier trade association representing service providers and suppliers for the telecom industry. Its diverse member base ranges from large publicly traded communications corporations to small companies and cooperatives – all providing advanced communications service to both urban and rural markets.

<sup>2</sup> ITTA serves as the preeminent advocate for mid-size companies before federal policymakers, in industry forums, and before the federal courts on issues affecting the communications industry. Its members include mid-size communications companies that provide a broad range of high quality wireline and wireless voice, broadband, Internet, and video services to residential and business customers in predominately rural areas across 45 states.

Specifically, we request that the Commission extend the due date for opening comments until at least twelve weeks after two criteria have been satisfied: (1) the Commission issues a Public Notice confirming that the data set has been finalized and a change control process has been instituted for any further modifications (including explanations for all future changes); and (2) all software and tools necessary to conduct relevant data analysis have been made available by NORC. As explained below and in the attached declaration, such additional time is necessary to ensure a full and fair opportunity for parties to comment on the important and complicated issues and the unprecedented volume and complexity of the data involved in this proceeding, consistent with the Administrative Procedure Act and Commission rules.

## **I. BACKGROUND AND INTRODUCTION.**

The Commission opened this proceeding in 2005 to examine the state of competition in the special access, or business broadband marketplace.<sup>3</sup> After the ILECs argued for years that any comprehensive analysis in this proceeding would have to be based on competitive data from *all* special access providers, the Commission agreed. But its first attempt to collect such data starting in 2010 collapsed because the very CLECs that are now complaining about providing a few weeks necessary for adequate reviews of the data<sup>4</sup> refused to provide their own data on a

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<sup>3</sup> Report and Order and Further Notice of Proposed Rulemaking, *Special Access for Price Cap Local Exchange Carriers, et al.*, 27 FCC Rcd. 16318 (2012) (“*Data Collection Order*”); *see also* Report and Order, *Special Access for Price Cap Local Exchange Carriers, et al.*, 28 FCC Rcd. 13189 (2013) (Wireline Competition Bureau 2013) (“*Implementation Order*”); Order on Reconsideration, *Special Access for Price Cap Local Exchange Carriers, et al.*, 29 FCC Rcd. 10899 (2014) (Wireline Competition Bureau 2014) (“*Reconsideration Order*”); Order, *Special Access for Price Cap Local Exchange Carriers, et al.*, 29 FCC Rcd. 14346 (2014) (Wireline Competition Bureau 2014) (“*Extension Order*”).

<sup>4</sup> *See* Joint Opposition of INCOMPAS and CCA to Request for Extension of Time, WC Docket No. 05-25, RM-10593 (filed Oct. 23, 2015); Opposition of Sprint Corporation to Request for Extension of Time, WC Docket No. 05-25, RM-10593 (filed Oct. 26, 2015) (“*Sprint Opposition*”).

voluntary basis. Eventually, in 2012, the Commission launched another, mandatory data collection, and collected most of the data at issue here in 2015 (for services offered in 2013).

This data collection is enormous.<sup>5</sup> Indeed, the Commission spent the better part of 2015 preparing the data for review by interested parties through a secure platform maintained by NORC. Unfortunately, that process is *still* not complete. Careful review and analysis of this data collection is essential to any further consideration of the issues in this proceeding, and the Commission has acknowledged that it cannot assess special access competitive dynamics without a comprehensive analysis of the entire industry.<sup>6</sup> The current comment schedule will not give interested parties a full and fair opportunity to analyze the data and to submit meaningful comments, and there is no reasonable justification for shoehorning the parties into such a compressed schedule. Under these circumstances, the existing pleading cycle is unreasonable.<sup>7</sup>

As explained in the attached declaration of Dr. Glenn Woroch, who is leading a team of economists and statisticians with vast experience analyzing large complex data sets to analyze the data collection, the current comment schedule is unreasonable for at least three broad sets of

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<sup>5</sup> There are more than 120 million records, billions of data points, and more than 15 Gigabytes of data identifying highly geographically-granular street level deployment and pricing information for the multi-billion dollar dedicated services industry. *See* Exhibit A, ¶ 2 attached hereto (Declaration of Glenn Woroch In Support of Request For Extension of Time) (“Woroch Decl.”).

<sup>6</sup> Report and Order, *Special Access for Price Cap Local Exchange Carriers, et al.*, 27 FCC Rcd. 10557, ¶ 3, (2012) (“*Pricing Flexibility Suspension Order*”) (Commission “cannot yet evaluate these claims of competitive harm based on the evidence to date in the record,” which is why the Commission has undertaken the data collection); *see also id.* ¶¶ 6-7, 50, 52.

<sup>7</sup> Petitioners acknowledge that WCB has already extended the pleading cycle once in response to our request. Joint Request for Extension of Time of USTelecom and ITTA, WC Docket No. 05-25, RM-10593 (filed Oct. 21, 2015); *see* Order, *Special Access for Price Cap Local Exchange Carriers, et al.*, WC Docket No. 05-25, RM 10593, DA 15-1239 (rel. Nov. 2, 2015) (“*Nov. 2015 Extension Order*”). However, Petitioners sought that extension because their members and their consultants were experiencing significant delays in gaining access to the data collection. The bureau granted less time than was requested, and the extension order did not take into account the additional considerations raised in this request, which were not known to Petitioners at the time of their initial request.

reasons. First, the data set is still in flux. Just since October 20, when Dr. Woroch and his team first gained access to the data, there have been significant changes to the data set and Bureau staff and NORC have indicated that another, similar substantial “refresh” of the data will occur in about two weeks.<sup>8</sup> *After* these further updates are completed – which likely will not be until mid-November – the data set purportedly will be “stable,” but the parties and their consultants have been unable to conduct their analysis in the meantime while the data remains in flux.<sup>9</sup>

Second, the NORC platform still lacks important software needed to analyze the data, particularly as they relate to geographic coding of the data. Because of confidentiality concerns, parties can access and work with the data only through the NORC platform, and parties are thus limited to the software available on that platform. AT&T last year highlighted the need to ensure that sufficient software and tools for analysis would be available, but the Commission started the clock before resolving these issues,<sup>10</sup> leaving parties to determine and ask for the software and tools that should be available for analysis of the data, further eating into the time allotted for review and comment. As a result, the Bureau and NORC are only now working through these issues.

Third, even if these problems were resolved tomorrow, the current pleading cycle does not allow enough time for review, analysis, and drafting of comments. Once the data is stable and the requested software and tools have been installed, the consultants will need at least eight

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<sup>8</sup> In one case, the number of observations was increased by 50 percent as data that was previously missing from the data set was added and errors in the previous data set were corrected. Also, other essential files that identify how close CLEC fiber facilities are to customer locations have not been released.

<sup>9</sup> Woroch Decl., ¶¶ 17-19.

<sup>10</sup> This is despite promising to resolve such issues “*prior* to making the [Data Enclave] available for access.” Order ad Data Collection Protective Order, *Special Access for Price Cap Local Exchange Carriers*, WC Docket No. 05-25, DA 14-1424, ¶¶ 16-17 (rel. Oct. 1, 2014) (emphasis added).

to ten weeks to analyze the data.<sup>11</sup> And, once the consultants have completed their data analysis, they will still need time to create reports (including a redacted version that can be reviewed by individuals not authorized to see the data contained in the Data Enclave) summarizing their results, and the ILEC parties will need time to work from the report to write their comments.

Interested parties have raised these issues with Bureau staff, and Bureau staff has indicated that it is working hard to address them. We recognize, however, that these issues take time to resolve, and the data are not yet stable and will not be until at least mid-November (pending the next large update), and it is still unclear when all of the necessary software and tools will be made available on the NORC platform. Thus, even with Bureau staff working hard to resolve these issues, there still will not be enough time for the parties to analyze the stable version of the data set in time to meet the current deadlines.

The Administrative Procedure Act *requires* the Commission to give all interested parties an adequate opportunity to assess and comment on these data, which are indispensable to this proceeding. Accordingly, the Commission should extend the due date for the opening comments until at least twelve weeks *after* two criteria have been satisfied: (1) the Commission issues a Public Notice confirming that the data has been finalized and a change control process has been instituted for any further modifications (including explanations for all future changes); and (2) all software and tools necessary to conduct relevant data analysis have been made available by NORC.

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<sup>11</sup> Woroch Decl., ¶¶ 3, 7, 27-37.



## II. UNDER THE CURRENT DEADLINES, THE PARTIES WILL NOT HAVE A FULL AND FAIR OPPORTUNITY TO COMMENT.

The need for a further extension is manifest. It will take substantial time – at least twelve weeks<sup>12</sup> – for parties to review, analyze and prepare comments on the data submission after the data set is finalized. The need for additional time is not the fault of any interested party, nor is it the fault of Bureau staff who, we believe, are working hard to resolve the ongoing issues Petitioners and other parties face. Rather, it flows from complexities in the procedures adopted to protect the confidentiality of the information, the difficulties inherent in any rigorous analysis of a data set this large and complex, and the corresponding complexity of the issues to be addressed in this proceeding.

The ILECs' experts and other interested parties only very recently gained access to the data. And they are working under unusual constraints because of the highly confidential nature of the data; the protective orders in this proceeding provide that only outside consultants and counsel can see and analyze much of the most important data at issue. Also because of the sensitivity of the data, the Commission has established a process under which persons can gain access to the data *only* via a platform maintained by NORC. The Commission has adopted a variety of procedures to control access to the NORC-FCC Data Enclave (“Data Enclave”) and to manage the Data Enclave. Under those procedures,<sup>13</sup> interested parties were unable to access the data until mid- to late October. For example, the first day that Dr. Woroch’s team could have obtained – and did obtain – access to the Data Enclave was October 20, 2015.<sup>14</sup> Other

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<sup>12</sup> The twelve weeks is comprised of the ten weeks needed for the analyses to be conducted and two weeks for reports and comments presenting those findings to be drafted.

<sup>13</sup> Order and Data Collection Protective Order, *Special Access for Price Cap Local Exchange Carriers, et al.*, 29 FCC Rcd. 11657 (Wireline Competition Bureau 2014) (“*Data Collection Protective Order*”).

<sup>14</sup> Woroch Decl., ¶¶ 8-13.

USTelecom and ITTA members have experienced similar delays. As our members' experts have begun to work with the Data Enclave, it has become clear that the data collection is not complete and the necessary tools for analysis are not yet in place; even after the Data Enclave is considered to be "stable," the economists and other consultants will still need at least eight to ten weeks to analyze the data before they prepare their reports.<sup>15</sup>

**A. The Data Set Is Still Being Supplemented And Revised.**

As Dr. Woroch explains, his team's ability to analyze the data set is dramatically impaired by the fact that the data are still being updated and revised.<sup>16</sup> For example, on Friday, October 23, 2015, massive changes were made to the data responding to Question II.A.4, which contain location information for the dedicated circuits provided by competitive local exchange carriers ("CLEC") that are crucial to any competitive analysis of the marketplace.<sup>17</sup> Overall, data for about 40 additional CLECs were added to the Data Enclave, resulting in a *50 percent increase* (from 400,000 to 600,000) in the number of observations.<sup>18</sup> In addition, on the following Monday, October 26, 2015, NORC informed Dr. Woroch's team that, at the Commission's request, NORC had removed several folders from the Data Enclave.<sup>19</sup> Yet another very significant update of the data occurred on November 3, 2015.<sup>20</sup>

Additional substantial changes to the data are ongoing. Bureau staff has informed Dr. Woroch's team that the data will be updated again sometime in mid-November to add both new data for large companies in existing tables and entirely new tables containing critical

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<sup>15</sup> Woroch Decl., ¶¶ 3, 7, 27-37.

<sup>16</sup> Woroch Decl., ¶¶ 14-23.

<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

information, such as the relative location of competitive fiber to buildings.<sup>21</sup> Bureau staff has indicated that after this update, it expects the data set to be “stable.”<sup>22</sup>

In addition, a break in important links between the data sets in the Data Enclave impedes efficient analysis. For example, to compute the cost of special access circuits, the description of the circuit element must be linked to the carriers’ responses concerning the billing for a circuit’s various elements. Although the Commission’s data request asked for responses in a form that would allow them to be linked in this way, the Data Enclave masks one of these linking fields to protect customer information, which leaves no way to match descriptions to the billed element.<sup>23</sup> The experts are thus unable to separately identify the cost of specific circuit elements such as channel termination or channel mileage. These issues were raised with NORC and Bureau staff, and a new file purporting to address this issue for a subset of the relevant data (those related to circuits with capacity of less than 1 Gbps) was posted on November 4, 2015, but it does not appear that these new data completely fix the problem. Dr. Woroch’s team is “still unable to match billed circuit elements or their descriptions, and so, as an example, [they] are unable to separately identify the cost of specific types of circuit elements such as channel terminations or channel mileage.”<sup>24</sup> We submit that parties cannot be expected to conduct a proper analysis until these issues with the data set are resolved.

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<sup>21</sup> *Id.*

<sup>22</sup> *Id.* Notably, as Dr. Woroch explains, each new update to the data has the potential to create new setbacks. *See id.* ¶ 19 (“even setting aside that the upcoming updates will add entirely new tables, [ ] large updates to existing tables almost always have unanticipated consequences that need to be addressed because they undermine our existing plans or break our existing scripts”).

<sup>23</sup> *Id.* ¶ 21.

<sup>24</sup> *Id.* ¶ 22.

## **B. Important Software And Tools Are Still Missing.**

Even if the data set were finalized, the NORC Data Enclave still lacks software and tools needed to enable efficient and comprehensive analysis of the data.<sup>25</sup> To be sure, Bureau staff and NORC have been responsive to requests to install some useful software and have made it available for users of the Data Enclave. Nonetheless, immediately upon obtaining access to the Data Enclave, Dr. Woroch's team identified critical tools and software that were missing, and pursuant to the NORC's procedures, promptly requested that these tools and software be added to the Data Enclave.<sup>26</sup>

For example, identifying the geographic location of network facilities is important to any analysis of competition in the provision of special access services. Carriers submitted this information to the Commission in the form of geocodes, *i.e.*, latitude and longitude coordinates that position the facilities on the earth's surface. These data can be analyzed using Geographic Information System ("GIS") software. Mr. Woroch's team requested that NORC install this software on the first day they had access to the Data Enclave (October 20, 2015).<sup>27</sup> After subsequent requests, NORC installed proprietary, pay-to-use GIS software called "ArcGIS" on October 29, 2015.<sup>28</sup>

This does not solve the problem entirely, however, because significant geocode data is missing. In many cases, the Commission designated geocodes as optional for respondents. In those instances, the experts have to rely on street addresses to determine the location of facilities. Dr. Woroch's team estimates that about 40 percent of the records for both ILEC and CLEC

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<sup>25</sup> Woroch Decl., ¶¶ 24-26.

<sup>26</sup> *Id.*

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

circuits are missing geocode information for connection locations but include a street address.<sup>29</sup> Dr. Woroch’s team has requested software that would generate geocodes for such street addresses, and although on November 4, 2015, NORC uploaded a file to the Data Enclave that links the addresses to latitude and longitude coordinates, data is still missing for many of the street addresses, and there is no explanation as to why that is the case or whether and when that issue will be resolved.<sup>30</sup>

Other requests for software and tools needed to efficiently analyze the data are still outstanding. For example, software with “Post GIS” functionality is needed to compute distances between locations (*e.g.*, to compute how far a competitor’s fiber is from a particular building). As explained by Dr. Woroch, without these data, it will be necessary to implement workarounds that dramatically increase the time it takes to conduct the analyses.<sup>31</sup> Although NORC originally indicated that such software tools were not supported on its platform, it has since determined that certain of its software might be able to perform some of those functions, but it still investigating whether it could provide access to those capabilities under the terms of its licenses.<sup>32</sup>

The Commission previously recognized that delays associated with the lack of necessary software could be an issue and promised to resolve it *before* making the Data Enclave available to the public. In the Data Collection Protective Order, the Commission acknowledged AT&T’s position that “access to [SAS and Stata], as well as any *other software packages that parties*

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<sup>29</sup> *Id.* ¶ 23

<sup>30</sup> *Id.*

<sup>31</sup> *Id.* ¶ 26.

<sup>32</sup> *Id.*

*indicate they would like to use*, will be key to the parties’ ability to properly analyze the data.”<sup>33</sup>

The Commission then agreed to include SAS and Stata on the Data Enclave and explained that it would “defer at this time to decide whether to provide additional software programs or to permit reviewing parties to bring additional software programs and or other outside information into the [Data Enclave].”<sup>34</sup> Importantly, the Commission explained that it would “address this issue *prior* to making the [Data Enclave] available for access.”<sup>35</sup>

The Commission, however, did not seek additional comment on this issue before announcing that the Data Enclave was available, and it started the clock on the comment cycles, which effectively left any such issues to be resolved *after* the data was made available for review and while the clock was running on the comment deadlines. As a result, the parties had no way of knowing what software and tools would be in the Data Enclave until they actually gained access to it, nor did they know that all requests for additional software were to be directed to NORC until after their training sessions in mid-to-late October.

### **C. The Experts Will Still Need Eight to Ten Weeks to Analyze the Data.**

Dr. Woroch’s team conservatively estimates that it will take at least eight to ten weeks to analyze the data *after* the data set is stable and *after* all software required to effectively analyze the data is installed on the Data Enclave.<sup>36</sup>

Working with a data set as large and complex as this one is necessarily an *iterative* process. The researchers cannot simply write all of their programming scripts in advance and then, when the data are finally ready, “push a button,” run the analysis, and the job is done.

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<sup>33</sup> *Data Collection Protective Order*, ¶ 16 (emphasis added).

<sup>34</sup> *Id.* ¶ 17.

<sup>35</sup> *Id.* (emphasis added)

<sup>36</sup> Woroch Decl., ¶¶ 27-37.

Although Dr. Woroch’s team has been writing computer programs and planning how they will conduct their analyses in advance, this work does not result in a “turn-key” analysis that can quickly be implemented when the data and software applications become available.<sup>37</sup>

For example, the experts cannot write or finalize their computer programs until they know what additional software applications and analysis tools will be available in the Data Enclave.<sup>38</sup> As explained above, it is still not entirely clear what software will be available. In addition, it takes time to become familiar with software applications and tools that are encountered for the first time, and although Dr. Woroch’s team is familiar with many of the packages installed on the Data Enclave, his team is not as familiar with ArcGIS, DBeaver and Vertica, and the possible extensions of those programs that may yet become available.<sup>39</sup> Further, because the data set is not yet stable, any planning now would be a moving target and would likely have to be modified later anyway.<sup>40</sup>

Once the data set is finalized and the required software and tools are installed, Dr. Woroch explains that “it will take about two weeks to become familiar with the intricacies of the stable data set, modify our analyses to account for the information actually available in the data set, modify our pre-existing computer programs to account for the content and format of the stable data set, and write new computer programs for the software that is added.”<sup>41</sup> Then the experts can begin the iterative process of analyzing the data, which will take another six to eight

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<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> *Id.*

<sup>41</sup> *Id.* ¶ 32.

weeks.<sup>42</sup> They will run their computer code and review the output, and in almost all cases, the data analyst will then identify problems and either fix the code or, if it cannot be fixed, modify the planned analysis. Iterative runs will often reveal issues with either the computer program or the data set, and the researchers must spend time resolving the problem or developing workarounds. Examining the outputs also often exposes new problems or inconsistencies with the data that need to be addressed, and the initial output may also reveal faults in the initial approach to the analysis that need to be corrected to ensure accurate results.<sup>43</sup>

All of these processes will likely take longer here than they normally would, because Dr. Woroch's team has to perform all of its analyses remotely through the NORC platform.<sup>44</sup> Dr. Woroch's team would ordinarily conduct its analyses using its own computer systems and servers, and working through the virtual private network connection is much slower than working on local systems.<sup>45</sup> And whenever issues arise, rather than addressing them directly themselves, many of those issues will have to be raised with NORC or the Commission, which inevitably takes time.<sup>46</sup> For all of these reasons, the experts estimate that it will take at least eight to ten weeks to complete the analysis of the data on the Data Enclave.<sup>47</sup>

### **III. UNDER THESE CIRCUMSTANCES, THE APA AND FUNDAMENTAL FAIRNESS REQUIRE AN EXTENSION.**

Under these circumstances, the current comment schedule violates the Administrative Procedure Act ("APA") and the Commission's rules requiring that the agency provide interested

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<sup>42</sup> *Id.* ¶¶ 32-36.

<sup>43</sup> *Id.*

<sup>44</sup> *Id.* ¶ 36.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.*

<sup>47</sup> *Id.* ¶ 37.



parties a meaningful opportunity to comment.<sup>48</sup> The principal purpose of this comment cycle is to obtain input on the data that has been collected. Interested parties cannot provide meaningful comments without full access to a complete data set<sup>49</sup> and sufficient time to review it.<sup>50</sup> The Commission cannot defend a process that seeks comment on a massive data collection but then withholds the very data at issue from interested parties until it is effectively too late for them to perform an adequate review.<sup>51</sup>

Nor can the current comment process provide the Commission with a sufficient basis to adopt rules. The Commission cannot take action without giving interested stakeholders a full opportunity to submit their views and analyses of the data and the relevant issues.<sup>52</sup> On the

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<sup>48</sup> See 5 U.S.C. § 553(c); 47 C.F.R. § 1.415(b); *Rural Cellular Ass'n v. FCC*, 588 F.3d 1095, 1101 (D.C. Cir. 2009) (“[t]he opportunity for comment must be a meaningful opportunity”); *Portland Cement Association v. Ruckelshaus*, 486 F.2d 375, 393 n.67 (D.C. Cir. 1973) (“Obviously a prerequisite to the ability to make meaningful comment is to know the basis upon which the rule is proposed.”).

<sup>49</sup> *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 35 (D.C. Cir. 1977) (agency must “disclose in detail” the “data upon which [the proposed] rule is based” so that there can be “an exchange of views, information, and criticism between interested persons and the agency”) (emphasis added); *Air Trans. Ass'n of Am. v. FAA*, 169 F.3d 1, 7 (D.C. Cir. 1999) (“the most critical factual material that is used to support the agency’s position on review must have been made public in the proceeding and exposed to refutation”); *Am. Radio Relay League, Inc. v. FCC*, 524 F.3d 227, 243 (D.C. Cir. 2008) (Tatel, J., concurring) (Commission must disclose redacted portions of the record to petitioners so they could “mount a substantial evidence challenge”).

<sup>50</sup> *Prometheus Radio Project v. FCC*, 652 F.3d 431, 450 (3d Cir. 2011) (meaningful opportunity for comment means “enough time with enough information to comment”).

<sup>51</sup> *Prometheus*, 652 F.3d at 453 (rule vacated where parties did not have adequate time to comment); *North Carolina Growers’ Association, Inc. v. United Farm Workers*, 702 F.3d 755, 770 (4th Cir. 2012) (“Our conclusion that the Department [of Labor] did not provide a meaningful opportunity for comment further is supported by the exceedingly short duration of the comment period.”).

<sup>52</sup> *Portland Cement*, 486 F.2d at 393 (“It is not consonant with the purpose of a rule-making proceeding to promulgate rules on the basis of inadequate data, or on data that, [to a] critical degree, is known only to the agency.”); *Prometheus*, 652 F.3d at 449 (quoting *Int’l Union, United Mine Workers of Am. v. Mine Safety and Health Admin.*, 407 F.3d 1250, 1259 (D.C. Cir. 2005)) (APA requires agency “to ensure that agency regulations are tested via exposure to diverse public comment” and “to give affected parties an opportunity to develop evidence in the

current schedule, however, the parties will not be able to sort through and resolve the significant problems that have emerged in the data set, conduct thorough analyses, or provide the sort of carefully considered comments that the APA contemplates and that are a necessary predicate to Commission action.<sup>53</sup>

The APA violations posed by the existing comment deadlines also implicate the fundamental fairness principles that underlie the APA requirements.<sup>54</sup> The Commission is seeking comment on rule changes that could fundamentally alter the ILECs' rates, services, and contractual arrangements, as well as the workings of the special access marketplace. It therefore would be grossly unfair for the Commission to fail to provide the ILECs with complete and timely access to the data that the Commission is reviewing, and to deprive them of sufficient time to provide the agency with their analyses of the data and their considered comments on the proposed Commission actions. The core purpose of the APA is to prevent such unjust proceedings.

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record to support their objections to the rule and thereby enhance the quality of judicial review”).

<sup>53</sup> The suggestion that the parties can present their views and analysis later, during the post-comment *ex parte* process, is no answer. See Sprint Opposition at 2. Such an argument implicitly concedes that the comment periods themselves are premature, and if the ability to weigh in after the fact were sufficient, the APA's notice and comment requirement would be rendered a nullity. See, e.g., *Doe v. Rumsfeld*, 341 F. Supp. 2d 1, 15 (D.D.C. 2004) (finding that interested parties were deprived of “a meaningful opportunity to submit comments and participate in the administrative process mandated by law” where agency relied on post-comment vetting of information); *American Federation of Labor v. Donovan*, 757 F.2d 330, 340 (D.C. Cir. 1985) (rejecting agency's “assumption that [interested parties] would have monitored the submission of comments”). Moreover, the Commission expressly rejected this reasoning in its recent extension order, observing that “relying on unscheduled submissions could have the effect of adding further delay if analysis is submitted without deadlines common to all.” *Nov. 2015 Extension Order*, ¶ 7.

<sup>54</sup> *Home Box Office*, 567 F.2d at 35 (the APA's requirements are designed to “provide fair treatment for persons affected by a rule”); *Prometheus*, 652 F.3d at 449 (same).

**IV. CONCLUSION.**

For the foregoing reasons, the Commission should extend the due dates for initial comments until twelve weeks after the issues described above have been resolved.

Respectfully submitted,

UNITED STATES TELECOM ASSOCIATION



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# EXHIBIT A

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

In the Matter of	)	
	)	
Special Access for Price Cap Local Exchange Carriers;	)	WC Docket No. 05-25
	)	
AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services	)	RM-10593
	)	
	)	

**DECLARATION OF GLENN WOROCH  
IN SUPPORT OF REQUEST FOR EXTENSION OF TIME TO FILE COMMENTS**

**QUALIFICATIONS AND BACKGROUND**

1. My name is Glenn Worocho. I am a Senior Consultant with the economic consulting firm Compass Lexecon. I have a Ph.D. in Economics and an M.A. in Statistics from the University of California at Berkeley, and a B.A. from the University of Wisconsin, Madison. I have been teaching in the Economics Department of the University of California at Berkeley since 1993. I have also taught economics at the University of Rochester and Stanford University, I have served on the editorial boards of *Information Economics & Policy* and the *Journal of Regulatory Economics*, and I currently sit on the editorial board of the journal *Telecommunications Policy*. I have considerable experience evaluating markets for special access services. While a member of the technical staff of GTE Laboratories in the early 1990s, I collected data on special access rates in local exchange areas throughout the country over time, which I used to analyze the role they play for entry by Competitive Access Providers. Subsequently I submitted a number of filings in regulatory and court proceedings on these same issues.

## **I. PURPOSE AND SUMMARY**

2. I submit this declaration in support of the request for an extension of time to file comments in this proceeding. Compass Lexecon has been engaged by seven companies<sup>1</sup> to analyze the industry-wide data that the Commission collected to ascertain, among other things, the extent and impact of competition in the marketplace for special access services. The data set is extraordinary, both in terms of its scale and its detail. Our team has determined that there are more than 120 million records, billions of data points, and more than 15 Gigabytes of data containing geographically granular street level deployment and pricing information for the multi-billion dollar dedicated services industry.

3. In addition, due to confidentiality concerns, these data are available only via a secure platform maintained by NORC (called simply the “Data Enclave”). Consequently, we do not have control over the computer hardware and software as we would if we analyze its contents using our own systems. As I explain in more detail below, it is my opinion, based on our experience maintaining and analyzing large data sets and based on the complex issues raised in this proceeding, that analysis of the data plus writing a report that collects our findings to be shared with our clients to incorporate in their comments would require between eight to ten weeks to complete once the data set is finalized and all software needed to perform an efficient analysis has been installed on the Data Enclave. The Commission’s current deadline for comments therefore allots insufficient time for us to conduct a full analysis of the data submissions and to report on our results. Even if we do complete a report before the deadline, it

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<sup>1</sup> We have been engaged by Alaska Communication Systems, AT&T Communications, Inc., CenturyLink Communications, LLC, FairPoint Communications, Frontier Communications, Hawaiian Telcom, and Verizon Communications.

would be in the middle of the winter holiday season and would leave very little time for our clients to assess our findings and incorporate them into their comments in this proceeding.

4. The short period of time we have to analyze the data is not due to any lack of diligence on the part of my team. We applied for access to the Data Enclave in July of this year, but it was not until about September 22, 2015 that we were authorized by the Wireless Competition Bureau (“WCB”) to access the data.<sup>2</sup> Subsequently, it was not until October 20, 2015 that NORC made available to us the credentials and training required to access the data.

5. After obtaining access to the Data Enclave, it was clear that the data set still was not ready to be analyzed because it had not been finalized, and the software and tools needed to efficiently analyze it had not been installed. As described below, we raised these issues promptly, and the WCB and NORC are still in the process of resolving them. At this stage, we understand that the WCB intends to provide at least one more substantial update to the data set at some time in mid-November – at which time the WCB submits that the data set will be “stable.” We further understand that the WCB and NORC intend to install the software applications and tools we requested (or substitutes for them) on the Data Enclave at some point in the coming weeks. As a result, as I explain below, although we can begin planning some of our data analysis, much of our work must be done after the data set becomes stable and final software and other tools have been placed on the Data Enclave.

6. It should not be controversial that it takes a substantial amount of time to process a large, detailed data set to address an array of complex regulatory issues. We note that it took much of 2015 for the WCB to prepare even the current incomplete version of this massive data

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<sup>2</sup> On September 17, 2015, the FCC issued a Public Notice inviting parties to object to our access to the data within 5 days. Consequently, it was not until September 22, 2015 that we were authorized to access the data.

collection and make it accessible to interested parties. This amount of time was proportionate to the scale and detail of the data set. Analysis of the contents of that data set will likewise require significant amounts of time and resources. Accordingly, we strongly encourage the Commission to provide us and other interested parties with sufficient time to conduct a detailed and comprehensive analysis of the extraordinary data set that the Commission has collected.

7. The rest of this declaration is organized as follows. In Part II, I recount the events that delayed our access the Data Enclave until October 20, 2015. In Part III, I explain that upon receiving access to the Data Enclave it was clear that the data set was incomplete (and still is incomplete), that it was continuing to undergo substantial changes by the WCB and NORC, and that the Data Enclave lacked (and still lacks) software and tools needed to efficiently analyze the data. In Part IV, I explain that once the data set is stable and all of the necessary software and tools are made available, it will take us approximately eight to ten weeks to conduct our analysis, to collect our findings in a report, and to provide those results to our clients for inclusion in their comments.

## **II. DELAYS GAINING ACCESS TO THE DATA**

8. The Commission's final deadline for entities to submit data in response to the mandatory data collection was February 27, 2015. The WCB and NORC then spent the next several months organizing these data and making them available on a secure platform maintained by NORC called the NORC-FCC Data Enclave ("Data Enclave"). As explained below, although my team applied for access to the Data Enclave in July 2015, it took the WCB more than two months to authorize our access, and NORC did not provide the required credentials and training needed to access the Data Enclave until October 20, 2015.



9. Access to the Data Enclave is governed by the Protective Order adopted by the Commission last year, on October 1, 2014.<sup>3</sup> Although I am not an attorney, I understand that the following steps are required to gain access to the Data Enclave. First, the person seeking access must file with the WCB a signed version of the Acknowledgment attached to the Protective Order. Second, the Commission issues a Public Notice stating that the Commission has received the Acknowledgement and giving interested parties five days to object. If no party objects, the person who submitted the Acknowledgment is authorized to access the Data Enclave. However, even after an individual is authorized to review the data, he or she must wait until NORC schedules a time to provide the required credentials and training.

10. My team initiated the process of gaining access to the Special Access Data on July 13, 2015, when we submitted to the Commission the required Acknowledgments under the Protective Order.<sup>4</sup> The Commission, however, did not issue the Public Notice announcing this submission for more than two months, on September 17, 2015.<sup>5</sup> As a consequence, the five-day waiting period for objections began on that day, and thus my team was first authorized to obtain access to the Data Enclave on September 22, 2015.

11. However, my team could not actually access the Data Enclave until NORC scheduled a time to provide my team with the required credentials and training. NORC told us

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<sup>3</sup> Order And Data Collection Protective Order, *Special Access for Price Cap Local Exchange Carriers*, WC Docket No. 05-25 (rel. Oct. 1, 2014), available at [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-14-1424A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-14-1424A1.pdf).

<sup>4</sup> Letter from Rishi P. Chhatwal to Marlene H. Dortch, *Special Access for Price Cap Local Exchange Carriers*, WC Docket No. 05-25 (July 13, 2015), available at <http://apps.fcc.gov/ecfs/document/view?id=60001114895>.

<sup>5</sup> Parties Seeking Access To Data And Information Filed In Response To The Special Access Data Collection, *Special Access for Price Cap Local Exchange Carriers*, WC Docket No. 05-25 (rel. Sep. 17, 2015), available at [https://apps.fcc.gov/edocs\\_public/attachmatch/DA-15-1038A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DA-15-1038A1.pdf).

they would contact us with the information we needed to obtain credentials and training. On October 5, 2015, NORC sent an email to us asking for our individual email addresses. We responded on the same day. On October 14, 2015, NORC requested our mailing addresses in order to FedEx the RSA SecureID tokens that we would need to obtain access to the Data Enclave. Again, we responded the same day.

12. After we received our RSA tokens on October 16, 2015, the first available training sessions offered by NORC to us were on Tuesday, October 20, 2015 and Thursday, October 22, 2015. One of our team members attended the October 20, 2015 training session, and two others who need access to the Data Enclave attended the October 22, 2015 training.<sup>6</sup> Thus, the first day that we could have – and did – obtain access to the Data Enclave was October 20, 2015. Following the Commission’s procedures – which require all parties to gain access to the data through NORC – we could not have obtained access any earlier.

13. By the time we received access to the data, there were only four weeks left in the Commission’s original November 20, 2015 deadline for us to analyze the data, draft our reports and provide them to our clients, who must then incorporate our findings into their comments to be submitted. Recognizing this, the WCB, on November 2, 2015, extended the comment deadline to January 6, 2015. As explained below, however, that extension of time is insufficient because the data in the Data Enclave is not yet stable (it continues to undergo substantial changes), and the software tools needed to analyze it have not yet been installed. Indeed, given the massive amount of data to be analyzed and the complexity of the process for doing so, January 6 would not be a realistic comment deadline even if these problems did not exist.

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<sup>6</sup> Compass Lexecon submitted signed Acknowledgements for five individuals. Three of us will be working with the NORC Data Enclave.

### **III. THE INFORMATION IN THE DATA ENCLAVE IS NOT STABLE AND THE SOFTWARE NEEDED TO EFFICIENTLY ANALYZE IT IS NOT YET AVAILABLE**

14. Immediately upon receiving access to the Data Enclave, my team began examining the data and evaluating the software that had been installed in the Data Enclave for the purpose of analyzing it. We identified several issues that impede our ability to conduct our analysis, which we promptly raised with NORC.

15. *Changing Data.* Since we first gained access to the Data Enclave, NORC and the WCB have modified the contents of the data set and plan additional modifications in the future. On Friday, October 23, 2015, changes were made to the data responding to Question II.A.4, which contain the location information for the dedicated circuits provided by competitive local exchange carriers (“CLEC”) that is crucial to any competitive analysis of the special access marketplace. Overall, data for about 40 additional CLECs were added to the Data Enclave, which represented a significant increase in the number of locations reported to have CLEC connections. We discovered that after the change, responses to Question II.A.4 increased from more than 400,000 to more than 600,000, a 50% increase. At that time, neither the WCB nor NORC had documented this change (my team identified this change independently).

16. On Monday, October 26, 2015, NORC also acknowledged that, at the WCB’s request, it had removed several folders from the Data Enclave. At that time, NORC did not provide any description of the folders, nor did they offer a reason why the folders were removed.

17. Based on subsequent discussions with WCB Staff, we were informed these changes were intended to add data previously missing from the datasets and to correct errors in the existing dataset. In addition, we were informed that the WCB and NORC were planning two additional substantial updates to the data. The first update was set to occur, and did occur, on November 3, 2015. We have been told that the next substantial update is set to occur sometime

in mid-November, at which point, according to the WCB Staff, the data set is expected to be stable. We understand from WCB Staff this “mid-November” update will include the addition of new or revised data for large companies in existing tables, as well as entirely new tables containing information that is central to this proceeding, such as the relative location of CLEC fiber routes and nodes.

18. Thus, at this time, the data in the Data Enclave have changed substantially since we first gained access and they are expected to change substantially again later this month, including changes that will add new tables containing important information. These changes obviously create substantial challenges to our ability to conduct our analysis at this stage given that we do not yet have a stable data set to work with.

19. Equally important, each update to the data will almost certainly create new tasks that have to be performed. We are currently engaged in the process of planning our analyses and writing programs – based on the currently available information in the Data Enclave – to speed up our analysis once the data set is stable. But, even setting aside that the upcoming updates will add entirely new tables (for which we cannot write program scripts), large updates to existing tables almost always have unanticipated consequences that need to be addressed because they force us to revise our research plans or they render our existing scripts unsuitable.

20. A simple recent example illustrates this point. The first update to the data set on October 23, 2015 introduced commas in table entries having numbers exceeding three digits (*e.g.*, four-digit values under the “year” field). This is a small change to the data. However, the addition of these commas changed how our programs recognized certain fields from numeric variables to string variables. To process the data properly, we had to modify our programs to handle the commas and recode variables to numeric formats. It took time to identify the original

problem and implement the fix, even for this very seemingly simple change in the data. We have every expectation that we will have to make adjustments for idiosyncrasies that are bound to occur with each update of the dataset; we just do not know ahead of time what those idiosyncrasies will be.

21. Another example involves a possible change in the coding of a field that matches out-of-cycle “billing adjustments” described in CLEC responses to Question II.A.13 to the billing of the corresponding circuit elements that is found in their responses to Question II.A.12. Adjustment ID fields in responses to Question II.A.12 contain purely numeric values while the Adjustment ID field in response to Question II.A.13 contain string values, numeric values, and alpha numeric values. NORC does not mention recoding these fields in either data set. We have raised this issue with NORC and the WCB, but it remains unresolved.

22. *Data Structure Issues.* Not only is the data set being updated, my team has identified issues with the way the data are structured that impedes our analysis. As one example, to compute the cost of special access circuits requires that responses about billing for a circuit’s various elements be linked to the description of the circuit element. As laid out in the WCB’s data request, the “billing\_code” field in responses to Questions II.A.12 and II.B.4 allow researchers to link billed circuit elements with their descriptions in responses to Questions II.A.14 and II.B.6 for CLECs and ILECs, respectively. However, the dataset masks (recodes) the “billing\_code” field in the data related to Questions II.A.12 and II.B.4 to protect customer information, without any means to match descriptions from the seemingly unmasked “billing\_code” field in the data related to Questions II.A.14 and II.B.6. We contacted NORC about this issue on October 26, 2015; on November 4, 2015 NORC posted a file that purports to re-link responses to the two questions for both ILECs and CLECs. However, even with this

update we were still unable to match billed circuit elements to their descriptions, and so, as an example, we are unable to separately identify the cost of specific types of circuit elements such as channel termination or channel mileage.

23. Another issue relates to the lack of geocode information in the responses to the WCB's information requests. In many cases, geocodes were designated as optional for respondents. In those cases we are forced to rely on street addresses to determine the location of facilities. As of October 26, 2015, we estimated about 40% of the records for both ILEC and CLEC circuits are missing geocode information for connection locations but included a street address. To analyze the location of these circuits we need to be able to translate these addresses into coordinates. On October 26, 2015, we explicitly requested some means to generate geocodes for those addresses from NORC, and we followed up that request several times over subsequent days. On November 4, 2015, NORC uploaded a file to the Data Enclave that linked the addresses to latitude and longitude coordinates. However, initial inspection of that file revealed that many of street addresses still did not have coordinates associated with them.

24. *Lack of Software Needed For The Data Analysis.* Recognizing that analysis of these enormous data sets will require sophisticated data analysis tools and software, NORC has installed some useful software and made it available for users of the Data Enclave. A procedure was established for users to request that NORC install additional software to the Data Enclave that may be required or useful for analyzing the data. We have identified some critical tools and software that were not immediately available on the Data Enclave, and we requested that NORC install these tools and software available on the Data Enclave. Although NORC has been responsive to our requests, not all the tools and software we requested have yet been installed.

25. As the Commission well knows, identifying the geographic location of network facilities is critical to analysis of competition in the provision of special access connections. Much of this information was submitted to the WCB in the form of geocodes, *i.e.*, latitude and longitude coordinates that position the facilities on the earth's surface. These data can be analyzed using Geographic Information System ("GIS") software. When we first gained access to the Data Enclave there was no GIS program installed for this purpose. We requested that NORC install GIS software on the first day that we had access to the Data Enclave, October 20, 2015, immediately following the training. After several subsequent requests, NORC did install proprietary, pay-to-use GIS software called "ArcGIS" on October 29, 2015. As a result, the earliest we could begin this type of analysis was October 29, 2015. However, as mentioned above, our analysis is necessarily incomplete due to missing coordinate information. We understand that NORC is working on installing geocoding tools onto the ArcGIS platform, but we have not yet received confirmation that these tools are available.

26. On a related issue, we requested on October 20, 2015 that NORC provide us with software that has "PostGIS functionality" through a PostgreSQL utility. That utility (or one with this functionality) would allow us to submit queries to a database of locations of special access connections or prospective customers of special access services. For example, a query could identify all the locations that reside within a specified distance of an existing ILEC or CLEC network. On October 21 and October 26, 2015, NORC responded to our request for this functionality saying that the structure of the Data Enclave did not allow them to install and support such software packages. Following an email exchange with Data Enclave managers, on November 2, 2015, NORC indicated that the Vertica SQL database currently installed on the Data Enclave has the potential to conduct some geospatial queries via an application add-on. At

this time, NORC is investigating whether it is able to make such an add-on available on the Data Enclave under its existing license with the software publisher.

**IV. ONCE THE DATA SET IS STABLE AND ALL REQUIRED SOFTWARE IS PROVIDED, IT WILL TAKE ABOUT EIGHT TO TEN WEEKS TO CONDUCT OUR ANALYSIS**

27. Our team includes economists and statisticians who routinely work with large data sets and conduct the type of analysis at issue in this proceeding. Based on our extensive experience with large data sets and the sorts of issues here, it is our opinion that it will take at least eight to ten weeks to conduct our analysis and report our results *after* the data set is stable (*i.e.*, when the WCB and NORC are longer be making substantial changes to it) and all software required to effectively analyze the data is installed on the Data Enclave.

28. We understand that there may be a misconception that with advanced planning we can have all of our programming scripts ready to run, and the protocol to analyze the results even before the data and software are ready, so that all we have to do is “push a button” when the data and software become available and the analyses are complete. That is not how analyses of large and complex data sets work. It is true that we can (and did) conduct planning before the data and software were available that mapped how we intended to conduct our analyses. It is also true that we can (and did) write some computer programs needed for the analyses before the data has been finalized. But this anticipatory work does not create a turn-key analysis that can be quickly implemented when the data, and the software applications and tools, become available.

29. First, we cannot write computer programs until we know what software applications we can use while working on the data set in the Data Enclave. As we noted, when we gained access to the Data Enclave on October 20, 2015, we discovered that certain software was missing. First, the Data Enclave was missing GIS software. Immediately after training we requested the installation of the “Quantum GIS” software package on October 20, 2015. On



October 29, NORC installed a different program called “ArcGIS.” As a result, it was not until the end of October that we knew that a GIS resource would be available for which we could write programs to prepare data for the software to read or to read data that the software processed. Furthermore, it is not yet clear whether the ArcGIS package that was installed on the Data Enclave has geocoding functionality which would, for example, allow us to assign latitude and longitude coordinates to street addresses. As of November 2, 2015 NORC reported that they were working on adding geocoding functionality to the ArcGIS software but that capability is not available to us on the Enclave at this time.

30. Second, it takes time to become familiar with software applications and tools when we encounter them for the first time. Many of the packages that are installed on the Data Enclave are well known to us, such as Stata, SAS, SPSS, Excel and so on; my staff is not as familiar with ArcGIS, DBeaver and Vertica, however. In addition, we have not yet been given information on the software extensions of ArcGIS and Vertica that may be made available to us in the future. As a result we are unable to learn about the capabilities and syntax of these programs and extensions in advance.

31. Third, until the data set is stable, much of the planning and analyses are aimed at a moving target and must ultimately be modified for the final stable data set. The examples provided above illustrate some of these issues: the data set has broken links that undermine the ability to match data provided in different tables, and updates have changed the format of the data that require modifications to pre-existing software, and after all substantial changes, an audit must be conducted to determine whether any unexpected changes adversely affect the ability of pre-written programs and protocols to obtain correct results. Moreover, as noted, it appears that

important and entirely new tables will be added to the database. Until we see those tables, we cannot effectively plan how to use them or to write computer scripts that call upon them.

32. In our experience, after the data set is stable and all required software and tools are installed, it will take about two weeks to become familiar with the intricacies of the stable data set, modify our analyses to account for the information actually available in the data set, modify our pre-existing computer programs to account for the content and format of the stable data set, and write new computer programs for the software that is added.

33. Once these steps are completed, we can begin to analyze the data, which will take an additional six to eight weeks. This process is iterative. The first step is to implement our plan, run our computer code and review the output. In virtually every case, problems are identified at this stage that must be fixed, and if they cannot be fixed, our planned analysis must be modified. It is almost always the case that some computer program does not work as intended – either due to coding errors or unexpected issues with the data – and substantial time must be spent debugging the software. It is also almost always the case that this process identifies additional problems, inconsistencies, or other issues with the data. These issues either have to be fixed, or workarounds must be developed.

34. Once the programs and protocols are working as expected, we turn to the output. The results of these data runs typically exposes new problems or inconsistencies with the data that need to be fixed, and if they cannot be fixed, new workarounds need to be developed. The initial output also often exposes faults in our initial approach to the analysis that need to be corrected to ensure accurate results.

35. Importantly, the time estimates provided above are based on our experience analyzing data using our own systems and databases that are under our control. When we can

make decisions regarding computer hardware and software, we can more efficiently address the types of issues described above internally. In this proceeding, it will almost certainly take longer to resolve these sorts of issues, because some problems first have to be raised with NORC and the WCB, and past experience shows that resolving even relatively straightforward issues can take a week or more.

36. In addition, our estimate is likely conservatively low because it does not account for the likely additional time that will be required due to the fact that all of our analysis must be done on the Data Enclave. We ordinarily conduct our analyses using our own computer systems and servers. The servers on the Data Enclave likely have less processing power and capacity compared to our own systems. And simply working through the virtual private network connection is much slower than working on our local systems and creates its own inefficiencies such timing lags. Moreover, importing resources or exporting work product requires sending a request to NORC and waiting for approval.

37. For all of these reasons, we believe that our estimate that it will take at least eight to ten weeks to complete our analysis of the data on the Data Enclave is reasonable and conservatively low.

## **CONCLUSION**

38. This is an extraordinary collection of information about the provision of special access services in this country. In the history of this Commission, few efforts to collect marketplace information to support Commission policy can compare. The WCB and NORC have expended a tremendous amount of effort to collect, organize and clean the special access data submissions, and to build the Data Enclave to provide access to the data by interested parties. Their work has taken many months but that is not at all surprisingly given the magnitude of the undertaking. The delays we have experienced are testimony to this enormous task. As we

approach the finalization of the data set, the potential value that can be gleaned as a result of its apparent exceptional scope and detail should not be squandered by superficial and partial analysis of the information due to lack of sufficient time. A detailed, thorough investigation of the information takes a substantial amount of time – more time than allotted by the Commission’s current comment schedule. For the foregoing reasons, we strongly encourage the Commission to provide us and other interested parties with the extension of time being requested by USTA and ITTA.

**VERIFICATION PAGE**

I hereby swear under penalty of perjury that the foregoing is true and correct.

/s/ Glenn Woroch  
Glenn Woroch

Dated: November 10, 2015