SUPPORTING STATEMENT

The Commission is seeking the full three-year approval from the Office of Management and Budget (OMB) to extend a currently-approved information collection. There is no change in the reporting requirements.

A. Justification:

1. 47 U.S.C. § 254(b) mandates the Federal Commissions Commission to preserve and advance "[a]ccess in rural and high cost areas [to] interexchange services and advanced Telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas." Pursuant to that mandate, the Commission adopted the *USF/ICC Transformation Order*, 76 FR 73830 (Nov. 29, 2011), which comprehensively reformed universal service funding, including funding for incumbent local exchange carriers (ILECs) to serve high-cost, rural areas.¹

Fees totaling approximately \$4.5 billion dollars are assessed on interstate, end-user telecommunications revenues in part to support the deployment of voice and broadband-capable infrastructure in rural, high cost areas. High-cost support is granted to a carrier based on the characteristics of its "study area," the geographic area served by an ILEC within a state. Therefore, complete and accurate study area boundary data are essential for calculating a carrier's costs and expenses, which in turn determines the amount of support that carrier can receive to serve high-cost areas.

In order to collect a complete and accurate set of ILEC study area boundaries, the Commission's Wireline Competition Bureau (Bureau) sought comment in a 2012 Public Notice (*Data Specifications for Collecting Study Area Boundaries*, 77 FR 37402 (June 21, 2012)) on how best to collect study area boundary data. Later that year, the Bureau adopted the study area boundary data collection requirements in *Report & Order*, DA 12-1777, 78 FR 5750 (Nov. 6, 2012). The Bureau required the collection of study area boundary data in a geographic information system (GIS) shapefile format, a data storage format for storing the location, shape, and attributes of geographic features.² Study areas within a state consist of one or more exchanges, and the Bureau also required rate-of-return carrier to submit the component exchange boundaries within a study area so that the Commission could distinguish the exchanges within a study area that are subject to frozen levels of high cost support, based on an existing Commission rule, from those that are not. In addition, carriers occasionally sell exchanges among

1.427, and pursuant to the delegations of authority in paragraphs 157, 184, 187, 192, 217 of the USF/ICC Transformation Order.

¹ 47 U.S.C. § 254 (mandating FCC authority over universal service) and the FCC's delegation of authority to the Wireline Competition Bureau in the *USF/ICC Transformation Order* are the most direct lines of authority for this Order. The Order as a whole is adopted pursuant to sections 1, 2, 4(i), 201-205, 218-220, 254, 256, 303(r), and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 201-205, 218-220, 254, 303(r), and 403, and sections 0.91, 0.201(d), 0.291, and 1.427 of the Commission's rules, 47 C.F.R. §§ 0.91, 0.201(d), 0.291,

² A shapefile is a vector data storage format for storing the location, shape, and attributes of geographic features. A shapefile at a minimum consists of a Main file (.shp), an Index file (.shx), and a dBASE table (.dbf). Esri introduced the shapefile format in the early 1990s. Since that time, the esri shapefile has become the industry standard for storing, depicting, and analyzing spatial data. As a result, there are multiple geographic information system (GIS) platforms capable of creating and managing esri shapefiles, and certain software programs can convert spatial data stored in other formats (such as MapInfo) to an esri shapefile format.

themselves, and standardized study area map data allows the Commission to track which exchanges have been bought and sold.

In December 2012, the Commission submitted a request for emergency preapproval of the Study Area Boundary Data Reporting in Esri Shapefile Format data collection, which the Office of Management and Budget (OMB) granted on January 23, 2013.³ The Bureau subsequently adopted an *Order on Reconsideration*, DA 13-282 (Feb. 26, 2013), which modified and clarified certain rules related to this data collection.⁴ On June 12, 2013, the Commission submitted a request for a three-year extension of the collection to July 31, 2016 (78 FR 34382), which OMB approved on July 31, 2013 (78 FR 76312).

ILECs were required to submit their initial study area boundary data to the Commission in May 2013.⁵ In cases where a state public utility commission submitted data on behalf of the ILECs in its state (see answer 5 below), those data were due in June 2013. Since that time, the Commission has been using the boundary data to implement its rules related to determining the level of high-cost support for rate-of-return carriers and eliminating support where an unsubsidized competitor offers voice and broadband service that overlaps a rate-of-return carrier's study area (see answer 2 below).

The information collection request adopted in these orders is mandatory, and failure to comply may lead to enforcement action, including forfeiture penalties, pursuant to the Communications Act and other applicable law.⁶

This information collection does not affect individuals or households; thus, there are no impacts under the Privacy Act.

Statutory authority for this information collection is contained in 47 U.S.C. § 254(b), which charges the Commission, among other requirements, to preserve and advance "[a]ccess in rural and high cost areas [to] interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas."

2. The Commission uses and will continue to use the study area boundary data collected through 3060-1181 to implement certain universal service reforms. First, the Commission uses the data as an essential input into a model, the Alternative Connect America Cost Model (A-CAM), that calculates the forward-looking economic costs of deploying and operating a fiber-to-the-premise network in rate-of-return study areas. The geographic variables used in the model that affect this calculation are predicated on knowing the specific service territory of each carrier.

Second, the Commission is using the study area boundary data to determine whether unsubsidized competitors offer service within all or a portion of an incumbent rate-of-return carrier's study area. In 2015, the Wireline Competition Bureau analyzed which ILEC study areas were 100%

³ 78 FR 10100, February 13, 2013. The emergency preapproval expired on July 31, 2013.

⁴ On February 28, 2013, the Commission submitted an Explanation of Non-Substantive Changes to OMB to explain these changes.

⁵ Wireline Competition Bureau Announces Procedures and Deadlines for Submissions of Study Area Boundaries, WC Docket Nos. 10-90 and 05-337, Public Notice, 28 FCC Rcd 2852 (WCB 2013).

⁶ See 47 U.S.C. §§ 401(b), 409(m), 501, 502, 503; 47 C.F.R. § 1.80 (describing forfeiture penalty limits for entities regulated by the FCC).

⁷ Wireline Competition Bureau Publishes Map of Study Areas for Use in Alternative Connect America Cost Model, WC Docket No. 10-90, Public Notice, 30 FCC Rcd 2944 (WCB 2015).

overlapped by an unsubsidized competitor offering voice and broadband service, and phased out universal service support in such areas.⁸ The Commission plans to use the study area boundary data in the future to determine whether unsubsidized competitors offer voice and broadband service in a portion of a rate-of-return carrier's study area.

The study area boundary data also complement the data collected through the Commission's Form 477 Local Telephone Competition and Broadband Reporting effort, as they indicate where fixed voice service is available from ILECs. In addition, the data inform the work of the Commission's Technology Transitions Policy Task Force, which is developing recommendations on how the Commission can modernize policies to encourage technological transition, empower consumers, promote competition, and ensure network reliability. Finally, the Commission has made the study area boundary data available to the public for its use.⁹

3. Each ILEC (or state commission filing on its behalf; see answer 5 below) has filed a map of its study area in a uniform GIS esri shapefile format. These maps are submitted via a secure Internet-browser web interface developed and maintained by the Commission. If a study area boundary changes, filers are required to submit, via this interface, revised boundary data incorporating such changes by March 15 of the year following the change. In addition, all filers are required to recertify their study area boundaries every two years.

To submit or recertify study area boundary data, ILECs log into the study area boundary data collection web site using an existing FCC identification and verification protocol, while state commissions use an FCC-assigned username and password. Both types of filers navigate through a few screens to enter information and upload data. The web site checks the contents of the upload for compliance and displays the uploaded data for viewing and certification by the filer.

- 4. There is no overlap with an existing information collection.
- 5. The requirements adopted impose the least possible burden on ILECs consistent with the regulatory need for the information. ILECs have already completed the initial and most burdensome task associated with this filing requirement, which is producing esri shapefiles of their study area boundaries. These shapefiles were due in May 2013. To ease the burden on ILECs, especially those that are small entities, the Bureau allowed state commissions to submit study area boundary data on behalf of ILECs in their respective states. Study area boundaries filed by state commissions were due in June 2013.

It is critical to the Commission's universal service reform implementation efforts that study area boundary data do not become out of date. Therefore, ILECs (or state commissions) are required to submit updated data when their study area boundaries change. Filers are required submit updated boundary data – using the procedures described below – by March 15 of each year showing any changes made as of December 31 of the previous year. Updated study area boundaries reflecting changes made in 2014 were due in March 2015, and updated boundaries reflecting changes made in 2015 were due in March 2016.

In addition, all ILECs are required to recertify their study area boundary data every two years, by logging into the web interface and reviewing and certifying the previously-submitted data, or by emailing a notification to the Commission staff. The first round of study area boundary recertifications were due in May 2015.

⁸ Connect America Fund, WC Docket No. 10-90, Order, 30 FCC Rcd 14145 (WCB 2015).

⁹ See FCC, Study Area Boundary Data as of August 15, 2014, http://apps.fcc.gov/wcb/sabdata/.

The study area boundaries of ILECs that are price cap carriers are needed to verify the accuracy of the adjacent study areas of ILECs that are rate-of-return carriers. In addition, data on exchanges are needed for tracking the sale or transfer of exchanges between price cap and rate-of-return carriers. Price cap carriers can submit study area boundary data on a wire center basis, as long as the filer indicates the exchange or exchanges associated with each wire center.

The study area boundary filing procedures for ILECs and state commissions are listed below:

Process for ILECs submitting revised study area boundary data

- 1. ILEC logs into a secure web interface at https://sab.fcc.gov/ilec/login/ using an FCC Registration Number (FRN) and password.
- 2. ILECs can update cover page information (such as contact information) as necessary.
- 3. ILECs upload a zip file with their study area boundary data.
- 4. ILECs review their map data.
- 5. If accurate, ILECs certify and submit the data.
- 6. If the map is not accurate, ILECs revise the data as needed, upload a revised zip file, and certify and submit the data at that time.

Process for state commissions submitting revised study area boundary data

- 1. State commission logs into a secure web interface at https://sab.fcc.gov/state/login/ using an assigned password.
- 2. State commission can update cover page information (such as contact information) as necessary.
- 3. State commission uploads a zip file for the entire state or for any ILEC(s) within the state, distinguishing study areas and exchanges/wire centers.
- 4. State commission reviews their map data.
- 5. If accurate, state commission certifies and submits the data.
- 6. If the map is not accurate, the state PUC can revise the data as needed, upload a revised zip file, and submit the data at that time.
- 6. There is no source of the information sought other than the ILECs or their state commissions. The Commission cannot sustain an accurate system for distributing universal service support nationwide without accurate maps of study area boundaries. Only a complete and reliable set of study area map data that is kept up to date can assure that the substantial funds devoted to high cost support in rural areas are distributed fairly and in accord with federal rules and policies.
- 7. No special circumstances will apply to this information collection.
- 8. Pursuant to 5 CFR 1320.8(d), the Commission published a notice in the Federal Register on April 15, 2016 (81 FR 22268). No PRA comments were received.
- 9. There are no payments or gifts to respondents.
- 10. No questions of a confidential nature are asked.
- 11. This collection does not address any private matters or matters of a sensitive nature.
- 12. There are approximately 747 holding companies with ILEC operations. *See*, Form 477 Filers by State June 2015 at https://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/statefilers0615.xls. Some of these holdings companies may have multiple ILEC operations and multiple study areas, but we have found that the one person with the parent company usually files study area boundary data for all of the ILEC operations and study areas.

ILECs have already undertaken the initial filing burden associated with this information collection: creating and submitting GIS esri shapefiles of their study area boundaries. Therefore, the burden estimate for the extension of this collection focuses only on the ongoing tasks associated with maintaining accurate study area boundary data, which are (a) submitting boundary changes and (b) recertification.

If an ILEC's study area boundary changes, it is required to submit a revised study area boundary reflecting those changes by March 15 of the year following the calendar year in which those changes were made. The total number of study area boundary modifications each year is small relative to the total number of ILECs and study areas. Based on the number of modifications filed in recent years, we estimate there will be no more than 10 study area boundary modifications filed each year.

We estimate that approximately half of the study area boundary modifications filed are and will be done by ILEC respondents with in-house GIS resources and the other half are or will be done by third party contractors hired by an ILEC. We estimate the industry burden associated with *modifying* a study area boundary shapefile in house to be 26 hours. This is the same estimate we used for the hour burden associated with *creating* a shapefile. While modifying a shapefile is likely less burdensome than creating a new one, we have no rational means of estimating the difference and therefore use our estimate for creating a new shapefile when estimating the burden associated with modifying a shapefile.

Therefore, the annual hour burden for modifying shapefiles in house is:

5 modifications per year x 26 hours per modification = $\underline{130 \text{ hours}}$.

We estimate that approximately half of the estimated 10 study area boundary modifications filed each year will be done by third-party contractors hired by an ILEC, rather than the ILEC completing the work in house. We estimate the hour burden associated with hiring a contractor to modify a study area boundary shapefile to be between 4.25 and 12 hours, for an average of 8.13 hours. These are the same estimates we used for the hour burden associated with creating a shapefile. While modifying a shapefile is likely less burdensome than creating a new one, we have no rational means of estimating the difference and therefore use our estimates for creating a new shapefile when estimating the burden associated with hiring a consultant to modify a shapefile.

Therefore, the annual hour burden for contracting expenses for modifying shapefiles is:

5 modifications per year x 8.13 hours per modification = 41 hours.

Total Annual Burden Hours: 130 hours + 41 hours= 171 hours.

If an ILEC modifies its study area boundary shapefile in house, we estimate the hourly salary of such in-house technical staff to be approximately \$39. This amount is roughly equivalent to the hourly salary of a GS 12 step 5 federal employee, which is \$38.56. *See* https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/16Tables/html/RUS h.aspx.

Therefore, the annual cost burden for modifying shapefiles in-house is:

130 hours x \$39.00/hour = \$5,070.00.

Total Respondents: 747
Total Responses: 757

Total Annual Burden Hours: 171 hours Total In-Costs to the Respondent: \$5,070.00

In addition to submitting any boundary modifications, all 747 ILECs are required certify the accuracy of their previously-submitted boundary shapefile every two years. We consider this recertification – which involves by either emailing a notification to Commission staff or logging on to the Commission's study area boundary website and certifying the accuracy of the study area shapefile – to be a normal business activity and of negligible burden.

13. ILECs have already undertaken the initial filing burden associated with this information collection: creating and submitting GIS esri shapefiles of their study area boundaries. Therefore, the additional cost burden estimated here for the extension of this collection focuses on the ongoing task of hiring contractors to modify study area boundary shapefiles.

If an ILEC hires a third-party contractor to modify its study area boundary, we estimate the ILEC will spend approximately \$97.00 per hour for this work. A 2015 online poll shows GIS consultants charge an average of \$97 per hour. *See* https://www.reddit.com/r/gis/comments/2who4p/poll what do gis consultants charge for rates per/.

Therefore, the annual cost burden for contracting expenses for modifying shapefiles is:

41 hours x \$97.00/per hour = \$3,977.00.

14. The costs to the federal government for the initial collection of the study area boundary far exceed the costs for keeping the shapefiles accurate and up-to-date after they are collected.

The work of processing the submitted study area boundary updates, maintaining the data, and updating the online study area boundary map takes approximately 24 hours each year. This work is performed by a GS 14 Geospatial Data Specialist at a base hourly rate of approximately \$54.00 per hour. The base hourly rate of a GS 14 step 5 is \$54.19. *See* https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/16Tables/html/RUS h.aspx.

The annual cost to the federal government:

24 hours x \$54.00/hour = **\$1,296.00**

15. The Commission is reporting adjustments/decreases to this information collection. Since the last submission to OMB, the total number of respondents decreased from 1,443 to 747 (-696), the total annual responses decreased from 1,443 to 757 (-686), the total annual burden hours decreased from 7,924 to 171 (-7,753), and the total annual costs decreased from \$705,935 to \$3,977.00 (-\$701,958). These adjustments/decreases are due to most of the ILECs fulfilling the initial requirements of creating and submitting GIS esri shapefiles of their study area boundaries. The remaining annual costs associated with this information collection will be incurred by the small number of ILECs that have study area boundary changes and hire contractors to modify their study area boundary GIS data. All ILECs are required to recertify their study area boundaries every two years, but we have determined that this task to be a normal business activity and of negligible burden.

There are no program changes.

- 16. The Commission's study area boundary data can be viewed and downloaded online at http://apps.fcc.gov/wcb/sabdata/. The boundaries were initially published in December 2013 and have been updated periodically.
- 17. The Commission does not intend to seek approval not to display the OMB expiration date for OMB approval of the information collection. The Commission publishes a list of OMB-approved information collections displaying the OMB control number, OMB expiration date and title of each collection in 47 CFR 0.408 of the Commission's rules.
- 18. There are no exceptions to Certification Statement.

B. Collections of Information Employing Statistical Methods:

The Commission does not anticipate that the collection of information will employ statistical methods.