

This collection is being submitted to extend an existing collection. There is no change in the Commission's burden estimates. There is no change in the reporting requirements. The Commission is now seeking OMB approval for the full three year clearance after receiving emergency OMB approval in January 2013.

SUPPORTING STATEMENT

Reason for extension of a currently-approved collection: On January 23, 2013, the Office of Management and Budget (OMB) issued an emergency preapproval of the Study Area Boundary Data Reporting in Esri Shapefile Format data collection (OMB Control Number 3060-1181). This preapproval expires on July 31, 2013. The Commission is now filing a regular Paperwork Reduction Act (PRA) submission and requesting an extension of this previously-approved collection until July 31, 2016, which is three years from the expiration date of the preapproval.

In addition, since OMB issued the emergency preapproval for this data collection, the Commission's Wireline Competition Bureau (Bureau) has released an *Order on Reconsideration* DA 13-282 (Feb. 26, 2013) (*Reconsideration Order*). This *Reconsideration Order* modified and clarified certain rules related to this data collection in response to issues raised by both incumbent local exchange carriers (LECs) and state commissions after the original *Report & Order*, DA 12-1777, 78 FR 5750 (Nov. 6, 2012) (*Order*) was released and after the emergency PRA filing for this data collection was submitted to OMB in December 2012. In the *Reconsideration Order*, the Bureau requires state commissions to certify to the accuracy of any study area boundary data that they voluntarily submit to the Commission, allows incumbent LECs subject to price cap regulation to submit the boundaries of wire centers in each study area rather than exchange-level data (as long as the filer indicates the exchange or exchanges associated with each wire center), and clarifies that the Commission will take a flexible approach in administering the requirement that shapefiles conform to the 1:24,000 topographic scale of the USGS National Map. On February 28, 2013, the Commission submitted an Explanation of Non-Substantive Changes to OMB to explain these changes. In addition, these changes have been incorporated into this Supporting Statement below.

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 reforms universal service funding, including for high-cost, rural areas.¹ Confirming the relevant geographic boundaries is important for implementing several components

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

of those reforms. In particular, the maps are needed to implement the Commission’s benchmarking rule, and to eliminate support where an unsubsidized competitor offers voice and broadband service that overlaps an incumbent carrier’s study area.

A “study area” is the geographic area served by an incumbent local exchange carrier (LEC) within a state and consists of one or more exchanges. The benchmarking rule establishes limits on reimbursable capital costs and operating expenses for purposes of high-cost loop support by comparing rate-of-return carriers to their similarly-situated peers. A geographic information system (GIS) shapefile is a data storage format for storing the location, shape, and attributes of geographic features.² The Bureau sought comment how best to collect the information in a public notice, *Data Specifications for Collecting Study Area Boundaries*, 77 FR 37402 (June 21, 2012) (*Study Area Boundary Public Notice*).

Fees totaling approximately \$4.5 billion dollars are assessed on interstate, end-user telecommunications revenues to support voice and broadband-capable infrastructure deployment in rural, high cost areas. The support is delivered to carriers based on the characteristics of their study areas. Complete and accurate study area maps are necessary in order to calculate a rate of return carrier’s capital costs and operating expenses, which in turn determine the allocation of funds among those high cost carriers. Also, support levels for exchanges in some study areas have been frozen in order to prevent their sale merely to maximize the funds they receive through the high cost support mechanism, and those exchanges need to be identified. Carriers also occasionally sell exchanges among themselves, and standardized study area map data will allow the Commission to keep track of bought and sold exchanges.

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.³

As noted on the OMB Form 83-I, 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. Commission staff will use the study area boundary data to implement certain reforms to universal service support. For example, as part of implementing the benchmarking rule, staff will use the data as an essential input in a model that determines the level of high cost support for rate of return carriers. All of the geographic variables used in this model that affect the level of support—including road miles, road crossing, density, depth of bedrock, soil difficulty, climate, percent tribal, park and urban land—are predicated on knowing the specific service territory of each carrier. Exchange boundaries are necessary

Transformation Order.

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.

³ 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).

to collect from rate of return carriers so that the Commission can 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, when making its calculations for the model. In addition, data on exchanges are also useful for tracking which exchanges have been transferred from one incumbent LEC to another (see answer 5 below).

The Commission staff also will use 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. This analysis will be used to implement a rule that phases out universal service support where unsubsidized competitors offer voice and broadband service throughout 100 percent of an incumbent carrier's study area. The study area boundary data will also complement the data collected through the Commission's Form 477 Local Telephone Competition and Broadband Reporting effort, as they will indicate where fixed voice service is available from incumbent LECs. In addition, the data will help 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 will make the study area boundary data available to the public for its use.

3. Each incumbent LEC (or state commission filing on its behalf; see answer 5 below) is required to file a map of its study area in a uniform GIS esri shapefile format. The incumbent LEC or state commission filer is expected to use a standard xml or java secure Internet-browser web interface, which is being developed by the Commission. Incumbent LECs log into this 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.

This approach offers an efficient data collection process. It imposes a reasonable burden on incumbent LECs consistent with the policy goals of ensuring compatibility, limiting potential errors, and processing information efficiently. Esri GIS shapefiles are easy to submit and access. Permitting respondents to file maps in other formats, such as hard-copy maps or non-GIS digitized formats, was considered and rejected. A uniform format is necessary for the Commission staff to access, analyze, and aggregate the study area boundary data. The conversion of other formats to the uniform shapefile format can introduce errors that would be apparent to local filers, including states and the incumbent LECs themselves, but would not be readily apparent to Commission staff. We attempt to reduce the burden on small entities by encouraging state commissions to submit data on their behalf.

4. There is no overlap with an existing information collection. Existing information, such as location information filed by ZIP Code, is not sufficient to produce an accurate GIS shapefile of an incumbent LEC's study area.

5. The requirements adopted impose the least possible burden on incumbent LECs consistent with the regulatory need for the information. Incumbent LECs typically record the locations of their customers and their facilities, making them well situated to verify where they actually offer service. In addition, incumbent LECs generally file maps of their study areas and exchange areas with state public utility commissions, in part because it is these maps that determine calling areas for rate purposes and help those state commissions resolve any conflicts on which carrier is required to serve a new customer located between exchange areas. Examples of exchange maps available at public service commissions or on carrier websites can be found at: all incumbent LECs in Wisconsin (<http://psc.wi.gov/apps40/DLLink/Maps/Exchange.aspx>; Teton Telephone (<http://www.puc.state.id.us/tariff/approved/Title61/Teton%20Telecom%20Tariff%20No.%202.pdf>));

Qwest Colorado (CenturyLink) (http://www.centurylink.com/tariffs/co_gc_ens_t_no_23_maps.pdf); CenturyTel of Minnesota (CenturyLink) (http://www.centurylink.com/tariffs/mn_ct-mn_gen_t.pdf); Southwestern Bell Telephone Company d/b/a/ AT&T Oklahoma (<http://cpr.att.com/pdf/ok/h002.pdf>); Windstream Kentucky East (http://psc.ky.gov/tariffs/telecommunications/telecommunications_n-z/windstream%20kentucky%20east,%20inc/tariff%20no.%207/Tariff%20No.%207%20-%20%282%29%20General%20Customer%20Services%20-%20Section%203%20A.pdf); BellSouth (AT&T) of Kentucky (http://psc.ky.gov/tariffs/telecommunications/telecommunications_a-c/bellsouth%20telecommunications,%20inc/EXCHANGE%20SERVICE%20AREA%20MAPS%20A-Z/Tariff%201B%20OR%202A-%20Exchange%20Service%20Area%20Maps%20A-Z%20Travel%20File.pdf); and Cincinnati Bell of Kentucky (http://psc.ky.gov/tariffs/telecommunications/telecommunications_a-c/cincinnati%20bell%20telephone/cincinnati%20bell%20-%20exchange%20rate/Tariff%20No.%202%20-%20Exchange%20Rate.pdf).

The study area boundaries of ILECs that are price cap carriers are needed to “complete the puzzle” for implementing the benchmarking rule (see answer 2 above) – 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. However, after the *Order* was released, certain price cap carriers argued that exchange-level study area data may be unduly burdensome to compile and requested flexibility to submit wire center data instead. The *Reconsideration Order* provides such flexibility and allows price cap carriers to 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.

Incumbent LECs or state entities are best suited to undertake the conversion of existing map data to an esri shapefile, and should be able to do so based largely on existing information. Shapefile polygons defining exchange boundaries may be created in a variety of ways, including but not limited to: conversion of existing GIS and/or CAD data, digitizing from existing paper maps, heads-up digitizing using on-screen data, use of coordinate geometry from physical descriptions, GPS data, and field surveys. The submitted shapefile should conform to the U.S Geological Survey (USGS) National Map standard of 1:24,000-scale topographic quadrangles, which claims a horizontal accuracy of +/- 40 feet. Using a USGS standard aids in the reconciliation process. For example, if two adjoining study areas are bound by a road, stream, or other geographic or topographic feature, it produces more accurate maps if the study areas conform to a similar base map with a standard scale. Moreover, requiring the submission of data in esri shapefile format—which has become the standard mapping format over the last two decades—ensures compatibility, prevents delay, and helps minimize errors. As such, it best balances the need for accurate and timely data with the goal of minimizing burdens on providers.

To ease the burden on incumbent LECs, especially those that are small entities, we also encourage and will accept submissions of study area boundary data from willing state commissions on behalf of carriers. The *Study Area Boundary Public Notice* asked whether state entities should be allowed to assist in the data collection process, and commenters strongly supported the idea.⁴ The *Order* agreed with commenters that state entities are well situated to assist carriers, and invited state commissions to upload data to the mapping website on behalf of incumbent LECs within their states. In addition, after the *Order* was released, both state commissions and incumbent LECs urged the Commission to enable state commissions to certify the accuracy of the data they submit, thereby relieving incumbent LECs of that requirement. The *Reconsideration Order* adopted this change and hence requires state commissions choosing to submit study area boundary data to certify that the data are correct to the best of their

⁴ See, e.g., NPSC Comments at 2-3 (maintaining that submission by state commissions would ensure accuracy and consistency and eliminate conflict and confusion); ACS Reply Comments at 5 (arguing that state commission should submit mapping data).

information, knowledge, and belief. Consistent with this decision, the Commission concluded in general in the *Reconsideration Order* that the party submitting data should be the one to certify to its accuracy. As a result, there is no longer an option for state telecommunications associations to submit data directly to the Commission on behalf of the incumbent LECs in their state, as they would not have the information necessary to certify to its accuracy, but associations can and are encouraged to assist incumbent LECs in preparing study area boundary data for submission.

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

Process for ILECs⁵ submitting their own study area boundary data

1. ILEC logs into a secure web interface using their FCC Registration Number (FRN) and password.
2. ILECs provide cover page information and methodology process used to create the data.
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 study area boundary data

1. State PUC logs into a secure web interface using an assigned username and password.
2. State PUC provides state-specific cover page information and methodology process used to create the data.
3. State PUC 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 PUC reviews their map data.
5. If accurate, state PUC 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.

It is critical to the Commission's universal service reform implementation efforts to ensure that the study area boundary data do not become out of date. Therefore incumbent LECs are required to submit updated data when their study area boundaries change. Incumbent LECs (or state commissions) should submit updated data – using procedures similar to those described above – by March 15 of each year, beginning the year following the initial data submissions, showing any changes made as of December 31 of the previous year. In addition, all incumbent LECs should recertify their study area boundary data every two years, by logging into the web interface and reviewing and certifying the previously-submitted data.

6. There is no source of the information sought other than the incumbent LECs or their state commissions, which are encouraged to file study area boundary data for the incumbent LECs in their state. For the time being, the Commission relies on commercially-available data of doubtful accuracy and has established an expedited waiver process for an incumbent LEC to challenge the accuracy of its study area boundary(ies) from that commercial source. But the Commission cannot sustain an accurate system for distributing universal service support nationwide if the data are known to be unreliable. Sporadic and carrier-initiated waivers may introduce other inaccuracies. Only a complete and reliable set of study area

⁵ For the sake of brevity we use acronyms in this list that we avoid in the text: “ILEC” for Incumbent LEC and “PUC” for the state regulatory commissions, e.g., Public Utilities Commission, Public Service Commission, and similar variations.

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 March 26, 2013 (78 FR 18338). 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. *Methodology:* For purposes of this data collection, we divide incumbent LECs into two categories, “large incumbent LECs” and “small incumbent LECs.” We consider an incumbent LEC to be large if it had more than 1,500 employees in 2010.⁶ Using this criterion, there are 301 large incumbent LECs affected by this information collection. We consider it highly probable that a company with more than 1,500 employees has adequate in-house technological expertise to produce a GIS shapefile from data, or to convert a paper map or map in another digital form into a GIS shapefile. Hence, we analyze the burden on large incumbent LECs below. By contrast, incumbent LECs with 1,500 employees or less are considered “small.” These small incumbent LECs are more likely to engage an expert contractor or other external entity and we analyze their burden separately under question 13.

In order to calculate the time burden of creating GIS shapefiles we consulted the Arkansas Geographic Information Office (GIO). The Arkansas GIO has created GIS shapefiles for incumbent LECs throughout the entire state. Using Arkansas exchange-boundary GIS data available at the Arkansas State Geostore and information obtained from the Arkansas GIO, we were able to estimate an average cost per meter unit of perimeter by exchange. The Arkansas GIO created these exchange boundaries using coordinate geometry, which is a labor intensive process of roughly the same magnitude as the process of scanning and digitizing paper maps. See <http://www.gis.state.ar.us/>

The Arkansas data was produced in 3 months, or approximately 60 working days, or 480 hours (60 days x 8 hrs/day). The total perimeter of the Arkansas exchanges is 38,434,278 meters. Dividing this by 480 hours yields a result of 80,000 meters per hour.

The total perimeter of these large incumbent LECs is 622,861,402 meters.
Total Exchange Perimeter/80,000 meters per hour: 7,768 hours.
The average total hours of each of 301 large incumbent LECs: 26 hours.

We consider the technical expertise needed to create GIS shapefiles to approximate that of a GS 12 step 5. The base hourly rate of a GS 12 step 5 is \$32.73. See http://www.opm.gov/oca/12tables/html/gs_h.asp. Given the range of actual GS hourly rates, which vary by locality, we consider it reasonable to round the expected hourly salary of in house technical staff to the nearest dollar: \$33.00.

Under this assumption, the average large incumbent LEC would pay for 26 hours of work at \$33.00 per hour to create a GIS shapefile. 26 x \$33.00 = \$858.00.

⁶ See *Trends in Telephone Service*, Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*). This is the same standard used in the Final Regulatory Flexibility Analysis of this Order, Appendix C, para. 9.

The *subtotal* large incumbent LEC initial filing burden is 301 times \$858 = \$258,258.00.

In addition, an incumbent LEC that changes its study areas must report that change, and each incumbent LEC must certify the accuracy of its shapefile every two years. We consider an incumbent LEC's use of an Internet browser to log on to the Commission's study area maps web site in order to certify the accuracy of its study area shapefile to be a normal business activity. It is also a negligible burden unless the boundaries have changed. If, however, the incumbent LEC's study area boundaries have changed, a new and accurate shapefile must be resubmitted.

During the three years 2008-2011, three exchanges were sold from one large incumbent LEC to another large incumbent LEC, and on that basis we predict that three exchanges will be bought and sold over the course of this 3-year information collection request. (No small incumbent LECs reported buying or selling an exchange from 2008 to 2011).

Both buyer and seller would have to submit corrected shapefiles, for an industry total of 6 new shapefiles. Although amending a shapefile would likely be less burdensome than creating one, we have no rational means of estimating the difference, and so consider the burden of amending a shapefile to be the same as creating a new shapefile.

The *subtotal* industry hour burden of an estimated 6 amended shapefiles:
6 x 26 hours = 156 hours.

The *subtotal* industry cost burden of an estimated 6 amended shapefiles:
156 hours x \$33.00 = \$5,148.00.

Total large incumbent LEC industry hour burden:
7,768 hours for first-time shapefiles + 156 hours for amended shapefiles.
7,768 + 156 = 7,924 hours.

Total large incumbent LEC industry cost burden:
\$258,258.00 for first-time shapefiles + \$5,148.00 for amended shapefiles.
\$258,258.00 + \$5,148.00 = \$263,406.00.

13. *Methodology*. We consider all remaining respondent incumbent LECs (i.e., those with 1,500 employees or fewer) to be small incumbent LECs. According to the National Exchange Carrier Association (NECA), there are 1,443 incumbent LEC study areas.⁷ We subtract the 301 incumbent large LECs considered in question 12 above and conclude that there are 1,142 small incumbent LECs. Although some small incumbent LECs may have adequate in-house technological expertise to convert a map or location data into a GIS shapefile, we consider it likely that most small incumbent LECs will have the GIS shapefile made for or provided to them by another entity: either a state commission, a telecommunications association, or an outside specialist GIS mapping contractor.

As discussed in question 12 above, we consulted the Arkansas GIO in order to estimate the average cost per meter unit of perimeter by exchange. The Arkansas data was produced in 3 months, or approximately 60 working days, or 480 hours (60 days x 8 hrs/day). The total perimeter of the Arkansas exchanges is 38,434,278 meters. Dividing this by 480 hours yields a result of 80,000 meters per hour. We begin our analysis by applying the same "80,000 meters per hour" to the total exchange perimeters of the small incumbent LECs. In short, we replicate the methodology used in question 12, above.

The total perimeter of small incumbent LECs is 387,049,793 meters.
Total Exchange Perimeter/80,000 meters per hour: 4,838 hours.

⁷ See HC NECA ILEC Support Data - by Study Area.xls, available at http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC_State_Link/Monitor/2011_MR_Supplementary_Material.zip.

The average total hours of each of 1,142 small incumbent LECs: 4.25 hours.

We believe, however, that 4.25 hours represents a reasonable expectation of the cost of contracting out the task for only a minority of small incumbent LECs.

If the small incumbent LEC contracts out the work commercially, we believe that, realistically, a consulting firm would not create a single shapefile for just one incumbent LEC without charging a minimum “small job” fee that would compensate the consultant for setting up the account, and cover the cost of billing and related administrative expenses. Therefore, we estimate that a reasonable minimum for a single small project by a GIS specialist might be approximately 12 hours of work.

If a state telecommunications association works with small incumbent LECs to create shapefiles for the study area boundaries in a state, the association would likely combine the shapefiles of many small incumbent LECs into a single order for a GIS consulting firm, and thereby enjoy considerable benefits of scale, which it would presumably pass on to the individual small incumbent LECs. Therefore, for these incumbent LECs, we consider 4.25 hours to reasonably approximate the actual contracting out cost to the incumbent LEC. While the *Reconsideration Order* requires the entity that submits the data to certify it, and therefore does not allow state telecommunications associations to upload and submit data directly, associations can help incumbent LECs in preparing their study area boundary data. In such cases, the incumbent LEC simply uploads the shapefile created by the state association at essentially zero cost burden. Although we fully expect some telecommunications associations to assist in this effort, we lack a reasonable basis to predict how many will do so. Therefore, we limit our prediction to 10 percent of small incumbent LECs, which we consider a plausible and conservative minimum.

If a state commission creates the shapefiles for the small incumbent LECs it regulates, there will likely be no out-of-pocket burden on the small incumbent LEC for “contracting out the work.” Interaction between a state commission and a small incumbent LEC concerning service territory is an ordinary and customary part of doing business for both parties. Therefore, for small incumbent LECs whose files are created, uploaded, and certified by state commissions, we assign a zero cost burden to “contracting out” the work. The record indicates that “the knowledge, expertise, and experience in matters involving LECs and telecommunications boundaries lies with state commissions” and that state commissions have been performing the boundary process for many years.⁸ The record also includes strong support by both incumbent LECs and state commissions, and the order endorses state participation. We therefore estimate conservatively that a minimum of 30 percent of small incumbent LECs will have their shapefiles created and uploaded by state commissions.

Using this conceptual framework, we predict that:

1,142 small incumbent LECs x 60 percent that contract independently with map makers.

685 at 12 hours each.

1,142 small incumbent LECs x 10 percent telecommunications associations

114 at 4.25 hours each.

1,142 small incumbent LECs x 30 percent state commission filers

343 at 0 hours each.

Total hours equals $(114 \times 4.25 = 484.5) + (685 \times 12 = 8,220)$

$484.5 + 8,220$ equals 8,704.5 total hours of contracting expenses for all small incumbent LECs.

⁸ Nebraska PSC Comments at 4-5.

In 2011, GIS consultants charged from \$35 per hour to \$133 per hour, with an average rate of \$81.10 per hour. Directions Magazine, *How Much Do GIS Consultants Charge in 2011?* (April 28th 2011)

<http://www.directionsmag.com/articles/how-much-do-gis-consultants-charge-in-2011/176035>

8,704.5 hours x \$81.10 equals \$705,935.00.

Thus, industry-wide cost for contracting out shapefile maps equals **\$705,935.00**

Divided by 1,142 small incumbent LECs:

\$705,935.00/1,142 = average cost per small incumbent LEC of \$618.00.

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

We expect all work to be performed by a GS 14 Geospatial Data Specialist at a base hourly rate of approximately \$46.00 per hour. The base hourly rate of a GS 14 step 5 is \$45.99. See http://www.opm.gov/oca/12tables/html/g_s_h.asp. Given the range of actual GS hourly rates, which vary by locality, we consider it reasonable to round the expected hourly salary of federal in house professional staff to the nearest dollar: \$46.00.

The initial development, reconciliation, and processing of GIS shapefile maps for all 1409 reporting incumbent LECs is expected to cost the federal government as follows:

Task: Coordination with developers for web interface:

Hours: 40

40 x \$46.00 = \$1,840.00

Task: Data reconciliation:

Hours: 520

520 x \$46.00 = \$23,920.00

Task: Data processing and distribution:

Hours: 80

80 x \$46 = \$3,680.00

Thus, the subtotal cost for the initial information collection:

40 hours + 520 hours + 80 hours = 640 hours

\$1,840.00 + \$23,920.00 + \$3,680.00 = \$29,440.00

In addition, after the initial information collection, incumbent must notify the FCC if the boundaries their service territories change. Also, all incumbent LECs must recertify the accuracy of their maps every two years. During the three years 2008-2011, three exchanges were sold from one large incumbent LEC to another large incumbent LEC, and on that basis we predict that three exchanges will be bought and sold over the course of this 3-year information collection request. (No small incumbent LECs reported buying or selling an exchange 2008-2011).

Task: Data Processing and Redistribution

Times 3

Hours: 8

Total: 24 hours

24 x \$46.00 = \$1,104.00

The cost off the initial data collection plus the cost of 3 years of maintenance equals:
640 initial collection hours + 24 biannual upkeep hours = 664 total federal hours.
\$29,440.00 + \$1,104.00 = total cost to the federal government of \$30,544.00

15. There are no changes in the Commission's burden estimates.

16. When we have compiled a complete set of the reconciled boundaries, we will publish the study area boundary data. We have not yet estimated a date for release, but our expectation is that it would probably be 4Q13 (1QFY14) or 1Q14 (2QFY14).

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 item 19.

B. Collections of Information Employing Statistical Methods:

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