

FACT SHEET*

Toll Free Assignment Modernization

Notice of Proposed Rulemaking – WC Docket No. 17-192; CC Docket No. 95-155

Background: Toll free numbers are currently assigned on a first-come, first-served basis. In order to better promote the equitable and efficient use of this finite resource, this *Notice of Proposed Rulemaking (Notice)* would seek comment on amending the Commission’s rules to allow for the use of auctions to assign certain toll free numbers and examine other means by which to modernize the administration and assignment of toll free numbers. The *Notice* also specifically proposes auctioning certain unassigned toll free numbers sought by multiple parties. Examples of such numbers include 833-LAWYERS and 833-333-3333.

What the Notice Would Do:

The *Notice* proposes and/or seeks comment on:

- Amending the Commission’s toll free number assignment rule to permit use of auctions, among other assignment mechanisms, to assign toll free numbers.
- Using a single round, sealed-bid Vickrey auction for assigning the approximately 17,000 numbers in the new 833 toll free code that have been sought by multiple, competing parties.
- Applying the net proceeds from any toll free number auction to offset the costs of toll free administration.
- Allowing a secondary market for toll free numbers to develop.
- Setting aside toll free numbers necessary to promote health and safety for use, without cost, by government agencies and non-profit health and safety organizations.
- Additional changes to overall toll free number administration.

* This document is being released as part of a “permit-but-disclose” proceeding. Any presentations or views on the subject expressed to the Commission or to its staff, including by email, must be filed in WC Docket No. 17-192, which may be accessed via the Electronic Comment Filing System (<https://www.fcc.gov/ecfs/>).

Before the
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of)
Toll Free Assignment Modernization) WC Docket No. 17-192
Toll Free Service Access Codes) CC Docket No. 95-155

NOTICE OF PROPOSED RULEMAKING*

Adopted: []

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By the Commission:

Comment Date: [30 days after date of publication in the Federal Register]
Reply Comment Date: [60 days after date of publication in the Federal Register]

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* This document has been circulated for tentative consideration by the Commission at its September open meeting. The issues referenced in this document and the Commission’s ultimate resolution of those issues remain under consideration and subject to change. This document does not constitute any official action by the Commission. However, the Chairman has determined that, in the interest of promoting the public’s ability to understand the nature and scope of issues under consideration, the public interest would be served by making this document publicly available. The FCC’s ex parte rules apply and presentations are subject to “permit-but-disclose” ex parte rules. See, e.g., 47 C.F.R. §§ 1.1206, 1.1200(a). Participants in this proceeding should familiarize themselves with the Commission’s ex parte rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission’s meeting. See 47 CFR §§ 1.1200(a), 1.1203.

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I. INTRODUCTION

1. Toll free calling originated in 1967, and to this day remains an important feature of the communications system.¹ Even with the growth of e-commerce, many businesses, large and small, continue to use toll free numbers for sales and customer service, as well as for advertising and marketing purposes.² Non-profit and government organizations also use toll free numbers to provide vital health and safety services to the public.³ While the Commission’s current rule uses a first-come, first-served approach to the assignment of toll free numbers,⁴ to help ensure the continued usefulness and availability of this finite resource, we now examine alternative assignment methodologies. Specifically, we propose amending our rules to allow for use of an auction to assign certain toll free numbers—such as vanity and repeater numbers—in order to better promote the equitable and efficient, use of numbers. With the opportunity afforded by the opening of the 833 toll free code, we propose to use an auction for assigning numbers for which mutually exclusive⁵ interest has been expressed. In this Notice of Proposed Rulemaking (*Notice*), we also consider a variety of other means to modernize toll free number assignments that are consistent with our statutory mandate to make “numbers available on an equitable basis.”⁶

¹ See Kevin T. Duffy-Deno, Steve G. Parsons, *Toll-free Numbers: Demand, Property Rights, and Public Policy*, 36 Telecomm. Pol’y 324, 325 (2012) (Telecom Policy Report).

² *Id.*

³ E.g., *U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration Petition for Permanent Reassignment of Three Toll Free Suicide Prevention Hotline Numbers*, Order, 27 FCC Rcd 2965, 2968, para. 7 (WCB 2012); *Toll Free Service Access Codes*, Order, 21 FCC Rcd 9925, 9925 para. 1 (WCB 2006).

⁴ 47 CFR § 52.111.

⁵ Mutually exclusive numbers are those toll free numbers for which there are two or more requests for assignment. See *Toll Free Service Access Codes*, Order, 35 FCC Rcd 3153, 3155, para. 6 (WCB 2017) (*833 Code Opening Order*).

⁶ 47 U.S.C. § 251(e)(1).

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II. BACKGROUND

2. Since mandating the porting of toll free numbers and introducing the second toll free code, 888, to relieve exhaust of the original 800 code, the Commission has sought to assign numbers in a manner that is equitable and efficient, and that fosters a smooth introduction of a new code.⁷ Doing so required the Commission to address the treatment of vanity numbers, those numbers that spell a name or word of value to the number holder (e.g., 1-800-FLOWERS), as well as repeater numbers that are easy to remember (e.g., 1-800-222-2222), as new codes open.⁸ Attempting to assign these desirable numbers equitably, the Commission in 1997 initially permitted 800 number subscribers the right of first refusal to reserve corresponding numbers in the new 888 code.⁹ After the 888 code opening, however, the Commission adopted in 1998 the current first-come, first-served rule, codified in section 52.111 of the Commission's rules.¹⁰ Although the Commission considered auctions to be "generally efficient," the Commission concluded at that time the first-come, first-served rule was a preferable mechanism for toll free number assignment.¹¹ The Commission followed the first-come, first-served rule, with slight modifications made by the Wireline Competition Bureau, for the next four code openings (877, 866, 855, and 844), as well as for those instances in which toll free numbers are released back into the pool of available numbers.¹²

3. In an attempt to extend the life of each toll free code, the Commission also prohibited warehousing, hoarding, and brokering of toll free numbers.¹³ Thus, the Commission's current rules prohibit "warehousing" of a toll free number, defined as the practice in which a Responsible Organization (RespOrg),¹⁴ either directly or indirectly through an affiliate, reserves a number from the toll free database without having an end user subscriber for whom the number is being reserved.¹⁵ Similarly, the Commission's rules prohibit the practice of "hoarding"—the acquisition by a toll free subscriber from a RespOrg of more toll free numbers than the toll free subscriber intends to use for the provision of toll free

⁷ *Toll Free Service Access Codes*, CC Docket No. 95-155, Second Report and Order and Further Notice of Proposed Rulemaking, 12 FCC Rcd 11162, 11163, para. 1 (1997) (*1997 Toll Free Order*). For a detailed discussion of the toll free administration system, see *Toll Free Service Access Codes; Database Services Management, Inc. Petition for Declaratory Ruling; Beehive Telephone Company Petition for Declaratory Ruling*, CC Docket No. 95-155, NSD File Nos. L-99-87, L-99-88, Fifth Report and Order, 15 FCC Rcd 11939, 11941-44, paras. 3-9 (2000).

⁸ *1997 Toll Free Order*, 12 FCC Rcd at 11163, para. 1; see also *Toll Free Service Access Codes*, CC Docket No. 95-155, Fourth Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 9058, 9059, para. 1 (1998) (*1998 Toll Free Order*); *Toll Free Service Access Codes*, CC Docket No. 95-155, Report and Order, 11 FCC Rcd 2496, 2497, para. 6 (1996) (*1996 Toll Free Order*).

⁹ *1998 Toll Free Order*, 13 FCC Rcd at 9065, para. 13, 9075, para. 39.

¹⁰ 47 CFR § 52.111 ("Toll free numbers shall be made available on a first-come, first-served basis unless otherwise directed by the Commission."); see also *1998 Toll Free Order*, 13 FCC Rcd at 9078, Appx A.

¹¹ *1998 Toll Free Order*, 13 FCC Rcd at 9066, para. 16.

¹² For the 855 and 844 code openings, as well as the release of valuable 800 numbers that had been disconnected, the Wireline Competition Bureau limited Responsible Organizations to obtaining 100 numbers per day for the first 30 days of the code opening to better ensure an efficient and equitable distribution of high value numbers in those two codes. *Toll Free Service Access Codes*, CC Docket No. 95-155, Order, 25 FCC Rcd 13687, 13688-90, paras. 3-6 (WCB 2010) (*855 Code Opening Order*); see also *Toll Free Service Access Codes*, CC Docket No. 95-155, Order, 28 FCC Rcd 16139, 16140-41, para. 3, 16142, paras. 6-7 (WCB 2013) (*844 Code Opening Order*); *Toll Free Service Access Codes*, CC Docket No. 95-155, Order, 31 FCC Rcd 6828, 6828-30, paras. 2-6 (WCB 2016).

¹³ See 47 CFR §§ 52.105, 52.107.

¹⁴ A "RespOrg" is an "entity chosen by a toll free subscriber to manage and administer the appropriate records in the toll free Service Management System for the toll free subscriber." 47 CFR § 52.101(b).

¹⁵ See 47 CFR § 52.105(a).

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service.¹⁶ And, finally, the definition of hoarding also prohibits number brokering, which is the selling of a toll free number by a private entity for a fee.¹⁷

4. Almost 20 years ago, the Commission considered an auction approach to toll free number assignment in the *1998 Toll Free Order*. In doing so, the Commission recognized that auctions “offer all participants an equal opportunity to obtain a particular vanity number.”¹⁸ The order also determined that although auctions are “generally efficient,” it could not say “based on the present record that auctions of vanity numbers would produce efficiencies that would outweigh the practical difficulties,” such as cost, administration, and impact on the international membership of the North American Numbering Plan (NANP).¹⁹ Recently, however, with the opening of the 833 toll free code, the Commission took steps to reevaluate number assignment by establishing a series of pre-opening procedures to identify toll free numbers that could be part of an auction or other alternative assignment methodology. Specifically, the Wireline Competition Bureau directed each RespOrg to “submit a single request for up to 2,000 individual preferred 833 toll numbers.”²⁰ The Wireline Competition Bureau then directed Somos, Inc., the toll free number administrator (TFNA), to review all 833 number requests and identify mutually exclusive numbers—those numbers for which there are two or more requests for assignment.²¹ Somos identified approximately 17,000 mutually exclusive numbers and placed these numbers in unavailable status pending the outcome of this proceeding.²² These mutually exclusive numbers include repeaters numbers (e.g., 833-333-333 and 833-888-8888) as well as numbers that spell memorable words and phrases (e.g., 833-DENTIST, 833-DIVORCE, 833-DOCTORS, 833-FLOWERS, 833-HOLIDAY, 833-INJURED, and 833-LAWYERS).²³ Somos notes that 147 RespOrgs participated in the pre-code opening process and the top ten mutually exclusive toll free numbers were requested by 65 or more RespOrgs. The top 25 numbers were requested by 48 or more RespOrgs, and the top 50 numbers were requested by 43 or more RespOrgs.²⁴ The remaining numbers were assigned as established in the Commission’s existing rule, that is, on a first-come, first-served basis.²⁵

III. DISCUSSION

A. Distribution of Toll Free Numbers

5. We propose expanding the existing toll free number assignment rule to permit use of an

¹⁶ See 47 CFR § 52.107.

¹⁷ 47 CFR § 52.107(a); see also *id.* § 52.10(a)(2) (“No person or entity shall acquire a toll free number for the purpose of selling the toll free number to another entity or to a person for a fee.”).

¹⁸ *1998 Toll Free Order*, 13 FCC Rcd FCC Rcd at 9066, para. 16.

¹⁹ *1998 Toll Free Order*, 13 FCC Rcd at 9066, para. 16. The NANP is comprised of 20 North American countries that share numbering resources. See N. Am. Numbering Plan Admin., *About the North American Numbering Plan*, https://www.nationalnanpa.com/about_us/abt_nanp.html (last visited Aug. 16, 2017).

²⁰ See *833 Code Opening Order*, 35 FCC Rcd at 3159, Attach.

²¹ See *id.* at 3155, para. 6. (defining mutually exclusive numbers as toll free numbers “for which there are multiple RespOrg Group reservation requests.”).

²² See Somos, Inc., *Report of the Toll Free Neutral Administrator (TFNA) to the North American Numbering Council* 6 (June 2017), http://www.nanc-chair.org/docs/mtg_docs/Jun17_TFNA_Report.pdf. Unavailable status means “[t]he toll free number is not available for assignment due to an unusual condition.” 47 CFR § 52.103(a)(8).

²³ See Letter from Joel Bernstein, Vice President, Regulatory and Public Policy, Somos, Inc. to Marlene H. Dortch, Secretary, FCC, CC Docket No. 95-155 at 1 (filed Sept. 5, 2017).

²⁴ See Letter from Joel Bernstein, Vice President, Regulatory and Public Policy, Somos, Inc. to Marlene H. Dortch, Secretary, FCC, CC Docket No. 95-155 at 1 (filed Aug. 31, 2017) (Somos Aug. 31, 2017 *Ex Parte* Letter).

²⁵ See *833 Code Opening Order*, 35 FCC Rcd at 3159, Attach.

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auction methodology, among other assignment mechanisms, to assign toll free numbers. To do so, we propose to revise section 52.111 of our rules to allow the Commission to assign numbers in a manner that is equitable, including by auction, on a first-come, first-served basis, an alternative assignment methodology, or by a combination of the forgoing as circumstances require. We intend to delegate to the Wireline Competition Bureau, in consultation with the Wireless Telecommunications Bureau, the authority to propose and designate the assignment methodology, through public notice and comment, for new toll free code openings and other toll free number assignments. For example, the Wireline Competition Bureau, in consultation with the Wireless Telecommunications Bureau, would have authority to decide the methodology for assigning valuable numbers returned to the spare pool of available numbers.²⁶ We seek comment on this proposal.

6. We also seek comment on conducting a single round, sealed-bid Vickrey auction for the roughly 17,000 numbers set aside, pursuant to the 833 *Code Opening Order*, for which there were mutually exclusive requests. If adopted, we intend to consider the outcome of the 833 auction to determine if changes need to be made to future code opening assignments. In addition, we propose—and seek comment on—revising our rules to promote development of a secondary market for toll free numbers.

7. *Equity Considerations.* Section 251(e)(1) of the Communications Act directs the Commission to make numbers available on an equitable basis.²⁷ The Commission has adopted rules to implement this obligation, as well as to serve the broader public interest in telephone number administration. We believe that toll free numbers generally can be made available equitably via an auction—under which RespOrgs bid for numbers valuable to them—and that in many cases, including with respect to the mutually exclusive 833 toll free numbers, such an auction approach would be more equitable than under the Commission’s current first-come, first-served assignment rule. Parties who want particular toll free numbers often will have a better opportunity of acquiring those numbers, albeit for a price, in an auction than under the Commission’s current rule, which does not take into account the need for or the value placed on particular numbers. As discussed above, with respect to 833 numbers, there are at least 65 RespOrgs that want the top-ten mutually exclusive numbers.²⁸ This demonstrates that there is demand for certain mutually exclusive numbers, and thus we believe that auctioning these numbers would be a more equitable assignment mechanism than assigning them on a first-come, first-basis.²⁹ Moreover, if we allow for a secondary market for toll free numbers, it would be inequitable for a RespOrg or subscriber to get a valuable public resource for free, but then later be able to profit from it even when others would have paid for it initially.

8. We note that the first-come, first-served rule has raised questions about whether recent toll free code openings were equitable because certain RespOrgs had enhanced connectivity to the toll free database that allowed them to quickly reserve desirable numbers.³⁰ To address these concerns for the 855 and 844 toll free code openings, the Wireline Competition Bureau directed the TFNA to limit the

²⁶ Somos Aug. 31, 2017 *Ex Parte* Letter at 2 (informing the Commission that there are 9,738 numbers in the 800-629-XXX exchange that were returned to Somos and are with the Help Desk in unavailable status. To the best of Somos’s knowledge, these 800 toll free numbers have never been assigned to end-user customers).

²⁷ 47 U.S.C. § 251 (e)(1) (“The Commission ...shall make such numbers available on an equitable basis.”).

²⁸ Somos Aug. 31, 2017 *Ex Parte* Letter at 1.

²⁹ We note that although a first-come, first-served system may randomly assign mutually exclusive numbers, it may also less equitably reward actors that invest in systems to increase their chances that their choices are received first by the TFNA.

³⁰ 855 *Code Opening Order*, 25 FCC Rcd at 13688-89, paras. 3-5; 844 *Code Opening Order*, 28 FCC Rcd at 16140-41, para. 3.

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quantity of toll free numbers a RespOrg may reserve to 100 per day for the first 30 days.³¹ The Wireline Competition Bureau found that this limited allocation would distribute desirable numbers more equitably.³² If the Commission adopts an auction approach for toll free numbers, such rationing of numbers would not be necessary. All bidders would have the same access to numbers in a new toll free code. We seek comment on whether this market-based auction approach would yield a more equitable outcome by allowing any RespOrg an opportunity to bid for numbers based on their valuations.

9. *Efficiency and Public Interest Considerations.* In addition to meeting the statutory mandate of making numbers available on an equitable basis, an auction method of assigning toll free numbers is more efficient and serves the public interest in toll free number conservation. An auction assignment mechanism for mutually exclusive toll free numbers will promote efficiency by assigning these numbers to the parties that value them most. Moreover, toll free numbers are a limited resource that are often used inefficiently because there is no real cost associated with obtaining that resource. If subscribers and RespOrgs are required to pay for toll free numbers, they are more likely to acquire only the numbers they or their customers need; they will have no incentive to acquire numbers beyond those needed. Thus, we believe that a toll free number auction will help limit exhaust of toll free numbers and further the public interest. We seek comment on our analysis.

1. Costs and Benefits of an Auction

10. The investment by RespOrgs in enhanced connectivity to the database discussed above is evidence of strong competing demand among RespOrgs for toll free numbers.³³ And the fact that the Commission places constraints on how many numbers a RespOrg can obtain at any point, and also on hoarding, suggests that certain toll free numbers are currently underpriced. We therefore believe that assignment via auction would more equitably and efficiently address this source of excess demand. Moreover, to the extent that, with the current assignment method, transaction costs impede or restrict the efficient assignment of toll free numbers, the public interest gains from implementing an efficient auction mechanism would be substantial. Thus, we believe that the equity and efficiency gains of an auction of mutually exclusive toll free numbers outweigh any costs of implementing an auction. We seek comment on this analysis. Also, if any commenters assert that an auction approach is inequitable, they should clearly explain why an auction approach would be inequitable, as well as how the current means of assignment, or some other means, would be more equitable.

11. In arriving at our 833 number auction proposal, the Commission has considered the experience of the Australian Communications and Media Authority (ACMA) in auctioning toll free numbers. Between 2005 and 2015, the ACMA attempted to auction 1.8 million unreleased “freephone” (toll free) and “local-rate numbers,” considered desirable (as vanity numbers or repeaters), which were branded as “smartnumbers®.”³⁴ The results of the auction show that the most desirable smartnumbers® were sold in highly competitive auctions early in the process. However, after the initial auctions within the first year of the most desirable numbers, the vast majority of smartnumbers® were uncontested and thus auctioned at set reserve prices. In reviewing the outcome of the ACMA auction, we propose, at least for the 833 code, to auction only mutually exclusive toll free numbers for which there is some demonstration of demand, and to assign the rest on a first-come, first-served basis. We seek comment on how the Commission has considered the results of the ACMA experience in developing our own auction

³¹ 855 Code Opening Order, 25 FCC Rcd at 13687, 13688, paras. 1, 3; 844 Code Opening Order, 28 FCC Rcd at 16139-41, paras. 1, 3.

³² 855 Code Opening Order, 25 FCC Rcd at 13688, para. 4; 844 Code Opening Order, 28 FCC Rcd at 16140, para. 4.

³³ See *supra* para. 8.

³⁴ See Austl. Commc’ns & Media Auth., *Telecommunications Performance Report 2004-05* at 201-02 (Nov. 17, 2005), <https://www.accc.gov.au/system/files/37%20-%20ACMA%20Telco%20Performance%20Report%202004-05.pdf>.

model.

2. Auction Procedures for 833

12. As discussed above, the Commission proposes to assign toll free numbers in a manner that is equitable, including by auction, on a first-come, first-served basis, by alternative assignment methodologies, or by a combination of these methods, as circumstances require. In this section, we seek comment on certain auction procedures for the roughly 17,000 mutually exclusive numbers, which were set-aside in our *833 Code Opening Procedures Order*. Specifically, we propose to use a single round, sealed-bid Vickrey auction, as discussed below. We emphasize that our proposal discussed herein is limited to the set-aside 833 mutually exclusive toll free numbers. If adopted, we intend to consider the 833 auction process and outcomes in deciding how to make future toll free assignments. And, we intend to delegate to the Wireline Competition Bureau, in consultation with the Wireless Telecommunications Bureau, authority to make those decisions, after public notice and comment, as was done with the 855 and 844 toll free code openings. In particular, they may decide whether to use the single round, sealed-bid Vickrey auction model or another auction model, to employ the current first-come, first-served policy, or an alternative assignment method, or combination of these methods, as circumstances require. We seek comment on these proposals.

a. Single Round, Sealed-Bid Vickrey Auction

13. *Single Round, Sealed-Bid Auction.* We propose to assign numbers using a single round, sealed-bid auction. This methodology would be used for the roughly 17,000 numbers set aside in the 833 code. In such an auction, a bidder submits bids for individual numbers privately to the auctioneer.³⁵ We propose use of a single round, sealed-bid auction here because such auctions are relatively easy to implement and to bid in and, therefore, less costly to both the auctioneer and participants than more complex multi-round auctions.

14. We further propose an auction in which participants simultaneously submit separate bids for each number they are interested in, with the winning bid for each number being determined solely by bids for that number, independent of the bids for any other number. Thus, the proposed auction will not allow for package bids—bids for combinations of numbers.³⁶ While it is likely that some bidders may demand more than one number in an auction, we do not believe valuation synergies, to the extent they exist, warrant allowing package bids. We seek comment on this proposal. Interested stakeholders should also comment on whether a combinatorial or package auction may make it easier for strong, sophisticated bidders to foreclose access to numbers of weaker, less-sophisticated bidders by bidding on packages. We further seek comment on other advantages or disadvantages of allowing package bids.

15. *Vickrey (Single Round, Sealed-Bid) Auction.* To assign 833 mutually exclusive toll free numbers, we also propose to incorporate a Vickrey auction into the 833 auction procedures. In a Vickrey auction, the highest bidder for a number wins and pays the second-highest bid for the number. If we determine that package bids are allowed in an auction, then the bidders who maximize overall revenue from the auction win and pay the opportunity costs (highest alternative value) of their bids as discussed in more detail in Appendix A.

16. We believe that a Vickrey auction will result in an equitable and efficient assignment of mutually exclusive toll free numbers. For example, in a Vickrey auction for one object, such as a toll free number, because the winner pays the second highest bid, the winner's surplus (the winner's value minus

³⁵ See generally R. Preston McAfee & John McMillan, *Auctions and Bidding*, 25 J. Econ. Literature 699, 701-703 (1987)), available at <http://vita.mcafee.cc/PDF/JEL.pdf>.

³⁶ Thus, if a bidder values one number at, say \$10, and another at \$20, and the two together at \$50, the bidder cannot place three bids, one of \$10 for the first number, a second of \$20 for the second, and a third of \$50 for both. Instead, only two bids can be placed, one for each of the two numbers, with no guarantee both numbers will be won.

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the amount paid), does not depend on the winner's bid. Since the amount paid is not a function of the winner's bid, it is optimal for bidders in this type of auction to bid their valuation.³⁷ Similarly, bidders in a Vickrey auction with package bidding can do no better in equilibrium than to bid their valuations.³⁸ As a consequence of truthful bidding, a Vickrey auction allocates the numbers efficiently to the bidders who hold the highest valuations. We do note that although a Vickrey auction may lead to an efficient outcome, are there disadvantages or costs to this approach.³⁹ Furthermore, it might be undesirable for bidders in a Vickrey auction to fully reveal their valuations in the auction, particularly when some bids become public information.⁴⁰ We seek comment on using the Vickrey auction methodology for the 833 mutually exclusive numbers and ask parties to elaborate on the advantages and disadvantages of this proposal.

17. *Reserve Prices.* Reserve prices (or minimum acceptable bids for a number) can help to improve revenue in an auction.⁴¹ However, our objective is primarily to increase the efficiency of toll-free number assignments. Since the numbers that are not auctioned are offered on a first-come, first-served basis at zero price, we recognize that an equitable assignment of numbers in the auction may be inconsistent with the imposition of a reserve price. Furthermore, establishing a level of the reserve price that is in the public interest may require precise information that is unavailable prior to running a first auction for toll free numbers. We seek comment on whether a reserve price should be imposed in the auction, and generally on the potential advantages and disadvantages of reserve prices in an auction of toll-free numbers. If a reserve price is imposed in the auction, what factors should we consider in determining a level of the reserve price that is in the public interest?

b. Alternative Auction Methodologies

18. *Pay-Your-Bid Auction.* An alternative methodology is a pay-your-bid auction whereby the highest bidder wins and pays his or her bid. A pay-your-bid auction also has benefits. This type of auction is generally straightforward because, as the name suggests, the highest bidder for a number wins the auction and pays his or her bid. Moreover, the pay-your-bid auction may yield significantly higher revenues than the generalized Vickrey second-price auction.⁴² On the other hand, the pay-your-bid auction may give rise to an inefficient toll free number assignment because in a pay-your-bid auction,

³⁷ This result rests on the assumption that bidder values are independent, i.e., a bidder's payoff is only a function of that bidder's estimates of value, and not a function of the opponents' estimates of value. With interdependent valuations, bidding one's value is typically not optimal. Independence implies bidders do not interact in a future circumstance, where any information gained by observing the auction's outcomes (notably, if bid amounts are later made public) could be used. The result also assumes the auction's rules are enforced.

³⁸ See Laurence M. Ausubel & Paul Milgrom, *The Lovely but Lonely Vickrey Auction*, in *Combinatorial Auctions 9* (Peter Cramton, Yoav Shoham, & Richard Steinberg eds., MIT Press, 2006), available at <http://cramton.umd.edu/ca-book/cramton-shoham-steinberg-combinatorial-auctions.pdf>.

³⁹ *Id.*

⁴⁰ See generally, e.g., Michael H. Rothkopf, Thomas J. Teisberg, & Edward P. Kahn, *Why Are Vickrey Auctions Rare*, 98 J. Pol. Econ. 94, 94-109 (1990), available at <http://www.jstor.org/stable/2937643> (subscription needed).

⁴¹ R. Preston McAfee & John McMillan, *Auctions and Bidding*, 25 J. Econ. Literature 699, 713 (summarizing the tradeoffs associated with the imposition of a reserve prices).

⁴² Campbell *et al.* show that the revenue ranking of a Vickrey and a pay-your-bid auction is affected by asymmetries between bidder demands. See Colin Campbell, Octavian Carare, & Richard P. McLean, *Auction Form Preference and Inefficiency of Asymmetric Discriminatory Auctions*, 86 Econ. Letters 95, 95-100 (2005), available at [http://www.sciencedirect.com/science/article/pii/S0165-1765\(04\)00231-9](http://www.sciencedirect.com/science/article/pii/S0165-1765(04)00231-9) (subscription required).

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bidding to reflect true valuations is not usually optimal.⁴³

19. *Open Auction.* Although we propose a Vickrey auction, we seek comment on the use of an open auction. Open auctions can help bidders form more accurate expectations of the value of an object in environments in which bidders possess different and uncertain information about the objects for sale. Examples of open auctions include the traditional English auction where the auctioneer calls increasing prices, eBay auctions where ascending bids are placed over a period of time, and the simultaneous multi-round auction employed by the Commission for the allocation of electromagnetic spectrum.⁴⁴ Open auctions offer bidders the opportunity for price discovery and can lead to more efficient outcomes. However, these types of auctions may be more costly to implement, and we expect the bidders' valuations for toll free numbers will not be subject to significant uncertainty, as discussed in more detail in Appendix A.⁴⁵ We seek comment on this issue. Would bidders change their valuations if they knew more about other bidders' valuations? Would this new information be central to an increase in the efficiency of the auction? Are there other advantages and disadvantages of an open auction that we should consider?

20. *Other Auction Designs.* Other than the auction designs and procedures discussed above, we seek comment on whether there are other auction designs we should consider. We believe that the auction design best suited to yield an outcome that is in the public interest depends in large measure on the institutional details of the toll free number market. We therefore seek comment from industry and interested stakeholders about the essential characteristics of the toll free number market that might be helpful to develop an auction design most suitable to serve that market and the broader public interest. We invite parties to provide any alternatives or offer further economic, legal, or logistical insights about these and other auction designs and procedures.

21. *Auctioning All Numbers in a New Code.* We also ask parties to consider whether, for the next toll free code opening, we should auction all numbers in that code. In other words, should we auction both mutually exclusive numbers and numbers for which there is no overlapping interest from bidders? Would such an approach be more efficient? Would it affect who can participate in the auction or should implement the auction? Would there be a significant cost increase in auctioning all toll free numbers in a new code? Interested parties should address these questions.

3. Auction Eligibility

22. We propose to allow only RespOrgs to bid in an auction; potential subscribers seeking mutually exclusive toll free numbers would need to approach one or more RespOrgs about placing a bid on their behalf. We seek comment on this proposal. We think our proposal is consistent with the RespOrg's role as manager and administrator of toll free records in the TFNA database.⁴⁶ Our proposal also reflects in part the importance of RespOrgs as market makers. Further, RespOrgs may have strengths in maximizing the valuation of certain numbers, for example, by piecing together geographic coalitions of subscribers who may be unable to coordinate by themselves. We seek comment on this proposal. We also seek comment on whether we should consider allowing subscribers to directly participate in an auction. Are there benefits to allowing their participation? Would an auction that includes both

⁴³ Bidding one's valuation in a pay-your-bid auction guarantees zero payoff: the difference between value and bid (the bidder's surplus) is equal to zero whether one wins or not. As a result, to ensure a positive expected payoff, bidding below one's value is optimal in the pay-your-bid auction.

⁴⁴ See e.g., 47 CFR § 1.2104.

⁴⁵ Idiosyncratic is a term of art. An example of idiosyncratic valuations is where one person values a painting because it evokes certain memories, another values it because of the artist's composition and technique, and a third values the painting because it fits well in a pre-selected space. The valuation that each person attaches to the painting is not changed by knowing whether or why the other persons like it.

⁴⁶ 47 CFR § 52.101(b) (definition of a RespOrg).

subscribers and RespOrgs be difficult to implement? Are there legal restrictions to allowing subscribers to circumvent their relationship with RespOrgs to participate directly in an auction, and would other provisions in our existing toll free rules need to be revised to allow participation by subscribers?

23. The greater the number of auction participants, the more effective the 833 number auction and subsequent toll free number auctions will be. We seek comment on ways to notify potential subscribers about auctions and encourage their participation through their chosen RespOrg(s). Should we consider including subscriber information in the TFNA database? Currently, the TFNA can notify RespOrgs about auctions—because the toll free database identifies the RespOrg for each number assigned—but it cannot notify subscribers potentially interested in bidding for a number because the database does not contain subscriber information. Would inclusion of subscriber information in the toll free database provide greater market transparency for auction bidders, improving the efficiency of the auction? Are the costs of including this information in the database significant? Would having subscriber information in the database be useful for other reasons, such helping the TFNA and the Commission resolve disputes over the use of a toll free number or helping law enforcement agencies identify the subscriber for a number being used for unlawful purposes? Are there privacy or other considerations that would militate against including subscriber information in the database that would be visible to other bidders (as opposed to being visible just to TFNA)?

24. We also seek comment on whether we should limit the quantity of toll free numbers RespOrgs can acquire through the auction. We think that limiting the number of bids that can be placed by a RespOrg in the auction may hamper efficiency because it may constrain primarily the bidders who hold the highest valuations. Do parties agree with this belief? If subscribers are allowed to bid for numbers, should we impose limits on the quantity of 833 numbers they can acquire in the auction?

4. Auctioneer

25. We seek comment on the characteristics of an auctioneer who would be able to put in practice the auction process we propose above at the lowest cost. Should we designate the TFNA as the auctioneer?

5. Treatment of Auction Funds

26. We propose that the net proceeds from any toll free number auction proposed in this *Notice* be directed to defray the costs of number administration. Specifically, we propose that auction funds be applied to offset the costs of toll free numbering administration by the TFNA within the NANP for the benefit of all RespOrgs and subscribers. This approach would include the administrative costs of implementing numbering auctions should the Commission designate the responsibility to the TFNA. The TFNA administers toll free numbers, which are part of the NANP numbering resources. The NANP is comprised of 20 member countries. We propose that the auction proceeds from any toll free auction be applied to offset the costs of the TFNA to equally benefit RespOrgs and subscribers in those member countries to the extent they pay fees to the TFNA. Commenters should address whether this approach is the best method of applying the proceeds from the auction, or whether alternative methods are preferable. We also seek comment on any legal, logistical or international implications of this proposal, given the international composition of the NANP. Further, we do not believe that applying auction funds to offset the TFNA costs, within the NANP, implicates any U.S. fiscal statutes. Pursuant to our authority under section 251(e), the Commission has used a number of different approaches to collect funds to defray the costs of numbering administration⁴⁷ without implicating, for example, the Miscellaneous Receipts Act (MRA).⁴⁸ None of these cost recovery mechanisms implicated the MRA, and we do not believe that

⁴⁷ See 47 CFR § 52.12 for NANP Billing and Collection Agent; 47 CFR § 52.32 for Local Number Portability administrator.

⁴⁸ 31 U.S.C. § 3302(b) (stating that “an official or agent of the Government receiving money for the Government from any source shall deposit the money in the [U.S.] Treasury . . . without deduction for any charge or claim”).

(continued....)

applying auction funds to offset the TFNA costs, within the NANP, would implicate the MRA, due to the Commission's authority under section 251(e). We seek comment on this view.

27. We also seek comment on implementation issues from applying auction funds to offset the TFNA. We currently require that the TFNA's tariffed rates charged to RespOrgs be based on the cost of providing its services, determined on a year-by-year basis.⁴⁹ What is the best way to factor in auction revenues? Because the TFNA is limited to recovering its revenue requirement, and must budget and adjust its fees accordingly each year, how should it account for additional revenues from a number auction? Should we create a system whereby auction proceeds realized in a given calendar year⁵⁰ are held and remitted to the TFNA in the beginning of the following year (early January)? Or, are there alternative remittance systems that are preferable?

28. If an auction generates more revenue than the TFNA revenue requirement for a particular year, parties should comment on how to allocate those additional funds. Should the TFNA retain any excess auction revenues, and apply them to the revenue requirements of future years? Alternatively, should such remaining auction proceeds instead be remitted to the NANP Administrator (NANPA) to defray the general costs of administering it?⁵¹ Would directing any excess proceeds in this manner benefit all users of the NANP across the 20 countries that comprise it? Are any of the federal statutes discussed above implicated if we handle additional auctions proceeds in this manner?

6. Alternative Assignment Methodologies

29. The Commission seeks comment on the costs and benefits of other possible assignment approaches for desirable 833 numbers. We classify assignment approaches as either market-based, such as an auction, or administrative, such as a lottery or first-come, first-served. Notwithstanding our proposal to adopt the market-based auction approach described above, an administrative approach may also have value. Therefore, we also seek comment on possible benefits and drawbacks of administrative assignments.

30. Are there benefits specific to a lottery system? If the Commission conducts a lottery for later code openings, should we limit it to mutually exclusive numbers? Does the random outcome of a lottery promote any efficiencies or equities for businesses or individual consumers? Would alternative methods help conserve toll free numbers in any way? Are there benefits to maintaining the status-quo first-come, first-served approach? Has that approach protected any business or consumer interests that may be harmed by a market-based approach? If the Commission determines that a lottery or first-come, first-served approach is optimal, should we consider charging fees for use of a number, apart from reservation fees now charged by the TFNA? If so, would a uniform or demand-based fee structure help

Congress sometimes uses the term "general fund" which, for deposit purposes, is synonymous with "miscellaneous receipts." In the Act, for example, application fees paid to the Commission "shall be deposited in the general fund of the Treasury." 47 U.S.C. § 158(e); *see also* 47 U.S.C. §§ 154(f), 309(j), 510(d), 928(d), 1441, 1452(d), 1457.

⁴⁹ Somos, a non-profit membership corporation, is subject to section 61.38 of the Commission's rules, 47 CFR §61.38, and must file annual tariff revisions pursuant to the applicable part 61 rules for a dominant carrier, subject to the tariff requirements and enforcement provisions in the Act and the Commission's rules. *Toll Free Service Access Codes, Petition to Change the Composition of SMS/800, Inc.*, CC Docket No. 95-155 and WC Docket No. 12-260, Order, 28 FCC Rcd 15328, 15342, paras. 37-38 (2013) (*Toll Free Governance Order*). Tariff modifications must be filed each January 31 (following the close of its fiscal year, which is the calendar year) updating the rates for its services, effective in February. Each such filing must contain an updated cost of service study pursuant to section 61.38. *Id.*

⁵⁰ The fiscal year of Somos, the TFNA, is the calendar year.

⁵¹ The NANP is comprised of 20 North American countries that share numbering resources. *See* N. Am. Numbering Plan Admin., *About the North American Numbering Plan*, https://www.nationalnanpa.com/about_us/abt_nanp.html (last visited Aug. 16, 2017).

(continued....)

promote any of the efficiencies discussed herein? For example, should the Commission establish one price for all toll free numbers assigned by a lottery or first-come, first-served approach or should the Commission set a higher price for desirable numbers?

B. Secondary Markets for Toll Free Numbers

31. Consistent with the market-based approach for assigning mutually exclusive toll free numbers, we seek comment on revising our current rules to promote development of a secondary market for toll free numbers generally. A secondary market would allow subscribers to reassign their toll free numbers to other subscribers for a fee (or other compensation) the parties negotiate.⁵² We are mindful of long-standing Commission and legal precedent that a telephone number is a public resource that is not privately owned and cannot be sold.⁵³ We seek comment, however, on whether we should change our rules so that even though a subscriber does not own a toll free number, he or she may reassign the right to use that number for a fee. For example, in a secondary market, a business owner who wants to sell his or her business may sell the right to use the toll free number associated with the business. This reassignment would benefit both the seller and buyer of the business. Therefore, a secondary market may be more equitable and promote economic efficiencies as the number would be better utilized by the new business owner than if it were returned to the pool of available toll free numbers and subject to first-come, first-served assignment.

32. Current market realities appear to support a secondary market as an efficient and productive use of numbers.⁵⁴ Despite the fact that toll free numbers are a public resource and neither carriers nor subscribers “own” their numbers,⁵⁵ it takes little effort to find toll free numbers advertised for sale. An Internet search for “toll free numbers for sale” produces numerous options to presumably buy and sell toll free numbers, as do online auction site searches for “toll free number.”⁵⁶ Indeed, the Enforcement Bureau has taken action against an individual who, through his company, engaged in multiple rule violations, including brokering “15 toll free numbers for fees ranging from \$10,000 to \$17,500 per number” to a pharmaceutical company.⁵⁷ The fact that some parties are willing to take the risk of participating in a black market to obtain toll free numbers suggests that there is significant demand for such numbers. We believe that allowing these secondary markets would be beneficial by permitting subscribers to legally obtain numbers which they value. Even outside the context of a business ownership

⁵² Under the Commission’s rules, RespOrgs are responsible for managing and administering toll free records on behalf of subscribers. See 47 CFR § 52.101(b). We do not propose to change those responsibilities in this *Notice*.

⁵³ See 47 U.S.C. § 251(e); *1998 Toll Free Order*, 13 FCC Rcd at 9061, para. 6, n.14; *Toll Free Service Access Codes*, CC Docket No. 95-155, Notice of Proposed Rulemaking, 10 FCC Rcd 13692, 13702, para. 36 (1995); *1995 NANP Order*, 11 FCC Rcd at 2591, para. 4. Federal courts have upheld the Commission’s determination that no person or entity has a property interest in a telephone number. See, e.g., *In re StarNet, Inc.*, 355 F.3d 634, 637 (7th Cir. 2004) (“No one has a property interest in a phone number.”).

⁵⁴ See *supra*, para. 33(explaining that toll free numbers are bought and sold online).

⁵⁵ See *1997 Toll Free Order*, 12 FCC Rcd at 11178-79, para. 22; see also *Jahn v. 1-800-Flowers.com, Inc.*, 284 F.3d 807 (7th Cir. 2002), rehearing and rehearing en banc denied (Apr. 23, 2002); *1998 Toll Free Order*, 13 FCC Rcd at 9061, n.14; *Administration of the North American Numbering Plan*, CC Docket No. 92-237, Report and Order, 11 FCC Rcd 2588, 2591, para. 4 (1995) (*1995 NANP Order*). The buying and selling of numbers is a violation of the Commission’s brokering rule. See 47 CFR § 52.107(a).

⁵⁶ E.g., Internet Search for Vanity Toll Free Numbers for Sale, Bing.com, <http://www.bing.com/search?q=vanity+toll+free+numbers+for+sale&src=IE-SearchBox&FORM=IESR02> (last visited July 18, 2017); Ebay.com, https://www.ebay.com/sch/i.html?_nkw=toll+free+number (last visited July 24, 2017) (eBay site search to buy toll free numbers).

⁵⁷ *Mr. Richard Jackowitz IT Connect*, Notice of Apparent Liability for Forfeiture, 27 FCC Rcd 7896, 7896, para. 1 (2012).

(continued....)

change, RespOrgs and subscribers may wish to buy and sell toll free numbers among themselves based on the usefulness of the numbers. We seek comment on our proposal, and in particular, the impact of a rule change on our public resource precedent.

33. We also seek comment on whether the TFNA should receive any transaction proceeds or charge any fees to offset number administration costs. Such funds could be used for the same purpose as we propose for auction funds: to offset the costs of toll free numbering administration by the TFNA within the NANP for the benefit of all RespOrgs and subscribers.⁵⁸ Would this be an efficient use of funds? If we did charge a transaction fee for the transfer of toll free numbers in the secondary market, what amount should be charged? Are there legal constraints in charging a transaction fee for the transfer of toll free numbers? Are there international concerns if such fees went to offset costs of the NANP? Additionally, we seek comment on whether a RespOrg should be able to charge a fee for such transfers, and on whether such fees, if charged, should be regulated. Or, should we put in place some other mechanisms to prevent the abuse of any market power RespOrgs might have? Would a secondary market have an impact on settling trademark or branding disputes in desirable toll free numbers?

34. Interested parties should further comment on what types of information the TFNA would need from the buyer and seller to document a reassignment. Would the TFNA need to develop an online system to record any reassignments in the secondary market? How will parties know when a number is available for reassignment, i.e., when a RespOrg or subscriber wishes to sell it? Should the Commission or the TFNA maintain a database that potential buyers could check, or should buyers be responsible for their own advertising of numbers for sale?⁵⁹ How could the Commission or the TFNA help ensure members of the public are able to verify that an entity is in fact a RespOrg? Are there additional roles or functions the TFNA could perform or provide that would benefit functioning of a secondary market or market participants?

C. Toll Free Number Administration

1. Toll Free Number Rule Revisions

35. We propose revising certain toll free number rules to support our market approach to assigning certain toll free numbers for new code openings, recovered toll free numbers, and in the secondary market. Specifically, we propose revising the first-come, first-served rule⁶⁰ and eliminating the brokering rule⁶¹ entirely. We seek comment on proposed revisions to the warehousing and hoarding rules.⁶²

36. *First-Come, First-Served Rule.* We propose revising section 52.111 of our rules⁶³ to allow for the assignment of toll free telephone numbers to RespOrgs and subscribers on an equitable basis by auction, on a first-come, first-served basis, by using an alternative assignment methodology, or by a combination of these approaches as circumstances require. We intend to delegate to the Wireline Competition Bureau, in consultation with the Wireless Telecommunications Bureau, the authority to propose and designate the assignment methodology, after public notice and comment, for new toll free code openings and other assignments. We seek comment on this proposal. Are different or more specific

⁵⁸ See *supra* paras. 26-29 (Treatment of Auction Funds).

⁵⁹ See *supra*, para. 23 (seeking comment on proposal that the TFNA include subscriber information in the toll free database as a means of encouraging participation in toll free number auctions).

⁶⁰ 47 CFR § 52.111.

⁶¹ 47 CFR § 52.107(a), (a)(2).

⁶² 47 CFR §§ 52.105, 52.107.

⁶³ 47 CFR § 52.111 (“Toll free numbers shall be made available on a first-come, first-served basis unless otherwise directed by the Commission”).

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parameters needed? It has been nearly 20 years since the adoption of the first-come, first-served rule. Are there other revisions to that rule we should consider?

37. *Brokering Rule.* The Commission's brokering rule prohibits RespOrgs and subscribers from selling a toll free number for a fee.⁶⁴ We seek comment on eliminating the brokering rule as it directly precludes a secondary market for toll free numbers. Alternatively, we seek comment on whether the Commission should relax or suspend the brokering rule in any way. Commenters should address whether these approaches are consistent with the public resource nature of toll free numbers, while still promoting the economic efficiencies of a secondary market in toll free numbers. The brokering rule was adopted with the intention of equitably assigning numbers and minimizing number exhaust.⁶⁵ However, we now question whether the brokering rule was a useful way to achieve those ends. We seek comment on whether there are any other modifications we should make to the rule in lieu of eliminating it to avoid any undesirable or unforeseen outcomes.

38. *Warehousing and Hoarding Prohibitions.* We seek comment on revising or eliminating the current rules prohibiting warehousing and hoarding of toll free numbers.⁶⁶ These prohibitions are intended to limit exhaust of toll free numbers by ensuring that numbers, once removed from the pool of available numbers, are used efficiently.⁶⁷ We seek comment on whether these rules effectively serve their purpose. Should we keep the warehousing and hoarding prohibitions in place if we eliminate the number brokering rule? If numbers could be stored, and traded, would market forces ensure their efficient assignment? Without these rules, will RespOrgs and subscribers hold numbers they no longer need, hoping to sell them later at higher prices? If they were to do so, is this a reason for concern? If it were a reason for concern, could we discourage this practice by limiting the amount of time a RespOrg or subscriber may hold a toll free number without either using or selling it? That is, should we require that a number be "in use" within a certain time after it is obtained? What constitutes number "use" in this context? What time limit should we impose and how should we enforce that limitation? Should we consider increasing administrative fees on RespOrg (which would be passed on to subscribers) to limit the amount of time a number is held? In the alternative, should the Commission eliminate these warehousing and hoarding prohibitions, along with the brokering prohibition, and rely instead on market forces to determine if and when toll free numbers are sold in the secondary market?

39. *Other Rule Revisions.* We also seek comment on whether the Commission should eliminate or revise any other toll free rules. For example, should the Commission revise the definition of the Service Management System (SMS) Database in section 52.101(d) to include subscriber information as discussed above?⁶⁸ Moreover, section 52.103 of the rules contains a number of definitions and rules pertaining to the "status" of toll free numbers in the database and when these numbers are available for assignment to subscribers.⁶⁹ The term "status" refers to whether and how a toll free number is being used. What revisions, if any, to these categories should we consider to promote a secondary market?

2. Toll Free Numbers Used for Health and Safety Purposes

40. We seek comment on whether certain desirable toll free numbers necessary to promote health and safety be set aside for use, without cost, by government (federal, state, local and Tribal)

⁶⁴ 47 CFR § 52.107(a), (a)(2).

⁶⁵ See 1997 Toll Free Order, 12 FCC Rcd at 11189-90, paras. 38-40.

⁶⁶ See 47 CFR §§ 52.105, 52.107.

⁶⁷ See 1997 Toll Free Order, 12 FCC Rcd at 11189, para. 38.

⁶⁸ See *supra* para. 23.

⁶⁹ See 47 CFR § 52.103.

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agencies as well as by non-profit health and safety organizations.⁷⁰ Numerous organizations use desirable toll free numbers for a variety of purposes, such as for contacting the organization for information or assistance and for fundraising. For example, the Department of Health and Human Services uses 800-SUICIDE to support a network of suicide prevention hotlines.⁷¹ Parties should address the advantages and disadvantages of granting an exemption for certain governmental and non-profit health and public safety purposes. How would such a system be implemented and administered? For example, how should such health and safety organizations be defined, should definitions from other sections of the Act or the Commission's rules be used,⁷² and should other entities such as non-profit educational and charitable organizations be included in this definition or receive similar treatment? Should the Commission treat these purposes differently from other purposes for which desirable numbers are used? What are the pros and cons of each approach?

3. Abuse of Toll Free Numbers

41. We also seek comment on ways the Commission may address possible abuse of toll free numbers after they have been assigned to a public health and safety organizations or any purchaser in an auction or in the secondary market? Should the Commission propose a rule stating its ability to reclaim any toll free number that is used for fraudulent or otherwise unlawful purposes? Also, should the Commission create, or direct the TFNA to create, any terms and conditions for use of a toll free number purchased in an auction or the secondary market? Should the Commission codify its authority to reassign a number to another subscriber if there is a strong public interest need to use the number for another purpose. For example, following Hurricane Katrina in 2005, the Commission reassigned 800-RED-CROSS from a for-profit corporation to the American Red Cross so it could facilitate the Nation's response to the disaster wrought by Hurricane Katrina.⁷³

4. Toll Free Number Assignment Management

42. In light of the proposed changes to the toll free number assignment methodology in this *Notice*, we seek comment on whether the Commission should consider changes to overall toll free number administration. Since the Commission required designation of an impartial entity to administer toll free numbers,⁷⁴ the TFNA has evolved from a Bell Operating Company operated organization, to a non-profit membership corporation. Somos, Inc., the TFNA—organized as an independent, non-profit corporation—administers the toll free SMS.⁷⁵ Somos provides access to the SMS pursuant to the SMS Tariff that sets forth the regulations, rates, and charges applicable to SMS services, and describes the

⁷⁰ We refer to all such entities as “health and safety organizations,” regardless of whether they are government or non-profit.

⁷¹ See, e.g., *U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration Petition for Permanent Reassignment of Three Toll Free Suicide Prevention Hotline Numbers*, Order, 27 FCC Rcd 2965, 2968, para. 7 (WCB 2012).⁷² See, e.g., the definition of “public safety services” in section 337(f) of the Act and the eligibility criteria for public safety licensees in section 90.20(a) of the Commission's rules. 47 U.S.C. § 337(f); 47 CFR § 90.20(a).

⁷² See, e.g., the definition of “public safety services” in section 337(f) of the Act and the eligibility criteria for public safety licensees in section 90.20(a) of the Commission's rules. 47 U.S.C. § 337(f); 47 CFR § 90.20(a).

⁷³ See *Toll Free Service Access Codes*, Order, 20 FCC Rcd 15089, 15090, para. 3 (2005)

⁷⁴ *Toll Free Governance Order*, 28 FCC Rcd at 15331, para. 8 (citing *Toll Free Service Access Codes*, Second Report and Order and Further Notice of Proposed Rulemaking, 12 FCC Rcd 11162, 11162 (1997)).

⁷⁵ As described in the SMS Tariff, the SMS is “an operations and administrative support system used for the creation and maintenance of call processing records for toll free telephone numbers” as well as “the source of toll free number availability and reservation status information.” See SMS Tariff § 2.1.

(continued....)

features and functions of the SMS.⁷⁶

43. *SMS 800 Tariff*. Should we consider a different mechanism for toll free number administration than the tariff mechanism described above? The TFNA currently files a tariff⁷⁷ that outlines the features and functions of the SMS, establishes RespOrg responsibilities and eligibility criteria, and sets forth the rates for service.⁷⁸ The tariff also lists both the monthly and non-recurring charges for database access and other SMS services. In the *1993 CompTel Declaratory Ruling*, the Commission declared that RespOrg access to the SMS database “is a Title II common carrier service and shall be provided subject to tariff.”⁷⁹ Subsequently, in 2013, the Commission found that the reorganized toll free administrator, now Somos, met the neutrality requirements required by section 251(e) of the Act and the Commission’s rules, so long as it files and maintains the tariff.⁸⁰

44. Should the Commission consider a different regulatory treatment for SMS service? How, given the central role of the TFNA in the administration of toll free numbers, would we ensure the public is protected from unreasonable rates, terms, and conditions? Alternatively, if the Commission adheres to the current TFNA model, including its filing of a tariff, should the Commission require more transparency in Somos’s operations and budget? Are there other ways to make Somos’s financial information more transparent? Although the tariff outlines Somos’s general operating procedures, it does not specifically describe its operating costs, or any other pricing guidelines.⁸¹ As a non-profit organization, Somos is only allowed to recover operating costs. Part of the Commission’s rationale in allowing Somos to reorganize as a non-profit membership was “any savings realized as a result of SMS/800, Inc.’s corporate restructuring is likely to be reflected in lower tariffed rates for RespOrgs, which should in turn lead to lower charges for toll free subscribers.”⁸² Would a transparent, or itemized accounting of Somos’s costs further this goal and also better inform RespOrgs and subscribers of the costs of acquiring toll free numbers? We seek comment and ideas from industry on the roles of the TFNA and tariff as an important means to help us modernize toll free number assignment.

D. Legal Authority

45. As noted above, section 251(e)(1) of the Act gives the Commission “exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States” and provides that numbers must be made “available on an equitable basis.”⁸³ The Commission retains “authority to set policy with respect to all facets of numbering administration in the United States.”⁸⁴ The

⁷⁶ See SMS Tariff § 1.1.

⁷⁷ *Toll Free Governance Order*, 28 FCC Rcd at 15342, para. 38.

⁷⁸ See generally Somos Tariff.

⁷⁹ *Provision of Access for 800 Service*, Order, CC Docket No. 86-10, 8 FCC Rcd 1423, 1423, para. 1 (1993) (*CompTel Declaratory Ruling*); see also *id.* at 1426, para. 27 (finding that “SMS access is *incidental* to the provision of 800 access services.” *Id.* (emphasis added)).

⁸⁰ See 47 U.S.C. § 251(c); see also 47 CFR §52.12; see also *Toll Free Governance Order*, 28 FCC Rcd at 15329, para. 2 (2013).

⁸¹ See generally Somos Tariff.

⁸² *Toll Free Governance Order*, 28 FCC Rcd at 15329, para. 1.

⁸³ 47 U.S.C. § 251(e)(1).

⁸⁴ *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers, Area Code Relief Plan for Dallas and Houston, Ordered by the Public Utility Commission of Texas, Administration of the North American Numbering Plan, Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech-Illinois, Second*

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Commission has promulgated toll free number rules to satisfy these congressional mandates⁸⁵ and, the proposed actions in this *Notice* are intended to further and better satisfy these mandates. This exclusive jurisdiction over numbering policy enables the Commission to act flexibly and expeditiously on important numbering matters.⁸⁶ Section 251(e)(1) of the Act requires the Commission to ensure that numbers are made available “on an equitable basis” and Section 1 of the Act states that the Commission is to ensure that efficient communication services are available to the people of the United States.⁸⁷ We have consistently found that these sections of the Act require the Commission to ensure the equitable, efficient, and orderly assignment of toll free numbers.⁸⁸ This plenary numbering authority supports the toll free numbering proposals described earlier in this *Notice*, including a new simple, low-cost auction method of assigning toll free numbers; and modifications to our current rules to allow a secondary market for toll free numbers that would support market forces after a code opening.

46. In addition to exclusive jurisdiction over numbering resources, the Commission also has broad authority, pursuant to section 4(i) of the Act, to “perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with [the Act], as may be necessary in the execution of its functions.”⁸⁹ Further, section 201(b) of the Act provides that “[a]ll charges, practices, classifications, and regulations for and in connection with such communication service, shall be just and reasonable” and that the Commission “may prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of [the Act].”⁹⁰ Sections 201(b) and 251(e)(1) of the Act “empower the Commission to ensure that toll free numbers, which are a scarce and valuable national public resource, are allocated in an equitable and orderly manner that serves the public interest.”⁹¹

47. As we noted in the background section of this *Notice*, in 1998, the Commission previously considered using an auction approach to toll free number assignment. In the *1998 Toll Free Order*, the Commission recognized that auctions are both an equitable and a “generally efficient” assignment mechanism.⁹² At that time, however, the Commission could not say “based on the present record that auctions of vanity numbers would produce efficiencies that would outweigh the practical difficulties,” such as cost, administration, and impact on the international membership of the NANP.⁹³ Our proposal to implement auctions for mutually exclusive toll free numbers is consistent with the Commission’s previous finding that auctions are generally equitable and efficient. We believe that auctions would now be a more equitable and efficient approach to assignment of mutually exclusive toll free numbers and that the benefits of such auctions would outweigh any practical difficulties. We seek

Report and Order and Memorandum Opinion and Order, 11 FCC Rcd 19392, 19512, para. 271 (1996) (*Local Competition Second Report and Order*).

⁸⁵ See 47 CFR §§ 52.101 – 111.

⁸⁶ *Local Competition Second Report and Order*, 11 FCC Rcd at 19512, para. 271.

⁸⁷ 47 U.S.C. §§ 151, 251(e)(1).

⁸⁸ See, e.g., *Toll Free Service Access Codes, Petitions to Modify 888 Number Allocation Plan Filed by LCI International, Inc., UniDial, Inc., and Consolidated Communication Telecom Services Inc.*, Second Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 95-155, 12 FCC Rcd 11162, 11164, 11176, paras. 2, 18 (1997) (*Toll Free Second Report and Order*); see also 47 U.S.C. §§ 151, 251(e)(1).

⁸⁹ 47 U.S.C. § 154(i).

⁹⁰ 47 CFR § 201(b).

⁹¹ *Toll Free Second Report and Order*, 12 FCC Rcd at 11178-79, para. 22; see also 47 U.S.C. §§ 201(b), 251(e)(1).

⁹² *1998 Toll Free Order*, 13 FCC Rcd at 9066, para. 16 (stating that auctions “offer all participants an equal opportunity to obtain a particular vanity number”).

⁹³ *Id.*

(continued....)

comment on this assessment. With nearly two more decades of experience and increased demand for toll free numbers, we seek to develop a new record which we believe will show that the efficiencies produced by the proposed auction will outweigh any practical difficulties.

48. For the reasons previously discussed in this *Notice*, we believe the proposals herein are consistent with and further the Commission's statutory mandate to make "numbers available on an equitable basis."⁹⁴ These proposals include a more efficient and market-driven approach to assigning toll free numbers, better promote productive use of numbers, and reflect current market realities. We invite comment on whether these actions are consistent with the Commission's plenary numbering authority as set forth in section 251(e)(1) of the Act, and supported by sections 1, 4(i), and 201(b) of the Act.

IV. PROCEDURAL MATTERS

A. Comment Filing Procedures

49. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document in Dockets WC 17-192, and CC 95-155. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS).⁹⁵ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- *Electronic Filers*: Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs/>
- *Paper Filers*: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.
- *People with Disabilities*: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an email to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

50. This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.⁹⁶ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the

⁹⁴ See 47 U.S.C. § 251(e)(1).

⁹⁵ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998).

⁹⁶ 47 CFR §§ 1.1200 *et seq.*

presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by Rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

B. Initial Regulatory Flexibility Analysis

51. Pursuant to the Regulatory Flexibility Act (RFA),⁹⁷ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and actions considered in this Notice of Proposed Rulemaking. The text of the IRFA is set forth in Appendix B. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comment on the Notice of Proposed Rulemaking. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Notice of Proposed Rulemaking, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).⁹⁸

C. Paperwork Reduction Act

52. This document contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, we seek specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.⁹⁹

D. Contact Person

53. For further information about this proceeding, please contact E. Alex Espinoza, FCC Wireline Competition Bureau, Competition Policy Division, Room 5-C211, 445 12th Street, S.W., Washington, D.C. 20554, at (202) 418-0849 or Alex.Espinoza@fcc.gov.

V. ORDERING CLAUSES

54. Accordingly, IT IS ORDERED, pursuant to sections 1, 4(i), 201(b), and 251(e)(1) of the Communication Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201(b), and 251(e)(1) that this Notice of Proposed Rulemaking IS ADOPTED.

55. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed

⁹⁷ See 5 U.S.C. § 603.

⁹⁸ See 5 U.S.C. § 603(a).

⁹⁹ See 44 U.S.C. § 3506(c)(4).

Rulemaking, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

In this Appendix, to assist interested stakeholders in preparing focused and detailed comments on the *Notice*, the Commission provides additional information on our interest in how potential bidders determine the value of toll free numbers, and on the Vickrey auction.

Toll Free Number Valuations

The way potential bidders in our proposed auction determine their valuations of coveted numbers, such as 1-833-FLOWERS, can determine whether there are benefits from having a multi-round auction. One possibility is individuals' valuations are idiosyncratic, that is, are inherent to the specific bidder, without commonalities or interdependencies in how subscriber valuations are determined. For example, potential bidders may develop their valuations based on the size of their merchant network, and their business models, and these valuations would not be changed if they were to discover a different bidder valued the same number differently.

RespOrgs act as intermediaries in the toll free market, RespOrgs' gains or surpluses from supplying a toll free number may be characterized by significant commonalities or interdependencies, that is, RespOrg valuations of toll free numbers may not be idiosyncratic. Instead, a RespOrg that observed another RespOrg with a significantly higher or lower valuation than its own might wonder if it was misinformed, and the other RespOrg knows something about the value of the number that it does not. A RespOrg derives surplus from acquiring a toll free number only to the extent that it can profitably supply it to a subscriber. This surplus is equal to the difference between the price the RespOrg obtains for the number, and the cost of supplying it. Differences in the technologies RespOrgs use to supply numbers, for example, to provide geographic-based calling, or in the markets the RespOrg address may give rise to idiosyncratic differences in cost. However, if RespOrgs generally compete with other similar RespOrgs using the same technologies, seeking to supply the same subscribers with largely the same service, then the key factor that might lead such RespOrgs' valuations of a number to differ is their assessment of the highest price that a subscriber is willing to pay for the number (since the relevant RespOrg's have similar costs, and are supplying essentially the same service). While the Commission recognizes many RespOrgs have different business models, it also considers that in general RespOrgs largely use the same technologies to supply the same services to customers with a demand for certain types of valuable toll free numbers. For any such RespOrgs, the Commission does not view differences in the cost of supplying toll free number or their business models as giving rise to significant differences in competing RespOrgs' surpluses from supplying a given toll free number. The *Notice* seeks comment on the extent to which this conclusion is correct, that is, on whether differences in the cost structure or business plans of various RespOrgs competing for the same customers using similar technologies may cause their surpluses from supplying a given toll-free number to vary idiosyncratically.

If the Commission is right about competing RespOrgs largely using the same technologies to satisfy the same business models, then the surpluses of different RespOrgs from supplying a toll free number are not likely to differ significantly *ex post*. However, the RespOrgs' *ex ante* valuations of a toll free number may be uncertain. In particular, while many RespOrgs likely have a deep understanding of the market for toll free number, and, consequently, their valuations of a given toll free number might be fairly precise, other competing RespOrgs may not have a similar understanding of the market, and their valuations of a given number might be uncertain to some degree. If it is true that at least some competing RespOrgs have materially different estimates of customers' valuations of certain toll free numbers than others, then an open auction might allow bidding RespOrgs to refine their value of the number or numbers they are bidding for. However, the Commission believes that, overall, the RespOrgs' valuations of a toll-free number are only slightly affected by uncertainty. We seek to understand the degree to which uncertainty affects some of the RespOrgs' valuations of a toll-free number.

The Vickrey Auction

To formulate their views on a Vickrey auction **with no package bids**, as proposed in the *Notice*, commenters may find this example helpful. Suppose there are two bidders, A and B, and two toll free numbers to be assigned Number 1 and Number 2. Bids are indicated by the dollar amounts in the table below. These bids should not be treated as indicative in any way of the expected value of any of the numbers auctioned, and are provided only as an example.

Bidding Example Table

Bidder/Number	1	2	{1,2}
A	\$10	\$20	\$32
B	\$16	\$8	\$25

In a Vickrey auction without package bids, but which allows simultaneous bidding over more than one number, only columns 1 and 2 are relevant. Bidder A obtains Number 2 because it bid the highest amount (\$20). Bidder A pays the highest non-winning bid for Number 2 (\$8). Bidder B obtains Number 1, because it bid the highest amount (\$16). Bidder 2 pays the highest non-winning bid for Number 1 (\$10). Moreover, our expectation is that the four bids reflect the bidders' true valuation of each number. This is because regardless of what other bids are made, a bidder can always do better by bidding its true value. If instead the bidder underbids, it may lose when it could have won by paying no more and potentially less than his value. If it overbids, it may win and potentially pay more than the object is worth to it. Therefore, it is optimal to bid his value.¹ Consequently, if each number's valuation was independent of the other, the auction would be economically efficient. It would assign the numbers to maximize value to the bidders.

In a generalized Vickrey auction **with package bids**, given the bids found in the table, the numbers are also assigned as in in the non-package generalized Vickrey auction.² In this case, however, the payments required of the winning bidders change. As in the case of the non-package auction, the payments in the generalized Vickrey auction are equal to the opportunity cost (highest alternative value) of the items won by each bidder. However, as is the case in the table, this changes the opportunity cost of the bid. The payments required in the package auction are determined as follows:

If Number 2 is assigned to Bidder B instead of Bidder A, then Bidder B would realize a value of \$25 (because Bidder B would have obtained both numbers). By assigning Number 2 to Bidder A, the (opportunity) cost for Bidder B is \$9 (\$25 minus \$16, the value for Bidder B from obtaining Number 1). If Number 1 is assigned to Bidder A instead of Bidder B, then Bidder A would realize a value of \$32. By assigning Number 1 to Bidder B, the (opportunity) cost for Bidder A is \$12 (\$32 minus \$20). Thus, the outcome of the generalized Vickrey auction is as follows: Bidder A obtains Number 2, for which it pays \$9. Bidder B obtains Number 1, for which it pays \$12.

Further, in such auctions, by similar reasoning to that provided for the non-package auction, the bidders best strategy is to bid their valuations. Accordingly, the highest value can be realized by assigning Number 2 to Bidder A and Number 1 to Bidder B. In this case, that value is \$36: \$20 for Bidder A and \$16 for Bidder B. If Number 1 is assigned to Bidder A, and Number 2 to Bidder B, then

¹ This assumes the rules of the auction are fully enforceable, and truth revelation in this auction would not be harmful to the bidders in other contexts.

² A different allocation would emerge, for example, if Bidder A valued both numbers at 37. Then Bidder A would get both numbers.

(continued....)

the value of the assignment is \$18. If both numbers are assigned to Bidder A, the value of the assignment is \$32. If both numbers are assigned to Bidder B, the value of the assignment is \$25. The generalized Vickrey auction assigns the two numbers to maximize value. Accordingly, the generalized Vickrey auction assigns Number 2 to Bidder A and Number 1 to Bidder B. Thus, the generalized Vickrey auction with package bids is economically efficient allocating the numbers to maximize the value to bidders.³

³ Subject to the caveats discussed in note 2, *supra*.

APPENDIX B**Draft Proposed Rules for Comment**

The Federal Communications Commission proposes to amend Part 52 of Title 47 of the Code of Federal Regulations as follows:

PART 52 – NUMBERING

* * * * *

Subpart D—Toll Free Numbers

1. Amend section 52.111 by:

The revision reads as follows:

§ 52.111 Toll free number assignment.

Toll free telephone numbers must be made available to Responsible Organizations and subscribers on an equitable basis. The Commission will assign toll free numbers by auction, on a first-come, first-served basis, by an alternative assignment methodology, or by a combination of the foregoing options, as circumstances require.

APPENDIX C

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹⁰³ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this *Notice of Proposed Rulemaking (Notice)*. The Commission requests written public comments on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided on the first page of the *Notice*. The Commission will send a copy of the *Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).¹⁰⁴ In addition, the *Notice* and IRFA (or summaries thereof) will be published in the Federal Register.¹⁰⁵

A. Need for, and Objectives of, the Proposed Rules

2. In this *Notice*, we propose changes to, and seek comment on, our toll free number administration and assignment rules. While the Commission's current rule uses a first-come, first-served approach to the assignment of toll free numbers,¹⁰⁶ to help ensure the continued usefulness and availability of this finite resource, we now examine alternative assignment methodologies. The objective of the proposed rules is to create a more efficient method of toll free number assignment that is consistent with our statutory mandate to make "numbers available on an equitable basis."¹⁰⁷ Specifically, we propose amending our rules to allow for use of an auction to assign certain toll free numbers—such as vanity and repeater numbers—in order to better promote the equitable and efficient, use of numbers. With the opportunity afforded by the opening of the 833 toll free code, we propose to use an auction for assigning numbers for which mutually exclusive¹⁰⁸ interest has been expressed. We seek comment on repealing or relaxing the prohibition on number brokering, thereby allowing toll free number secondary markets, and consider a variety of other means to modernize toll free number assignments.

B. Legal Basis

3. The legal basis for any action that may be taken pursuant to this *Notice* is contained in sections 1, 4(i), 201(b), and 251(e)(1) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201(b), and 251(e)(1).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

4. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rule revisions, if adopted.¹⁰⁹ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."¹¹⁰ In addition, the term "small business" has

¹⁰³ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601–612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 845 (1996).

¹⁰⁴ See 5 U.S.C. § 603(a).

¹⁰⁵ See *id.*

¹⁰⁶ 47 CFR § 52.111.

¹⁰⁷ See 47 U.S.C. § 251(e)(1).

¹⁰⁸ Mutually exclusive numbers are those toll free numbers for which there are two or more requests for assignment. See *Toll Free Service Access Codes*, Order, 35 FCC Rcd 3153, 3155, para. 6 (WCB 2017) (*833 Code Opening Order*).

¹⁰⁹ See 5 U.S.C. § 603(b)(3).

¹¹⁰ See 5 U.S.C. § 601(6).

the same meaning as the term “small-business concern” under the Small Business Act.¹¹¹ A “small-business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.¹¹²

5. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three comprehensive small entity size standards that could be directly affected herein.¹¹³ First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA’s Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.¹¹⁴ These types of small businesses represent 99.9% of all businesses in the United States which translates to 28.8 million businesses.¹¹⁵ Next, the type of small entity described as a “small organization” is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”¹¹⁶ Nationwide, as of 2007, there were approximately 1,621,215 small organizations.¹¹⁷ Finally, the small entity described as a “small governmental jurisdiction” is defined generally as “governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand.”¹¹⁸ U.S. Census Bureau data published in 2012 indicate that there were 89,476 local governmental jurisdictions in the United States.¹¹⁹ We estimate that, of this total, as many as 88,761 entities may qualify as “small governmental jurisdictions.”¹²⁰ Thus, we estimate that most governmental jurisdictions are small.

6. *Wired Telecommunications Carriers.* The U.S. Census Bureau defines this industry as “establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including

¹¹¹ See 5 U.S.C. § 601(3) (incorporating by reference the definition of “small-business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

¹¹² See 15 U.S.C. § 632.

¹¹³ See 5 U.S.C. § 601(3)-(6).

¹¹⁴ See SBA, Office of Advocacy, “Frequently Asked Questions, Question 1 – What is a small business?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016).

¹¹⁵ See SBA, Office of Advocacy, “Frequently Asked Questions, Question 2- How many small businesses are there in the U.S.?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016).

¹¹⁶ 5 U.S.C. § 601(4).

¹¹⁷ Independent Sector, *The New Nonprofit Almanac & Desk Reference* (2010).

¹¹⁸ 5 U.S.C. § 601(5).

¹¹⁹ U.S. Census Bureau, *Statistical Abstract of the United States: 2012* at 267, Table 428 (2011), <http://www2.census.gov/library/publications/2011/compendia/statab/131ed/2012-statab.pdf> (citing data from 2007).

¹²⁰ The 2012 U.S. Census Bureau data for small governmental organizations are not presented based on the size of the population in each organization. There were 89,476 local governmental organizations in the Census Bureau data for 2012, which is based on 2007 data. As a basis of estimating how many of these 89,476 local government organizations were small, we note that there were a total of 715 cities and towns (incorporated places and minor civil divisions) with populations over 50,000 in 2011. See U.S. Census Bureau, *City and Town Totals Vintage: 2011*, <http://www.census.gov/popest/data/cities/totals/2011/index.html>. If we subtract the 715 cities and towns that meet or exceed the 50,000 population threshold, we conclude that approximately 88,761 are small.

(continued....)

VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.”¹²¹ The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees.¹²² Census data for 2012 show that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this size standard, the majority of firms in this industry can be considered small.

7. *Local Exchange Carriers (LECs)*. Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. The closest applicable NAICS Code category is Wired Telecommunications Carriers as defined above. Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees.¹²³ According to Commission data, census data for 2012 shows that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.¹²⁴ The Commission therefore estimates that most providers of local exchange carrier service are small entities that may be affected by the rules adopted.

8. *Incumbent LECs*. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The closest applicable NAICS Code category is Wired Telecommunications Carriers as defined above. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹²⁵ According to Commission data, 3,117 firms operated in that year. Of this total, 3,083 operated with fewer than 1,000 employees.¹²⁶ Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by the rules and policies adopted. Three hundred and seven (307) Incumbent Local Exchange Carriers reported that they were incumbent local exchange service providers.¹²⁷ Of this total, an estimated 1,006 have 1,500 or fewer employees.¹²⁸

9. *Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), Shared-Tenant Service Providers, and Other Local Service Providers*. Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate NAICS Code category is Wired Telecommunications Carriers, as defined above. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹²⁹ U.S. Census data for 2012 indicate that 3,117 firms operated during that year. Of that number, 3,083 operated with fewer than 1,000

¹²¹ U.S. Census Bureau, *NAICS Search*, <http://www.census.gov/cgi-bin/sssd/naics/naicsrch> (last visited June 21, 2017).

¹²² 13 CFR § 121.201 (NAICS Code 517110).

¹²³ 13 CFR § 121.201 (NAICS Code 517110).

¹²⁴ See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016) http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

¹²⁵ 13 CFR § 121.201 (NAICS Code 517110).

¹²⁶ See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016) http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

¹²⁷ See Fed. Commc’ns Comm’n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

¹²⁸ Fed. Commc’ns Comm’n, *Trends in Telephone Service*, 5-5, tbl. 5.3 (Sept. 2010) (*Trends in Telephone Service*), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

¹²⁹ 13 CFR § 121.201 (NAICS Code 517110).

(continued....)

employees.¹³⁰ Based on this data, the Commission concludes that the majority of Competitive LECS, CAPs, Shared-Tenant Service Providers, and Other Local Service Providers, are small entities. According to Commission data, 1,442 carriers reported that they were engaged in the provision of either competitive local exchange services or competitive access provider services. Of these 1,442 carriers, an estimated 1,256 have 1,500 or fewer employees. In addition, 17 carriers have reported that they are Shared-Tenant Service Providers, and all 17 are estimated to have 1,500 or fewer employees. Also, 72 carriers have reported that they are Other Local Service Providers. Of this total, 70 have 1,500 or fewer employees. Consequently, based on internally researched FCC data, the Commission estimates that most providers of competitive local exchange service, competitive access providers, Shared-Tenant Service Providers, and Other Local Service Providers are small entities.

10. We have included small incumbent LECs in this present RFA analysis. As noted above, a “small business” under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and “is not dominant in its field of operation.”¹³¹ The SBA’s Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not “national” in scope.¹³² We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

11. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA has developed a definition for Interexchange Carriers. The closest NAICS Code category is Wired Telecommunications Carriers as defined above. The applicable size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.¹³³ U.S. Census data for 2012 indicates that 3,117 firms operated during that year. Of that number, 3,083 operated with fewer than 1,000 employees.¹³⁴ According to internally developed Commission data, 359 companies reported that their primary telecommunications service activity was the provision of interexchange services.¹³⁵ Of this total, an estimated 317 have 1,500 or fewer employees. Consequently, the Commission estimates that the majority of IXCs are small entities that may be affected by our proposed rules.

12. *Local Resellers*. The SBA has developed a small business size standard for the category of Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this

¹³⁰ See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016)

http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodTtype=table.

¹³¹ 5 U.S.C. § 601(3).

¹³² Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (filed May 27, 1999). The Small Business Act contains a definition of “small business concern,” which the RFA incorporates into its own definition of “small business.” 15 U.S.C. § 632(a); 5 U.S.C. § 601(3). SBA regulations interpret “small business concern” to include the concept of dominance on a national basis. 13 CFR § 121.102(b).

¹³³ 13 CFR § 121.201 (NAICS Code 517110).

¹³⁴ See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016),

http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodTtype=table.

¹³⁵ See *Trends in Telephone Service*, at tbl. 5.3.

industry.¹³⁶ Under that size standard, such a business is small if it has 1,500 or fewer employees.¹³⁷ Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, all operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of these prepaid calling card providers can be considered small entities.

13. *Toll Resellers.* The Commission has not developed a definition for Toll Resellers. The closest NAICS Code Category is Telecommunications Resellers. The Telecommunications Resellers industry comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure. Mobile virtual network operators (MVNOs) are included in this industry.¹³⁸ The SBA has developed a small business size standard for the category of Telecommunications Resellers.¹³⁹ Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁴⁰ Census data for 2012 show that 1,341 firms provided resale services during that year. Of that number, 1,341 operated with fewer than 1,000 employees. Thus, under this category and the associated small business size standard, the majority of these resellers can be considered small entities. According to Commission data, 881 carriers have reported that they are engaged in the provision of toll resale services. Of this total, an estimated 857 have 1,500 or fewer employees. Consequently, the Commission estimates that the majority of toll resellers are small entities.

14. *Other Toll Carriers.* Neither the Commission nor the SBA has developed a definition for small businesses specifically applicable to Other Toll Carriers. This category includes toll carriers that do not fall within the categories of interexchange carriers, operator service providers, prepaid calling card providers, satellite service carriers, or toll resellers. The closest applicable NAICS Code category is for Wired Telecommunications Carriers as defined above. Under the applicable SBA size standard, such a business is small if it has 1,500 or fewer employees.¹⁴¹ Census data for 2012 shows that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees.¹⁴² Thus, under this category and the associated small business size standard, the majority of Other Toll Carriers can be considered small. According to internally developed Commission data, 284 companies reported that their primary telecommunications service activity was the provision of other toll carriage.¹⁴³ Of these, an estimated 279 have 1,500 or fewer employees. Consequently, the Commission estimates that most Other Toll Carriers are small entities that may be affected by rules adopted pursuant to the Second Further Notice.

¹³⁶ U.S. Census Bureau, *2012 NAICS Definition*, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517911&search=2012+NAICS+Search&search=2012> (last visited June 20, 2017).

¹³⁷ 13 CFR § 121.201 (NAICS code 517911).

¹³⁸ U.S. Census Bureau, *2012 NAICS Definition*, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517911&search=2012+NAICS+Search&search=2012> (last visited June 20, 2017) (NAICS 517911 Telecommunications Resellers).

¹³⁹ 13 CFR § 121.201 (NAICS code 517911).

¹⁴⁰ See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

¹⁴¹ 13 CFR § 121.201 (NAICS code 517110).

¹⁴² See U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table.

¹⁴³ *Trends in Telephone Service*, at tbl. 5.3.

(continued....)

15. *Prepaid Calling Card Providers.* The SBA has developed a definition for small businesses within the category of Telecommunications Resellers. Under that SBA definition, such a business is small if it has 1,500 or fewer employees.¹⁴⁴ According to the Commission's Form 499 Filer Database, 500 companies reported that they were engaged in the provision of prepaid calling cards.¹⁴⁵ The Commission does not have data regarding how many of these 500 companies have 1,500 or fewer employees. Consequently, the Commission estimates that there are 500 or fewer prepaid calling card providers that may be affected by the rules.

16. *Wireless Telecommunications Carriers (except Satellite).* This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services.¹⁴⁶ The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.¹⁴⁷ For this industry, U.S. Census data for 2012 show that there were 967 firms that operated for the entire year.¹⁴⁸ Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more.¹⁴⁹ Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

17. The Commission's own data—available in its Universal Licensing System—indicate that, as of October 25, 2016, there are 280 Cellular licensees that will be affected by our actions today.¹⁵⁰ The Commission does not know how many of these licensees are small, as the Commission does not collect that information for these types of entities. Similarly, according to internally developed Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service, and Specialized Mobile Radio Telephony services.¹⁵¹ Of this total, an estimated 261 have 1,500 or fewer employees, and 152 have more than 1,500 employees. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

18. *Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined “small business” for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a “very small business” as an entity with average gross

¹⁴⁴ 13 CFR § 121.201 (NAICS code 517110).

¹⁴⁵ See Fed. Comm'n's Comm'n, *FCC Form 499 Filer Database*, <http://apps.fcc.gov/cgb/form499/499a.cfm> (last visited June 20, 2017).

¹⁴⁶ NAICS Code 517210. See U.S. Census Bureau, *American Fact Finder—About the Data*, <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.517210>.

¹⁴⁷ 13 CFR § 121.201 (NAICS code 517210).

¹⁴⁸ U.S. Census Bureau, *American Fact Finder* (Jan 08, 2016), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table (NAICS 51720, “Subject Series - Estab & Firm Size: Employment Size of Establishments for the U.S.: 2012”).

¹⁴⁹ Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

¹⁵⁰ See Fed. Comm'n's Comm'n, *Universal Licensing System*, <http://wireless.fcc.gov/uls> (last visited June 20, 2017). For the purposes of this FRFA, consistent with Commission practice for wireless services, the Commission estimates the number of licensees based on the number of unique FCC Registration Numbers.

¹⁵¹ *Trends in Telephone Service*, at tbl. 5.3

revenues of \$15 million for each of the three preceding years.¹⁵² The SBA has approved these definitions.¹⁵³

19. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. As noted, the SBA has developed a small business size standard for Wireless Telecommunications Carriers (except Satellite).¹⁵⁴ Under the SBA small business size standard, a business is small if it has 1,500 or fewer employees.¹⁵⁵ According to Commission data, 413 carriers reported that they were engaged in wireless telephony.¹⁵⁶ Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. Therefore, a little less than one third of these entities can be considered small.

20. *Cable and Other Subscription Programming.* This industry comprises establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis. The broadcast programming is typically narrowcast in nature (e.g. limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from external sources. The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.¹⁵⁷ The SBA has established a size standard for this industry stating that a business in this industry is small if it has 1,500 or fewer employees.¹⁵⁸ The 2012 Economic Census indicates that 367 firms were operational for that entire year. Of this total, 357 operated with less than 1,000 employees.¹⁵⁹ Accordingly we conclude that a substantial majority of firms in this industry are small under the applicable SBA size standard.

21. *Cable Companies and Systems (Rate Regulation).* The Commission has developed its own small business size standards for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.¹⁶⁰ Industry data indicate that there are currently 4,600 active cable systems in the United States.¹⁶¹ Of this total, all but eleven cable operators nationwide are small under the 400,000-subscriber size standard.¹⁶² In addition, under the Commission's rate regulation rules, a "small system" is a cable system serving 15,000 or fewer

¹⁵² *Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS)*, Report and Order, 12 FCC Rcd 10785, 10879, para. 194 (1997).

¹⁵³ See Letter from Aida Alvarez, Administrator, SBA, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (filed Dec. 2, 1998).

¹⁵⁴ 13 CFR § 121.201 (NAICS code 517210).

¹⁵⁵ *Id.*

¹⁵⁶ *Trends in Telephone Service*, at tbl. 5.3.

¹⁵⁷ See U.S. Census Bureau, 2012 NAIC Definition, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=515210&search=2012+NAICS+Search&search=2012> (last visited June 20, 2017) (2012 NAICS code, "515210 Cable and Other Subscription Programming").

¹⁵⁸ 13 CFR § 121.201 (NAICSs Code 515210).

¹⁵⁹ See U.S. Census Bureau, *American Fact Finder* (Jan 08, 2016), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ2&prodType=table (NAICS code 51510, "Estab & Firm Size: Employment Size of Establishments for the U.S.").

¹⁶⁰ 47 CFR § 76.901(e).

¹⁶¹ This figure was derived from a August 15, 2015 report from the FCC Media Bureau, based on data contained in the Commission's Cable Operations and Licensing System (COALS). See <http://www.fcc.gov/coals>.

¹⁶² Data obtained from SNL Kagan database on April 19, 2017.

(continued....)

subscribers.¹⁶³ Current Commission records show 4,600 cable systems nationwide. Of this total, 3,900 cable systems have fewer than 15,000 subscribers, and 700 systems have 15,000 or more subscribers, based on the same records.¹⁶⁴ Thus, under this standard as well, we estimate that most cable systems are small entities.

22. *Cable System Operators (Telecom Act Standard)*. The Communications Act also contains a size standard for small cable system operators, which is “a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000.”¹⁶⁵ There are approximately 52,403,705 cable video subscribers in the United States today.¹⁶⁶ Accordingly, an operator serving fewer than 524,037 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.¹⁶⁷ Based on available data, we find that all but nine incumbent cable operators are small entities under this size standard.¹⁶⁸ We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.¹⁶⁹ Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

23. *All Other Telecommunications*. The “All Other Telecommunications” industry is comprised of establishments that are primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry.¹⁷⁰ The SBA has developed a small business size standard for “All Other Telecommunications,” which consists of all such firms with gross annual receipts of \$32.5 million or less.¹⁷¹ For this category, U.S. Census data for 2012 show that there were 1,442 firms that operated for the entire year. Of these firms, a total of 1,400 had gross annual receipts of less than \$25 million.¹⁷² Thus a majority of “All Other Telecommunications” firms potentially affected by our action can be considered

¹⁶³ 47 CFR § 76.901(c).

¹⁶⁴ August 5, 2015 report from the FCC Media Bureau based on its research in COALS. See <http://www.fcc.gov/coals>.

¹⁶⁵ See 47 CFR § 76.901(f) & nn.1-3.

¹⁶⁶ See SNL Kagan at <http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx> (subscription required).

¹⁶⁷ 47 CFR § 76.901(f) & nn.1-3.

¹⁶⁸ See SNL Kagan at http://www.snl.com/interactivex/TopCable_MSOs.aspx (subscription required).

¹⁶⁹ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority’s finding that the operator does not qualify as a small cable operator pursuant to section 76.901(f) of the Commission’s rules. See 47 CFR § 76.901(f).

¹⁷⁰ U.S. Census Bureau, *NAICS Search*, <http://www.census.gov/cgi-bin/sssd/naics/naicsrch> (last visited June 21, 2017) (enter 2012 NAICS code 517919).

¹⁷¹ 13 CFR § 121.201 (NAICS Code 517919).

¹⁷² U.S. Census Bureau, *American Fact Finder* (Jan. 08, 2016), http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ4&prodT_ye=table (2012 NAICS Code 517919, “Estab & Firm Size: Receipts Size of Firms for the U.S.”).

small.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

24. The *Notice* proposes and seeks comment on rule changes that will affect toll free number assignment and administration. In particular, we propose expanding the existing toll free number assignment rule to permit use of an auction methodology, among other assignment mechanisms, to assign toll free numbers. To do so, we propose to revise section 52.111 of our rules to allow the Commission to assign numbers in a manner that is equitable, including by auction, on a first-come, first-served basis, an alternative assignment methodology, or by a combination of the foregoing as circumstances require. We intend to delegate to the Wireline Competition Bureau, in consultation with the Wireless Telecommunications Bureau, the authority to propose and designate the assignment methodology, through public notice and comment, for new toll free code openings and other toll free number assignments. We also seek comment on conducting a sealed, single round, sealed-bid Vickrey auction for the roughly 17,000 numbers set aside, pursuant to the *833 Code Opening Order*, for which there were mutually exclusive requests. Auction procedure compliance will affect the toll free auction administrator and all RespOrgs, including those considered small entities, as described above.

25. In addition, we seek comment on revising our rules to promote development of a secondary market for toll free numbers. We seek comment on what types of information would be needed from the buyer and seller to document a reassignment, whether an online recording system is needed to record reassignments in the secondary market, and whether there should be a database for potential buyers. The *Notice* also seeks comment on whether the Toll Free Numbering Administrator (TFNA) should keep toll free number subscriber records and whether we should consider including subscriber information in a TFNA database?

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

26. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rules for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities.¹⁷³

27. This *Notice* invites comment on a number of proposals and alternatives to modify the present toll free number administration and assignment method rules. The *Notice* proposes expanding the existing toll free number assignment rule to permit use of an auction methodology, among other assignment mechanisms, to assign toll free numbers. To do so, we propose to revise section 52.111 of our rules to allow the Commission to assign numbers in a manner that is equitable, including by auction, on a first-come, first-served basis, an alternative assignment methodology, or by a combination of the foregoing as circumstances require. The *Notice* also seeks comment on types of auction methods that should be employed and on the advantages and disadvantages of these auction methods.

28. The *Notice* also seeks comment on repealing or relaxing the prohibition against brokering and open number distribution to secondary markets. These proposal could minimize burdens on current and future toll free subscribers, some of which may be small entities. Finally, in the *Notice*, we seek comment on whether certain desirable toll free numbers necessary to promote health and safety be set aside for use, without cost, by government (federal, state, local and Tribal) agencies as well as by non-

¹⁷³ 5 U.S.C. § 603(c)(1)-(c)(4).

profit health and safety organizations.¹⁷⁴ We also seek comment on whether other entities such as non-profit educational and charitable organizations be included in this definition or receive similar treatment.¹⁷⁵ These organizations could include small entities and such set asides would ensure that these organizations could receive certain numbers with minimal effort.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

29. None.

¹⁷⁴ *See Notice*, para. 41.

¹⁷⁵ *Id.*