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FCC RELEASES TELEPHONE NUMBERING RESOURCE UTILIZATION REPORT

Numbering Resource Utilization at 39.7%

Washington, D.C. – The Federal Communications Commission (FCC) today released its fourth report on telephone number utilization in the United States. Telephone number utilization refers to how well telephone numbers are being used by carriers. The report presents numbering resource utilization statistics based on December 31, 2001 data that carriers submitted to the North American Numbering Plan Administrator (NANPA), as well as other information submitted by the NANPA. The number utilization reports comprehensively examine telephone number utilization in the United States since the development of local competition.

Summary Data

1. *Utilization Statistics by Carrier* – Reporting carriers have over 1.2 billion telephone numbers, of which 480 million were assigned to customers, more than 620 million were available to be assigned, and about 110 million were used for other purposes, such as for administrative use. New York has the two area codes with the highest utilization rates: area code 212 at 78.5% and area code 718 at 65.4%.
Following is utilization statistics by carrier type:
 - The overall utilization rate for Incumbent Local Exchange Carriers (ILECs) is 52.5%.
 - The overall utilization rate for Competitive Local Exchange Carriers (CLECs) is 11.4%.
 - The overall utilization rate for Cellular/PCS carriers is 47.2%.
 - The overall utilization rate for Paging carriers is 20.2%.

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2. ***Telephone Numbers Returned*** – Carriers are returning large quantities of telephone numbers that they do not need to the North American Numbering Plan Administrator so that those numbers can be assigned to other carriers with more immediate needs. Each area code has up to 7.9 million usable telephone numbers, so in the first three quarters of 2001, carriers returned the equivalent of more than five area codes to the NANPA. No significant quantities of telephone numbers had been voluntarily returned to the NANPA before the second quarter of 1999.
 - In the third quarter of 2001, carriers returned 16 million telephone numbers to the NANPA.
 - In the fourth quarter of 2001, carriers returned 14 million telephone numbers to the NANPA.
 - In the first quarter of 2002, carriers returned 12 million telephone numbers to the NANPA.
3. ***Number pooling*** – Where standard-sized blocks of 10,000 telephone numbers are divided into blocks of 1,000 numbers (thousands-blocks) so they can be used by several different carriers:
 - As of January 1, 2002, 21 states had assigned pooled thousands-blocks to carriers in need of numbers.
 - Over 100,000 thousands-blocks were reassigned through pooling. As each “block” contains 1,000 individual telephone numbers, this made over 100 million telephone numbers available to carriers in need of numbering resources.

This report is updated twice a year and is available in the FCC's Reference Information Center, Courtyard Level, 445 12th Street SW, Washington, DC 20554. Contact the Commission's duplicating contractor Qualex International at (202) 863-2893 to purchase a copy. This and many other reports can be downloaded from the **FCC-State Link** Internet site at www.fcc.gov/wcb/stats.

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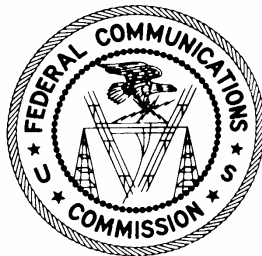
Wireline Competition Bureau contact: Craig Stroup at (202) 418-0989; TTY (202) 418-0484.

Numbering Resource Utilization in the United States as of December 31, 2001

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This report is available for reference in the FCC's Reference Information Center, Courtyard Level, 445 12th Street SW, Washington, DC. 20554. Several private firms specialize in locating, duplicating, and distributing FCC documents. Documents may be purchased by calling Qualex International at (202) 863-2893, or (202) 863-2898 (fax) or via e-mail at qualexint@aol.com. Also, this and many other useful reports can be downloaded from the **FCC-State Link** Internet site at <http://www.fcc.gov/wcb/stats>.

Numbering Resource Utilization in the United States As of December 31, 2001

Executive Summary

This is the Federal Communications Commission's (FCC's) report on numbering resource utilization in the United States.¹ In this report, we summarize the fourth systematic collection of comprehensive data on the utilization of telephone numbers within the United States. The underlying information was acquired from carriers holding numbering resources and analyzed as part of our ongoing assessment of the efficacy of numbering resource optimization measures prescribed by the Commission's recent Numbering Resource Optimization (NRO) Orders.²

Findings

As of December 31, 2001:

- Carriers reported data on over 1.2 billion telephone numbers. (see Table 1)
- Overall, carriers assigned 39.7% of their telephone numbers to end users. (see Table 1)
- New York has the two area codes with the greatest percentage of telephone numbers assigned to end users: area code 212 at 78.5%, and area code 718 at 65.4%. (see Table 6)
- Over 100 million telephone numbers had been assigned to carriers through thousands-blocks number pooling. (see Table 8)
- In the second half of 2001, 30 million telephone numbers were returned to the North American Numbering Plan Administrator. (see Table 12)

Background

The United States uses ten-digit telephone numbers, which are organized in accordance with the North American Numbering Plan (NANP).³ The NANP divides the country into separate

¹ The previous edition of this report was released on November 13, 2001, Industry Analysis Division, Common Carrier Bureau, *Numbering Resource Utilization in the United States as of June 30, 2001*.

² See *Numbering Resource Optimization*, CC Docket No. 99-200, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 7574 (2000) (*NRO Report and Order*); *Numbering Resource Optimization*, CC Docket Nos. 99-200 and 96-98, Second Report and Order, Order on Reconsideration in CC Docket No. 96-98 and CC Docket No. 99-200, and Second Further Notice of Proposed Rulemaking in CC Docket No. 99-200, 16 FCC Rcd 306 (2000) (*NRO Second Report and Order*); *Numbering Resource Optimization*, CC Docket Nos. 99-200, 96-98, and 95-116, Third Report and Order and Second Order on Reconsideration in CC Docket No. 96-98 and CC Docket No. 99-200, 17 FCC Rcd 252 (2001); *Numbering Resource Optimization*, CC Docket Nos. 99-200, 96-98, and 95-116, Third Order on Reconsideration in CC Docket No. 99-200, Third Further Notice of Proposed Rulemaking in CC Docket 99-200, and second Further Notice of Proposed Rulemaking in CC Docket No.95-116, 17 FCC Rcd 4784 (2002) (*NRO Third Order on Reconsideration*).

³ The North American Numbering Plan is used in the United States and its territories; and in Canada, Bermuda, and many Caribbean nations, including Anguilla, Antigua & Barbuda, Bahamas, Barbados, British Virgin

geographic areas called numbering plan areas (NPAs), more commonly called area codes. Calls between these areas are generally dialed using the three-digit area code, followed by a seven-digit local telephone number.

When the NANP was established in 1947, only 86 area codes were assigned to carriers in the United States.⁴ Only 61 new codes were added during the next 50 years. But the rate of activation has increased dramatically since then. In 1997 alone, 32 new area codes were activated in the continental United States. Because the remaining supply of unassigned area codes is diminishing, and because a premature exhaust of area codes imposes significant costs on consumers, the Commission has taken a number of steps to ensure that the limited numbering resources are used efficiently. Among other things, the Commission requires carriers to submit data on numbering resource utilization and forecasts twice a year. The information is submitted using the Numbering Resource Utilization/Forecast (NRUF) form.⁵ Carriers controlling numbering resources for the purpose of providing services to their customers are required to file their NRUF forms with the North American Numbering Plan Administrator (NANPA)⁶ by February 1 and August 1 of each year.⁷

The administrator compiles the information submitted into a database and provides that database to the Commission.⁸ The information in this report presents number utilization as of December 31, 2001. It reflects all corrections and submissions that the NANPA received through April 22, 2002.

Historically, local telephone companies received geographic numbers in blocks of 10,000. These blocks of 10,000 numbers are often called NXXs and are identifiable as the first three digits of a seven-digit telephone number.⁹ One of the recent efforts to improve the efficiency with which numbers are used is “thousands-block pooling.” Where thousands-block pooling is implemented, carriers with blocks of 1,000 numbers (thousands-blocks)¹⁰ that are not

Islands, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, and Turks & Caicos. The data contained in this report are all limited to the United States and its overseas territories.

⁴ “Nationwide Numbering Plan and Dialing Procedures – Efficient Code Utilization and Conservation Program,” Memorandum from AT&T Assistant Vice President of Engineering (R. H. Kaschner) to Commercial Managers, page 1 (Mar. 25, 1974).

⁵ See *NRO Report and Order*, 15 FCC Rcd 7574. FCC Form 502 and most other FCC forms can be downloaded from www.fcc.gov/formpage.html.

⁶ The current NANPA is NeuStar, Inc.

⁷ *Numbering Resource Optimization*, CC Docket 99-200, Order, 15 FCC Rcd 17005 (2000). June 30 data must be filed by August 1, and December 31 data must be filed by the following February 1.

⁸ The NANPA’s database is continually updated because not all carriers filed by the prescribed date, and because carriers sometimes file updated information throughout the year. Carriers missing the filing date may be the subject of enforcement action.

⁹ A ten-thousands block is the block of 10,000 telephone numbers that have the same area code and the same NXX.

¹⁰ A thousands-block is the block of 1,000 telephone numbers that have the same area code, the same NXX and the same thousands digit.

needed within a six-month window provide those blocks to a pooling administrator, which then assigns those thousands-blocks to other carriers in need of numbers.¹¹ This effectively allows the assignment of numbers in blocks of 1,000 rather than 10,000. Most carriers are required to report their telephone number usage at the thousands-block level so that we can evaluate the efficacy of telephone number pooling. Carriers that meet the statutory definition of “rural telephone company”¹² and operate in non pooling areas are required to submit their number usage at the 10,000-block (or NXX) level.

In this report, we present data for four types of carriers:¹³

- Incumbent Local Exchange Carriers (ILECs),
- Competitive Local Exchange Carriers (CLECs),
- Cellular/PCS Carriers, and
- Paging Carriers.

Carriers report on numbering resources in the following six categories:

- assigned,
- intermediate,
- reserved,
- aging,
- administrative, and
- available.

An assigned number is one that is in use by an end-user customer. Intermediate numbers are those that one carrier has assigned to another carrier (or to a non-carrier) so that the numbers may then be assigned to an end user. Reserved numbers are those that are being held by the service provider at the request of an end user for future use. Aging numbers are those that are being held out of use by the carrier for a period of time after the end user that last used it discontinues service. Administrative numbers include test numbers and other numbers used for network purposes. Available numbers are numbers that are generally available for assignment to customers.¹⁴

Some carriers receive telephone numbers from other carriers. When this occurs, the carrier that received its numbers from another carrier (as opposed to directly from the NANPA) is

¹¹ The current pooling administrator is NeuStar, Inc., which is also the NANPA. *See Federal Communications Commission's Common Carrier Bureau Selects NeuStar, Inc. as National Thousands-Block Number Pooling Administrator*, News Release (rel. June 18, 2001).

¹² 47 U.S.C. § 153(37).

¹³ Carriers classified themselves in a variety of ways on their NRUF forms, but were aggregated into four categories for the purposes of this report. Also, carriers may provide multiple types of services, but must indicate only their primary line of business on FCC Form 502.

¹⁴ For precise definitions of these categories *see* 47 C.F.R. § 52.15(f)(1).

required to report utilization data for those numbers, and to mark those numbers as having been received from other carriers.¹⁵

The vast majority of numbering resources reported were part of geographic area codes. That is, the numbers were part of area codes that are associated with specific regions of the United States. Carriers are also required to report utilization on some non-geographic area codes, such as 500 numbers and 900 numbers (which are described later in this report).

There are other non-geographic numbering resources as well. Carriers use millions of numbers to provide toll-free services using non-geographic area codes such as 800, 888, 877 and so forth. These numbering resources are managed separately. They are neither reported on FCC Form 502, nor addressed in this report.¹⁶

Analysis and Results

Number Utilization by Carrier Type:

Table 1 shows the quantity of telephone numbers reported in each of the six categories and the percentages of telephone numbers that are in each category. Table 1 also shows the number of 10,000 blocks (or NXXs) associated with these numbers.

Carriers reported on about 119,600 NXXs. This amount is up from the 115,500 NXXs in the previous filing (data for June 30, 2001). As the NANPA calculates that about 127,000 NXXs have been assigned to United States carriers,¹⁷ it appears that this data collection garnered information on 94% of those numbering resources. Although reporting is up from the last filing, many carriers still had not provided usable utilization data by April 22, 2002.

Among filing carriers, 480 million telephone numbers are reported as being assigned and more than 625 million are reported to be available for assignment, indicating that the quantity of numbers available for assignment exceeds the number already assigned. These 625 million available telephone numbers do not include any of the telephone numbers in NXXs that had not yet been assigned by the NANPA. As more NXXs are assigned to carriers by the NANPA, and as more area codes are opened up, more numbers will become available for assignment. Intermediate, reserved, aging and administrative categories collectively account for another 110 million telephone numbers.

¹⁵ This means that sometimes more than one carrier can report utilization data for the same thousands-block (or ten-thousands block). Carriers receiving numbers from another carrier are required to report utilization data for those numbers on a different page (of FCC Form 502) than the page that carriers use to report numbers received directly from the NANPA. Not all carriers that received numbers from other carriers filed on the correct page, however, so within the database it can appear that more than one carrier has reported data for the same block of numbers. Carriers that receive numbers from other carriers are also required, of course, to report on any telephone numbers received from the NANPA.

¹⁶ For utilization information on these toll-free numbers, see Industry Analysis and Technology Division, Wireline Competition Bureau, *Trends in Telephone Service* (May 2002) Tbl. 19.2.

¹⁷ The NANPA lists the NXXs that have been assigned on their web site: http://www.nanpa.com/number_resource_info/co_code_assignments.html.

Detail of Number Utilization:

Table 2 presents utilization statistics for carriers that reported at the thousands-block level. Carriers that do not meet the statutory definition of a rural carrier are required to report at the thousands-block level. Of all the NXXs reported on, about 90% were reported on at the thousands-block level. As does Table 1, Table 2 shows the quantity of telephone numbers reported in each of the six categories and the percentages of telephone numbers that are in each category. The table shows non-rural carriers assigned 42% of their numbers to their customers.

Table 3 shows the same information as Table 2, but for rural carriers, which reported at the 10,000 block level. Carriers that meet the statutory definition of a rural carrier are required to report at the 10,000 block level.¹⁸ Rural carriers assigned 17.2% of their numbers to their customers. As might be expected, overall utilization rates are reported to be lower in rural areas (17%) than in more urban areas (42%).

State-by-State Information:

Table 4 shows similar utilization statistics on a state-by-state basis. As might be expected, states that are relatively rural and have low population densities have fewer telephone numbers assigned to end-user customers, and have a lower percentage of numbers that have been assigned to end-user customers than in more urban, populous states. As noted earlier, carriers report for only those numbers that have been assigned to them, so the quantity of available numbers does not include any of the NXXs that had not yet been assigned to a carrier.

Table 5 shows the number of carriers reporting telephone number utilization data for each state. Carriers are required to report their NRUF data at the Operating Company Number (OCN) level.¹⁹ Carriers typically obtain one or more OCNs per state in which they operate. The number of carriers in each state is based on the number of OCNs reported in each state.

Area Code-by-Area Code Information:

Table 6 shows utilization statistics on an area code-by-area code basis. The table also shows the month in which the area code was opened for use, and the total number of carriers (OCNs) that reported data for each area code. Again, carriers report for only those numbers that have been assigned to them, so the quantity of available numbers does not include any of the NXXs in the state that had not yet been assigned to a carrier.

¹⁸ See *NRO Report and Order*, 15 FCC Rcd at 7604-7605. A small number of rural carriers may operate in areas where thousands-block number pooling is required. As all carriers in pooling areas are required to report at the thousands-block level, rural carriers in pooling areas, if any, should be included in Table 2 rather than Table 3.

¹⁹ See *NRO Report and Order*, 15 FCC Rcd at 7594, para. 41. Carriers obtain OCNs from the National Exchange Carrier Association.

Table 7 shows actual quantities of assigned, aging and available numbers for wireline carriers (ILECs and CLECs), and for cellular/PCS carriers (wireless carriers). This information is presented on an area code-by-area code basis. The information in Table 7 is useful for at least two reasons. First, there is no information on the number of telephone lines in each area code. The number of lines per area code cannot be perfectly divined from this information. Although cellular/PCS carriers typically assign one geographic telephone number to each subscriber, wireline carriers sometimes do not. Some wireline customers want multiple telephone numbers associated with a smaller number of lines. This is common when the customer has a PBX. Other customers, especially those expecting many inbound calls—such as from a help line, want a single telephone number that serves many lines. Thus, the quantity of telephone numbers in an area code provides only a rough guide to the number of lines served in each area code.

Second, the information in Table 7 provides the only information available for examining churn on an area code-by-area code basis and wireline-versus-wireless basis.²⁰ After a customer disconnects from a carrier's network, that carrier will hold a number out of circulation ("age" the number) for up to ninety days if the customer was a residential subscriber, and up to one year if the customer was a business subscriber. Therefore, the quantity of aging numbers gives some indication of the number of customers that have disconnected carriers' networks in the previous three months to a year. Aging numbers, however, do not give a perfect indication of churn, because not all carriers age their numbers for the full time allowed. In particular, where carriers cannot immediately obtain new numbers from the NANPA, and have no other available numbers to assign, carriers may assign numbers that have not completed their aging process. Also, as mentioned in the previous paragraph, wireline carriers do not always issue one telephone number per line. Thus, as with line counts, churn rates can only be roughly estimated from the data in Table 7.

Additional Information:

Table 8 focuses on telephone number pooling. A thousands-block is potentially poolable when 90% or more of the numbers are classified as available for assignment. Pooling utilizes number porting technology, which the FCC required to be implemented within the top 100 metropolitan statistical areas (MSAs) as they were defined in 1996.²¹ Prior to the implementation of national pooling, several states received delegated authority to implement thousands-block pooling trials. Pooling had already commenced in many areas inside and outside of the top 100 MSAs by the end of 2001. The Commission established a roll-out schedule for thousands-block number pooling that commenced March 15, 2002.²²

Table 8 shows the number of thousands-blocks that have been pooled and the number of thousands-blocks that are potentially poolable. The January 2002 Local Exchange Routing Guide (LERG) was used to determine the number of thousands-blocks that have been pooled.

²⁰ Churn is the rate at which customers change carriers.

²¹ See *NRO Second Report and Order*, 16 FCC Rcd at 322-330.

²² See *The Common Carrier Bureau Announces First Quarter Schedule for National Thousands-block Number Pooling*, CC Docket No. 99-200, Public Notice, 17 FCC Rcd 103 (2001). See also *Numbering Resource Optimization*, CC Docket No. 99-200, Order, 17 FCC Rcd 7347 (2002).

NeuStar's NRUF database was used to determine the number of thousands-blocks where at least 90% of the numbers were available, and, therefore, potentially poolable. Table 8 also shows the number of thousands-blocks that could be available if pooling were implemented statewide. Given that pooling may not be implemented in all areas where pooling is possible, and that carriers with poolable numbering resources are allowed to retain a six-month inventory of numbers in each rate center, the numbers of poolable thousands-blocks shown in Table 8 are overstated. Wireless carriers are listed separately from CLECs and ILECs because wireless carriers are not required to implement pooling until November 24, 2002.

Figures 1 through 4 focus on utilization rates as a function of the number of thousands-blocks that the carriers hold in a local geographic area.²³ Where carriers have sought and received multiple NXXs (each NXX contains 10 thousands-blocks) within the same area, they should generally be able to achieve higher utilization rates. We have used "rate centers" as our measure of local geographic area because thousands-blocks are assigned to carriers on a rate center basis.²⁴ The figures in the previous versions of this report examined whole NXXs. Thousands-blocks are used here because number pooling has increased dramatically since the last data collection, and now many carriers no longer have whole NXXs in each rate center.

Figure 1 shows average ILEC utilization rates as a function of the number of thousands-blocks in a rate center held by the same carrier. The points in the figures were calculated using a three-step process. First, all reported thousands-blocks were grouped based on the number of thousands-blocks held by the same carrier that were used within the same rate center. Some carriers had only one thousands-block in a rate center, others had thousands. Second, the number of thousands-blocks being held in a rate center was rounded to the nearest ten, so many observations could be grouped together. This protects the confidentiality of the data. Third, for each grouping (i.e., for all instances where there were 10 thousands-blocks in a rate center, 20 thousands-blocks in a rate center, and so forth), the average utilization rate was calculated.²⁵ In other words, an average utilization rate was calculated for all instances where, for one carrier, in one rate center, the rounded number of thousands-blocks was 10, 20, 30, and so on through 1,000 thousands-blocks in a rate center. Figures 2 through 4 show the same information for CLECs, Cellular/PCS carriers and paging carriers.

Table 9 shows utilization data for two specialized NPAs: 500 and 900. The 500 NPA is used for "follow me" service, which, among other things, can be used to route an incoming call to different phone numbers, depending on the time of day. The 900 NPA is used for information services where the caller is not charged the normal long distance rates set by the caller's long distance carrier, but usually is charged much higher prices that are preset by the

²³ For the purposes of these figures, the utilization rate is defined as the number of telephone numbers assigned to end-user customers divided by the number of telephone numbers in that NXX (10,000).

²⁴ A rate center is a geographic area used to determine distances and prices for local and long distance calls.

²⁵ Thus, wherever a carrier reported 7 thousands-blocks in a rate center, those blocks were treated as if the carrier reported 10 thousands-blocks in the rate center. They were then grouped with all other observations where a carrier reported a number of thousands-blocks in a rate center that rounded to 10. Similarly, wherever a carrier reported 14 thousands-blocks in a rate center, those observations were grouped as if the carrier had reported 10 thousands-blocks in that rate center.

call's recipient. Carriers reported utilization data for these specialized NPAs for the first time in their June 2001 filings.

There are three different databases that contain sources of NPA-NXX assignment information: NANPA's NRUF database, NANPA's database of NPA-NXX assignments, and the Local Exchange Routing Guide (LERG).²⁶ For a variety of reasons, the databases are not identical. The timing of the comparison of the databases is a large factor in this. For example, during an area code split, a carrier will maintain both the old and new NPA-NXXs in its systems during the phase called permissive dialing.²⁷ After permissive dialing ends, the carrier should remove the old NPA-NXXs from its systems. Carriers may not do this immediately, however, and may report utilization data on both the old and the new NPA-NXXs. Similarly, the carrier may not update the LERG immediately. Thus, the NRUF database, the LERG and the NANPA assignment database may not be identical. Table 10 shows the number of NPA-NXXs that appear in the three databases.

Table 11 shows utilization rates over time. Over the last twelve months, utilization has been generally increasing for ILECs, CLECs and cellular/PCS carriers. The size of the paging market is shrinking, however, and their telephone number utilization rates are dropping.

Table 12 shows, on a quarterly basis, the number of NXX assignments made by the NANPA, the number of NXXs that have been returned to the NANPA, and the number of net NXX assignments to carriers. The table shows that fewer NXXs are being issued each quarter, and the number of NXXs that the carriers have returned to the NANPA for reassignment is up sharply.

Technical Details

The following material provides technical details on the data and procedures used in this analysis. With respect to Tables 1 through 3, the reader should note that the number of unique NXXs for each carrier type does not add up to the total number of unique NXXs.²⁸ This occurs when multiple carriers report data for the same numbering resource. In addition, some carriers reported at the thousands-block level and other carriers reported at the NXX level for the same NXX.

In the past, when numbers were transferred from an ILEC to another carrier, these numbers were classified as "assigned," because those numbers could not be used elsewhere in the ILEC's own system. According to the Commission's standardized definitions, however, these numbers are classified as "intermediate" numbers. It appears that some carriers have not reported these numbers as intermediate numbers. Because, in many instances, we were unable to match submissions that report intermediate numbers with submissions that report

²⁶ The NANPA's assignment database can be found online at http://www.nanpa.com/number_resource_info/co_code_assignments1.html. The LERG is published monthly by Telcordia Technologies.

²⁷ During permissive dialing, a phone number may be called by using either the old or the new NPA.

²⁸ In some instances, more than one carrier reported numbering utilization data for the same NPA-NXX. Tables 1-3 report on the number of unique NPA-NXXs that were reported by each carrier type and by the industry as a whole.

numbers as being received from another carrier, we had to create filters to ensure that numbers were not double counted.

For ease of comparison, Figures 1 through 4 plot utilization rates only when there were 1,000 or fewer thousands-blocks in a rate center. Some ILECs and Cellular/PCS carriers reported more than 1,000 unique thousands-blocks in a single rate center. For both types of carriers, however, the average utilization rates remained unchanged when there were more than 1,000 thousands-blocks in a rate center. The figures therefore show only the data where the carriers reported up to 1,000 thousands-blocks within a rate center, so that a linear scale could be used.

In some instances, we observed that some CLECs had a large number of thousands-blocks in a single rate center. Although most CLECs do not have enough end-user lines in a rate center to warrant having so many thousands-blocks in that rate center, there are at least two reasons that a CLEC would do so. First, some CLECs provide service to unified messaging services.²⁹ These services may use large quantities of numbers.³⁰ Second, as do other types of carriers, some CLECs are operating in areas undergoing area code splits, where the area code will change for many of its thousands-blocks. When this happens, a CLEC may maintain two thousands-blocks (one NXX using the old area code, and another NXX using the new area code) in its systems for a period of time so that callers can adapt to the new area code.

* * * *

We invite users of this information to provide suggestions for improved data collection and analysis by 1) using the attached customer response form; 2) e-mailing comments to cstroup@fcc.gov; or 3) calling the Industry Analysis and Technology Division at (202) 418-0940; for TTY, call (202) 418-0484.

²⁹ Unified messaging services allow end users to receive multiple types of messages (such as voicemail and faxes) at one phone number. Typically, these messages are then digitized and e-mailed to the end user. Because the end user does not need to answer the call personally, the messages can be sent to any phone number in the United States. Presumably, unified messaging service providers operate most efficiently by obtaining a large number of NXXs in a single rate center, so the use of their equipment can be optimized.

³⁰ Carriers assigning numbers to unified messaging services are required to report numbers as “intermediate” until the numbers are assigned by the unified messaging service providers to end users. Some carriers have assigned large quantities of numbers to unified messaging services but may not have received information back from the unified messaging company as to whether any of those numbers have been assigned to end users. This may explain why some carriers reported dozens of NXXs in a single rate center, yet still classified all those numbers as intermediate rather than assigned.

Table 1
Number Utilization by Carrier Type as of December 31, 2001

Carrier Type	Assigned	Intermediate	Reserved	Aging	Admin	Available ¹	Total	Unique NXXs
	(Thousands of telephone numbers)							
ILEC	305,430	23,717	11,034	18,850	8,539	213,959	581,529	59,225
CLEC	30,941	3,082	4,712	2,720	2,654	228,252	272,361	27,618
Cellular/PCS	128,493	4,960	3,209	11,652	3,677	120,348	272,339	26,521
Paging	18,001	4,110	1,576	2,062	268	63,318	89,334	6,642
All Reporting Carriers	482,865	35,869	20,531	35,284	15,137	625,877	1,215,563	119,589 ²
ILEC	52.5%	4.1%	1.9%	3.2%	1.5%	36.8%	100.0%	
CLEC	11.4%	1.1%	1.7%	1.0%	1.0%	83.8%	100.0%	
Cellular/PCS	47.2%	1.8%	1.2%	4.3%	1.4%	44.2%	100.0%	
Paging	20.2%	4.6%	1.8%	2.3%	0.3%	70.9%	100.0%	
All Reporting Carriers	39.7%	3.0%	1.7%	2.9%	1.2%	51.5%	100.0%	

Table 2
Detail of Number Utilization: Non-rural Carriers (Reported at the Thousands-block Level)

Carrier Type	Assigned	Intermediate	Reserved	Aging	Admin	Available ¹	Total	Unique NXXs
	(Thousands of telephone numbers)							
ILEC	289,868	21,500	6,945	17,703	8,040	151,329	495,385	50,635
CLEC	30,467	3,075	4,495	2,701	2,609	216,680	260,029	26,408
Cellular/PCS	125,757	4,947	2,831	11,422	3,634	113,074	261,665	25,470
Paging	17,623	4,102	1,494	2,027	263	61,833	87,342	6,454
All Reporting Carriers	463,715	33,625	15,764	33,853	14,547	542,916	1,104,421	108,076 ²
ILEC	58.5%	4.3%	1.4%	3.6%	1.6%	30.5%	100.0%	
CLEC	11.7%	1.2%	1.7%	1.0%	1.0%	83.3%	100.0%	
Cellular/PCS	48.1%	1.9%	1.1%	4.4%	1.4%	43.2%	100.0%	
Paging	20.2%	4.7%	1.7%	2.3%	0.3%	70.8%	100.0%	
All Reporting Carriers	42.0%	3.0%	1.4%	3.1%	1.3%	49.2%	100.0%	

Table 3
Detail of Number Utilization: Rural Carriers (Reported at the NXX Level)

Carrier Type	Assigned	Intermediate	Reserved	Aging	Admin	Available ¹	Total	Unique NXXs
	(Thousands of telephone numbers)							
ILEC	15,562	2,216	4,089	1,147	498	62,630	86,144	8,600
CLEC	473	7	217	19	44	11,572	12,333	1,233
Cellular/PCS	2,736	13	379	230	43	7,274	10,675	1,059
Paging	378	8	82	35	5	1,484	1,992	188
All Reporting Carriers	19,149	2,244	4,767	1,431	591	82,960	111,143	11,080
ILEC	18.1%	2.6%	4.7%	1.3%	0.6%	72.7%	100.0%	
CLEC	3.8%	0.1%	1.8%	0.2%	0.4%	93.9%	100.0%	
Cellular/PCS	25.6%	0.1%	3.5%	2.2%	0.4%	68.1%	100.0%	
Paging	19.0%	0.4%	4.1%	1.8%	0.2%	74.5%	100.0%	
All Reporting Carriers	17.2%	2.0%	4.3%	1.3%	0.5%	74.7%	100.0%	

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar, Inc. as of April 22, 2002 (94% of NXXs reported).

¹ Includes only telephone numbers in NXXs assigned to carriers and therefore available for assignment to customers.

Does not include any numbers in NXXs that have not yet been assigned to carriers.

² Unduplicated total.

Note: Figures may not add due to rounding.

Table 4
Telephone Number Utilization by State as of December 31, 2001

State/jurisdiction	Assigned		Intermediate		Reserved		Aging		Administrative		Available ¹		Total 000s
	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	
Alabama	6,340	37.5	1,138	6.7	173	1.0	499	3.0	334	2.0	8,403	49.8	16,887
Alaska	1,027	21.7	12	0.3	51	1.1	65	1.4	24	0.5	3,542	75.0	4,722
Arizona	9,767	52.1	295	1.6	362	1.9	747	4.0	184	1.0	7,381	39.4	18,737
Arkansas	3,349	28.8	701	6.0	153	1.3	207	1.8	91	0.8	7,139	61.3	11,639
California	58,005	39.7	7,640	5.2	1,333	0.9	4,073	2.8	2,115	1.4	73,062	50.0	146,228
Colorado	9,472	50.6	76	0.4	295	1.6	832	4.4	273	1.5	7,773	41.5	18,722
Connecticut	5,549	38.7	884	6.2	122	0.9	318	2.2	177	1.2	7,278	50.8	14,328
Delaware	1,701	38.2	33	0.7	74	1.7	92	2.1	56	1.3	2,500	56.1	4,458
District of Columbia	2,916	56.0	61	1.2	406	7.8	224	4.3	35	0.7	1,561	30.0	5,204
Florida	28,914	45.7	2,954	4.7	920	1.5	2,605	4.1	927	1.5	26,892	42.5	63,212
Georgia	14,715	43.6	2,114	6.3	811	2.4	1,245	3.7	378	1.1	14,484	42.9	33,748
Guam	61	43.6	3	2.1	2	1.4	2	1.4	1	0.7	71	50.7	140
Hawaii	2,236	48.2	79	1.7	8	0.2	175	3.8	61	1.3	2,080	44.8	4,638
Idaho	2,134	37.8	17	0.3	44	0.8	125	2.2	92	1.6	3,239	57.3	5,651
Illinois	20,811	36.0	1,512	2.6	1,948	3.4	1,502	2.6	776	1.3	31,218	54.0	57,768
Indiana	8,350	34.0	372	1.5	404	1.6	612	2.5	363	1.5	14,489	58.9	24,591
Iowa	4,136	30.2	155	1.1	211	1.5	527	3.9	300	2.2	8,351	61.0	13,681
Kansas	3,858	26.8	800	5.6	247	1.7	242	1.7	172	1.2	9,057	63.0	14,376
Kentucky	5,591	33.0	573	3.4	189	1.1	468	2.8	245	1.4	9,880	58.3	16,946
Louisiana	6,658	37.0	1,388	7.7	157	0.9	764	4.2	240	1.3	8,789	48.8	17,996
Maine	1,875	38.3	17	0.3	93	1.9	70	1.4	26	0.5	2,818	57.5	4,900
Maryland	10,880	45.5	282	1.2	407	1.7	679	2.8	294	1.2	11,374	47.6	23,916
Massachusetts	15,401	44.0	275	0.8	589	1.7	720	2.1	250	0.7	17,744	50.7	34,979
Michigan	15,002	31.8	468	1.0	1,001	2.1	1,271	2.7	689	1.5	28,678	60.9	47,108
Minnesota	9,047	39.6	158	0.7	1,280	5.6	656	2.9	196	0.9	11,529	50.4	22,866
Mississippi	3,370	27.9	798	6.6	58	0.5	286	2.4	95	0.8	7,461	61.8	12,068
Missouri	8,856	33.2	654	2.5	435	1.6	616	2.3	281	1.1	15,812	59.3	26,653
Montana	1,103	21.9	24	0.5	14	0.3	66	1.3	23	0.5	3,816	75.6	5,046
Nebraska	2,819	30.5	103	1.1	396	4.3	305	3.3	86	0.9	5,532	59.9	9,241
Nevada	3,704	47.7	191	2.5	65	0.8	261	3.4	128	1.6	3,420	44.0	7,769
New Hampshire	2,504	39.9	30	0.5	91	1.4	90	1.4	53	0.8	3,509	55.9	6,277
New Jersey	16,219	42.7	471	1.2	632	1.7	1,000	2.6	305	0.8	19,390	51.0	38,017
New Mexico	2,651	42.0	38	0.6	79	1.3	190	3.0	71	1.1	3,276	52.0	6,305
New York	34,139	53.1	742	1.2	2,127	3.3	2,237	3.5	579	0.9	24,411	38.0	64,236
North Carolina	13,276	41.8	1,544	4.9	494	1.6	944	3.0	289	0.9	15,178	47.8	31,725
North Dakota	910	18.7	61	1.3	73	1.5	76	1.6	27	0.6	3,706	76.3	4,854
Northern Marianas Is.	12	66.7	0	0.0	0	0.0	0	0.0	0	0.0	6	33.3	18
Ohio	17,455	37.6	627	1.3	734	1.6	1,165	2.5	576	1.2	25,892	55.7	46,448
Oklahoma	4,583	30.6	962	6.4	100	0.7	322	2.2	188	1.3	8,807	58.9	14,961
Oregon	5,932	45.2	34	0.3	122	0.9	518	3.9	163	1.2	6,357	48.4	13,127
Pennsylvania	19,589	35.7	484	0.9	812	1.5	1,168	2.1	480	0.9	32,325	58.9	54,858
Puerto Rico	3,674	54.5	90	1.3	37	0.5	140	2.1	16	0.2	2,779	41.3	6,736
Rhode Island	2,051	41.4	48	1.0	78	1.6	94	1.9	26	0.5	2,658	53.6	4,955
South Carolina	6,255	41.3	972	6.4	195	1.3	449	3.0	235	1.6	7,031	46.5	15,136
South Dakota	1,008	20.0	54	1.1	31	0.6	77	1.5	56	1.1	3,808	75.6	5,034
Tennessee	9,016	40.5	1,163	5.2	112	0.5	832	3.7	199	0.9	10,940	49.1	22,263
Texas	35,015	38.3	3,983	4.4	895	1.0	2,859	3.1	1,504	1.6	47,268	51.6	91,523
US Virgin Is.	129	48.0	9	3.3	31	11.5	29	10.8	3	1.1	67	24.9	269
Utah	4,706	44.3	48	0.5	134	1.3	309	2.9	130	1.2	5,293	49.8	10,621
Vermont	914	19.2	4	0.1	33	0.7	23	0.5	155	3.3	3,625	76.3	4,753
Virginia	13,412	49.8	257	1.0	524	1.9	869	3.2	343	1.3	11,529	42.8	26,933
Washington	11,713	46.4	101	0.4	328	1.3	959	3.8	344	1.4	11,786	46.7	25,231
West Virginia	2,026	33.0	20	0.3	58	0.9	119	1.9	54	0.9	3,871	63.0	6,148
Wisconsin	7,257	30.2	344	1.4	552	2.3	503	2.1	377	1.6	15,033	62.5	24,065
Wyoming	771	27.1	6	0.2	9	0.3	56	2.0	50	1.8	1,958	68.7	2,850
Totals	482,865	39.7	35,869	3.0	20,531	1.7	35,284	2.9	15,137	1.2	625,877	51.5	1,215,563

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 22, 2002.

¹ Includes only telephone numbers in NXXs assigned to carriers and therefore available for assignment to customers. Does not include any numbers in NXXs that have not yet been assigned to carriers.

Note: Figures may not add due to rounding.

Table 5
Number of Carriers Reporting Numbering Resources as of December 31, 2001¹

State/jurisdiction	ILECs ²	CLECs ²	Cellular/PCS ²	Paging Carriers ²	Total Carriers
Alabama	26	17	23	8	74
Alaska	19	5	7	2	33
Arizona	18	26	16	12	72
Arkansas	26	14	11	6	57
California	24	47	22	19	112
Colorado	27	24	16	8	75
Connecticut	2	19	7	10	38
Delaware	1	19	7	9	36
District of Columbia	1	26	6	9	42
Florida	12	42	24	15	93
Georgia	32	46	26	12	116
Guam	0	0	3	1	4
Hawaii	2	2	7	3	14
Idaho	20	13	18	1	52
Illinois	56	38	35	13	142
Indiana	38	34	24	17	113
Iowa	148	41	20	6	215
Kansas	33	20	17	8	78
Kentucky	21	32	26	10	89
Louisiana	20	24	24	10	78
Maine	16	14	8	2	40
Maryland	2	34	13	13	62
Massachusetts	4	33	10	7	54
Michigan	35	32	25	13	105
Minnesota	87	53	17	9	166
Mississippi	16	21	19	4	60
Missouri	41	35	21	12	109
Montana	17	7	7	2	33
Nebraska	45	10	13	5	73
Nevada	12	18	8	11	49
New Hampshire	13	19	11	5	48
New Jersey	2	35	8	12	57
New Mexico	17	10	14	4	45
New York	37	48	21	17	123
North Carolina	26	36	18	11	91
North Dakota	30	11	9	1	51
Northern Marianas Islands	0	0	1	1	2
Ohio	36	33	23	11	103
Oklahoma	37	17	18	10	82
Oregon	26	27	16	7	76
Pennsylvania	35	48	23	16	122
Puerto Rico	1	1	7	1	10
Rhode Island	1	16	6	7	30
South Carolina	25	25	16	7	73
South Dakota	44	12	7	2	65
Tennessee	26	30	25	7	88
Texas	63	64	42	26	195
US Virgin Islands	1	0	3	0	4
Utah	17	15	13	9	54
Vermont	7	8	5	2	22
Virginia	16	41	24	9	90
Washington	26	35	14	8	83
West Virginia	6	9	16	6	37
Wisconsin	92	30	28	12	162
Wyoming	12	7	14	2	35
Unduplicated Total	1,223	1,001	425	133	4,032

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 22, 2002.

¹ Company numbers determined by counting operating company numbers (OCNs). Carriers typically obtain at least one OCN per state in which they do business. Thus, carriers with multiple OCNs are counted multiple times.

² Carriers occasionally misclassify the type of service that they provide. For instance, the CLEC operations of ILECs are occasionally classified as ILEC operations.

Table 6
Telephone Number Utilization by Area Code as of December 31, 2001

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
201	New Jersey	Jan-47	44.7%	1.3%	1.9%	2.4%	0.5%	49.2%	43
202	District of Columbia	Jan-47	56.0%	1.2%	7.8%	4.3%	0.7%	30.0%	42
203	Connecticut	Jan-47	41.1%	7.5%	0.8%	2.5%	1.2%	46.8%	36
205	Alabama	Jan-47	43.6%	5.3%	0.6%	3.6%	2.3%	44.6%	39
206	Washington	Jan-47	58.2%	0.6%	0.7%	5.8%	1.6%	33.2%	38
207	Maine	Jan-47	38.3%	0.3%	1.9%	1.4%	0.5%	57.5%	40
208	Idaho	Jan-47	37.8%	0.3%	0.8%	2.2%	1.6%	57.3%	52
209	California	Jan-58	31.5%	6.3%	0.4%	2.0%	1.4%	58.4%	43
210	Texas	Nov-92	50.1%	5.0%	1.0%	4.1%	2.2%	37.7%	38
212	New York	Jan-47	78.5%	0.3%	6.2%	4.2%	1.3%	9.6%	30
213	California	Jan-47	32.6%	5.6%	1.0%	3.2%	2.1%	55.4%	49
214	Texas	Jan-47	49.1%	2.0%	1.7%	4.0%	1.3%	41.8%	52
215	Pennsylvania	Jan-47	55.5%	1.6%	2.6%	3.4%	0.8%	36.1%	36
216	Ohio	Jan-47	40.4%	1.8%	2.7%	3.3%	1.4%	50.3%	37
217	Illinois	Jan-47	25.6%	0.7%	4.4%	1.9%	1.9%	65.5%	47
218	Minnesota	Jan-47	23.6%	0.3%	9.9%	1.2%	0.6%	64.4%	57
219	Indiana	Jan-47	39.1%	1.8%	2.7%	2.5%	1.4%	52.5%	53
225	Louisiana	Aug-98	41.8%	7.3%	0.4%	3.9%	1.4%	45.3%	32
228	Mississippi	Sep-97	30.2%	5.1%	0.3%	2.5%	0.5%	61.4%	24
229	Georgia	Aug-00	30.0%	9.0%	1.1%	1.9%	0.5%	57.5%	29
231	Michigan	Jun-99	22.9%	0.6%	0.8%	1.9%	1.4%	72.4%	33
234	Ohio	Oct-00	20.0%	0.0%	0.8%	0.0%	20.0%	59.1%	4
240	Maryland	Jun-97	18.1%	0.6%	0.6%	1.4%	1.6%	77.6%	39
248	Michigan	May-97	40.4%	1.0%	1.1%	3.0%	1.5%	53.0%	38
251	Alabama	Jun-01	36.3%	10.3%	3.3%	2.6%	3.7%	43.7%	29
252	North Carolina	Mar-98	37.6%	0.4%	2.3%	2.1%	0.5%	57.0%	27
253	Washington	Apr-97	50.0%	0.4%	0.9%	4.1%	1.3%	43.3%	36
254	Texas	May-97	30.0%	3.2%	0.4%	2.6%	1.9%	61.9%	44
256	Alabama	Mar-98	37.4%	7.1%	0.2%	3.0%	1.5%	50.7%	33
262	Wisconsin	Sep-99	25.7%	0.7%	2.1%	1.8%	1.4%	68.3%	41
267	Pennsylvania	Jul-99	11.7%	0.4%	0.4%	0.9%	1.1%	85.5%	37
270	Kentucky	Apr-99	25.0%	4.4%	0.6%	2.2%	0.8%	66.9%	44
276	Virginia	Sep-01	29.5%	0.9%	1.1%	1.9%	2.3%	64.3%	17
281	Texas	Nov-96	44.6%	4.6%	0.6%	3.6%	1.4%	45.2%	39
301	Maryland	Jan-47	60.6%	1.3%	1.9%	3.6%	0.8%	31.8%	35
302	Delaware	Jan-47	38.2%	0.7%	1.7%	2.1%	1.3%	56.1%	36
303	Colorado	Jan-47	65.0%	0.2%	1.3%	5.1%	1.5%	26.9%	36
304	West Virginia	Jan-47	33.0%	0.3%	0.9%	1.9%	0.9%	63.0%	37
305	Florida	Jan-47	55.4%	7.3%	0.6%	5.2%	2.0%	29.5%	40
307	Wyoming	Jan-47	27.0%	0.2%	0.3%	2.0%	1.8%	68.7%	34
308	Nebraska	Jan-55	17.9%	0.6%	8.7%	1.2%	0.9%	70.7%	40
309	Illinois	Jan-57	29.3%	9.1%	6.3%	2.3%	1.5%	51.4%	55
310	California	Nov-91	51.8%	6.3%	0.6%	3.8%	1.3%	36.2%	48
312	Illinois	Jan-47	40.4%	3.0%	4.5%	2.1%	1.3%	48.6%	46
313	Michigan	Jan-47	39.1%	1.8%	4.1%	4.7%	2.3%	48.0%	36
314	Missouri	Jan-47	48.6%	3.2%	2.5%	3.2%	1.3%	41.2%	33
315	New York	Jan-47	36.7%	1.4%	2.6%	2.1%	0.9%	56.3%	39
316	Kansas	Jan-47	33.3%	4.1%	3.2%	2.5%	2.1%	54.8%	27
317	Indiana	Jan-47	39.6%	2.1%	2.0%	3.1%	1.8%	51.4%	48
318	Louisiana	Jan-57	33.5%	7.6%	0.5%	2.8%	0.7%	54.8%	42
319	Iowa	Jan-47	35.3%	1.8%	0.6%	5.7%	4.1%	52.6%	60
320	Minnesota	Mar-96	24.4%	0.2%	10.4%	2.0%	0.6%	62.3%	57
321	Florida	Nov-99	37.3%	4.1%	1.4%	2.9%	1.4%	53.0%	43
323	California	Jun-98	36.5%	4.7%	0.6%	3.3%	1.2%	53.7%	45
330	Ohio	Mar-96	37.3%	1.2%	2.0%	2.4%	1.3%	55.9%	38

Table 6
Telephone Number Utilization by Area Code as of December 31, 2001

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
334	Alabama	Jan-95	31.4%	6.2%	1.2%	2.3%	1.2%	57.7%	44
336	North Carolina	Dec-97	42.2%	7.0%	1.3%	3.0%	0.8%	45.6%	45
337	Louisiana	Oct-99	33.4%	9.5%	0.5%	3.9%	1.1%	51.6%	37
339	Massachusetts	May-01	2.7%	0.9%	0.0%	0.1%	0.2%	96.0%	11
340	US Virgin Islands	Jun-97	48.1%	3.2%	11.7%	10.9%	1.2%	24.9%	4
347	New York	Oct-99	32.8%	0.9%	1.5%	1.2%	0.9%	62.7%	28
351	Massachusetts	May-01	Not shown to protect carrier confidentiality						1
352	Florida	Dec-95	42.2%	4.3%	0.6%	3.5%	0.9%	48.5%	33
360	Washington	Jan-95	39.7%	0.3%	2.0%	3.0%	1.3%	53.7%	55
361	Texas	Feb-99	30.7%	5.6%	0.4%	2.7%	1.8%	58.8%	31
386	Florida	Feb-01	36.6%	6.7%	0.6%	2.6%	0.7%	52.8%	37
401	Rhode Island	Jan-47	41.4%	1.0%	1.6%	1.9%	0.5%	53.6%	30
402	Nebraska	Jan-47	35.2%	1.3%	2.6%	4.1%	1.0%	55.8%	49
404	Georgia	Jan-47	56.8%	4.9%	1.3%	5.1%	1.4%	30.5%	41
405	Oklahoma	Jan-47	38.9%	7.0%	1.0%	2.8%	1.2%	49.0%	40
406	Montana	Jan-47	21.9%	0.5%	0.3%	1.3%	0.5%	75.6%	33
407	Florida	Apr-88	48.2%	3.7%	2.3%	4.7%	0.8%	40.3%	41
408	California	Jan-59	52.1%	5.2%	0.8%	3.7%	0.7%	37.6%	43
409	Texas	Nov-82	32.5%	12.1%	0.4%	3.0%	1.3%	50.7%	35
410	Maryland	Oct-91	64.8%	1.9%	2.3%	3.9%	1.1%	26.1%	29
412	Pennsylvania	Jan-47	41.0%	1.0%	2.7%	2.6%	0.8%	52.0%	42
413	Massachusetts	Jan-47	48.5%	0.5%	1.5%	1.7%	0.4%	47.4%	32
414	Wisconsin	Jan-47	44.0%	3.4%	3.6%	3.9%	2.5%	42.6%	35
415	California	Jan-47	44.7%	3.8%	1.1%	3.4%	1.1%	46.0%	43
417	Missouri	Jan-50	28.5%	3.0%	1.2%	1.7%	0.7%	65.0%	49
419	Ohio	Jan-47	33.8%	2.7%	0.8%	2.3%	1.3%	59.2%	54
423	Tennessee	Sep-95	38.7%	5.5%	0.7%	3.4%	1.0%	50.7%	41
425	Washington	Apr-97	47.2%	0.4%	1.9%	3.9%	1.4%	45.2%	38
434	Virginia	Jun-01	41.8%	0.7%	1.4%	2.5%	1.7%	51.9%	20
435	Utah	Sep-97	23.5%	0.5%	1.4%	1.1%	0.9%	72.6%	45
440	Ohio	Aug-97	31.7%	1.4%	1.4%	1.9%	0.8%	62.7%	42
443	Maryland	Jun-97	17.0%	0.5%	1.3%	1.3%	1.8%	78.1%	39
469	Texas	Jul-99	19.9%	0.8%	1.1%	1.3%	2.3%	74.6%	35
478	Georgia	Aug-00	37.8%	10.3%	0.8%	3.1%	0.7%	47.3%	31
480	Arizona	Mar-99	65.2%	0.6%	2.0%	5.0%	0.8%	26.4%	35
484	Pennsylvania	Jun-99	7.5%	0.5%	0.8%	0.4%	1.0%	89.9%	44
501	Arkansas	Jan-47	34.9%	6.0%	1.2%	2.1%	0.9%	54.9%	40
502	Kentucky	Jan-47	44.8%	5.0%	0.8%	3.9%	1.7%	43.7%	36
503	Oregon	Jan-47	54.4%	0.3%	0.9%	5.1%	1.3%	38.0%	42
504	Louisiana	Jan-47	46.1%	6.2%	1.5%	5.0%	2.1%	39.0%	37
505	New Mexico	Jan-47	43.8%	0.6%	1.3%	3.1%	1.1%	50.1%	45
507	Minnesota	Jan-54	24.1%	0.3%	10.4%	1.8%	0.7%	62.7%	70
508	Massachusetts	Jul-88	51.8%	0.7%	1.6%	2.3%	0.8%	42.8%	41
509	Washington	Jan-57	40.6%	0.3%	0.8%	2.7%	1.2%	54.4%	45
510	California	Sep-91	39.4%	6.1%	0.8%	3.0%	1.4%	49.3%	40
512	Texas	Jan-47	47.6%	7.8%	1.1%	3.6%	1.6%	38.3%	43
513	Ohio	Jan-47	48.8%	0.2%	1.6%	3.0%	1.0%	45.4%	34
515	Iowa	Jan-47	43.5%	1.1%	1.2%	4.9%	2.2%	47.1%	46
516	New York	Jan-51	55.4%	1.1%	2.3%	3.6%	0.9%	36.8%	45
517	Michigan	Jan-47	29.9%	0.6%	2.1%	2.3%	1.3%	63.8%	46
518	New York	Jan-47	43.7%	0.5%	3.0%	2.3%	0.9%	49.6%	43
520	Arizona	Mar-95	42.4%	1.8%	1.6%	3.5%	1.1%	49.5%	48
530	California	Nov-97	29.6%	4.4%	3.7%	1.6%	1.3%	59.4%	49
540	Virginia	Jul-95	42.1%	0.5%	2.1%	2.7%	1.2%	51.3%	50
541	Oregon	Nov-95	36.4%	0.2%	1.1%	2.7%	1.2%	58.4%	56

Table 6
Telephone Number Utilization by Area Code as of December 31, 2001

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
551	New Jersey	Dec-01	0.0%	0.0%	0.0%	0.0%	5.3%	94.7%	6
559	California	Nov-98	29.5%	6.6%	0.6%	2.4%	1.4%	59.5%	35
561	Florida	May-96	48.0%	6.2%	1.9%	3.9%	1.1%	38.8%	44
562	California	Jan-97	39.5%	2.6%	0.4%	3.1%	2.0%	52.4%	48
563	Iowa	Mar-01	33.9%	1.1%	0.7%	4.9%	2.9%	56.4%	48
570	Pennsylvania	Dec-98	33.9%	0.6%	1.9%	2.7%	0.8%	60.0%	45
571	Virginia	Mar-00	21.5%	0.9%	1.0%	1.8%	0.7%	74.1%	26
573	Missouri	Jan-96	27.7%	2.0%	2.1%	2.0%	0.8%	65.3%	38
580	Oklahoma	Nov-97	17.9%	6.9%	0.3%	1.1%	1.2%	72.6%	42
585	New York	Nov-01	13.4%	0.2%	12.7%	0.7%	0.5%	72.6%	12
586	Michigan	Sep-01	34.9%	0.7%	2.4%	1.9%	1.4%	58.6%	19
601	Mississippi	Jan-47	31.0%	6.2%	0.5%	2.7%	0.9%	58.8%	41
602	Arizona	Jan-47	61.5%	2.5%	0.8%	4.8%	1.1%	29.4%	41
603	New Hampshire	Jan-47	39.9%	0.5%	1.5%	1.4%	0.8%	55.9%	48
605	South Dakota	Jan-47	20.0%	1.1%	0.6%	1.5%	1.1%	75.6%	65
606	Kentucky	Jan-55	27.2%	2.1%	2.0%	2.4%	2.2%	64.1%	28
607	New York	Jan-54	36.3%	0.6%	2.3%	1.7%	0.5%	58.6%	31
608	Wisconsin	Jan-55	31.8%	1.8%	3.0%	2.0%	1.7%	59.7%	63
609	New Jersey	Jan-57	44.9%	1.2%	1.2%	2.9%	0.9%	48.9%	37
610	Pennsylvania	Jan-94	54.3%	1.0%	1.6%	2.9%	0.7%	39.5%	50
612	Minnesota	Jan-47	58.2%	0.7%	0.5%	5.2%	1.2%	34.1%	44
614	Ohio	Jan-47	42.3%	1.2%	2.0%	2.7%	1.4%	50.3%	36
615	Tennessee	Jan-54	44.2%	4.6%	0.3%	4.0%	1.2%	45.6%	44
616	Michigan	Jan-47	36.1%	1.4%	1.9%	2.7%	1.4%	56.4%	45
617	Massachusetts	Jan-47	57.1%	1.2%	3.1%	3.1%	0.9%	34.8%	40
618	Illinois	Jan-47	21.5%	0.6%	4.9%	2.1%	1.3%	69.6%	52
619	California	Jan-82	44.1%	5.5%	0.8%	3.3%	1.3%	45.0%	43
620	Kansas	Feb-01	16.2%	8.2%	1.2%	0.9%	0.5%	73.1%	42
623	Arizona	Mar-99	49.0%	0.7%	2.2%	3.9%	1.5%	42.6%	33
626	California	Jun-97	37.1%	5.1%	0.9%	2.6%	2.1%	52.2%	48
630	Illinois	Aug-96	40.6%	2.7%	2.8%	2.7%	1.0%	50.2%	42
631	New York	Nov-99	40.0%	0.7%	2.3%	2.6%	0.6%	53.8%	42
636	Missouri	May-99	24.9%	0.8%	1.6%	1.8%	1.5%	69.3%	31
641	Iowa	Jul-00	16.3%	0.4%	2.0%	2.1%	0.9%	78.2%	53
646	New York	Jul-99	54.2%	1.5%	6.3%	3.2%	1.2%	33.5%	36
650	California	Aug-97	36.1%	5.0%	0.8%	2.3%	1.0%	54.7%	40
651	Minnesota	Jul-98	56.6%	2.1%	2.2%	3.1%	0.9%	35.1%	45
660	Missouri	Oct-97	15.0%	1.7%	0.7%	1.2%	0.7%	80.9%	34
661	California	Feb-99	30.7%	7.7%	0.6%	2.0%	1.4%	57.6%	42
662	Mississippi	Apr-99	23.1%	7.7%	0.5%	1.9%	0.8%	65.9%	38
670	Northern Marianas Is.	Jul-97		Not shown to protect carrier confidentiality					1
671	Guam	Jul-97		Not shown to protect carrier confidentiality					3
678	Georgia	Jan-98	27.7%	1.9%	2.1%	2.7%	2.1%	63.5%	52
682	Texas	Oct-00	10.3%	0.6%	0.1%	0.6%	5.3%	83.2%	15
701	North Dakota	Jan-47	18.8%	1.3%	1.5%	1.6%	0.6%	76.4%	51
702	Nevada	Jan-47	58.2%	1.0%	1.0%	4.3%	1.5%	34.0%	30
703	Virginia	Jan-47	60.3%	1.0%	2.6%	4.1%	1.0%	31.1%	43
704	North Carolina	Jan-47	45.1%	6.4%	0.8%	3.1%	1.2%	43.3%	45
706	Georgia	May-92	39.9%	8.4%	6.5%	3.0%	0.8%	41.4%	62
707	California	Jan-59	29.8%	6.2%	1.2%	1.6%	1.3%	59.9%	46
708	Illinois	Nov-89	37.1%	2.0%	1.7%	2.8%	1.3%	55.1%	43
712	Iowa	Jan-47	21.5%	1.1%	2.8%	1.8%	1.0%	71.8%	78
713	Texas	Jan-47	54.4%	4.8%	2.1%	3.7%	1.2%	33.7%	38
714	California	Jan-51	46.7%	5.1%	0.8%	3.5%	1.0%	43.0%	50
715	Wisconsin	Jan-47	24.1%	0.8%	0.6%	1.5%	1.0%	72.0%	83

Table 6
Telephone Number Utilization by Area Code as of December 31, 2001

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
716	New York	Jan-47	52.3%	1.0%	3.5%	4.5%	1.5%	37.1%	40
717	Pennsylvania	Jan-47	44.2%	1.2%	1.3%	2.2%	0.7%	50.5%	39
718	New York	Sep-84	65.4%	0.1%	4.7%	6.1%	0.8%	22.9%	35
719	Colorado	Mar-88	43.4%	0.7%	0.9%	4.5%	1.2%	49.3%	40
720	Colorado	Jun-98	40.1%	0.7%	2.7%	4.7%	2.1%	49.7%	25
724	Pennsylvania	Feb-98	27.6%	0.6%	1.0%	1.7%	0.6%	68.6%	47
727	Florida	Jul-98	47.7%	1.5%	1.2%	5.4%	2.4%	41.9%	38
731	Tennessee	Feb-01	24.9%	5.7%	0.5%	2.2%	0.5%	66.2%	30
732	New Jersey	Jun-97	47.7%	1.6%	2.1%	3.7%	0.9%	44.0%	36
734	Michigan	Dec-97	31.5%	0.5%	1.1%	2.2%	1.1%	63.5%	39
740	Ohio	Dec-97	30.8%	1.1%	0.8%	2.0%	1.2%	64.1%	38
754	Florida	Aug-01		Not shown to protect carrier confidentiality					1
757	Virginia	Jul-96	53.0%	1.2%	1.2%	3.1%	1.3%	40.3%	34
760	California	Mar-97	35.2%	4.2%	0.6%	2.5%	1.8%	55.6%	52
763	Minnesota	Feb-00	44.5%	0.5%	1.1%	3.6%	0.8%	49.5%	44
765	Indiana	Feb-97	25.3%	1.1%	0.8%	1.9%	1.4%	69.4%	53
770	Georgia	Aug-95	57.8%	7.1%	0.8%	4.9%	0.6%	28.8%	39
773	Illinois	Oct-96	46.4%	3.6%	1.5%	4.3%	1.2%	42.9%	42
774	Massachusetts	May-01	4.1%	0.4%	0.4%	0.3%	0.6%	94.2%	24
775	Nevada	Dec-98	33.4%	4.5%	0.6%	2.1%	1.9%	57.6%	34
781	Massachusetts	Sep-97	38.2%	0.8%	1.0%	2.1%	0.5%	57.4%	40
785	Kansas	Jul-97	23.4%	5.8%	1.5%	1.2%	1.2%	66.9%	43
786	Florida	Mar-98	30.9%	1.6%	2.9%	3.1%	1.5%	60.0%	35
787	Puerto Rico	Mar-96	56.6%	1.4%	0.6%	2.2%	0.2%	39.1%	10
801	Utah	Jan-47	55.1%	0.4%	1.2%	3.8%	1.4%	38.1%	33
802	Vermont	Jan-47	19.2%	0.1%	0.7%	0.5%	3.3%	76.3%	22
803	South Carolina	Jan-47	42.1%	7.6%	2.2%	2.5%	1.5%	44.2%	56
804	Virginia	Jun-73	49.0%	1.2%	2.1%	3.3%	1.6%	42.9%	37
805	California	Jan-57	38.9%	5.3%	0.6%	2.3%	1.6%	51.3%	44
806	Texas	Jan-57	23.9%	4.8%	0.5%	2.1%	1.4%	67.3%	42
808	Hawaii	Jan-57	48.2%	1.7%	0.2%	3.8%	1.3%	44.8%	14
810	Michigan	Dec-93	27.0%	1.4%	4.6%	3.4%	1.3%	62.3%	37
812	Indiana	Jan-47	29.1%	0.9%	0.6%	2.3%	1.3%	65.8%	52
813	Florida	Jan-53	51.5%	1.6%	1.1%	4.3%	2.8%	38.7%	43
814	Pennsylvania	Jan-47	29.9%	0.7%	0.5%	1.5%	1.2%	66.2%	37
815	Illinois	Jan-47	28.7%	2.1%	2.6%	2.2%	1.4%	63.0%	68
816	Missouri	Jan-47	39.1%	2.9%	1.2%	3.0%	1.2%	52.7%	47
817	Texas	Jan-53	39.8%	2.4%	1.1%	3.5%	0.9%	52.2%	48
818	California	Jan-84	46.2%	6.1%	0.9%	3.3%	1.5%	42.0%	49
828	North Carolina	Mar-98	38.3%	5.7%	1.1%	2.6%	1.1%	51.2%	38
830	Texas	Jul-97	21.4%	2.0%	0.3%	2.3%	1.0%	73.0%	43
831	California	Jul-98	28.6%	6.8%	0.9%	1.9%	1.9%	59.8%	37
832	Texas	Jan-99	27.9%	0.8%	0.4%	2.5%	5.1%	63.4%	34
843	South Carolina	Mar-98	42.0%	5.4%	0.4%	3.0%	1.8%	47.5%	43
845	New York	Jun-00	47.8%	0.9%	2.3%	3.1%	0.9%	45.0%	43
847	Illinois	Jan-96	49.1%	1.8%	2.5%	2.9%	1.3%	42.4%	44
848	New Jersey	Dec-01	0.0%	0.0%	0.1%	0.0%	7.5%	92.4%	7
850	Florida	Jun-97	39.7%	3.9%	2.5%	3.0%	0.7%	50.2%	44
856	New Jersey	Jun-99	33.5%	0.9%	1.1%	2.2%	0.7%	61.6%	35
857	Massachusetts	May-01	3.0%	0.4%	0.2%	0.2%	1.9%	94.3%	23
858	California	Jun-99	42.3%	3.8%	0.8%	2.4%	1.6%	49.1%	37
859	Kentucky	Apr-00	37.3%	1.3%	1.4%	2.6%	1.4%	56.0%	45
860	Connecticut	Aug-95	36.3%	4.9%	0.9%	1.9%	1.2%	54.9%	32
862	New Jersey	Dec-01	0.0%	0.0%	0.0%	0.0%	8.4%	91.6%	8
863	Florida	Sep-99	34.1%	2.4%	0.9%	3.4%	1.9%	57.3%	35

Table 6
Telephone Number Utilization by Area Code as of December 31, 2001

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs	
864	South Carolina	Dec-95	39.6%	6.3%	1.3%	3.5%	1.4%	47.9%	32	
865	Tennessee	Nov-99	46.9%	5.1%	0.3%	4.1%	0.8%	42.7%	30	
870	Arkansas	Apr-97	21.2%	6.0%	1.5%	1.4%	0.6%	69.3%	37	
878	Pennsylvania	Aug-01	Not shown to protect carrier confidentiality							1
901	Tennessee	Jan-47	53.1%	5.4%	0.9%	5.0%	0.7%	34.8%	32	
903	Texas	Nov-90	28.7%	5.0%	1.1%	2.4%	1.1%	61.7%	52	
904	Florida	Jan-65	49.2%	6.3%	1.1%	4.2%	1.2%	37.9%	43	
906	Michigan	Jan-61	14.1%	0.5%	0.2%	0.6%	1.0%	83.6%	21	
907	Alaska	Jan-57	21.7%	0.3%	1.1%	1.4%	0.5%	75.0%	33	
908	New Jersey	Nov-90	32.6%	0.9%	1.1%	1.7%	0.6%	63.1%	44	
909	California	Nov-92	54.9%	4.9%	0.6%	3.1%	1.4%	35.1%	44	
910	North Carolina	Nov-93	36.6%	3.7%	4.2%	3.1%	0.8%	51.5%	40	
912	Georgia	Jan-54	36.6%	6.9%	3.8%	2.9%	1.1%	48.7%	46	
913	Kansas	Jan-47	41.4%	2.8%	1.6%	2.8%	1.4%	50.0%	37	
914	New York	Jan-47	47.5%	1.4%	2.0%	2.2%	0.8%	46.1%	51	
915	Texas	Jan-47	34.9%	3.9%	1.1%	3.0%	1.6%	55.4%	57	
916	California	Jan-47	42.1%	4.1%	1.8%	3.0%	1.4%	47.6%	40	
917	New York	Jan-92	60.2%	4.2%	1.0%	4.0%	0.4%	30.3%	32	
918	Oklahoma	Jan-53	33.3%	5.6%	0.7%	2.4%	1.3%	56.7%	53	
919	North Carolina	Jan-54	47.3%	4.2%	0.6%	3.5%	1.0%	43.4%	45	
920	Wisconsin	Jul-97	27.5%	0.8%	2.4%	1.6%	1.4%	66.3%	57	
925	California	Mar-98	32.2%	5.7%	0.8%	1.9%	1.5%	57.9%	38	
928	Arizona	Jun-01	35.8%	1.0%	4.4%	2.0%	0.5%	56.3%	38	
931	Tennessee	Sep-97	27.3%	5.4%	0.1%	3.0%	0.7%	63.5%	42	
936	Texas	Feb-00	28.2%	8.0%	0.2%	1.9%	1.2%	60.5%	30	
937	Ohio	Sep-96	35.7%	1.1%	1.5%	2.6%	1.3%	57.9%	35	
939	Puerto Rico	Sep-01	Not shown to protect carrier confidentiality							3
940	Texas	May-97	25.1%	4.3%	0.9%	2.3%	1.8%	65.7%	51	
941	Florida	May-95	42.6%	2.4%	1.4%	4.2%	1.2%	48.2%	41	
949	California	Apr-98	39.1%	3.8%	0.7%	3.0%	1.8%	51.6%	46	
952	Minnesota	Feb-00	48.7%	0.7%	2.8%	3.2%	1.2%	43.3%	39	
954	Florida	Sep-95	49.6%	9.0%	1.8%	4.4%	1.7%	33.4%	44	
956	Texas	Jul-97	34.5%	6.1%	0.3%	3.6%	2.0%	53.6%	28	
970	Colorado	Apr-95	38.6%	0.3%	1.8%	3.1%	1.2%	55.0%	44	
971	Oregon	Oct-00	11.4%	0.2%	0.4%	1.3%	1.2%	85.3%	24	
972	Texas	Sep-96	50.6%	2.5%	1.5%	3.8%	1.7%	40.0%	44	
973	New Jersey	Jun-97	51.1%	1.4%	2.3%	2.8%	0.7%	41.7%	40	
978	Massachusetts	Sep-97	38.2%	0.7%	1.6%	1.5%	0.6%	57.5%	40	
979	Texas	Feb-00	25.1%	5.7%	0.4%	2.3%	1.1%	65.3%	42	
980	North Carolina	Apr-01	10.3%	3.9%	0.1%	0.8%	0.0%	84.8%	8	
985	Louisiana	Feb-01	27.5%	8.5%	1.5%	6.1%	1.2%	55.2%	28	
989	Michigan	Apr-01	25.3%	0.4%	1.6%	1.7%	1.4%	69.6%	37	

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 22, 2002.

Table 7
Assigned, Aging and Available Telephone Numbers by Area Code
(in thousands except OCNs)

Area Code	Wireline (ILECs and CLECs)				Wireless (Cellular/PCS)			
	Assigned	Aging	Available	OCNs	Assigned	Aging	Available	OCNs
201	2,153	105	2,612	27	933	57	509	5
202	2,381	174	981	27	463	40	295	6
203	2,041	105	2,532	21	822	63	475	7
205	1,494	100	1,469	20	685	81	545	13
206	2,000	194	1,019	26	827	80	356	7
207	1,398	54	2,109	30	436	14	673	8
208	1,632	78	2,156	33	488	46	1,061	18
209	1,142	54	2,019	19	525	49	629	13
210	1,579	117	1,240	21	694	62	250	7
212	5,969	320	726	28	0	0	0	0
213	807	74	1,352	30	438	53	402	6
214	1,885	142	1,884	36	1,189	105	369	7
215	3,326	208	2,027	21	851	41	266	6
216	1,133	65	1,495	21	625	66	535	8
217	1,009	87	2,920	27	436	20	707	17
218	636	31	1,942	45	296	17	582	9
219	1,925	106	2,469	24	800	63	1,009	15
225	839	47	750	15	337	65	401	11
228	349	22	692	11	175	22	265	10
229	505	36	983	16	256	12	412	9
231	572	42	1,760	19	203	23	357	12
234	10	0	30	4	0	0	0	0
240	312	13	2,199	25	327	35	493	10
248	1,827	90	2,706	25	745	98	453	7
251	550	38	679	16	238	20	243	10
252	1,110	53	1,536	12	406	32	644	9
253	1,343	94	1,210	25	412	48	212	7
254	638	61	1,461	23	291	23	375	13
256	1,178	71	1,409	17	568	73	800	12
262	982	63	2,105	24	171	18	463	10
267	186	5	3,904	30	402	42	361	6
270	999	60	2,885	22	375	61	752	14
276	145	9	250	6	62	4	202	11
281	2,232	193	2,565	25	816	50	151	6
301	3,373	174	1,646	16	933	72	236	10
302	1,272	65	2,061	20	388	25	259	7
303	3,859	255	1,593	21	926	87	187	9
304	1,421	80	2,985	15	557	37	815	16
305	2,728	234	906	21	959	112	305	6
307	547	39	1,068	19	223	17	890	14
308	309	19	1,440	31	144	10	348	7
309	973	81	1,842	36	359	25	391	15
310	2,724	198	2,000	29	1,088	80	180	5
312	2,135	81	1,499	27	468	39	946	8
313	1,430	83	1,575	20	843	173	857	7
314	1,751	96	1,653	19	966	76	494	7
315	1,265	79	2,024	26	416	17	452	7
316	526	28	1,029	10	245	24	190	10
317	1,681	101	2,463	30	751	89	495	7
318	954	65	1,563	23	432	53	635	13
319	817	156	1,125	46	289	21	491	10
320	462	34	1,246	43	139	15	274	11
321	655	31	1,169	27	333	41	255	7
323	1,514	119	2,762	27	558	71	160	6
330	1,647	85	2,389	19	804	67	895	12

Table 7
Assigned, Aging and Available Telephone Numbers by Area Code
(in thousands except OCNs)

Area Code	Wireline (ILECs and CLECs)				Wireless (Cellular/PCS)			
	Assigned	Aging	Available	OCNs	Assigned	Aging	Available	OCNs
334	880	60	1,444	27	504	43	854	13
336	1,786	89	1,834	30	729	93	733	11
337	709	52	1,178	19	349	81	415	13
339	10	0	431	8	Not shown to protect carrier confidentiality			3
340	Not shown to protect carrier confidentiality			1	Not shown to protect carrier confidentiality			3
347	262	1	819	22	407	23	456	6
351	Not shown to protect carrier confidentiality			1	0	0	0	0
352	1,093	72	990	15	423	53	516	11
360	2,016	127	2,664	42	600	67	803	8
361	625	53	953	17	277	27	591	9
386	639	42	751	18	252	21	386	12
401	1,531	58	2,200	17	447	30	208	6
402	1,700	205	3,021	34	633	66	610	11
404	2,246	147	713	25	1,097	141	596	8
405	1,211	73	1,766	21	558	46	353	12
406	809	38	2,603	24	290	28	1,211	7
407	1,820	172	1,543	24	722	73	276	7
408	2,493	157	1,637	24	855	71	399	8
409	594	49	876	18	249	29	333	11
410	3,756	206	1,174	11	877	57	164	7
412	1,644	110	2,247	22	736	35	653	10
413	1,629	47	1,587	20	258	17	179	8
414	1,098	64	913	14	689	95	438	10
415	2,183	153	2,227	25	697	62	340	6
417	842	55	2,052	32	352	15	631	10
419	1,605	84	2,636	37	657	65	1,068	12
423	1,221	67	1,332	20	540	89	793	17
425	1,774	140	1,717	27	416	41	320	7
434	336	20	373	10	245	14	348	9
435	683	21	1,611	28	164	20	921	13
440	1,071	53	2,482	24	416	31	349	10
443	418	14	3,569	26	521	60	670	8
469	251	13	1,402	27	180	16	199	6
478	509	35	587	15	260	27	290	10
480	1,867	133	725	22	340	35	145	8
484	253	9	4,542	33	159	11	359	9
501	1,468	79	2,409	26	726	52	904	8
502	1,161	74	1,101	19	557	77	420	10
503	2,796	270	2,086	31	917	74	378	7
504	1,248	78	772	18	582	128	489	11
505	1,910	101	2,109	27	696	84	738	14
507	728	34	2,040	55	277	43	574	12
508	2,765	122	2,777	28	975	37	249	6
509	1,599	90	1,980	27	492	46	774	13
510	1,655	97	2,162	22	784	82	500	7
512	2,015	139	1,421	26	704	52	474	10
513	1,934	85	1,562	21	796	78	725	8
515	943	119	1,037	30	339	27	314	11
516	1,677	109	1,088	30	1,118	54	398	7
517	830	47	1,724	30	424	48	725	13
518	1,411	79	1,785	28	424	16	220	8
520	1,368	72	1,300	26	498	82	746	14
530	1,288	52	2,540	25	415	39	537	13
540	1,643	89	1,559	26	627	55	1,174	20
541	1,442	108	2,163	33	538	35	993	16

Table 7
Assigned, Aging and Available Telephone Numbers by Area Code
(in thousands except OCNs)

Area Code	Wireline (ILECs and CLECs)				Wireless (Cellular/PCS)			
	Assigned	Aging	Available	OCNs	Assigned	Aging	Available	OCNs
551	Not shown to protect carrier confidentiality				0	0	99	4
559	1,047	62	2,215	19	457	47	422	8
561	1,967	132	1,198	25	791	89	604	9
562	1,346	89	2,028	29	562	63	299	6
563	426	73	736	38	191	17	268	9
570	1,405	125	2,554	30	446	23	579	9
571	45	4	425	17	135	11	171	6
573	923	63	2,136	23	354	28	867	12
580	533	29	2,600	24	239	16	515	11
585	65	3	338	7	10	0	73	5
586	672	33	777	14	96	6	483	4
601	1,142	76	2,225	22	572	74	946	15
602	2,338	140	767	23	1,111	122	633	8
603	1,930	63	2,766	32	512	23	659	11
605	727	52	2,910	56	281	26	898	7
606	699	51	1,742	14	221	31	442	12
607	709	35	1,161	18	217	8	307	10
608	1,006	64	1,978	45	424	25	532	11
609	1,533	95	1,817	19	885	58	561	6
610	2,886	161	2,264	31	960	43	162	8
612	1,148	111	783	26	1,053	80	382	9
614	1,616	79	2,154	20	711	68	411	9
615	1,625	116	1,921	26	696	103	356	11
616	1,636	101	2,373	23	721	83	930	15
617	3,135	168	2,222	26	1,034	53	222	7
618	982	98	3,692	27	441	41	867	19
619	1,469	97	1,487	25	842	68	425	6
620	491	31	2,566	27	188	9	502	12
623	619	41	485	19	157	21	144	8
626	1,270	70	2,026	27	589	63	280	6
630	1,983	122	2,053	22	760	55	1,071	8
631	1,642	104	2,409	30	301	13	163	6
636	618	43	1,626	20	81	6	229	6
641	227	34	1,216	41	159	16	639	11
646	831	36	574	30	682	54	360	6
650	1,631	93	2,602	24	452	38	250	7
651	1,511	70	959	30	343	30	156	9
660	333	27	1,944	20	132	8	565	12
661	936	52	1,835	22	386	34	270	8
662	745	50	2,094	23	297	37	784	12
670	0	0	0	0	Not shown to protect carrier confidentiality			1
671	0	0	0	0	Not shown to protect carrier confidentiality			3
678	973	79	3,709	36	764	93	246	11
682	47	0	392	12	Not shown to protect carrier confidentiality			3
701	651	50	2,819	41	257	26	880	9
702	1,840	126	1,111	15	686	54	185	5
703	3,424	247	1,911	29	973	51	141	6
704	2,186	131	1,950	28	896	82	768	11
706	1,587	95	1,518	31	704	73	683	21
707	1,363	61	2,851	24	509	37	491	9
708	1,297	93	2,003	23	731	57	697	8
712	490	44	1,779	65	226	16	611	12
713	2,828	202	1,678	22	901	48	137	6
714	2,027	137	2,054	29	1,053	90	264	6
715	913	50	2,677	59	337	27	986	18

Table 7
Assigned, Aging and Available Telephone Numbers by Area Code
(in thousands except OCNs)

Area Code	Wireline (ILECs and CLECs)				Wireless (Cellular/PCS)			
	Assigned	Aging	Available	OCNs	Assigned	Aging	Available	OCNs
716	2,576	256	1,868	24	826	37	421	12
717	1,812	96	2,290	22	667	28	434	8
718	4,607	435	1,623	28	163	8	51	5
719	1,229	119	1,035	23	392	48	739	11
720	673	65	990	17	514	74	481	7
724	1,316	69	3,703	29	436	35	526	11
727	1,584	126	1,301	22	399	45	222	6
731	404	29	980	16	167	22	402	10
732	2,446	199	2,446	20	857	62	220	6
734	1,150	58	2,722	26	505	58	451	8
740	1,230	74	2,234	21	385	30	922	13
754	Not shown to protect carrier confidentiality			1	0	0	0	0
757	2,019	101	1,277	17	758	63	583	8
760	1,631	97	2,762	29	651	68	503	10
763	950	78	987	31	71	5	111	8
765	1,032	57	2,647	36	313	47	894	10
770	3,377	287	1,547	18	826	61	119	12
773	1,771	132	1,691	23	928	90	611	8
774	32	2	629	18	6	0	255	6
775	822	46	1,616	20	259	22	219	8
781	2,305	126	3,690	26	342	17	174	7
785	787	39	2,594	26	291	15	480	12
786	218	10	747	22	319	44	419	7
787	Not shown to protect carrier confidentiality			2	1,890	130	938	7
801	2,942	160	1,767	17	823	94	594	7
802	761	22	3,303	15	141	1	267	5
803	1,561	77	1,279	36	594	47	785	13
804	1,982	117	1,568	20	617	54	575	11
805	1,707	81	2,095	24	630	55	548	9
806	619	54	2,206	27	300	25	375	11
808	1,550	123	1,429	4	616	44	453	7
810	643	43	2,014	20	705	122	731	10
812	1,186	70	2,887	31	407	56	683	15
813	1,888	142	1,292	27	483	54	212	7
814	1,156	57	2,682	18	384	20	678	14
815	1,330	101	3,500	40	607	44	557	17
816	1,334	74	2,403	27	832	61	554	12
817	1,810	155	2,876	35	784	68	265	6
818	2,002	121	1,803	27	924	78	292	6
828	963	63	1,200	24	392	29	531	10
830	451	47	1,484	20	127	19	242	13
831	661	35	1,303	18	258	26	315	9
832	337	15	1,592	25	645	73	606	6
843	1,596	98	1,620	26	613	58	751	13
845	1,322	83	1,070	26	160	10	184	9
847	2,839	147	2,539	24	1,045	75	582	8
848	Not shown to protect carrier confidentiality			3	0	0	128	4
850	1,327	93	1,570	20	521	48	572	17
856	1,310	90	2,347	22	216	12	218	6
857	12	0	459	17	10	2	222	6
858	1,260	65	1,412	21	240	18	172	6
859	970	56	1,463	24	422	42	554	13
860	1,770	79	3,204	18	675	44	411	6
862	0	0	40	4	0	0	97	4
863	777	66	1,054	18	198	33	446	8

Table 7
Assigned, Aging and Available Telephone Numbers by Area Code
(in thousands except OCNs)

Area Code	Wireline (ILECs and CLECs)				Wireless (Cellular/PCS)			
	Assigned	Aging	Available	OCNs	Assigned	Aging	Available	OCNs
864	1,107	102	1,311	21	544	45	540	6
865	805	58	742	17	392	47	234	9
870	765	50	2,727	23	319	21	737	11
878	Not shown to protect carrier confidentiality			1	0	0	0	0
901	1,286	79	700	20	629	110	402	8
903	1,142	92	2,602	28	475	48	750	15
904	1,373	90	912	23	597	71	377	10
906	246	11	1,285	15	96	5	318	5
907	764	59	3,216	24	257	4	309	7
908	1,267	69	2,541	27	566	26	871	7
909	2,708	125	1,560	24	1,159	92	256	5
910	1,041	71	1,360	24	534	62	782	9
912	684	56	860	28	373	28	442	12
913	918	53	1,188	22	324	27	228	9
914	1,487	69	1,629	34	814	34	368	9
915	1,377	106	2,327	27	537	56	553	19
916	1,657	99	1,935	21	771	67	485	9
917	657	20	328	16	2,742	137	182	7
918	1,263	71	2,263	31	574	53	739	13
919	2,041	128	1,852	28	786	74	574	10
920	1,012	48	1,934	35	462	34	1,016	15
925	1,216	64	2,333	22	445	32	340	7
928	912	44	1,158	22	186	19	552	12
931	593	55	1,313	22	260	39	554	15
936	502	28	967	17	145	15	259	8
937	1,552	91	2,294	21	573	59	922	9
939	Not shown to protect carrier confidentiality			1	Not shown to protect carrier confidentiality			2
940	485	45	1,428	33	175	13	260	12
941	1,906	124	1,867	21	497	54	548	10
949	1,310	93	1,793	27	444	42	212	6
952	1,228	82	993	29	61	4	82	7
954	2,023	167	1,063	26	877	91	385	7
956	734	63	802	14	355	46	740	8
970	1,224	90	1,377	24	426	41	959	14
971	38	1	334	17	18	6	84	6
972	3,275	246	2,520	30	339	24	39	6
973	2,842	149	2,454	26	749	47	137	5
978	2,073	77	3,424	27	392	13	202	6
979	474	45	1,088	21	184	18	434	10
980	Not shown to protect carrier confidentiality			3	11	2	139	5
985	513	37	886	14	235	131	538	10
989	755	54	1,873	20	276	16	733	14

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 22, 2002.

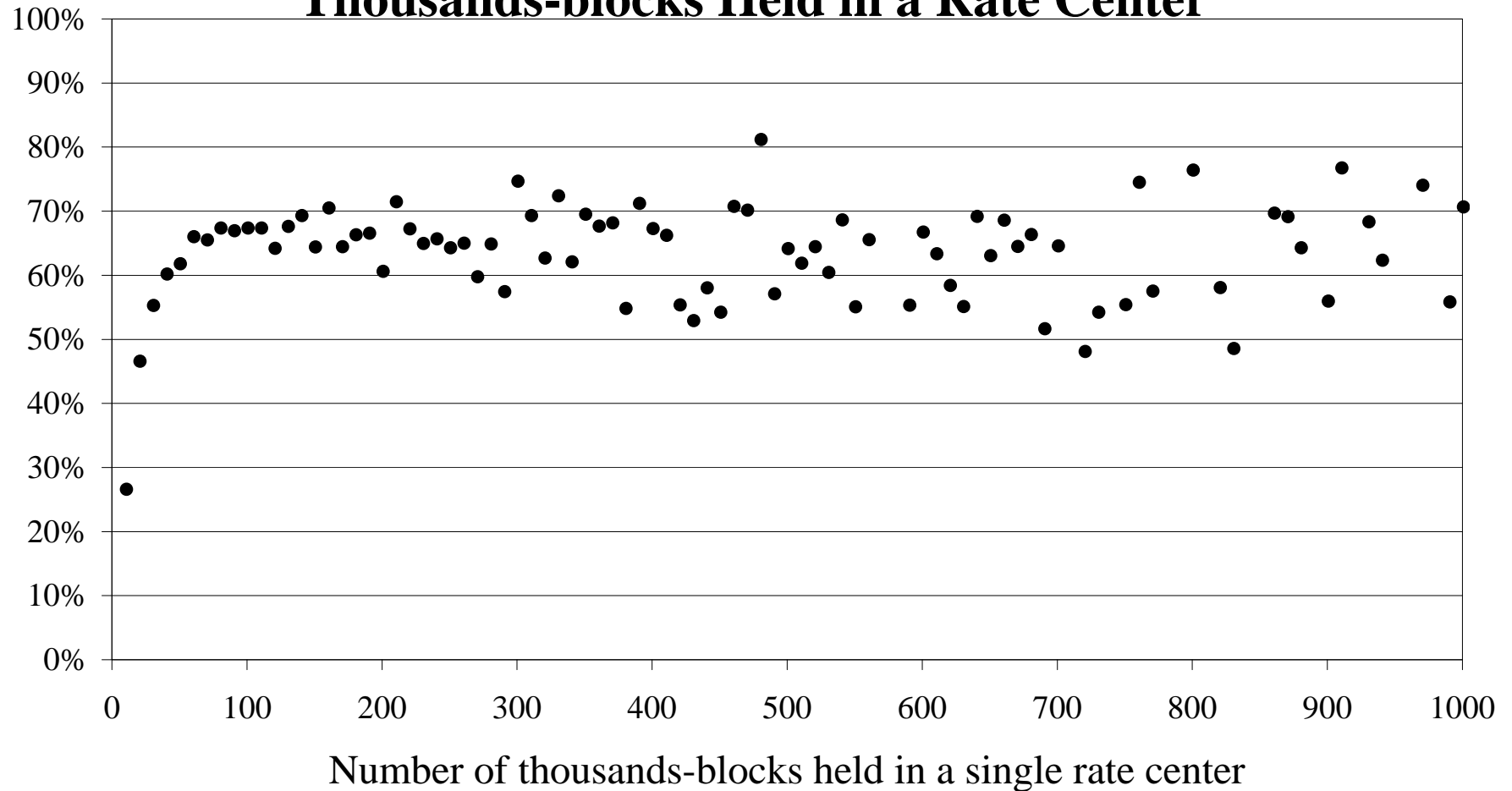
Table 8
Pooled and Potentially Poolable¹ Thousands-blocks as of December 31, 2001

State	Pooled	Poolable		
	ILECs and CLECs	ILECs and CLECs	Cellular/PCS	Total
Alabama	0	3,072	1,555	4,627
Alaska	0	885	194	1,079
Arizona	0	2,097	1,349	3,446
Arkansas	0	2,368	1,017	3,385
California	20,865	33,503	5,076	38,579
Colorado	1,430	2,652	1,567	4,219
Connecticut	3,742	4,021	531	4,552
Delaware	0	1,398	171	1,569
District of Columbia	0	608	130	738
Florida	2,695	10,594	3,211	13,805
Georgia	0	5,546	1,497	7,043
Hawaii	0	761	246	1,007
Idaho	0	1,009	787	1,796
Illinois	6,757	13,359	3,360	16,719
Indiana	2,309	6,821	1,635	8,456
Iowa	280	1,316	1,476	2,792
Kansas	0	4,513	771	5,284
Kentucky	0	4,350	1,510	5,860
Louisiana	0	2,506	1,499	4,005
Maine	1,878	922	307	1,229
Maryland	7,753	6,503	1,045	7,548
Massachusetts	3,480	12,078	1,082	13,160
Michigan	0	13,305	3,431	16,736
Minnesota	0	3,243	1,101	4,344
Mississippi	0	2,820	921	3,741
Missouri	0	6,943	2,494	9,437
Montana	0	546	908	1,454
Nebraska	360	1,978	555	2,533
Nevada	0	1,443	224	1,667
New Hampshire	2,378	1,938	437	2,375
New Jersey	2,168	10,919	1,498	12,417
New Mexico	0	526	632	1,158
New York	15,861	10,660	2,282	12,942
North Carolina	3,074	5,968	2,637	8,605
North Dakota	0	409	719	1,128
Ohio	0	11,171	3,738	14,909
Oklahoma	0	2,830	1,041	3,871
Oregon	2,460	2,317	932	3,249
Pennsylvania	11,221	18,912	2,793	21,705
Rhode Island	0	1,537	120	1,657
South Carolina	0	2,268	1,289	3,557
South Dakota	0	507	729	1,236
Tennessee	0	3,786	1,396	5,182
Texas	5,134	20,451	4,884	25,335
Utah	1,244	1,655	1,054	2,709
Vermont	0	2,688	195	2,883
Virginia	5,448	4,602	1,998	6,600
Washington	800	5,248	1,561	6,809
West Virginia	0	1,928	564	2,492
Wisconsin	0	4,010	2,507	6,517
Wyoming	0	259	460	719
Totals	101,337	265,749	73,116	338,865

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar, Inc. as of April 22, 2002 and January 2002 LERG.

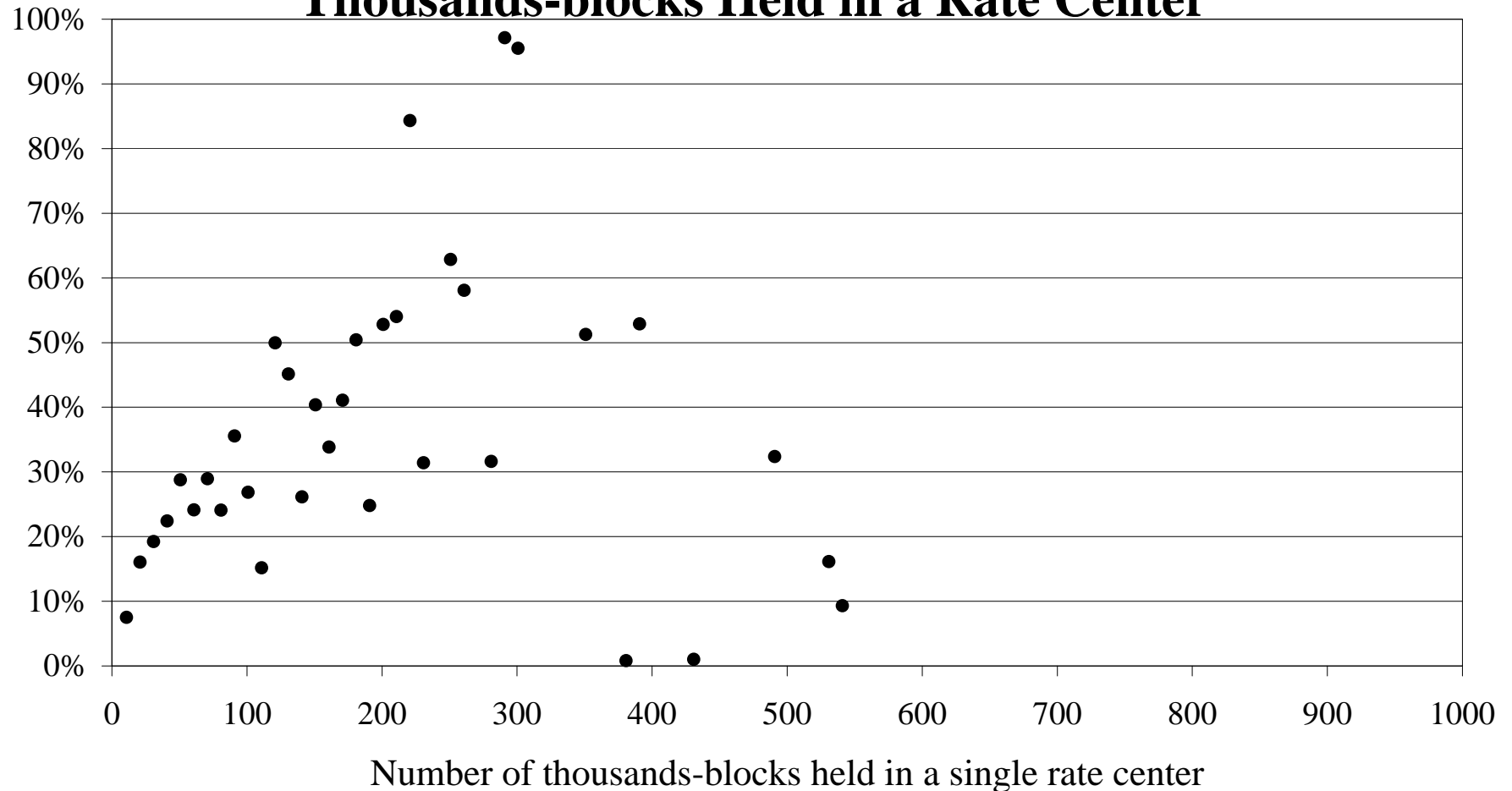
¹ Thousands-blocks can be donated to a pool if 90% of the numbers in the block are available. If a state has implemented pooling, carriers are allowed to keep a six-month inventory of numbers in each rate center, so not all thousands-blocks that are listed as poolable are actually subject to pooling. At least 90% of the numbers in these thousands-blocks are available, and therefore at least 90% of the numbers in these blocks are a subset of the numbers shown as available in Tables 1 through 3.

Figure 1
ILECs: Average Utilization Rates by Number of
Thousands-blocks Held in a Rate Center



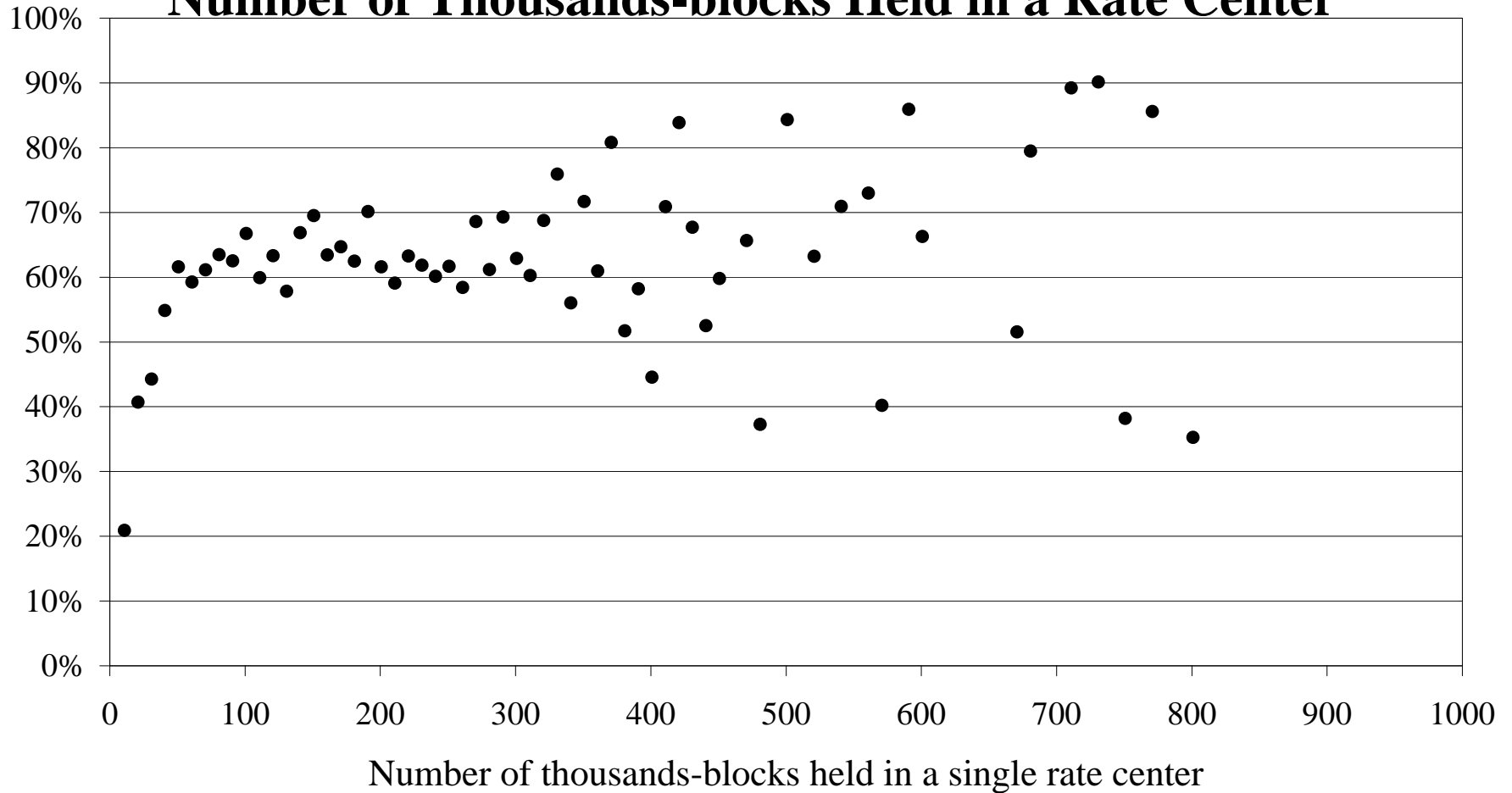
Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 22, 2002

Figure 2
CLECs: Average Utilization Rates by Number of
Thousands-blocks Held in a Rate Center



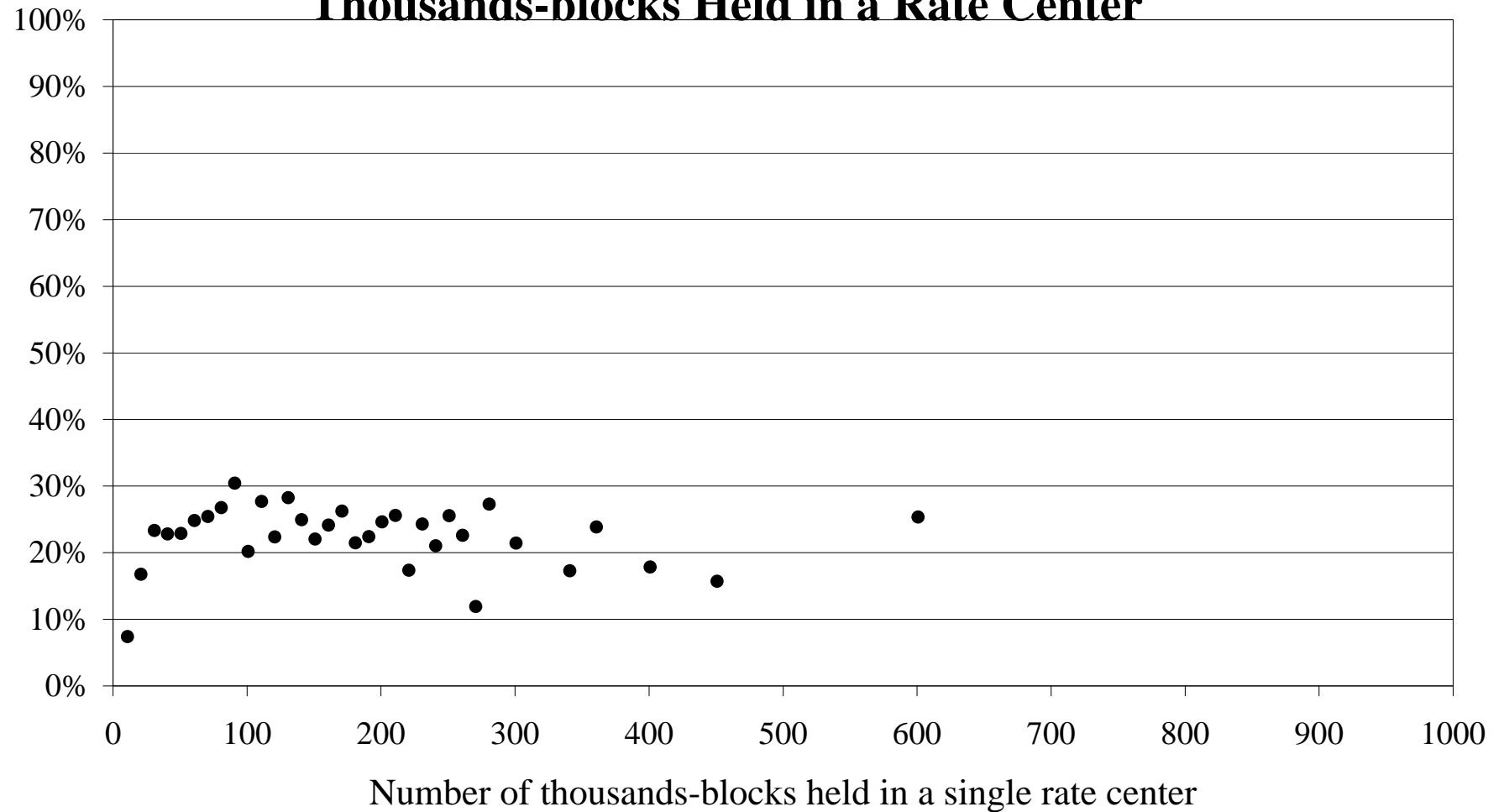
Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 22, 2002

Figure 3
Cellular/PCs Carriers: Average Utilization Rates by
Number of Thousands-blocks Held in a Rate Center



Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 22, 2002

Figure 4
Paging Carriers: Average Utilization Rates by Number of
Thousands-blocks Held in a Rate Center



Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 22, 2002

Table 9
Number Utilization for Specialized Non-geographic Area Codes as of December 31, 2001

Specialized Area Codes	Assigned	Intermediate	Reserved	Aging	Admin	Available ¹	Total	Unique NXXs
	(Thousands of telephone numbers)							
500	1,989	396	5	1,139	38	1,273	4,840	484
	41.1%	8.2%	0.1%	23.5%	0.8%	26.3%		
900	168	107	9	7	0	1,078	1,370	137
	12.3%	7.8%	0.6%	0.5%	0.0%	78.7%		

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 22, 2002.

Table 10
Alternate Sources of NPA-NXX Assignments

NPA-NXXs that Appear in	NRUF	NANPA	LERG	NXXs
All Three Databases				
NRUF, NANPA and LERG	✓	✓	✓	104,761
Two of the Three Databases				
NRUF and NANPA	✓	✓		10,765
NANPA and LERG		✓	✓	5,497
NRUF and LERG	✓		✓	2,766
Only One Database				
NRUF	✓			1,297
NANPA		✓		6,402
LERG			✓	6,591
Total NXXs in Database.	119,589	127,425	119,615	

Sources: December 31, 2001 NRUF database, as of April 22, 2002; NANPA's NPA-NXX assignments database as of May 15, 2002; and the LERG, as of January 1, 2002.

¹ Includes only telephone numbers in NXXs assigned to carriers and are therefore available for assignment to customers. Does not include any numbers in NXXs that have not yet been assigned to carriers.

Table 11
Number Utilization Over Time

Carrier Type	December 2000	June 2001	December 2001
ILEC	52.1%	52.1%	52.5%
CLEC	9.8%	10.9%	11.4%
Cellular/PCS	46.2%	45.3%	47.2%
Paging	26.3%	24.8%	20.2%
Overall	40.1%	39.6%	39.7%

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar, Inc.

Table 12
NPA-NXXs Assigned, Returned and Net Assignments

Quarter	NPA-NXXs Assigned	NPA-NXXs Returned	Net Assignments
1998 Q3	1,554	0	1,554
1998 Q4	2,375	0	2,375
1999 Q1	3,019	0	3,019
1999 Q2	4,693	95	4,598
1999 Q3	4,202	164	4,038
1999 Q4	3,993	545	3,448
2000 Q1	4,552	775	3,777
FCC Issued First Numbering Resource Optimization Order			
2000 Q2	4,126	923	3,203
2000 Q3	3,497	818	2,679
2000 Q4	3,235	1,146	2,089
FCC Issued Second Numbering Resource Optimization Order			
2001 Q1	3,095	1,725	1,370
2001 Q2	3,136	1,320	1,816
2001 Q3	2,112	1,611	501
2001 Q4	2,055	1,402	653
2002 Q1	1,731	1,199	532

Source: NeuStar, Inc.

Customer Response

Publication: *Numbering Resource Utilization in the United States as of December 31, 2001.*

You can help us provide the best possible information to the public by completing this form and returning it to the Industry Analysis and Technology Division of the FCC's Wireline Competition Bureau.

1. Please check the category that best describes you:

- Press
- Current telecommunications carrier
- Potential telecommunications carrier
- Business customer evaluating vendors/service options
- Consultant, law firm, lobbyist
- Other business customer
- Academic/student
- Residential customer
- FCC employee
- Other federal government employee
- State or local government employee
- Other (please specify)

2. Please rate the report: Excellent Good Satisfactory Poor No opinion

- | | | | | | |
|----------------------|-----|-----|-----|-----|-----|
| Data accuracy | () | () | () | () | () |
| Data presentation | () | () | () | () | () |
| Timeliness of data | () | () | () | () | () |
| Completeness of data | () | () | () | () | () |
| Text clarity | () | () | () | () | () |
| Completeness of text | () | () | () | () | () |

3. Overall, how do you rate this report? Excellent Good Satisfactory Poor No opinion

- | | | | | |
|-----|-----|-----|-----|-----|
| () | () | () | () | () |
|-----|-----|-----|-----|-----|

4. How can this report be improved?

5. May we contact you to discuss possible improvements?

Name:

Telephone #:

To discuss this report, contact Craig Stoup at 202-418-0989 or < cstroup@fcc.gov >.		
Fax this response to:	or	Mail this response to:
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