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FCC RELEASES TELEPHONE NUMBERING RESOURCE UTILIZATION REPORT

Over 36 Million Telephone Numbers Recovered in 2002 from Carriers to be Reused

Washington, D.C. – The Federal Communications Commission (FCC) today released its latest in an ongoing series of reports on telephone number utilization in the United States. Telephone number utilization refers to how efficiently telephone numbers are being used by carriers. At the end of 2002, numbering resource utilization was 39.2%, down from 39.7% a year earlier.

The report presents numbering resource utilization statistics based on December 31, 2002 data that carriers submitted to the North American Numbering Plan Administrator (NANPA), as well as other information.

Summary Data

1. *Utilization Statistics by Carrier Type* – Reporting carriers have over 1.2 billion telephone numbers, of which 483 million were assigned to customers, more than 651 million were available to be assigned, and about 97 million were used for other purposes, such as for administrative use.

Following is utilization statistics by carrier type as of December 31, 2002:

- The overall utilization rate for Incumbent Local Exchange Carriers (ILECs) is 52.2%, down from 52.5% the year before.
- The overall utilization rate for Cellular/PCS carriers is 47.8%, up from 47.2% the year before.
- The overall utilization rate for Competitive Local Exchange Carriers (CLECs) is 10.6%, down from 11.4% the year before.
- The overall utilization rate for Paging carriers is 17.0%, down from 20.2% the year before.

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2. ***Telephone Numbers Returned*** – As required by the Commission’s Numbering Resource Optimization Orders, 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. In 2002, carriers returned the equivalent of more than four 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 first half of 2002, carriers returned 24.6 million telephone numbers to the NANPA.
 - In the second half of 2002, carriers returned 11.5 million telephone numbers to the NANPA.

3. ***Most Utilized Area Codes in the United States*** – New York’s area code 212 (New York City) is the most utilized with 76.6% of numbers assigned to customers. Arizona’s area code 480 (Phoenix) is next with 66.2% of numbers assigned to customers.

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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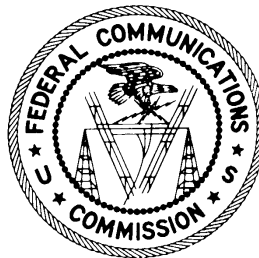
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Numbering Resource Utilization in the United States as of December 31, 2002

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Industry Analysis and Technology Division
Wireline Competition Bureau
Federal Communications Commission

July 2003



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/web/stats>.

Numbering Resource Utilization in the United States As of December 31, 2002

Executive Summary

This is the Federal Communications Commission's report on numbering resource utilization in the United States.¹ In this report, we summarize an ongoing 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 was analyzed as part of our ongoing assessment of the efficacy of numbering resource optimization measures prescribed by the Commission's Numbering Resource Optimization (NRO) Orders.²

Findings

As of December 31, 2002:

- Carriers reported data on over 1.2 billion telephone numbers (see Table 1).
- Overall, 39.2% of all telephone numbers are assigned to end users (see Table 1).
- Area code 212 (in New York City, NY) is the most utilized in the United States at 76.6% (see Table 6).
- In the second half of 2002, 11.45 million telephone numbers (1,145 NPA-NXXs) 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, with data as of December 31, 2001, was released in August 2002.

² See *Numbering Resource Optimization*, CC Docket No. 99-200, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 7574 (2000) (*March 2000 NRO Order*); *Numbering Resource Optimization*, CC Docket No. 99-200, Order, 15 FCC Rcd 17005 (2000) (*July 2000 NRO Order*); *Numbering Resource Optimization*, CC Docket Nos. 99-200, 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) (*December 2000 NRO Order*); *Numbering Resource Optimization*, CC Docket Nos. 99-200, 96-98, 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, 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).

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 and Barbuda, the Bahamas not in the Caribbean, Barbados, British Virgin Islands, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, and the Turks and Caicos Islands. The data contained in this report are all limited to the United States and its overseas territories.

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 FCC Form 502, which is known as 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, 2002. It reflects all corrections and submissions that the NANPA had received through April 15, 2003.

Historically, local telephone companies received geographic numbers in blocks of 10,000. These blocks of 10,000 numbers are often called NXXs, or central office codes, 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 number pooling,” where an NXX is broken into ten sequential blocks of 1,000 numbers. Carriers may then be required to donate unused or underutilized blocks to a pooling administrator, which then assigns those thousands-blocks to other carriers in need of numbers.¹⁰ This

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 *March 2000 NRO Order*. 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 *July 2000 NRO Order*.

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.

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

¹⁰ 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*, Press Release (rel. June 18, 2001).

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”¹¹ and operate in non-pooling areas are required to submit their number usage at the NXX level.

In this report, we present utilization data for four types of carriers:¹²

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

Carriers report on numbering resources in the following six categories:

- assigned
- intermediate
- reserved
- aging
- administrative
- 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 them 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.¹³

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 47 U.S.C. § 153(37).

¹² Carriers classified themselves in a variety of ways on their NRUF forms. With one exception, each carrier type was aggregated into one of these four categories for the purposes of this report. The exception involves carriers calling themselves interexchange carriers. These carriers reported data for area codes 500 and 900, which are summarized in Table 9 of this report. Therefore, there was no need to classify interexchange carriers as one of the four carrier types listed above. Also, the reader should note that carriers may provide multiple types of services, and may be doing so under a single operating company number. Where this occurs, this may cause a problem because carriers must indicate only their primary line of business on FCC Form 502. Thus, for example, there is some potential that some numbers are classified as cellular but are really used for paging. Only small carriers seem to do this, so the effects of this misclassification should be very minor.

¹³ For precise definitions of these categories, *see* 47 C.F.R. § 52.15.

required to report utilization data for those numbers, and to mark those numbers as having been received from other carriers.¹⁴

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 or another country. For instance, area code 406 is associated with Montana, and area code 506 is associated with New Brunswick, Canada. Carriers are also required to report on utilization of some non-geographic area codes, such as 500 numbers and 900 numbers (which are described later in this report).

Carriers use other types of non-geographic numbering resources as well: millions of numbers are used to provide toll-free services using non-geographic area codes such as 800, 888, 877 and 866. These numbering resources are managed separately; they are neither surveyed on FCC Form 502, nor is their utilization presented in this report.

Analysis and Results

Table 1 shows the total quantity of telephone numbers reported by the carriers and the number of 10,000 blocks (or NXXs) that were reported. Table 1 also shows the quantity of telephone numbers that carriers reported for each of the six categories. The percentages for each of the six categories are provided as well.

Carriers have reported usage data for about 122,500 NXXs. This is up from the 119,600 NXXs from the previous filing (data for December 31, 2001). As the NANPA calculates that about 129,000 NXXs have been assigned to United States carriers,¹⁵ this round of submissions (data for December 31, 2002) appears to have garnered usable information on 95% of the numbering resources assigned to carriers in the United States. Although the reporting level is high, many carriers still had not provided usable utilization data by April 15, 2003, the cut-off date for inclusion in this report.

Carriers filing FCC Forms 502 reported that more than 480 million telephone numbers were assigned to end users, and that more than 650 million were available for assignment. Thus, the quantity of numbers available for assignment exceeds the number already assigned to end users. These 650 million available numbers do not include any telephone numbers in NXXs that had not yet been assigned to a carrier. As more NXXs are assigned to carriers by the NANPA, and more area codes are opened up, more numbers will become available. Intermediate, reserved, aging and administrative categories collectively account for another 110 million telephone numbers of the assigned NXXs.

¹⁴ 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 to report on any telephone numbers received from the NANPA.

¹⁵ The NANPA lists the codes that have been assigned on their web site: www.nanpa.com/number_resource_info/co_code_assignments1.html.

Table 2 presents utilization statistics for carriers reporting 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). Table 3 presents statistics for rural carriers, which are required to report only at the 10,000 block level.¹⁶ As might be expected, overall utilization rates are lower in rural areas (18% of telephone numbers are assigned to end users) than in more urban areas (41% of telephone numbers are assigned to end users).

Table 4 shows utilization statistics on a state-by-state basis. As might be expected, states that are relatively rural and have low population densities have a lower percentage of numbers that have been assigned to end-user customers than in more urban, populous states. 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 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.¹⁷ Carriers typically obtain one or more OCNs per state in which they operate. The number of carriers in each state is determined by counting the number of OCNs reported in each state.

Table 6 shows utilization statistics on an area code-by-area code basis. The table also shows the total number of OCNs that reported for each area code. Wherever fewer than four carriers report data for an area code, the information is withheld to prevent release of proprietary data. 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.

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 working telephone lines in each area code. The number of working 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.

¹⁶ See *March 2000 NRO Order*, 15 FCC Rcd at 7604-05, para. 71. A small number of rural carriers may operate in areas with pooling. 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.

¹⁷ See *March 2000 NRO Order*, 15 FCC Rcd at 7594, para. 41. Carriers obtain OCNs from the National Exchange Carrier Association.

Second, the information in Table 7 provides the only information available for examining churn.¹⁸ 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 from the carrier's network 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 or the pooling administrator because of area code rationing, and the carriers have no other available numbers to assign to end users, carriers may assign end users telephone numbers that have not completed the aging process. (Thousands-block pooling alleviates this problem.) Moreover, 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.

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 is required in the top 100 MSAs.¹⁹ Pooling also is occurring in other areas where a state commission has exercised delegated authority to require pooling. Carriers also have voluntarily implemented pooling in certain areas. The Commission established a roll-out schedule for thousands-block number pooling where about 21 NPAs per quarter implement pooling.²⁰ The schedule will be completed by December 2003.

Table 8 shows the number of thousands-blocks that were transferred from one carrier to another through pooling. Table 8 also shows the number of thousands-blocks that are presumably poolable and are in rate centers where pooling exists. Finally, Table 8 shows the number of presumably poolable thousands-blocks if one assumes that pooling is implemented statewide. NeuStar provided the Commission with a list of thousands-blocks that had been transferred from one carrier to another under pooling. NeuStar's NRUF database was used to determine the number of thousands-blocks where at least 90% of the numbers were available, and therefore were presumably poolable. Given that carriers with poolable numbering resources are allowed to retain a six-month inventory of numbers in each rate center, and given that pooling may not be implemented statewide, the number of presumably poolable thousands-blocks shown in Table 8 is likely overstated. Wireless carriers are listed separately from CLECs and ILECs because wireless carriers just recently started pooling on November 24, 2002.

¹⁸ Churn is the rate at which customers change carriers.

¹⁹ The composition of MSAs may change over time. If a rate center is part of a top 100 MSA at any time after 1990, then the FCC generally requires number pooling. See *Numbering Resource Optimization*, CC Docket Nos. 99-200, 95-116, Fourth Report and Order in CC Docket No. 99-200 and CC Docket No. 95-116, and Fourth Further Notice of Proposed Rulemaking in CC Docket No. 99-200, FCC 03-126 (rel. June 18, 2003) (Fourth Report and Order).

²⁰ See *The Common Carrier Bureau Announces The 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 Nos. 99-200, Order, 17 FCC Rcd 7347 (2002).

Figures 1 through 4 focus on utilization rates as a function of the number of thousands-blocks that the carriers hold within a local geographic area.²¹ We have used rate centers as our measure of local geographic area because NXXs (and therefore, thousands-blocks) are assigned to carriers on a rate-center basis.²² Carriers serving densely populated areas may need more than one NXX (each NXX contains 10 thousands-blocks) to provide service. In these densely populated areas, carriers should generally be able to achieve higher utilization rates than carriers serving less densely populated areas, where a whole NXX may be used to serve just a few customers.

Figure 1 shows average ILEC utilization rates as a function of the number of thousands-blocks in a rate center held by a carrier. The points in the figures were calculated using a three-step process. First, thousands-blocks were grouped depending on the number of thousands-blocks held by a carrier within a rate center. Second, the number of thousands-blocks held in a rate center was rounded to the nearest ten, to help protect the confidentiality of the data. Third, the average utilization rates were calculated for each of the groups (i.e., from the group of 10 thousands-blocks per rate center through the group of 1,000 thousands-blocks per rate center).²³ For example, for all instances where a carrier reported from 5 to 14 (which round to 10) thousands-blocks in a rate center, the average utilization rate was calculated. A similar average utilization rate was calculated for all instances where, for a carrier in a rate center, the number of thousands-blocks in a rate center was rounded to 20, 30, and so on through 1,000. To preserve carrier confidentiality, some data points have been collapsed into a single data point. For example, if there were only two companies with 350 thousands-blocks in a rate center, and another two companies with 360 thousands-blocks in a rate center, those data points were collapsed. This way, no carrier-specific data are released. Figures 2 through 4 show the same information for Cellular/PCS carriers, CLECs, and paging carriers.

Table 9 shows utilization data for two specialized nongeographic area codes: 500 and 900. Area code 500 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. Area code 900 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 call’s recipient. Carriers reported utilization data for these specialized NPAs for the first time with their June 2001 data.

There are three different databases that contain sources of NPA-NXX assignment information: NANPA’s NRUF database, NANPA’s Code Administration System (CAS) database of NPA-NXX assignments, and the Local Exchange Routing Guide (LERG).²⁴ For

²¹ 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).

²² A rate center is a geographic area used to determine distances and prices for local and long distance calls.

²³ In order to prevent disclosure of proprietary information, we have grouped some individual data points into clusters so that the specific utilization data for individual carriers cannot be divined by comparing the individual plot points with other data sources.

²⁴ 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

a variety of reasons, the databases are not identical. Timing is a large factor in the differences. For instance, 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.²⁵ After permissive dialing ends, the carrier should remove the old NPA-NXXs from its systems. During permissive dialing, some carriers report utilization data for both the old and the new NPA-NXXs. Further, some carriers may not remove the old NPA-NXXs from their systems promptly after permissive dialing ends, and may therefore report utilization data on both the old and the new NPA-NXXs. Also, carriers sometimes delay updating the LERG after an NPA-NXX has been removed from their switch or when the carrier has given the NPA-NXX back to the NANPA. 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 the percentage of numbers that have been assigned to end users over time. Over the last twelve months, the overall percentage of assigned numbers has decreased slightly. This is not unexpected given that ILECs have fewer lines this year than last, and that the paging market is shrinking. With fewer lines, the percentages of numbers assigned to end users 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 generally are being issued each quarter, and that carriers continue to return large quantities of unneeded NPA-NXXs to the NANPA for reassignment.

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.²⁶ 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 large carriers have not reported these numbers as intermediate numbers. Because, in many instances, we

by Telcordia Technologies. The analysis in Table 10 examines only those codes in NANPA’s CAS database that are marked “assigned” (i.e., this study does not examine those codes marked “protected”, “reserved”, “unassignable”, or “vacant”).

²⁵ During permissive dialing, a phone number may be called by using either the old or the new NPA.

²⁶ 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.

were unable to match submissions that report intermediate numbers with submissions that report 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 in these instances (where the carrier has more than 1,000 thousands blocks in a rate center) were the same as the instances where the carrier has just fewer than 1,000 thousands blocks in a rate center. Therefore, the figures show only the data where the carriers reported up to 1,000 thousands-blocks within a rate center. This allows a linear scale to 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, such as e-fax.²⁷ These services use large quantities of numbers.²⁸ Second, 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 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 using the attached customer response form, e-mailing comments to cstroup@fcc.gov, jvu@fcc.gov, or calling the Industry Analysis and Technology Division at (202) 418-0940 (for TTY, call (202) 418-0484).

²⁷ Unified messaging services allow end users to receive multiple types of messages (such as voice mail 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. Thus, unified messaging service providers can operate efficiently by obtaining a large number of NXXs in a single rate center.

²⁸ 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 had 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, 2002

Carrier Type	Assigned	Intermediate	Reserved	Aging	Admin	Available ¹	Total	Unique NXXs
	(Thousands of telephone numbers)							
ILEC	297,433	26,624	7,363	16,834	9,834	211,732	569,820	59,366
Cellular/PCS	141,776	3,545	1,361	8,496	2,965	138,312	296,455	29,225
CLEC	29,892	4,868	4,608	2,506	1,477	238,671	282,021	29,824
Paging	14,111	2,764	2,477	1,083	146	62,545	83,126	6,198
All Reporting Carriers	483,212	37,801	15,810	28,919	14,422	651,259	1,231,422	122,504 ²
ILEC	52.2%	4.7%	1.3%	3.0%	1.7%	37.2%	100.0%	
Cellular/PCS	47.8%	1.2%	0.5%	2.9%	1.0%	46.7%	100.0%	
CLEC	10.6%	1.7%	1.6%	0.9%	0.5%	84.6%	100.0%	
Paging	17.0%	3.3%	3.0%	1.3%	0.2%	75.2%	100.0%	
All Reporting Carriers	39.2%	3.1%	1.3%	2.3%	1.2%	52.9%	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	280,717	24,494	5,686	15,762	9,368	141,186	477,213	50,147
Cellular/PCS	138,782	3,476	1,237	8,313	2,892	130,948	285,648	28,160
CLEC	29,369	4,860	4,272	2,468	1,442	229,617	272,028	28,851
Paging	13,793	2,732	2,360	1,044	138	61,509	81,577	6,072
All Reporting Carriers	462,662	35,562	13,555	27,587	13,840	563,260	1,116,466	111,199 ²
ILEC	58.8%	5.1%	1.2%	3.3%	2.0%	29.6%	100.0%	
Cellular/PCS	48.6%	1.2%	0.4%	2.9%	1.0%	45.8%	100.0%	
CLEC	10.8%	1.8%	1.6%	0.9%	0.5%	84.4%	100.0%	
Paging	16.9%	3.3%	2.9%	1.3%	0.2%	75.4%	100.0%	
All Reporting Carriers	41.4%	3.2%	1.2%	2.5%	1.2%	50.5%	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	16,716	2,130	1,677	1,072	466	70,547	92,607	9,224
Cellular/PCS	2,994	69	124	183	73	7,364	10,807	1,072
CLEC	523	8	336	38	35	9,054	9,993	995
Paging	318	32	117	39	8	1,035	1,550	126
All Reporting Carriers	20,550	2,239	2,254	1,332	582	87,999	114,956	11,395 ²
ILEC	18.1%	2.3%	1.8%	1.2%	0.5%	76.2%	100.0%	
Cellular/PCS	27.7%	0.6%	1.1%	1.7%	0.7%	68.1%	100.0%	
CLEC	5.2%	0.1%	3.4%	0.4%	0.4%	90.6%	100.0%	
Paging	20.5%	2.1%	7.6%	2.5%	0.5%	66.8%	100.0%	
All Reporting Carriers	17.9%	1.9%	2.0%	1.2%	0.5%	76.6%	100.0%	

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar, Inc. as of April 15, 2003 (95% 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, 2002

State/jurisdiction	Assigned		Intermediate		Reserved		Aging		Administrative		Available ¹		Total 000s
	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	
Alabama	6,209	34.1	1,326	7.3	139	0.8	426	2.3	258	1.4	9,871	54.1	18,229
Alaska	1,115	23.0	33	0.7	26	0.5	64	1.3	40	0.8	3,566	73.6	4,845
Arizona	9,825	51.7	346	1.8	300	1.6	625	3.3	137	0.7	7,773	40.9	19,006
Arkansas	3,324	25.8	811	6.3	185	1.4	212	1.6	241	1.9	8,099	62.9	12,872
California	59,018	39.5	8,002	5.4	1,104	0.7	3,515	2.4	2,056	1.4	75,767	50.7	149,462
Colorado	9,622	50.0	68	0.4	232	1.2	707	3.7	226	1.2	8,385	43.6	19,241
Connecticut	5,816	39.9	697	4.8	127	0.9	286	2.0	125	0.9	7,534	51.7	14,585
Delaware	1,738	43.8	34	0.9	70	1.8	65	1.6	50	1.3	2,010	50.7	3,967
District of Columbia	2,985	59.1	16	0.3	341	6.8	143	2.8	26	0.5	1,538	30.5	5,049
Florida	28,010	44.7	3,488	5.6	615	1.0	1,949	3.1	961	1.5	27,573	44.0	62,596
Georgia	13,989	39.8	3,189	9.1	304	0.9	976	2.8	357	1.0	16,292	46.4	35,107
Guam					Not shown to protect carrier confidentiality								80
Hawaii	2,359	54.0	77	1.8	15	0.3	112	2.6	52	1.2	1,752	40.1	4,367
Idaho	2,175	37.9	15	0.3	55	1.0	135	2.3	76	1.3	3,289	57.2	5,745
Illinois	21,694	37.6	1,199	2.1	847	1.5	1,179	2.0	679	1.2	32,118	55.6	57,716
Indiana	8,485	32.7	453	1.7	398	1.5	449	1.7	298	1.1	15,841	61.1	25,925
Iowa	4,428	27.0	120	0.7	209	1.3	248	1.5	134	0.8	11,252	68.6	16,392
Kansas	3,588	23.8	991	6.6	78	0.5	211	1.4	160	1.1	10,065	66.7	15,093
Kentucky	6,029	32.3	703	3.8	175	0.9	354	1.9	221	1.2	11,175	59.9	18,658
Louisiana	6,199	33.4	1,742	9.4	166	0.9	426	2.3	174	0.9	9,877	53.2	18,583
Maine	2,008	37.5	15	0.3	66	1.2	82	1.5	27	0.5	3,152	58.9	5,350
Maryland	11,280	47.8	115	0.5	343	1.5	536	2.3	236	1.0	11,073	47.0	23,583
Massachusetts	15,911	44.3	144	0.4	697	1.9	754	2.1	203	0.6	18,170	50.6	35,879
Michigan	14,841	32.5	389	0.9	1,002	2.2	959	2.1	511	1.1	27,906	61.2	45,609
Minnesota	9,348	40.4	121	0.5	173	0.7	497	2.1	136	0.6	12,860	55.6	23,135
Mississippi	3,403	25.1	1,032	7.6	137	1.0	241	1.8	100	0.7	8,645	63.8	13,559
Missouri	8,549	31.5	739	2.7	761	2.8	471	1.7	236	0.9	16,351	60.3	27,107
Montana	1,179	22.4	50	0.9	46	0.9	76	1.4	25	0.5	3,889	73.9	5,265
Nebraska	2,815	29.7	226	2.4	44	0.5	161	1.7	58	0.6	6,168	65.1	9,472
Nevada	4,310	50.5	367	4.3	267	3.1	240	2.8	135	1.6	3,216	37.7	8,534
New Hampshire	2,506	40.3	18	0.3	67	1.1	95	1.5	39	0.6	3,486	56.1	6,212
New Jersey	16,601	43.0	314	0.8	619	1.6	794	2.1	253	0.7	19,993	51.8	38,574
New Mexico	2,737	43.6	50	0.8	39	0.6	161	2.6	47	0.7	3,241	51.7	6,274
New York	34,076	52.2	585	0.9	1,758	2.7	2,277	3.5	471	0.7	26,118	40.0	65,285
North Carolina	13,199	40.2	1,842	5.6	173	0.5	716	2.2	284	0.9	16,620	50.6	32,834
North Dakota	899	18.8	52	1.1	20	0.4	50	1.0	24	0.5	3,737	78.1	4,782
Northern Marianas Is.					Not shown to protect carrier confidentiality								10
Ohio	17,023	35.4	614	1.3	599	1.2	927	1.9	406	0.8	28,477	59.3	48,046
Oklahoma	4,486	27.5	907	5.6	64	0.4	289	1.8	501	3.1	10,092	61.8	16,339
Oregon	5,962	44.3	74	0.6	101	0.8	373	2.8	140	1.0	6,797	50.5	13,447
Pennsylvania	20,117	38.5	301	0.6	818	1.6	990	1.9	404	0.8	29,566	56.6	52,196
Puerto Rico	1,413	40.5	0	0.0	26	0.7	163	4.7	5	0.1	1,883	54.0	3,490
Rhode Island	2,076	43.3	29	0.6	65	1.4	98	2.0	22	0.5	2,505	52.3	4,794
South Carolina	6,139	39.7	1,358	8.8	72	0.5	321	2.1	245	1.6	7,345	47.4	15,480
South Dakota	1,039	20.4	17	0.3	115	2.3	75	1.5	25	0.5	3,825	75.1	5,095
Tennessee	8,585	37.5	1,330	5.8	130	0.6	602	2.6	192	0.8	12,043	52.6	22,882
Texas	35,499	38.2	2,761	3.0	778	0.8	2,566	2.8	2,319	2.5	48,935	52.7	92,859
US Virgin Is.	129	44.2	10	3.4	30	10.3	12	4.1	2	0.7	109	37.3	292
Utah	4,630	44.6	46	0.4	91	0.9	341	3.3	96	0.9	5,166	49.8	10,370
Vermont	991	21.1	3	0.1	55	1.2	28	0.6	128	2.7	3,501	74.4	4,706
Virginia	14,096	51.3	161	0.6	446	1.6	700	2.5	235	0.9	11,822	43.1	27,460
Washington	9,986	43.5	620	2.7	318	1.4	659	2.9	267	1.2	11,117	48.4	22,967
West Virginia	2,084	36.3	40	0.7	54	0.9	107	1.9	37	0.6	3,413	59.5	5,734
Wisconsin	7,920	33.2	157	0.7	434	1.8	424	1.8	299	1.3	14,595	61.2	23,830
Wyoming	719	29.3	4	0.2	16	0.7	43	1.8	36	1.5	1,636	66.7	2,454
Totals	483,212	39.2	37,801	3.1	15,810	1.3	28,919	2.3	14,422	1.2	651,259	52.9	1,231,423

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 15, 2003.

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, 2002¹

State/jurisdiction	ILEC ²	Cellular/PCS ²	CLEC ²	Paging Carriers ²	Total Carriers
Alabama	27	23	22	11	83
Alaska	20	9	3	3	35
Arizona	21	15	22	10	68
Arkansas	31	13	12	8	64
California	26	19	47	18	110
Colorado	33	15	21	9	78
Connecticut	2	7	21	8	38
Delaware	1	7	15	6	29
District of Columbia	1	6	22	7	36
Florida	13	23	41	10	87
Georgia	35	22	41	13	111
Guam	0	3	0	0	3
Hawaii	2	6	3	2	13
Idaho	22	17	12	4	55
Illinois	58	28	37	10	133
Indiana	41	18	31	11	101
Iowa	153	20	44	5	222
Kansas	36	15	20	6	77
Kentucky	20	22	30	9	81
Louisiana	19	20	21	9	69
Maine	20	8	16	4	48
Maryland	2	12	31	11	56
Massachusetts	4	11	32	7	54
Michigan	34	19	30	10	93
Minnesota	81	17	55	7	160
Mississippi	18	22	25	7	72
Missouri	47	18	31	14	110
Montana	20	6	11	5	42
Nebraska	44	13	12	5	74
Nevada	13	9	18	9	49
New Hampshire	13	12	18	6	49
New Jersey	3	10	32	10	55
New Mexico	17	12	11	6	46
New York	41	20	43	14	118
North Carolina	27	14	37	8	86
North Dakota	33	7	15	3	58
Northern Marianas Islands	0	1	0	0	1
Ohio	38	20	34	11	103
Oklahoma	42	17	17	9	85
Oregon	34	14	25	6	79
Pennsylvania	39	19	46	13	117
Puerto Rico	0	6	1	1	8
Rhode Island	1	6	14	7	28
South Carolina	25	14	23	9	71
South Dakota	46	7	12	3	68
Tennessee	27	22	31	7	87
Texas	64	36	64	26	190
US Virgin Islands	1	3	0	1	5
Utah	17	11	16	6	50
Vermont	8	7	9	5	29
Virginia	16	19	37	6	78
Washington	26	14	33	7	80
West Virginia	8	15	14	6	43
Wisconsin	92	22	31	8	153
Wyoming	10	11	9	2	32
Unduplicated Total	1,282	389	1,074	136	2,876

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 15, 2003.

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, 2002

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
201	New Jersey	Jan-47	47.6%	0.6%	1.3%	2.2%	0.5%	47.7%	43
202	District of Columbia	Jan-47	59.1%	0.3%	6.7%	2.8%	0.5%	30.5%	36
203	Connecticut	Jan-47	42.3%	5.7%	1.1%	2.1%	0.8%	48.0%	37
205	Alabama	Jan-47	41.4%	6.3%	0.5%	2.7%	1.2%	48.0%	41
206	Washington	Jan-47	58.5%	0.9%	0.8%	4.1%	1.6%	34.0%	35
207	Maine	Jan-47	37.5%	0.3%	1.2%	1.5%	0.5%	58.9%	48
208	Idaho	Jan-47	37.9%	0.3%	1.0%	2.4%	1.3%	57.2%	55
209	California	Jan-58	31.8%	6.2%	0.5%	1.7%	1.4%	58.3%	42
210	Texas	Nov-92	51.7%	3.3%	0.7%	4.0%	2.2%	38.1%	37
212	New York	Jan-47	76.6%	0.3%	6.2%	4.2%	1.3%	11.5%	26
213	California	Jan-47	34.7%	5.7%	1.2%	2.5%	2.1%	53.8%	45
214	Texas	Jan-47	50.3%	0.7%	0.6%	3.5%	1.8%	43.1%	51
215	Pennsylvania	Jan-47	56.3%	1.2%	2.7%	3.0%	0.9%	35.9%	33
216	Ohio	Jan-47	40.1%	1.6%	1.7%	2.4%	0.7%	53.6%	34
217	Illinois	Jan-47	25.2%	0.7%	1.5%	1.0%	1.7%	69.9%	46
218	Minnesota	Jan-47	23.1%	0.6%	0.3%	1.0%	0.4%	74.7%	62
219	Indiana	Jan-47	39.9%	3.9%	1.5%	2.1%	1.3%	51.3%	31
224	Illinois	Jan-02	22.8%	0.1%	2.9%	0.8%	0.4%	73.2%	8
225	Louisiana	Aug-98	36.0%	12.0%	0.4%	2.3%	0.9%	48.4%	31
228	Mississippi	Sep-97	27.6%	5.3%	0.4%	2.1%	1.6%	62.9%	28
229	Georgia	Aug-00	25.4%	12.0%	0.3%	1.6%	0.7%	60.0%	34
231	Michigan	Jun-99	19.8%	0.4%	0.7%	2.6%	1.0%	75.5%	29
234	Ohio	Oct-00	0.9%	0.0%	0.0%	0.0%	0.5%	98.6%	5
239	Florida	Mar-02	54.9%	1.1%	0.0%	2.5%	2.3%	39.3%	16
240	Maryland	Jun-97	24.3%	0.4%	1.0%	1.1%	1.3%	71.9%	35
248	Michigan	May-97	41.5%	1.1%	1.5%	2.4%	1.1%	52.5%	34
251	Alabama	Jun-01	33.4%	10.8%	1.2%	2.2%	3.7%	48.7%	34
252	North Carolina	Mar-98	36.2%	0.9%	0.1%	1.5%	0.3%	61.0%	28
253	Washington	Apr-97	45.9%	7.0%	1.0%	3.0%	1.1%	42.0%	34
254	Texas	May-97	29.8%	2.8%	0.4%	2.2%	2.2%	62.6%	41
256	Alabama	Mar-98	31.6%	7.4%	0.3%	2.3%	1.0%	57.4%	42
260	Indiana	Jan-02	33.5%	0.5%	0.9%	1.1%	1.6%	62.3%	26
262	Wisconsin	Sep-99	30.7%	0.3%	1.7%	1.7%	0.8%	64.8%	38
267	Pennsylvania	Jul-99	15.9%	0.5%	0.5%	0.9%	0.8%	81.4%	34
269	Michigan	Jul-02	37.0%	1.5%	0.9%	2.4%	1.4%	56.9%	31
270	Kentucky	Apr-99	25.5%	4.6%	0.7%	1.8%	1.0%	66.4%	44
276	Virginia	Sep-01	31.5%	0.9%	0.4%	1.3%	0.4%	65.5%	24
281	Texas	Nov-96	45.2%	3.6%	0.5%	3.3%	2.5%	44.8%	38
301	Maryland	Jan-47	59.8%	0.6%	1.6%	3.0%	0.8%	34.3%	32
302	Delaware	Jan-47	43.8%	0.9%	1.8%	1.6%	1.3%	50.7%	29
303	Colorado	Jan-47	65.1%	0.2%	1.3%	4.3%	1.7%	27.4%	36
304	West Virginia	Jan-47	36.3%	0.7%	0.9%	1.9%	0.6%	59.5%	43
305	Florida	Jan-47	50.2%	10.3%	0.8%	4.2%	1.0%	33.6%	38
307	Wyoming	Jan-47	29.3%	0.2%	0.6%	1.8%	1.5%	66.7%	31
308	Nebraska	Jan-55	16.8%	3.2%	0.3%	0.9%	0.7%	78.1%	41
309	Illinois	Jan-57	28.6%	8.7%	0.8%	1.2%	1.0%	59.7%	51
310	California	Nov-91	50.6%	5.9%	0.6%	3.1%	1.1%	38.8%	46
312	Illinois	Jan-47	42.0%	2.8%	2.4%	2.2%	2.0%	48.6%	39
313	Michigan	Jan-47	38.7%	1.4%	4.1%	3.3%	1.9%	50.5%	31
314	Missouri	Jan-47	49.3%	3.1%	2.6%	2.5%	1.8%	40.8%	34
315	New York	Jan-47	35.1%	0.5%	3.5%	2.8%	0.7%	57.4%	42
316	Kansas	Jan-47	32.3%	4.8%	0.7%	2.0%	1.8%	58.3%	28
317	Indiana	Jan-47	42.7%	1.9%	2.4%	2.9%	1.2%	48.8%	38
318	Louisiana	Jan-57	29.6%	7.4%	0.6%	2.0%	0.9%	59.5%	39
319	Iowa	Jan-47	32.4%	1.5%	0.4%	2.0%	1.5%	62.2%	59

Table 6
Telephone Number Utilization by Area Code as of December 31, 2002

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
320	Minnesota	Mar-96	25.3%	0.5%	0.5%	1.8%	0.4%	71.5%	61
321	Florida	Nov-99	39.6%	4.4%	1.4%	2.3%	0.8%	51.5%	38
323	California	Jun-98	37.4%	4.3%	0.3%	3.1%	1.1%	53.8%	44
325	Texas	Apr-03	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	5
330	Ohio	Mar-96	36.8%	1.2%	1.3%	1.9%	0.9%	58.0%	36
334	Alabama	Jan-95	28.9%	6.3%	1.4%	2.1%	0.9%	60.4%	44
336	North Carolina	Dec-97	40.8%	7.5%	0.5%	2.3%	0.8%	48.1%	41
337	Louisiana	Oct-99	30.7%	8.3%	0.2%	2.3%	0.8%	57.7%	36
339	Massachusetts	May-01	13.2%	0.2%	0.4%	0.3%	1.1%	84.9%	15
340	US Virgin Islands	Jun-97	44.1%	3.5%	10.3%	4.2%	0.7%	37.2%	5
347	New York	Oct-99	40.6%	1.0%	1.0%	2.5%	0.5%	54.6%	24
351	Massachusetts	May-01		Not shown to protect carrier confidentiality					1
352	Florida	Dec-95	38.8%	3.3%	0.2%	2.1%	0.8%	54.8%	33
360	Washington	Jan-95	38.8%	0.6%	2.6%	2.5%	1.2%	54.4%	54
361	Texas	Feb-99	28.7%	2.4%	0.5%	2.2%	3.8%	62.5%	31
386	Florida	Feb-01	34.9%	7.3%	0.2%	2.4%	0.6%	54.6%	33
401	Rhode Island	Jan-47	43.3%	0.6%	1.4%	2.0%	0.5%	52.2%	28
402	Nebraska	Jan-47	34.8%	2.1%	0.5%	2.0%	0.6%	60.0%	50
404	Georgia	Jan-47	53.0%	6.7%	0.7%	3.7%	2.2%	33.8%	40
405	Oklahoma	Jan-47	36.0%	5.4%	0.5%	2.0%	5.9%	50.2%	42
406	Montana	Jan-47	22.4%	1.0%	0.9%	1.5%	0.5%	73.9%	42
407	Florida	Apr-88	48.3%	4.6%	0.9%	3.4%	0.8%	41.9%	35
408	California	Jan-59	49.7%	5.2%	0.7%	3.0%	0.8%	40.5%	45
409	Texas	Nov-82	30.8%	12.2%	0.5%	2.4%	2.6%	51.5%	34
410	Maryland	Oct-91	64.8%	0.5%	2.1%	3.0%	0.9%	28.7%	32
412	Pennsylvania	Jan-47	43.9%	0.3%	1.9%	2.2%	0.8%	51.0%	34
413	Massachusetts	Jan-47	46.9%	0.3%	1.5%	1.3%	0.3%	49.7%	36
414	Wisconsin	Jan-47	47.9%	1.9%	2.7%	2.8%	1.7%	43.0%	29
415	California	Jan-47	42.7%	3.8%	0.8%	2.6%	1.1%	48.9%	41
417	Missouri	Jan-50	24.5%	4.2%	5.8%	1.3%	0.8%	63.5%	53
419	Ohio	Jan-47	30.2%	2.8%	0.9%	1.4%	1.0%	63.7%	57
423	Tennessee	Sep-95	35.4%	4.7%	0.4%	2.0%	0.8%	56.7%	45
425	Washington	Apr-97	34.6%	8.0%	1.2%	2.5%	0.9%	52.9%	36
432	Texas	Apr-03		Not shown to protect carrier confidentiality					3
434	Virginia	Jun-01	40.5%	1.0%	2.4%	1.8%	0.6%	53.7%	24
435	Utah	Sep-97	21.8%	1.0%	1.3%	1.5%	0.7%	73.7%	44
440	Ohio	Aug-97	31.4%	1.3%	1.0%	1.7%	0.4%	64.3%	40
443	Maryland	Jun-97	23.4%	0.4%	0.6%	0.9%	1.4%	73.4%	36
469	Texas	Jul-99	24.6%	0.7%	1.6%	1.8%	2.1%	69.3%	34
478	Georgia	Aug-00	34.2%	12.6%	0.9%	2.1%	0.9%	49.2%	35
479	Arkansas	Jan-02	32.0%	3.7%	1.8%	2.0%	3.0%	57.5%	28
480	Arizona	Mar-99	66.2%	0.5%	1.4%	4.7%	0.7%	26.5%	32
484	Pennsylvania	Jun-99	10.9%	0.3%	1.0%	0.4%	0.8%	86.5%	44
501	Arkansas	Jan-47	30.7%	7.5%	0.7%	2.0%	1.9%	57.3%	33
502	Kentucky	Jan-47	40.3%	6.4%	0.3%	2.4%	1.4%	49.2%	35
503	Oregon	Jan-47	53.6%	0.8%	0.7%	3.4%	1.2%	40.2%	45
504	Louisiana	Jan-47	43.9%	10.3%	0.5%	2.9%	1.5%	40.9%	34
505	New Mexico	Jan-47	43.6%	0.8%	0.6%	2.6%	0.8%	51.7%	46
507	Minnesota	Jan-54	24.6%	0.1%	0.5%	1.4%	0.4%	73.0%	62
508	Massachusetts	Jul-88	52.9%	0.3%	2.1%	2.4%	0.8%	41.5%	41
509	Washington	Jan-57	38.5%	0.3%	0.8%	2.3%	1.0%	57.2%	43
510	California	Sep-91	39.8%	5.9%	0.5%	2.8%	1.0%	50.0%	39
512	Texas	Jan-47	49.3%	2.2%	1.5%	3.3%	1.5%	42.2%	41
513	Ohio	Jan-47	52.0%	0.2%	1.4%	3.2%	0.9%	42.3%	31
515	Iowa	Jan-47	41.9%	0.6%	0.9%	2.0%	0.9%	53.6%	50

Table 6
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Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
516	New York	Jan-51	54.0%	1.0%	1.9%	3.5%	0.7%	38.9%	40
517	Michigan	Jan-47	32.5%	0.6%	3.0%	1.6%	1.1%	61.1%	43
518	New York	Jan-47	40.1%	0.2%	1.9%	2.1%	0.7%	55.0%	43
520	Arizona	Mar-95	47.4%	1.3%	1.5%	3.0%	0.6%	46.2%	41
530	California	Nov-97	27.0%	8.0%	0.9%	1.2%	1.2%	61.7%	50
540	Virginia	Jul-95	44.5%	0.2%	1.4%	2.3%	1.3%	50.3%	44
541	Oregon	Nov-95	35.5%	0.3%	0.8%	2.2%	0.9%	60.4%	56
551	New Jersey	Dec-01	14.8%	0.4%	0.1%	1.0%	1.3%	82.4%	5
559	California	Nov-98	29.8%	7.4%	0.5%	1.7%	1.6%	58.9%	33
561	Florida	May-96	48.5%	8.5%	1.5%	3.3%	1.3%	36.9%	37
562	California	Jan-97	39.2%	2.3%	0.4%	2.6%	1.7%	53.9%	44
563	Iowa	Mar-01	28.3%	0.8%	0.5%	2.0%	0.5%	67.9%	50
567	Ohio	Jan-02	0.2%	0.0%	0.0%	0.0%	1.2%	98.6%	10
570	Pennsylvania	Dec-98	37.9%	0.4%	2.2%	2.7%	0.8%	55.9%	44
571	Virginia	Mar-00	35.6%	0.2%	1.5%	1.8%	0.2%	60.5%	25
573	Missouri	Jan-96	25.3%	2.3%	4.2%	1.6%	0.5%	66.1%	44
574	Indiana	Jan-02	34.9%	0.9%	1.4%	1.5%	0.8%	60.5%	29
580	Oklahoma	Nov-97	16.2%	5.6%	0.2%	0.9%	1.1%	76.0%	46
585	New York	Nov-01	46.0%	0.3%	4.1%	1.0%	0.1%	48.4%	33
586	Michigan	Sep-01	34.5%	0.4%	3.9%	2.1%	0.4%	58.6%	29
601	Mississippi	Jan-47	27.2%	8.4%	1.0%	1.9%	0.7%	60.8%	47
602	Arizona	Jan-47	58.8%	1.8%	0.9%	3.5%	0.9%	34.1%	38
603	New Hampshire	Jan-47	40.3%	0.3%	1.1%	1.5%	0.6%	56.1%	49
605	South Dakota	Jan-47	20.4%	0.3%	2.3%	1.5%	0.5%	75.1%	68
606	Kentucky	Jan-55	29.1%	2.3%	1.4%	1.5%	1.5%	64.2%	34
607	New York	Jan-54	35.4%	0.2%	1.0%	1.9%	0.3%	61.2%	32
608	Wisconsin	Jan-55	34.2%	0.8%	2.0%	1.7%	1.5%	59.8%	61
609	New Jersey	Jan-57	44.8%	0.9%	1.2%	2.1%	0.8%	50.2%	38
610	Pennsylvania	Jan-94	54.1%	0.5%	1.8%	2.2%	0.6%	40.7%	51
612	Minnesota	Jan-47	58.9%	0.5%	0.8%	3.2%	1.0%	35.5%	39
614	Ohio	Jan-47	42.0%	1.1%	1.7%	2.3%	0.8%	52.1%	29
615	Tennessee	Jan-54	42.5%	7.0%	0.7%	2.9%	0.9%	45.8%	40
616	Michigan	Jan-47	36.0%	1.4%	2.8%	2.0%	1.3%	56.5%	31
617	Massachusetts	Jan-47	56.8%	0.2%	3.5%	3.3%	0.7%	35.5%	42
618	Illinois	Jan-47	24.5%	0.4%	1.7%	1.2%	1.2%	71.1%	50
619	California	Jan-82	45.4%	5.4%	0.7%	3.0%	1.3%	44.2%	38
620	Kansas	Feb-01	12.1%	9.4%	0.2%	0.8%	0.2%	77.3%	49
623	Arizona	Mar-99	51.4%	0.9%	1.5%	3.7%	1.1%	41.4%	29
626	California	Jun-97	38.9%	5.2%	0.7%	2.2%	1.4%	51.6%	43
630	Illinois	Aug-96	41.6%	2.0%	1.2%	2.6%	0.9%	51.7%	39
631	New York	Nov-99	42.4%	0.6%	2.1%	3.5%	0.5%	50.9%	41
636	Missouri	May-99	26.4%	1.4%	1.8%	1.3%	1.0%	68.1%	32
641	Iowa	Jul-00	15.5%	0.3%	0.9%	1.0%	0.8%	81.6%	54
646	New York	Jul-99	59.7%	0.9%	5.1%	3.9%	0.7%	29.7%	31
650	California	Aug-97	36.4%	4.9%	0.6%	2.0%	0.9%	55.2%	36
651	Minnesota	Jul-98	60.2%	0.5%	1.0%	2.7%	0.8%	34.8%	41
660	Missouri	Oct-97	13.6%	1.9%	1.2%	1.0%	0.3%	82.0%	45
661	California	Feb-99	29.9%	7.8%	2.6%	1.7%	1.4%	56.7%	41
662	Mississippi	Apr-99	21.6%	7.4%	1.3%	1.5%	0.5%	67.7%	46
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	31.1%	3.1%	0.8%	2.1%	0.6%	62.2%	51
682	Texas	Oct-00	14.0%	0.4%	0.4%	0.9%	3.7%	80.6%	12
701	North Dakota	Jan-47	18.8%	1.1%	0.4%	1.0%	0.5%	78.2%	58
702	Nevada	Jan-47	55.7%	3.2%	0.9%	3.8%	1.3%	35.1%	31

Table 6
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703	Virginia	Jan-47	63.0%	0.3%	2.0%	3.6%	0.7%	30.3%	36
704	North Carolina	Jan-47	42.3%	8.5%	0.7%	2.6%	1.1%	44.8%	46
706	Georgia	May-92	35.5%	11.3%	1.1%	2.3%	0.8%	49.1%	62
707	California	Jan-59	30.8%	5.2%	0.8%	1.4%	1.3%	60.6%	46
708	Illinois	Nov-89	37.0%	1.1%	1.8%	2.6%	0.9%	56.5%	38
712	Iowa	Jan-47	19.2%	0.5%	3.2%	0.9%	0.3%	75.9%	86
713	Texas	Jan-47	55.1%	4.5%	1.3%	3.5%	3.5%	32.0%	34
714	California	Jan-51	43.8%	4.6%	0.6%	2.7%	2.3%	46.0%	47
715	Wisconsin	Jan-47	25.4%	0.4%	0.5%	1.2%	1.4%	71.1%	81
716	New York	Jan-47	49.8%	1.1%	2.1%	3.0%	1.3%	42.7%	33
717	Pennsylvania	Jan-47	48.5%	0.7%	1.5%	2.3%	0.8%	46.2%	37
718	New York	Sep-84	65.1%	0.1%	2.6%	6.6%	0.8%	24.8%	33
719	Colorado	Mar-88	43.4%	0.5%	0.6%	3.4%	0.7%	51.4%	41
720	Colorado	Jun-98	41.3%	0.7%	2.5%	4.5%	1.1%	49.8%	24
724	Pennsylvania	Feb-98	30.9%	0.5%	0.9%	1.4%	0.4%	65.9%	50
727	Florida	Jul-98	50.8%	0.8%	0.9%	3.6%	3.6%	40.2%	38
731	Tennessee	Feb-01	22.3%	5.2%	0.2%	1.6%	0.5%	70.2%	32
732	New Jersey	Jun-97	46.7%	0.8%	2.3%	2.4%	0.7%	47.1%	38
734	Michigan	Dec-97	34.1%	0.4%	1.7%	1.7%	0.7%	61.4%	38
740	Ohio	Dec-97	25.3%	1.0%	0.9%	1.3%	0.9%	70.6%	39
754	Florida	Aug-01	Not shown to protect carrier confidentiality						3
757	Virginia	Jul-96	54.1%	0.9%	1.2%	2.5%	0.9%	40.5%	28
760	California	Mar-97	37.4%	5.2%	0.7%	2.1%	1.7%	53.0%	48
763	Minnesota	Feb-00	46.5%	0.7%	1.3%	2.7%	0.6%	48.2%	44
765	Indiana	Feb-97	24.1%	2.4%	1.1%	1.1%	1.1%	70.2%	51
770	Georgia	Aug-95	51.2%	11.8%	0.5%	3.9%	0.9%	31.7%	35
772	Florida	Feb-02	38.5%	6.6%	1.7%	2.4%	2.7%	48.0%	29
773	Illinois	Oct-96	47.6%	1.5%	1.3%	3.6%	0.9%	45.1%	37
774	Massachusetts	May-01	6.8%	0.2%	0.7%	0.2%	0.3%	91.7%	24
775	Nevada	Dec-98	44.2%	5.6%	5.8%	1.7%	1.9%	40.8%	34
781	Massachusetts	Sep-97	39.3%	0.7%	1.2%	2.0%	0.4%	56.5%	41
785	Kansas	Jul-97	19.5%	7.6%	0.5%	1.1%	1.2%	70.0%	41
786	Florida	Mar-98	37.5%	2.6%	1.5%	2.8%	0.9%	54.7%	32
787	Puerto Rico	Mar-96	42.2%	0.0%	0.8%	5.0%	0.2%	51.9%	8
801	Utah	Jan-47	56.3%	0.2%	0.6%	4.2%	1.0%	37.6%	31
802	Vermont	Jan-47	21.1%	0.1%	1.2%	0.6%	2.7%	74.4%	29
803	South Carolina	Jan-47	40.2%	10.6%	0.5%	2.2%	1.6%	44.9%	55
804	Virginia	Jun-73	52.0%	0.7%	1.8%	2.2%	1.0%	42.3%	31
805	California	Jan-57	38.8%	4.8%	0.5%	1.9%	1.7%	52.2%	39
806	Texas	Jan-57	23.1%	3.6%	0.5%	1.9%	2.2%	68.7%	46
808	Hawaii	Jan-57	54.0%	1.8%	0.3%	2.6%	1.2%	40.1%	13
810	Michigan	Dec-93	29.2%	1.2%	1.9%	2.0%	1.1%	64.5%	33
812	Indiana	Jan-47	26.6%	0.9%	1.4%	1.3%	1.0%	68.8%	47
813	Florida	Jan-53	54.6%	1.1%	1.5%	3.7%	2.6%	36.5%	41
814	Pennsylvania	Jan-47	32.1%	0.5%	1.0%	1.3%	1.1%	63.9%	40
815	Illinois	Jan-47	34.5%	2.0%	1.2%	1.5%	1.3%	59.4%	64
816	Missouri	Jan-47	37.8%	2.8%	1.0%	2.1%	0.6%	55.7%	41
817	Texas	Jan-53	39.8%	1.6%	0.9%	2.9%	0.8%	54.0%	51
818	California	Jan-84	44.5%	5.9%	0.7%	2.6%	1.2%	45.2%	45
828	North Carolina	Mar-98	36.1%	5.1%	0.6%	1.9%	1.1%	55.3%	41
830	Texas	Jul-97	20.4%	1.3%	0.8%	1.7%	2.6%	73.2%	42
831	California	Jul-98	29.7%	10.3%	1.1%	1.6%	1.6%	55.7%	34
832	Texas	Jan-99	28.7%	0.7%	0.7%	1.9%	11.3%	56.7%	33
843	South Carolina	Mar-98	40.4%	7.2%	0.4%	1.9%	1.6%	48.5%	44
845	New York	Jun-00	45.8%	0.7%	1.9%	2.3%	0.7%	48.5%	44

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847	Illinois	Jan-96	50.9%	1.2%	1.1%	2.2%	0.8%	43.9%	40
848	New Jersey	Dec-01	15.7%	0.0%	0.1%	1.2%	0.4%	82.6%	8
850	Florida	Jun-97	38.3%	5.0%	1.2%	2.6%	1.2%	51.7%	34
856	New Jersey	Jun-99	35.0%	0.8%	1.0%	1.7%	0.6%	60.9%	43
857	Massachusetts	May-01	11.2%	0.5%	0.6%	1.0%	1.0%	85.6%	20
858	California	Jun-99	42.9%	3.7%	0.7%	2.8%	1.4%	48.6%	33
859	Kentucky	Apr-00	36.9%	1.4%	1.5%	1.8%	0.9%	57.6%	42
860	Connecticut	Aug-95	37.5%	3.9%	0.6%	1.8%	0.9%	55.3%	33
862	New Jersey	Dec-01	9.4%	0.0%	0.0%	1.0%	0.3%	89.3%	10
863	Florida	Sep-99	32.8%	1.3%	0.6%	2.0%	1.7%	61.6%	32
864	South Carolina	Dec-95	37.9%	8.6%	0.5%	2.1%	1.6%	49.3%	34
865	Tennessee	Nov-99	45.3%	5.7%	0.7%	3.1%	1.2%	43.9%	33
870	Arkansas	Apr-97	18.9%	6.8%	1.9%	1.2%	1.3%	70.0%	42
878	Pennsylvania	Aug-01	Not shown to protect carrier confidentiality						0
901	Tennessee	Jan-47	48.4%	7.4%	1.1%	4.1%	0.8%	38.2%	33
903	Texas	Nov-90	28.1%	3.9%	0.5%	1.8%	1.4%	64.3%	55
904	Florida	Jan-65	46.9%	8.3%	0.7%	3.2%	1.6%	39.4%	38
906	Michigan	Jan-61	14.4%	0.5%	0.3%	0.7%	0.9%	83.3%	18
907	Alaska	Jan-57	23.0%	0.7%	0.5%	1.3%	0.8%	73.6%	35
908	New Jersey	Nov-90	34.0%	0.5%	1.1%	1.5%	0.6%	62.3%	41
909	California	Nov-92	51.0%	4.7%	0.7%	2.8%	1.6%	39.2%	41
910	North Carolina	Nov-93	37.4%	4.3%	0.6%	2.1%	0.9%	54.7%	41
912	Georgia	Jan-54	31.3%	9.6%	2.0%	2.4%	0.8%	54.0%	45
913	Kansas	Jan-47	41.6%	1.9%	1.0%	2.2%	1.6%	51.7%	35
914	New York	Jan-47	47.3%	1.3%	1.4%	2.8%	0.8%	46.4%	44
915	Texas	Jan-47	32.6%	2.7%	1.1%	2.4%	2.1%	59.2%	53
916	California	Jan-47	43.3%	4.1%	0.7%	2.3%	1.1%	48.4%	39
917	New York	Jan-92	57.2%	3.7%	1.0%	4.3%	0.4%	33.4%	28
918	Oklahoma	Jan-53	29.5%	5.6%	0.5%	2.3%	2.3%	59.8%	59
919	North Carolina	Jan-54	45.1%	5.2%	0.5%	2.3%	0.9%	46.0%	44
920	Wisconsin	Jul-97	31.5%	0.3%	2.4%	1.8%	0.9%	63.1%	58
925	California	Mar-98	32.7%	5.3%	0.8%	1.9%	1.2%	58.1%	36
928	Arizona	Jun-01	31.1%	4.1%	3.0%	1.6%	0.4%	59.8%	46
931	Tennessee	Sep-97	25.9%	4.3%	0.3%	1.7%	0.6%	67.2%	42
936	Texas	Feb-00	33.0%	4.4%	0.7%	1.6%	1.2%	59.1%	33
937	Ohio	Sep-96	34.0%	0.9%	1.5%	2.0%	0.9%	60.7%	33
939	Puerto Rico	Sep-01	Not shown to protect carrier confidentiality						3
940	Texas	May-97	25.5%	3.5%	1.2%	1.7%	2.0%	66.1%	52
941	Florida	May-95	37.3%	2.5%	1.2%	2.7%	2.6%	53.7%	37
949	California	Apr-98	42.6%	3.9%	1.0%	2.5%	1.6%	48.4%	43
952	Minnesota	Feb-00	50.4%	1.0%	1.2%	2.9%	0.4%	44.2%	37
954	Florida	Sep-95	46.7%	11.5%	1.0%	3.7%	1.1%	36.0%	41
956	Texas	Jul-97	34.5%	3.8%	0.4%	4.2%	5.2%	51.9%	25
970	Colorado	Apr-95	36.8%	0.2%	0.7%	2.3%	0.7%	59.2%	48
971	Oregon	Oct-00	16.9%	0.1%	0.2%	1.5%	0.3%	80.9%	25
972	Texas	Sep-96	51.9%	1.1%	1.1%	3.6%	1.3%	41.0%	43
973	New Jersey	Jun-97	50.0%	1.2%	2.5%	2.4%	0.8%	43.1%	42
978	Massachusetts	Sep-97	38.4%	0.6%	1.5%	1.8%	0.5%	57.2%	39
979	Texas	Feb-00	20.3%	5.9%	1.0%	1.4%	1.7%	69.7%	37
980	North Carolina	Apr-01	27.4%	8.9%	0.2%	1.7%	0.4%	61.4%	11
985	Louisiana	Feb-01	26.2%	10.1%	3.1%	1.9%	0.6%	58.1%	31
989	Michigan	Apr-01	24.3%	0.2%	1.7%	1.3%	1.0%	71.4%	36

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 15, 2003.

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	2,182	108	2,356	28	1,014	38	468	6
202	2,414	111	926	23	525	29	286	6
203	2,048	114	2,506	23	949	35	542	7
205	1,439	93	1,566	21	736	52	682	14
206	1,937	148	1,029	23	875	52	334	7
207	1,426	67	2,369	36	517	12	667	8
208	1,592	89	2,232	34	569	40	1,027	17
209	1,134	55	1,987	20	652	38	762	12
210	1,608	129	1,252	21	787	58	233	7
212	5,789	315	871	25	0	0	0	0
213	953	77	1,194	28	419	26	458	6
214	1,853	144	1,808	36	1,239	72	444	6
215	3,265	176	1,837	21	850	46	285	6
216	1,158	64	1,521	18	556	34	586	7
217	1,015	40	3,477	28	484	21	612	14
218	633	28	2,510	50	324	13	583	9
219	685	40	826	13	336	17	422	9
224	Not shown to protect carrier confidentiality			3	44	4	237	5
225	663	39	761	15	362	28	457	10
228	325	20	634	12	176	19	385	12
229	531	33	1,151	19	229	14	575	11
231	554	33	1,897	18	141	13	447	7
234	Not shown to protect carrier confidentiality			3	Not shown to protect carrier confidentiality			2
239	802	40	480	8	430	15	341	7
240	406	14	2,017	21	444	25	457	10
248	1,822	95	2,628	23	820	39	495	6
251	559	33	783	19	287	23	389	11
252	1,151	46	1,917	14	456	21	692	10
253	1,167	72	1,204	23	463	35	179	7
254	647	58	1,582	24	339	18	413	12
256	1,042	69	1,798	22	624	53	1,059	14
260	641	21	935	15	258	9	709	6
262	1,013	63	2,214	24	334	13	553	8
267	228	6	3,302	27	499	34	373	6
269	700	38	1,016	17	159	19	243	9
270	1,070	45	2,855	25	423	63	984	12
276	389	18	780	12	116	4	271	11
281	2,206	186	2,622	26	892	48	150	6
301	3,306	171	1,768	15	966	45	240	9
302	1,287	42	1,591	16	424	22	251	7
303	3,799	264	1,565	22	990	54	168	7
304	1,428	68	2,595	22	626	38	754	15
305	2,421	202	943	21	938	87	609	9
307	509	29	1,086	18	209	14	548	11
308	320	18	1,666	31	128	6	411	8
309	963	37	2,324	35	409	20	443	12
310	2,746	176	2,027	29	1,210	66	423	6
312	2,200	108	1,576	23	422	19	919	7
313	1,346	103	1,513	19	775	60	963	6
314	1,699	91	1,608	20	984	45	510	6
315	1,242	120	2,270	27	512	22	494	9
316	480	27	1,111	13	265	21	180	9
317	1,679	128	2,162	26	770	38	531	6
318	925	60	1,888	23	474	36	850	11
319	778	49	1,647	47	348	19	475	9

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
320	464	37	1,562	45	215	11	354	12
321	559	29	913	24	389	22	325	7
323	1,555	134	2,814	28	725	59	193	6
325	Not shown to protect carrier confidentiality			2	Not shown to protect carrier confidentiality			2
330	1,695	78	2,661	18	797	46	840	10
334	885	58	1,517	28	464	38	1,107	12
336	1,611	86	1,840	29	753	46	787	9
337	666	45	1,222	20	388	36	682	11
339	22	0	152	12	Not shown to protect carrier confidentiality			3
340	Not shown to protect carrier confidentiality			1	Not shown to protect carrier confidentiality			3
347	177	4	402	17	491	37	497	7
351	0	0	0	0	Not shown to protect carrier confidentiality			1
352	879	44	1,056	17	495	28	643	10
360	1,710	110	2,420	41	679	43	844	8
361	608	44	1,049	18	312	27	743	9
386	566	38	733	18	275	19	418	10
401	1,503	70	1,901	15	520	25	329	6
402	1,688	90	3,314	35	661	45	665	11
404	1,970	130	787	24	1,200	83	683	8
405	1,142	61	1,895	23	632	38	444	12
406	824	51	2,896	31	346	26	918	6
407	1,619	115	1,509	21	786	56	308	7
408	2,401	157	1,750	27	924	46	514	8
409	525	46	894	18	286	20	362	11
410	3,766	170	1,226	17	901	45	179	7
412	1,650	82	2,199	19	790	41	543	7
413	1,618	38	1,757	21	311	13	191	9
414	1,156	70	967	13	604	35	462	9
415	2,065	135	2,344	24	762	37	452	7
417	714	44	1,982	32	340	14	724	11
419	1,528	67	3,361	40	726	37	1,096	11
423	1,175	57	1,783	26	598	43	864	15
425	693	54	1,413	25	471	29	312	7
432	Not shown to protect carrier confidentiality			3	0	0	0	0
434	660	29	802	11	295	12	447	10
435	559	37	1,711	29	200	15	778	11
440	1,076	55	2,447	24	434	23	497	8
443	584	13	3,076	22	660	35	701	8
469	282	20	1,477	26	292	21	118	6
478	545	33	636	18	269	17	448	11
479	596	31	1,073	17	325	25	521	6
480	1,881	124	763	19	471	45	152	8
484	339	6	4,069	34	238	13	426	8
501	820	44	1,547	19	468	38	774	8
502	1,086	59	1,239	19	600	41	620	10
503	2,712	181	2,262	34	994	54	357	7
504	1,023	64	761	16	609	44	454	10
505	1,899	102	2,179	28	793	56	859	12
507	670	40	2,321	49	319	18	641	10
508	2,840	126	2,591	28	1,025	46	315	6
509	1,267	75	1,832	26	551	32	841	13
510	1,722	131	2,153	22	866	49	621	7
512	2,024	135	1,630	25	779	40	482	10
513	2,011	107	1,462	19	869	70	583	6
515	996	45	1,385	35	380	20	338	10

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
516	1,667	105	1,054	26	1,109	47	519	7
517	790	35	1,255	28	378	21	650	11
518	1,351	77	2,105	29	510	18	321	8
520	1,336	74	1,053	23	534	43	595	12
530	1,128	50	2,690	27	488	22	656	13
540	1,466	67	1,251	25	668	42	1,097	15
541	1,438	96	2,372	36	590	26	1,022	14
551	0	0	0	0	31	2	173	5
559	1,049	61	2,211	18	580	32	539	8
561	1,398	94	772	23	670	46	548	8
562	1,322	89	1,988	28	648	44	454	6
563	413	33	1,167	39	208	12	302	9
567	2	0	778	7	Not shown to protect carrier confidentiality			3
570	1,396	118	2,076	31	518	21	559	7
571	69	5	319	16	233	11	169	6
573	854	60	2,309	26	375	18	840	11
574	579	23	898	18	260	12	522	7
580	530	27	2,844	26	276	18	877	13
585	1,326	21	1,221	20	268	11	397	10
586	705	42	1,067	18	468	17	684	6
601	1,105	67	2,500	25	583	53	1,140	16
602	2,286	124	878	21	1,089	78	708	8
603	1,850	73	2,483	31	598	20	893	12
605	709	56	2,990	58	324	19	813	7
606	939	33	1,957	19	269	31	707	12
607	699	43	1,292	19	268	8	339	10
608	1,018	53	2,084	45	468	22	530	10
609	1,584	68	1,984	23	933	47	583	6
610	2,889	120	2,295	35	986	41	239	8
612	1,171	74	759	24	1,018	48	495	9
614	1,678	90	2,355	17	628	34	282	6
615	1,487	86	1,866	26	751	55	366	9
616	923	52	1,142	18	488	25	659	8
617	3,123	190	2,191	28	1,076	53	307	7
618	943	44	3,373	28	487	26	861	16
619	1,480	96	1,400	21	945	63	432	6
620	427	34	3,155	34	172	7	657	12
623	646	40	478	16	208	21	175	8
626	1,280	69	1,870	26	704	46	380	6
630	1,995	144	2,332	22	845	37	1,074	7
631	1,654	140	2,128	27	488	22	328	7
636	634	34	1,682	20	122	5	317	6
641	353	25	2,239	42	187	9	612	11
646	827	48	459	24	787	58	344	7
650	1,652	97	2,487	21	512	24	420	7
651	1,510	66	957	27	406	21	144	8
660	323	29	2,305	29	144	7	518	13
661	902	52	1,827	24	484	26	343	7
662	781	48	2,487	28	353	29	1,007	14
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	1,092	75	3,435	33	886	57	460	12
682	41	0	335	9	42	5	141	3
701	610	32	2,922	48	287	17	787	7
702	1,762	129	1,104	17	794	44	296	6

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
703	3,520	223	1,748	24	997	39	161	6
704	2,034	115	2,015	32	888	68	822	8
706	1,387	83	1,707	31	749	53	1,032	19
707	1,370	61	2,821	23	601	28	573	11
708	1,287	107	2,105	21	766	40	772	7
712	573	24	2,368	71	176	11	589	13
713	2,867	201	1,601	21	904	45	141	6
714	1,954	129	2,085	29	1,150	67	601	6
715	942	37	2,747	62	366	26	1,008	15
716	1,358	87	1,297	20	675	36	350	11
717	1,783	90	1,785	21	771	34	477	7
718	4,521	470	1,751	25	222	14	56	6
719	1,244	96	1,168	23	434	36	738	11
720	741	71	1,039	16	556	70	522	7
724	1,300	56	3,325	32	504	28	620	12
727	1,436	98	1,057	22	568	30	347	8
731	386	27	1,183	17	190	15	493	11
732	2,433	125	2,569	23	874	46	264	7
734	1,148	55	2,431	26	561	29	466	7
740	1,059	53	3,004	21	387	19	833	12
754	Not shown to protect carrier confidentiality			1	Not shown to protect carrier confidentiality			2
757	2,147	83	1,252	14	868	55	695	8
760	1,654	89	2,425	30	778	48	598	8
763	934	55	1,012	31	138	7	83	8
765	959	41	2,521	35	366	20	1,270	10
770	2,921	231	1,664	16	863	48	188	9
772	432	29	461	15	226	13	278	9
773	1,765	146	1,912	21	1,048	79	631	7
774	49	0	769	18	64	2	741	6
775	1,399	46	1,196	20	297	17	318	9
781	2,345	123	3,315	27	395	15	447	7
785	612	40	2,648	25	278	12	537	11
786	264	14	581	20	470	40	550	8
787	Not shown to protect carrier confidentiality			1	1,266	162	822	6
801	2,933	211	1,701	18	876	74	603	7
802	780	26	3,111	17	182	1	325	7
803	1,510	74	1,307	34	654	42	884	12
804	1,737	65	1,016	17	642	36	745	9
805	1,594	78	1,939	24	758	37	707	7
806	600	49	2,291	29	345	25	541	11
808	1,611	66	1,198	5	707	43	404	6
810	597	40	1,426	19	521	36	827	9
812	1,163	54	2,969	29	466	25	1,303	13
813	1,739	130	1,056	26	705	38	348	8
814	1,125	45	2,311	20	445	16	746	15
815	1,333	62	2,833	41	696	28	560	14
816	1,278	80	2,396	24	687	29	484	10
817	1,871	151	3,157	38	881	52	250	6
818	1,971	115	1,961	27	1,032	61	442	6
828	952	53	1,462	27	459	21	607	9
830	426	38	1,696	20	187	14	356	13
831	681	37	1,217	17	314	15	295	8
832	165	9	1,251	25	808	56	641	6
843	1,536	74	1,713	30	710	34	835	10
845	1,327	69	1,242	28	274	10	281	10

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
847	2,887	126	2,714	24	1,098	47	580	7
848	Not shown to protect carrier confidentiality			3	42	3	202	5
850	1,287	84	1,744	21	623	45	720	16
856	1,329	64	2,292	22	292	15	227	6
857	14	0	199	14	43	5	231	6
858	1,199	81	1,327	19	311	17	213	6
859	1,037	41	1,633	23	474	33	631	12
860	1,852	97	3,246	20	795	28	487	6
862	Not shown to protect carrier confidentiality			3	32	4	392	7
863	702	48	1,154	17	307	15	603	8
864	932	60	1,329	22	628	29	523	7
865	736	47	736	22	423	32	249	8
870	718	47	2,678	25	328	23	1,122	13
901	1,159	80	693	20	630	67	510	8
903	1,156	85	2,866	31	547	28	890	15
904	1,265	81	948	21	676	47	489	10
906	238	10	1,083	13	68	6	253	4
907	825	43	3,229	23	285	21	318	9
908	1,263	62	2,560	25	706	26	873	8
909	2,471	127	1,792	23	1,387	85	493	6
910	1,117	62	1,610	28	619	32	832	8
912	683	55	992	26	350	24	684	13
913	911	50	1,249	21	378	15	239	8
914	1,441	103	1,478	28	823	28	482	9
915	1,333	95	2,649	28	556	39	635	16
916	1,733	93	1,961	21	885	44	565	9
917	602	76	304	14	2,761	148	199	7
918	1,148	73	2,575	39	594	61	815	12
919	1,975	106	2,070	30	862	38	649	10
920	1,053	48	2,236	37	530	48	887	15
925	1,265	79	2,290	21	523	24	506	7
928	832	42	1,449	28	288	17	697	13
931	563	37	1,525	25	298	20	581	12
936	577	26	1,002	19	197	12	308	9
937	1,292	55	2,299	21	505	48	661	7
939	Not shown to protect carrier confidentiality			1	Not shown to protect carrier confidentiality			2
940	495	36	1,502	35	202	11	281	11
941	870	57	1,032	20	380	16	599	9
949	1,380	87	1,504	27	526	24	323	6
952	1,220	73	1,064	27	108	4	28	6
954	1,791	149	1,073	26	940	73	547	8
956	641	51	885	13	565	99	838	8
970	1,203	76	1,660	28	484	31	1,010	13
971	42	1	340	17	48	8	94	7
972	3,265	230	2,513	30	363	20	30	5
973	2,831	137	2,619	28	817	36	130	7
978	2,128	104	3,269	27	494	17	496	6
979	227	18	969	19	225	12	479	9
980	26	0	35	6	37	4	107	5
985	500	34	938	15	274	22	693	12
989	728	37	1,987	21	296	17	713	11

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar as of April 15, 2003.

Table 8
Pooled and Presumably Poolable¹ Thousands-blocks as of December 31, 2002

State	Pooled (carrier received one or more thousands-blocks from another carrier)		Presumably Poolable			
	ILECs and CLECs	Cellular/PCS	In rate centers with pooling ²		Statewide	
			ILECs and CLECs	Cellular/PCS	ILECs and CLECs	Cellular/PCS
Alabama	3	2	466	540	3,561	2,121
Alaska	0	0	0	0	639	162
Arizona	26	8	1,513	594	2,064	1,284
Arkansas	0	0	0	0	2,288	1,837
California	867	1,074	25,316	5,392	32,896	6,855
Colorado	36	1	1,524	289	2,855	1,573
Connecticut	89	55	3,662	602	4,106	618
Delaware	0	0	625	117	1,202	142
District of Columbia	11	3	508	92	508	92
Florida	304	13	6,178	2,498	10,072	4,286
Georgia	11	1	3,340	343	6,069	2,276
Guam	0	0	0	0	0	3
Hawaii	0	0	243	115	539	213
Idaho	5	1	392	301	985	773
Illinois	1,169	17	9,357	2,726	13,743	3,527
Indiana	57	1	2,043	1,087	6,646	3,022
Iowa	0	0	135	160	1,333	1,393
Kansas	1	0	327	83	4,944	898
Kentucky	0	0	0	0	5,206	2,108
Louisiana	2	1	741	476	2,726	1,657
Maine	64	7	653	195	991	406
Maryland	114	29	5,812	841	6,001	939
Massachusetts	425	63	9,963	2,012	10,805	2,232
Michigan	68	16	6,893	2,248	11,985	3,304
Minnesota	13	2	1,841	343	3,540	1,000
Mississippi	0	0	0	0	3,310	1,361
Missouri	85	6	3,373	1,196	6,543	2,395
Montana	0	0	0	0	606	581
Nebraska	3	1	286	101	2,176	653
Nevada	0	0	156	70	1,105	381
New Hampshire	299	9	1,587	649	1,594	669
New Jersey	382	49	9,299	1,587	11,723	1,728
New Mexico	19	2	348	387	518	479
New York	686	74	9,542	2,642	10,250	2,816
North Carolina	66	0	2,610	950	7,161	2,730
North Dakota	0	0	0	0	511	643
Ohio	50	0	2,623	921	14,128	3,487
Oklahoma	23	3	1,247	449	3,264	1,517
Oregon	72	10	1,904	812	2,513	951
Pennsylvania	291	38	13,728	2,238	17,160	2,826
Puerto Rico	0	0	0	0	0	349
Rhode Island	12	0	1,139	181	1,247	208
South Carolina	0	0	0	0	2,441	1,398
South Dakota	0	0	0	0	562	662
Tennessee	26	6	1,133	296	4,626	1,705
Texas	137	22	9,038	1,212	21,751	5,083
US Virgin Islands	0	0	0	0	0	22
Utah	63	4	898	173	1,718	885
Vermont	10	5	567	133	2,446	261
Virginia	148	24	2,997	1,830	4,305	2,390
Washington	88	9	3,238	1,131	4,789	1,536
West Virginia	25	4	362	207	1,413	523
Wisconsin	4	0	451	124	4,758	2,332
Wyoming	0	0	0	0	372	330
Totals	5,754	1,560	148,058	38,343	268,694	83,622

Source: Pooling data provided by NeuStar. Numbering Resource Utilization/Forecast forms filed with NeuStar, Inc. as of April 15, 2003.

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.

² Pooling has been established in some rate centers where thousands-blocks have yet to be transferred from one carrier to another.

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

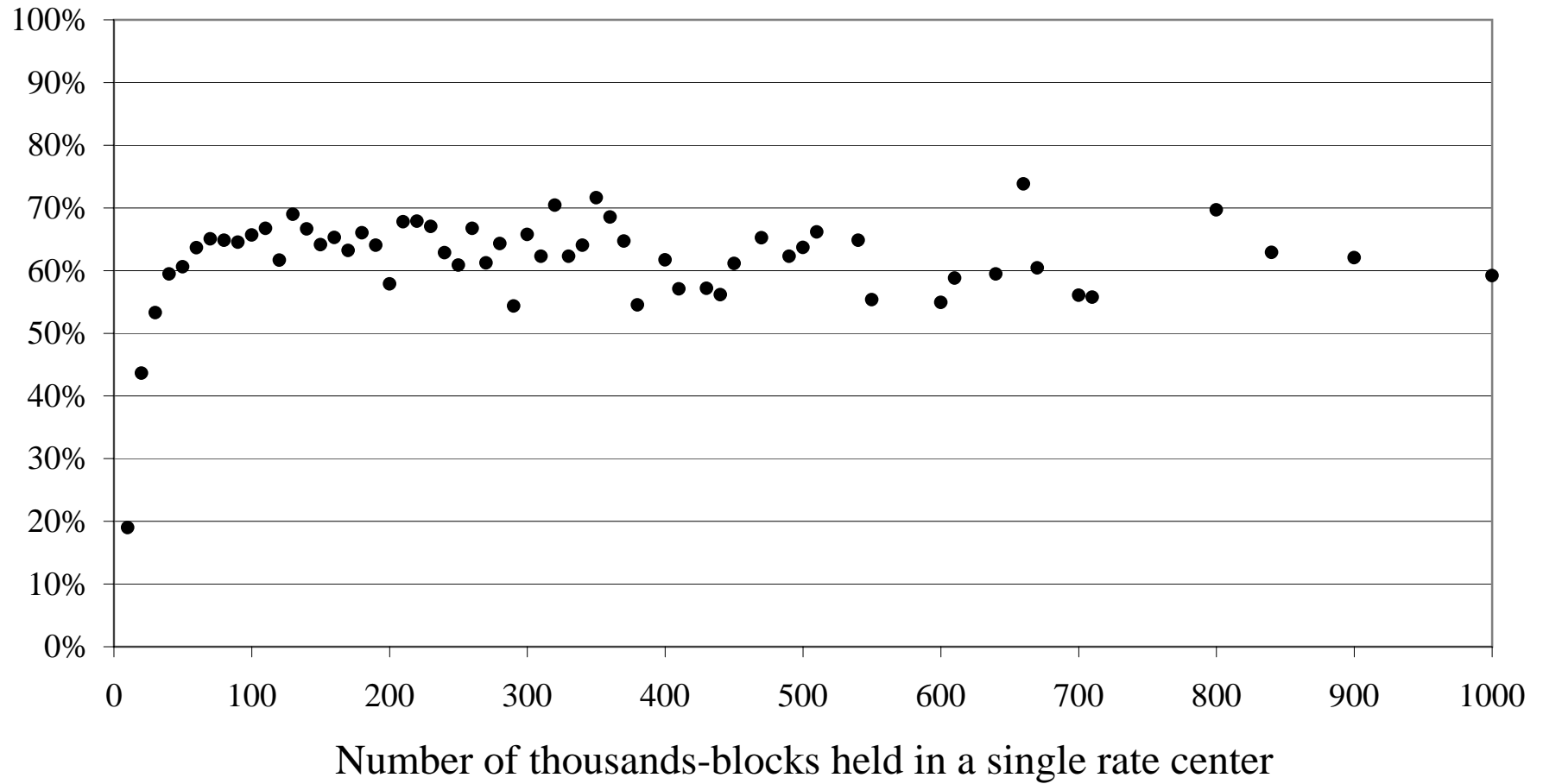


Figure 2
Cellular/PCs Carriers: Average Utilization Rates by
Number of Thousands-Blocks Held in a Rate Center

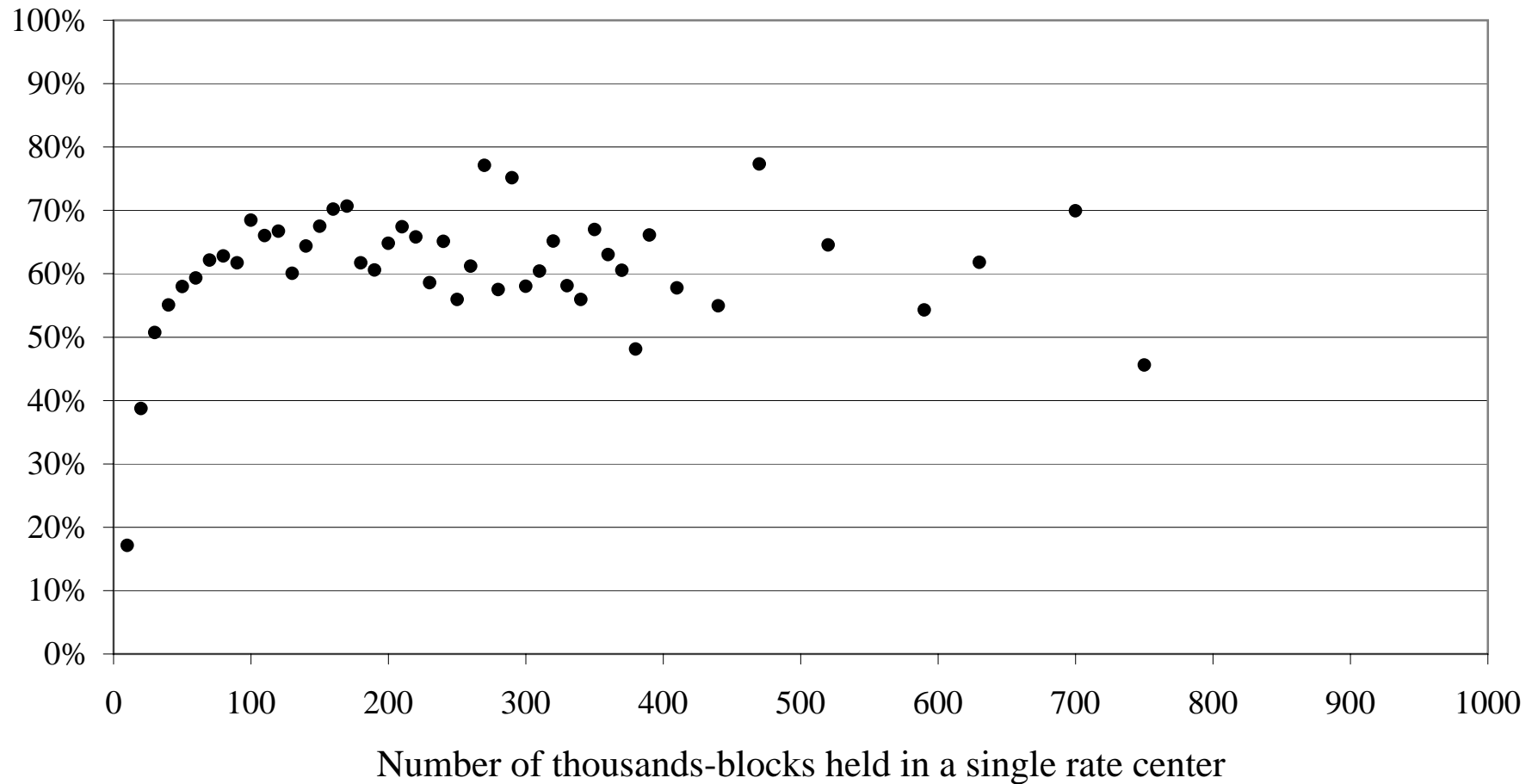


Figure 3
**CLECs: Average Utilization Rates by Number of
Thousands-Blocks Held in a Rate Center**

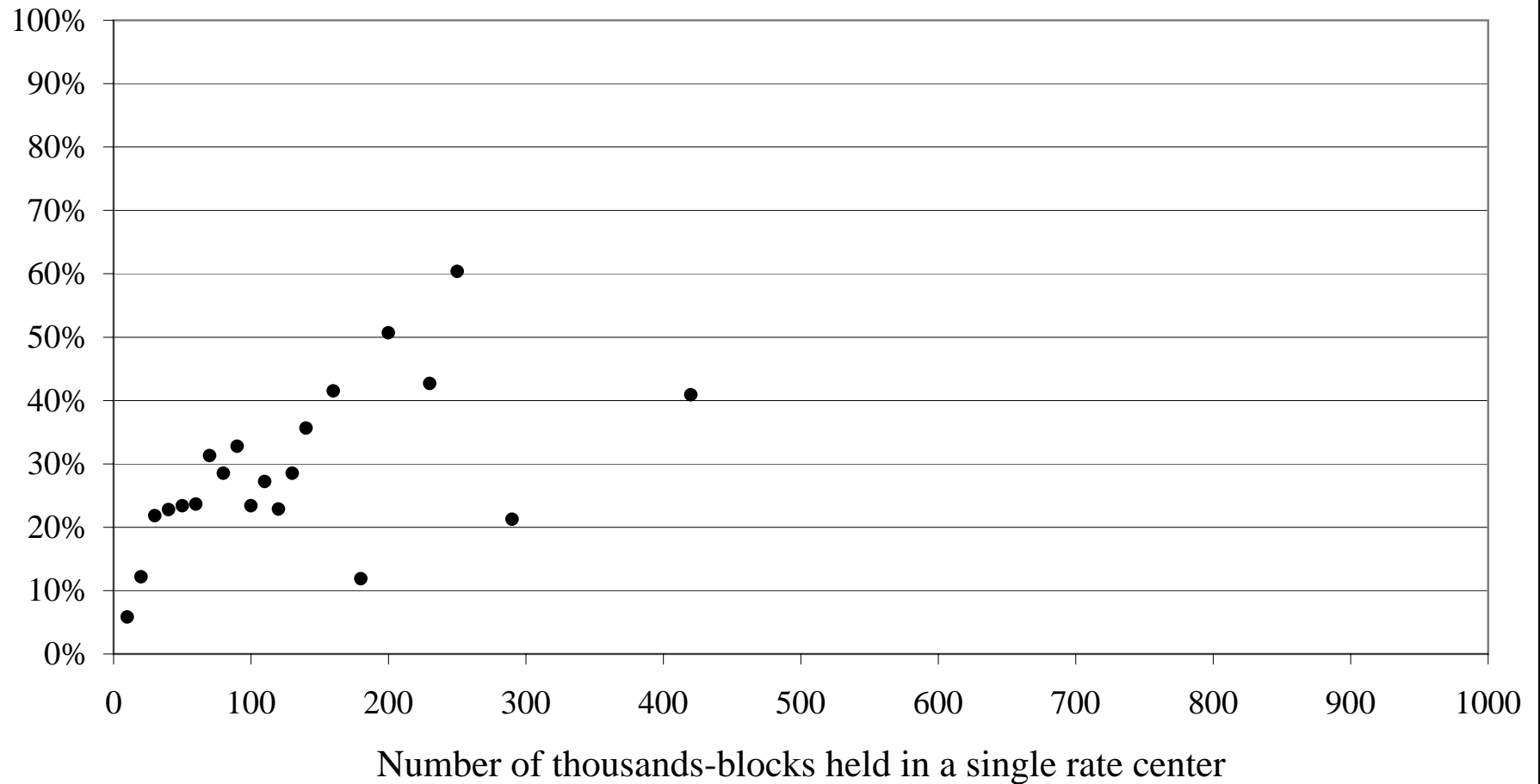


Figure 4
Paging Carriers: Average Utilization Rates by Number of
Thousands-Blocks Held in a Rate Center

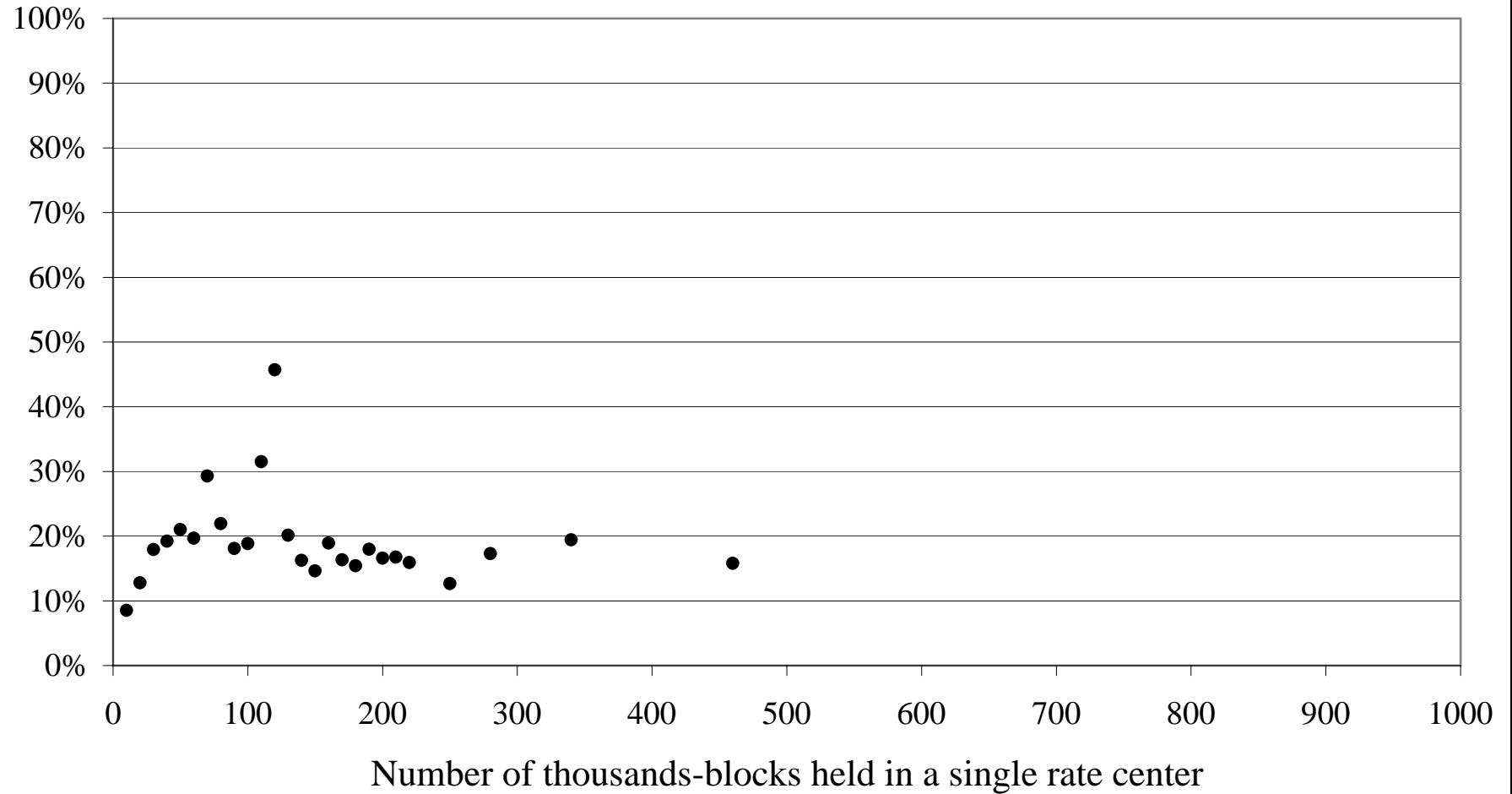


Table 9
Number Utilization for Specialized Nongeographic Area Codes as of December 31, 2002

Specialized Area Codes	Assigned	Intermediate	Reserved	Aging	Admin	Available ¹	Total	Unique NXXs
	(Thousands of telephone numbers)							
500	1,919	1,273	6	1,291	39	1,743	6,270	627
	30.6%	20.3%	0.1%	20.6%	0.6%	27.8%		
900	114	117	5	1	0	413	650	65
	17.5%	18.0%	0.8%	0.2%	0.0%	63.5%		

Table 10
Alternate Sources of NPA-NXX Assignments

NPA-NXXs that Appear in	NRUF	NANPA	LERG	NXXs
All Three Databases				
NRUF, NANPA and LERG	✓	✓	✓	121,514
Two of the Three Databases				
NRUF and NANPA	✓	✓		379
NANPA and LERG		✓	✓	5,664
NRUF and LERG	✓		✓	1,091
Only One Database				
NRUF	✓			260
NANPA		✓		1,587
LERG			✓	4,392
Total NXXs in Database.	123,244	129,144	132,661	

Sources: NRUF database as of April 15, 2003; NANPA's NPA-NXX assignments database as of January 1, 2003; and the LERG, as of January 1, 2003.

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.

Table 11
Percentage of Numbers Reported as Assigned

Carrier Type	December 2000	December 2001	December 2002
ILEC	52.1%	52.5%	52.2%
Cellular/PCS	46.2%	47.2%	47.8%
CLEC	9.8%	11.4%	10.6%
Paging	26.3%	20.2%	17.0%
Overall	40.1%	39.7%	39.2%

Source: Numbering Resource Utilization/Forecast Reports 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
FCC Issued Third Numbering Resource Optimization Order			
2002 Q1	1,731	1,199	532
2002 Q2	2,392	1,260	1,132
2002 Q3	1,954	587	1,367
2002 Q4	1,101	558	543
2003 Q1	897	533	364

Source: NeuStar, Inc.

Customer Response

Publication: *Numbering Resource Utilization in the United States as of December 31, 2002.*

You can help us provide the best possible information to the public by completing this form and returning it to the Industry Analysis & 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?

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