Numbering Resource Utilization in the United States as of June 30, 2001

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November 2001

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Introduction

In recent years, a rapidly increasing demand for telephone numbers in a competitive environment has required numerous area code splits, overlays, and number optimization measures. In this report, we summarize the third 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 numbering resource optimization measures prescribed by the Commission's recent Numbering Resource Optimization (NRO) Orders.[1] The reported data show that of the roughly 1.2 billion numbers held by reporting U.S. carriers, about 40% are assigned to subscribers and are in active use, about 50% are available for use, and the remaining 10% are dedicated to administrative and other purposes.

Background

The United States uses ten-digit telephone numbers, which are organized in accordance with the North American Numbering Plan (NANP).[2] The NANP divides the country into separate geographic areas called numbering plan areas (NPAs), more commonly called area codes. Calls between these areas generally require dialing 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.[3] Only 61 new codes were added during the next 50 years. But the rate of activation has increased dramatically since then. Between January 1, 1997 and December 31, 2000, 84 new codes were activated in the United States. Because the remaining supply of unassigned area codes is dwindling, 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

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[1] *See Numbering Resource Optimization*, Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 99-200, FCC 00-104, 15 FCC Rcd 7574 (rel. Mar. 31, 2000) (*March 2000 NRO Order*). N*umbering Resource Optimization*, Order, CC Docket No. 99-200, FCC 00-280 (rel July 31, 2000). (*July 2000 NRO Order*) *Numbering Resource Optimization*, 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. 99-2000) (rel. Dec. 29, 2000) (*December 2000 Order*).

[2] 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 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.

[3] "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).

requires carriers to submit data on numbering resource utilization and forecasts twice a year. The information is submitted using FCC Form 502, which is called the Numbering Resource Utilization/Forecast (NRUF) form.[4] 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)[5] by February 1 and August 1 of each year.[6]

The administrator compiles the information submitted into a database and provides that database to the Commission.[7] The information in this report represents number utilization as of June 30, 2001. It reflects all corrections and submissions that the NANPA had received through September 7, 2001.

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.[8] One of the recent efforts to improve the efficiency with which numbers are used is "thousands-block pooling," which several state public service commissions have implemented. In states with thousands-block pooling, carriers holding excess blocks of 1,000 numbers (thousands-blocks)[9] are required to provide those blocks to a pooling administrator, which then assigns those thousands-blocks to other carriers in need of numbers.[10] 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 could 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, however.

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[4] *See Numbering Resource Optimization*, Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 99-200, FCC 00-104, 15 FCC Rcd 7574 (rel. Mar. 31, 2000) (*NRO Order*). This form and most other FCC forms can be downloaded from www.fcc.gov/formpage.html.

[5] The current NANPA is NeuStar, Inc.

[6] *Numbering Resource Optimization*, Order, CC Docket No. 99-200, FCC 00-280 (rel. July 31, 2000). On August 1, carriers are required to report data as of June 30. The data for December 31 must be filed by the following February 1.

[7] 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.

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

[9] 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.

[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).

[11] 47 U.S.C. § 153(37).

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, and
- Paging Carriers.

From the carriers' submissions, numbering resources in the following six categories can be determined:

- 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 those 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 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. Carriers are also required to report utilization on some non-geographic area codes,

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[12] 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.

[13] For precise definitions of these categories *see March 2000 NRO Order*.

[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, of course, to report on any telephone numbers received from the NANPA.

such as 500 numbers and 900 numbers (which are described later in this report). Carriers for the first time reported utilization data for these area codes.

Other types of carriers use non-geographic numbering resources as well. Long distance 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. Those resources are neither surveyed on FCC Form 502, nor included in this report.

Analysis and Results

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

Carriers have reported usage data for about 115,500 geographic NXXs. This is up from 111,000 NXXs in the previous filing (data for December 31, 2000). As the NANPA calculates that about 124,000 NXXs have been assigned to United States carriers,[15] the third round of information submitted (data for June 30, 2001) appears to have garnered usable information on over 93% of the geographic numbering resources assigned to carriers in the United States. Although reporting is up from the last filing, many carriers still had not provided usable utilization data by September 7, 2001. As frequently happens in any situation where carriers are faced with new reporting requirements, the reliability of the data continues to improve with subsequent filings.[16]

Among filing carriers, 470 million telephone numbers are reported as being assigned and more than 600 million are reported to be available for assignment, indicating that the quantity of numbers available for assignment exceeds the number already assigned. These 600 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.

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). Table 3 presents statistics for rural carriers, which reported at the 10,000 block level (carriers that meet the statutory definition of a rural carrier are required to

[15] The NANPA lists the codes that have been assigned on their web site at www.nanpa.com/number_resource_info/co_code_assignments.html.

[16] For instance, one company had incorrectly reported millions of "intermediate" numbers as "reserved" numbers in its previous (December 31, 2000) filing, but corrected that error in its current filing. We are working with the NANPA and the carriers to improve the data and the quality of the submissions. The submissions continue to get better with each subsequent filing.

report at the 10,000 block level).[17] As might be expected, overall utilization rates are reported to be lower in rural areas (17% of telephone numbers are assigned to end users) than in more urban areas (42% of telephone numbers are assigned to end users).

Table 4 focuses on the percentages of NXX blocks that were reported as being utilized. After thousands-blocks were rolled up into whole NXXs, the utilization rate for those NXXs was calculated by dividing the quantity of assigned numbers by the quantity of numbers reported in the NXX. For each type of carrier, the data were sorted by decreasing utilization rates. Then, separately, for each type of carrier, the NXXs were divided into ten evenly sized groups (i.e., deciles). The first group contained the most utilized NXXs, and the last group contained the least utilized NXXs. Then, for each group, the lowest utilization rate was reported. Table 4 shows the results for all reporting carriers, as well as details for carriers that reported at the thousands-block level and the NXX level.

Table 5 shows utilization statistics for carriers 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. 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 6 shows similar utilization statistics for every area code. It also shows the state in which each area code is used and the month the area code was opened.

Table 7 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.[18] 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.

Table 8 shows the number of thousands-blocks that have been pooled and the number of thousands-blocks that are potentially poolable. A thousands-block is potentially poolable when 90% or more of the numbers are classified as available for assignment. Several states have been given the authority to implement thousands-block pooling, and other states may be considering pooling.[19] The Local Exchange Routing Guide (LERG) was used to determine the number of thousands-blocks that have been pooled. NeuStar's NRUF database was used to determine the number of thousands-blocks where at least 90% of the numbers were available, and so were potentially poolable. Pooling utilizes number porting technology,

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[17] *See March 2000 NRO Order, 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.

[18] *See NRO Order.* Carriers obtain OCNs from the National Exchange Carrier Association.

[19] See, e.g., *Numbering Resource Optimization*, Order, CC Docket Nos. 99-200, 96-98, DA 01-2013 (rel. Aug. 24, 2001) (granting thousands-block number pooling authority to the Michigan and North Carolina state Commissions). This Order also provides citations to all previous authorizations for thousands-block pooling.

which the FCC required to be implemented in the top 100 metropolitan statistical areas (MSAs) as defined in 1996.[20] Because pooling is most readily available in the top 100 MSAs, Table 8 shows the number of thousands-blocks that could be available if pooling were implemented in all areas within the top 100 MSAs. Because states can, under certain circumstances, implement pooling in areas outside of the top 100 MSAs,[21] Table 8 also shows the number of thousands-blocks that could be available if pooling were implemented statewide. Given that states may choose not to implement pooling in all areas of the state 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 shown in Table 8 are overstated. Wireless carriers are listed separately from CLECs and ILECs because wireless carriers are not required to implement the underlying technology until November 24, 2002.[22]

Figures 1 through 4 focus on utilization rates as a function of the number of NXXs that the carriers hold in a local geographic area. Where carriers have sought and received multiple NXXs 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 NXXs are assigned to carriers on a rate center basis.[23]

Figure 1 shows a scatter diagram of average ILEC utilization rates as a function of the number of NXXs in a rate center held by the same carrier.[24] These points were calculated using a two-step process. First, NXXs were grouped, depending on the number of NXXs held by the same carrier within the same rate center. Second, the average utilization rates were calculated for each of the groups (i.e., from 1 NXX per rate center through 100 NXXs per rate center). For example, for all instances where a carrier reported exactly one NXX in a rate center, the average utilization rate was calculated. A similar average utilization rate was calculated for all instances where a carrier reported exactly 2 NXXs in a rate center, 3 NXXs

[20] *See Telephone Number Portability*, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352, 8393 (1996).

[21] *See, e.g., Maine Public Utilities Commission Petition for Additional Delegated Authority to Implement Number Conservation Measures*, Order, 14 FCC Rcd 16440, 16452 (1999) (granting thousands-block pooling authority when a majority of the wireline carriers operating in Maine were LNP-capable); *see also Numbering Resource Optimization*, Order, CC Docket Nos. 99-200 and 96-98, paras. 32-34 (rel. Mar. 14, 2001) (granting thousands-block pooling authority to the Vermont Public Service Board and the Public Service Commission of West Virginia when a majority of the wireline carriers were LNP-capable).

[22] *See Numbering Resource Optimization*, 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, paras. 47-51 (2000).

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

[24] 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).

in a rate center, and so on through 100 NXXs in a rate center.[25] 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 call's recipient. Carriers reported utilization data for these specialized NPAs for the first time in the June 2001 filings.[26]

Table 10 compares the databases that can be used to identify which carriers hold which numbering resources. 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 LERG.[27] For a variety of reasons, the databases are not identical. Timing is a large factor in this. For instance, carriers sometimes report utilization on NXXs in anticipation of receiving them. Also, 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.[28] 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. The carrier may not update the LERG immediately, either. Thus, the NRUF database, the LERG and the NANPA assignment database may not be identical.

Table 11 shows that utilization rates generally increased for those NXXs that were reported by the same carriers when filing their December 31, 2000 and June 30, 2001 data. When attempting to compare utilization rates over time, one might simply compare Table 1 of this report (showing that the utilization across all carriers was 39.6%) with Table 1 of the previous report, (showing that utilization across all carriers was 40.1%) and conclude that number utilization rates had declined during the last half year. This conclusion, however, would be erroneous. More carriers submitted usable utilization information for this filing than for the previous filing, and some carriers reported on more of their numbering resources in this filing. Table 11 accounts for this by examining utilization rates for only those NXXs that were reported by the same carrier in both filings. Because subscribership is growing over time, and because carriers are starting to use their numbering resources more efficiently,

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[25] 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.

[26] *See Common Carrier Bureau Clarifies That Future Filings of Numbering Utilization and Forecast Reports Must Include Numbering Resources in the 500 and 900 NPAs*, Public Notice, CC Docket No. 99-200, (rel. June 11, 2001).

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

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

utilization rates for existing NXXs should improve. The apparent decrease in ILEC utilization is likely an artifact of ILECs' improved reporting in this filing. For CLECs and Cellular/PCS carriers, utilization improved over the six-month period after the previous filing.

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. [29] 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, the ILEC classified those numbers as "assigned" in its own system, because those numbers could not be used elsewhere. According to the Commission's recent standardized definitions, however, these numbers are classified as "intermediate" numbers. In the past, many large ILECs found it difficult to report these numbers as intermediate numbers. Because we were unable to match reports of received numbers with reports of intermediate numbers, we did not examine utilization data for blocks of numbers where carriers indicated that the numbers in the block were received from another carrier. The idea was to avoid counting some numbers as being assigned multiple times. Unfortunately, this resulted in an undercount of cellular/PCS numbers and paging numbers, both of which receive substantial quantities of numbers from ILECs. Because most ILECs are getting better at reporting, this report does utilize data from blocks of numbers where carriers indicated that the numbers in the block were received from another carrier. To the extent that ILECs and CLECs fail to properly report numbers that they give to other carriers as intermediate numbers, the percentage of numbers we report as being assigned will be overstated.

For ease of comparison, Figures 1 through 4 plot utilization rates only when there were 100 or fewer NXXs in a rate center. Some ILECs and Cellular/PCS carriers reported holding more than 100 unique NXXs in a single rate center. For both types of carriers, however, the average utilization rates remained unchanged when there were more than 100 NXXs in a rate center. The figures therefore show only the data where the carriers reported up to 100 NXXs within a rate center, so comparisons across carrier types could be made more easily.

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

In some instances, some CLECs reported a large number of NXXs in a single rate center. Although most CLECs do not have enough end-user lines in a rate center to warrant having so many NXXs 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 and j-fax.[30] These services use large quantities of numbers.[31] Second, some CLECs are operating in areas undergoing area code splits, where the area code will change for many of its NXXs. When this happens, a CLEC may maintain two NXXs (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.

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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 Division at (202) 418-0940; for TTY, call (202) 418-0484.

[30] 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. Thus, unified messaging service providers can operate efficiently by obtaining a large number of NXXs in a single rate center.

[31] 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 June 30, 2001

Carrier Type	Assigned	Intermediate	Reserved	Aging	Admin	Available[1]	Total	Unique NXXs
	(Thousands of telephone numbers)							
ILEC	305,938	24,758	7,855	18,475	9,209	221,173	587,407	59,515
CLEC	27,942	1,497	5,525	1,822	1,868	217,305	255,959	27,338
Cellular/PCS	111,734	8,059	1,825	9,872	5,716	109,581	246,786	23,757
Paging	23,621	12,022	1,355	1,999	266	55,869	95,131	5,813
All Reporting Carriers	469,235	46,335	16,561	32,167	17,058	603,928	1,185,284	115,499[2]
ILEC	52.1%	4.2%	1.3%	3.1%	1.6%	37.7%	100.0%	
CLEC	10.9%	0.6%	2.2%	0.7%	0.7%	84.9%	100.0%	
Cellular/PCS	45.3%	3.3%	0.7%	4.0%	2.3%	44.4%	100.0%	
Paging	24.8%	12.6%	1.4%	2.1%	0.3%	58.7%	100.0%	
All Reporting Carriers	39.6%	3.9%	1.4%	2.7%	1.4%	51.0%	100.0%	

Table 2
Detail of Number Utilization: Carriers that Reported at the Thousands-block Level

Carrier Type	Assigned	Intermediate	Reserved	Aging	Admin	Available[1]	Total	Unique NXXs
	(Thousands of telephone numbers)							
ILEC	290,522	22,189	3,719	17,150	8,423	156,528	498,531	50,720
CLEC	27,508	1,484	5,334	1,791	1,843	207,285	245,244	26,289
Cellular/PCS	109,225	8,004	1,129	9,651	5,670	102,732	236,411	22,744
Paging	23,366	12,022	1,328	1,985	206	54,861	93,768	5,679
All Reporting Carriers	450,621	43,698	11,510	30,577	16,143	521,406	1,073,954	104,615[2]
ILEC	58.3%	4.5%	0.7%	3.4%	1.7%	31.4%	100.0%	
CLEC	11.2%	0.6%	2.2%	0.7%	0.8%	84.5%	100.0%	
Cellular/PCS	46.2%	3.4%	0.5%	4.1%	2.4%	43.5%	100.0%	
Paging	24.9%	12.8%	1.4%	2.1%	0.2%	58.5%	100.0%	
All Reporting Carriers	42.0%	4.1%	1.1%	2.8%	1.5%	48.6%	100.0%	

Table 3
Detail of Number Utilization: Carriers that Reported at the NXX Level

Carrier Type	Assigned	Intermediate	Reserved	Aging	Admin	Available[1]	Total	Unique NXXs
	(Thousands of telephone numbers)							
ILEC	15,416	2,569	4,136	1,325	786	64,645	88,876	8,819
CLEC	435	13	191	31	24	10,020	10,715	1,083
Cellular/PCS	2,509	55	696	221	46	6,848	10,375	1,028
Paging	255	0	27	14	59	1,008	1,363	135
All Reporting Carriers	18,614	2,637	5,051	1,591	915	82,522	119,831	11,042[2]
ILEC	17.3%	2.9%	4.7%	1.5%	0.9%	72.7%	100.0%	
CLEC	4.1%	0.1%	1.8%	0.3%	0.2%	93.5%	100.0%	
Cellular/PCS	24.2%	0.5%	6.7%	2.1%	0.4%	66.0%	100.0%	
Paging	18.7%	0.0%	2.0%	1.0%	4.3%	74.0%	100.0%	
All Reporting Carriers	16.7%	2.4%	4.5%	1.4%	0.8%	74.1%	100.0%	

[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.

[2] Unduplicated total.

Note: Figures may not add due to rounding.

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar, Inc. as of Sept. 7, 2001 (93% of NXXs reported).

Table 4
Dispersion of NXX Utilization Rates by Carrier Type as of June 30, 2001

All Carriers

NXXs Sorted by Decreasing Utilization Rates	ILECs	CLECs	Cellular/PCS	Paging
Maximum utilization rate reported	100.0%	100.0%	100.0%	100.0%
Lower bound of top 10% NXXs	90.0%	37.0%	91.9%	70.8%
Lower bound of top 20% NXXs	87.1%	10.5%	84.6%	48.9%
Lower bound of top 30% NXXs	79.0%	4.2%	74.8%	34.1%
Lower bound of top 40% NXXs	70.7%	1.5%	61.4%	22.4%
Lower bound of top 50% NXXs	57.9%	0.4%	46.3%	13.2%
Lower bound of top 60% NXXs	41.4%	0.2%	29.6%	6.4%
Lower bound of top 70% NXXs	24.4%	0.0%	14.1%	2.0%
Lower bound of top 80% NXXs	11.8%	0.0%	3.6%	0.2%
Lower bound of top 90% NXXs	3.9%	0.0%	0.0%	0.0%
Minimum utilization rate reported	0.0%	0.0%	0.0%	0.0%

Carriers that Reported at the Thousands-block Level

NXXs Sorted by Decreasing Utilization Rates	ILECs	CLECs	Cellular/PCS	Paging
Maximum utilization rate reported	100.0%	100.0%	100.0%	100.0%
Lower bound of top 10% NXXs	91.1%	38.7%	92.0%	71.0%
Lower bound of top 20% NXXs	86.0%	10.9%	85.0%	49.3%
Lower bound of top 30% NXXs	81.4%	4.3%	75.8%	34.4%
Lower bound of top 40% NXXs	75.6%	1.6%	62.8%	23.0%
Lower bound of top 50% NXXs	66.7%	0.5%	48.1%	13.3%
Lower bound of top 60% NXXs	54.2%	0.2%	31.7%	6.4%
Lower bound of top 70% NXXs	38.1%	0.0%	16.1%	2.1%
Lower bound of top 80% NXXs	21.5%	0.0%	4.4%	2.0%
Lower bound of top 90% NXXs	7.8%	0.0%	0.1%	0.0%
Minimum utilization rate reported	0.0%	0.0%	0.0%	0.0%

Carriers that Reported at the NXX Level

NXXs Sorted by Decreasing Utilization Rates	ILECs	CLECs	Cellular/PCS	Paging
Maximum utilization rate reported	100.0%	99.0%	100.0%	94.9%
Lower bound of top 10% NXXs	51.0%	10.4%	75.0%	49.9%
Lower bound of top 20% NXXs	28.0%	3.3%	52.8%	21.5%
Lower bound of top 30% NXXs	17.9%	1.0%	31.2%	16.0%
Lower bound of top 40% NXXs	11.4%	0.3%	14.9%	14.1%
Lower bound of top 50% NXXs	8.4%	0.2%	5.8%	12.3%
Lower bound of top 60% NXXs	5.9%	0.1%	2.5%	10.0%
Lower bound of top 70% NXXs	4.0%	0.0%	0.4%	0.9%
Lower bound of top 80% NXXs	2.5%	0.0%	0.0%	0.3%
Lower bound of top 90% NXXs	1.3%	0.0%	0.0%	0.0%
Minimum utilization rate reported	0.0%	0.0%	0.0%	0.0%

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar, Inc. as of September 7, 2001.

Table 5
Telephone Number Utilization by State as of June 30, 2001

State/Jurisdiction	Assigned		Intermediate		Reserved		Aging		Administrative		Available[1]		Total
	000s	%	000s	%	000s	%	000s	%	000s	%	000s	%	000s
Alabama	6,359	36.7	1,074	6.2	169	1.0	514	3.0	332	1.9	8,866	51.2	17,314
Alaska	965	18.7	21	0.4	73	1.4	74	1.4	28	0.5	3,992	77.5	5,153
Arizona	9,539	52.0	431	2.4	307	1.7	629	3.4	251	1.4	7,183	39.2	18,340
Arkansas	3,015	26.4	772	6.8	129	1.1	208	1.8	84	0.7	7,218	63.2	11,426
California	57,879	40.7	8,391	5.9	1,568	1.1	4,022	2.8	1,916	1.3	68,500	48.1	142,276
Colorado	9,189	52.8	236	1.4	264	1.5	650	3.7	300	1.7	6,771	38.9	17,411
Connecticut	5,456	41.6	966	7.4	266	2.0	293	2.2	220	1.7	5,905	45.1	13,104
Delaware	1,725	38.3	67	1.5	17	0.4	81	1.8	48	1.1	2,563	57.0	4,500
District of Columbia	2,777	55.4	132	2.6	45	0.9	312	6.2	26	0.5	1,725	34.4	5,017
Florida	29,150	46.8	4,023	6.5	816	1.3	2,427	3.9	1,410	2.3	24,422	39.2	62,248
Georgia	15,042	42.7	2,353	6.7	827	2.4	1,181	3.4	624	1.8	15,160	43.1	35,187
Guam	55	50.0	2	1.8	1	0.9	2	1.8	1	0.9	48	43.6	110
Hawaii	2,278	49.0	109	2.3	10	0.2	132	2.8	70	1.5	2,049	44.1	4,648
Idaho	2,080	36.4	23	0.4	43	0.8	116	2.0	97	1.7	3,360	58.8	5,718
Illinois	20,019	38.1	2,995	5.7	1,695	3.2	1,255	2.4	764	1.5	25,845	49.2	52,572
Indiana	8,211	33.7	681	2.8	560	2.3	519	2.1	431	1.8	13,991	57.4	24,394
Iowa	3,980	24.7	140	0.9	205	1.3	267	1.7	492	3.1	11,010	68.4	16,095
Kansas	3,389	23.3	1,075	7.4	257	1.8	265	1.8	228	1.6	9,308	64.1	14,521
Kentucky	5,139	33.1	615	4.0	150	1.0	368	2.4	320	2.1	8,938	57.6	15,530
Louisiana	6,319	37.1	1,489	8.7	153	0.9	600	3.5	261	1.5	8,205	48.2	17,026
Maine	1,852	39.0	23	0.5	73	1.5	98	2.1	23	0.5	2,674	56.4	4,743
Maryland	10,523	42.2	614	2.5	128	0.5	685	2.7	304	1.2	12,663	50.8	24,917
Massachusetts	15,201	43.8	348	1.0	286	0.8	670	1.9	254	0.7	17,928	51.7	34,687
Michigan	13,932	32.6	892	2.1	509	1.2	918	2.1	723	1.7	25,821	60.3	42,795
Minnesota	8,846	38.5	277	1.2	1,310	5.7	574	2.5	311	1.4	11,638	50.7	22,955
Mississippi	2,991	27.5	777	7.1	205	1.9	240	2.2	113	1.0	6,543	60.2	10,868
Missouri	7,236	30.7	1,128	4.8	146	0.6	560	2.4	461	2.0	14,038	59.6	23,570
Montana	1,118	21.8	20	0.4	11	0.2	61	1.2	36	0.7	3,880	75.7	5,128
Nebraska	2,947	33.4	54	0.6	410	4.7	220	2.5	98	1.1	5,081	57.7	8,811
Nevada	4,056	49.8	497	6.1	44	0.5	254	3.1	129	1.6	3,172	38.9	8,152
New Hampshire	2,609	48.4	30	0.6	62	1.2	92	1.7	49	0.9	2,547	47.3	5,389
New Jersey	16,212	42.2	883	2.3	265	0.7	921	2.4	339	0.9	19,813	51.6	38,432
New Mexico	2,572	45.7	65	1.2	57	1.0	174	3.1	64	1.1	2,693	47.9	5,626
New York	33,495	54.1	1,649	2.7	1,151	1.9	2,252	3.6	743	1.2	22,667	36.6	61,957
North Carolina	13,170	40.6	1,688	5.2	339	1.0	996	3.1	486	1.5	15,797	48.6	32,476
North Dakota	860	17.9	47	1.0	64	1.3	49	1.0	30	0.6	3,753	78.1	4,803
Northern Marianas Is.	10	55.6	0	0.0	0	0.0	0	0.0	0	0.0	8	44.4	18
Ohio	16,175	37.3	1,086	2.5	422	1.0	994	2.3	650	1.5	23,993	55.4	43,321
Oklahoma	4,235	26.9	1,251	7.9	112	0.7	308	2.0	189	1.2	9,672	61.3	15,767
Oregon	5,883	44.2	135	1.0	142	1.1	401	3.0	203	1.5	6,543	49.2	13,306
Pennsylvania	19,748	36.8	741	1.4	465	0.9	1,129	2.1	379	0.7	31,274	58.2	53,736
Puerto Rico	3,635	57.5	32	0.5	78	1.2	325	5.1	13	0.2	2,235	35.4	6,318
Rhode Island	1,994	37.2	80	1.5	58	1.1	92	1.7	26	0.5	3,112	58.0	5,362
South Carolina	6,091	41.4	1,014	6.9	178	1.2	420	2.9	327	2.2	6,671	45.4	14,701
South Dakota	927	20.0	11	0.2	41	0.9	50	1.1	44	0.9	3,562	76.8	4,636
Tennessee	8,628	39.1	1,092	5.0	186	0.8	692	3.1	404	1.8	11,051	50.1	22,053
Texas	32,961	37.3	4,956	5.6	861	1.0	2,479	2.8	1,328	1.5	45,851	51.8	88,436
US Virgin Is.	114	46.9	3	1.2	31	12.8	27	11.1	2	0.8	65	26.7	243
Utah	4,472	45.9	148	1.5	202	2.1	275	2.8	167	1.7	4,487	46.0	9,751
Vermont	854	19.5	2	0.0	17	0.4	31	0.7	34	0.8	3,438	78.6	4,376
Virginia	12,522	44.8	469	1.7	332	1.2	896	3.2	259	0.9	13,472	48.2	27,950
Washington	11,463	45.8	320	1.3	451	1.8	810	3.2	467	1.9	11,504	46.0	25,015
West Virginia	1,922	28.9	40	0.6	28	0.4	117	1.8	33	0.5	4,522	67.9	6,661
Wisconsin	6,750	28.9	360	1.5	333	1.4	408	1.7	409	1.7	15,132	64.7	23,392
Wyoming	670	28.6	3	0.1	7	0.3	36	1.5	58	2.5	1,567	66.9	2,341
Totals	469,235	39.6	46,335	3.9	16,561	1.4	32,167	2.7	17,058	1.4	603,928	51.0	1,185,284

[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.

Note: Figures may not add due to rounding.

Table 6
Telephone Number Utilization by Area Code as of June 30, 2001

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
201	New Jersey	Jan-47	45.8%	2.2%	1.1%	2.4%	1.3%	47.3%	43
202	District of Columbia	Jan-47	55.4%	2.6%	0.9%	6.2%	0.5%	34.4%	40
203	Connecticut	Jan-47	42.2%	8.5%	2.1%	2.4%	1.5%	43.2%	38
205	Alabama	Jan-47	42.5%	5.1%	0.5%	3.5%	2.3%	46.2%	38
206	Washington	Jan-47	57.1%	2.4%	1.3%	4.4%	2.0%	32.9%	36
207	Maine	Jan-47	39.0%	0.5%	1.5%	2.1%	0.5%	56.4%	42
208	Idaho	Jan-47	36.4%	0.4%	0.7%	2.0%	1.7%	58.8%	55
209	California	Jan-58	34.3%	5.1%	0.3%	1.9%	1.6%	56.8%	41
210	Texas	Nov-92	45.8%	7.3%	0.8%	3.2%	1.3%	41.6%	35
212	New York	Jan-47	77.9%	0.3%	2.1%	4.2%	1.2%	14.5%	31
213	California	Jan-47	32.0%	10.8%	1.4%	3.3%	1.9%	50.6%	49
214	Texas	Jan-47	49.3%	3.7%	1.1%	3.4%	1.5%	40.9%	46
215	Pennsylvania	Jan-47	55.9%	3.0%	0.5%	3.3%	0.3%	37.1%	32
216	Ohio	Jan-47	40.8%	3.1%	1.5%	3.3%	1.6%	49.8%	33
217	Illinois	Jan-47	25.5%	1.1%	4.9%	1.3%	1.4%	65.9%	36
218	Minnesota	Jan-47	21.8%	0.4%	9.1%	1.2%	0.7%	66.9%	57
219	Indiana	Jan-47	37.8%	3.1%	4.6%	2.2%	1.6%	50.7%	54
225	Louisiana	Aug-98	40.9%	7.7%	0.6%	3.4%	1.9%	45.6%	28
228	Mississippi	Sep-97	30.8%	5.4%	1.6%	2.3%	1.4%	58.6%	24
229	Georgia	Aug-00	29.4%	10.2%	0.7%	3.0%	1.0%	55.7%	28
231	Michigan	Jun-99	26.6%	0.4%	0.3%	1.8%	1.4%	69.6%	28
234	Ohio	Oct-00	Not shown to protect carrier confidentiality						3
240	Maryland	Jun-97	15.7%	0.6%	0.6%	1.4%	3.6%	78.2%	41
248	Michigan	May-97	38.8%	2.8%	1.1%	2.4%	1.7%	53.2%	33
251	Alabama	Jun-01	33.8%	10.1%	2.9%	2.4%	0.9%	50.0%	22
252	North Carolina	Mar-98	36.4%	0.4%	0.6%	2.6%	0.7%	59.6%	27
253	Washington	Apr-97	49.8%	1.9%	1.2%	3.7%	1.8%	41.6%	35
254	Texas	May-97	29.1%	3.7%	0.3%	2.7%	1.4%	62.7%	40
256	Alabama	Mar-98	36.6%	6.4%	0.4%	3.2%	2.0%	51.4%	34
262	Wisconsin	Sep-99	24.1%	0.9%	1.3%	1.4%	2.2%	70.3%	36
267	Pennsylvania	Jul-99	10.4%	1.1%	0.4%	0.6%	2.3%	85.3%	33
270	Kentucky	Apr-99	24.3%	4.6%	0.5%	1.7%	1.6%	67.2%	41
281	Texas	Nov-96	44.6%	7.2%	0.9%	4.2%	1.0%	42.2%	39
301	Maryland	Jan-47	56.5%	3.3%	0.7%	3.9%	0.3%	35.3%	31
302	Delaware	Jan-47	38.3%	1.5%	0.4%	1.8%	1.1%	57.0%	32
303	Colorado	Jan-47	68.6%	1.3%	1.4%	4.1%	1.8%	22.8%	31
304	West Virginia	Jan-47	28.9%	0.6%	0.4%	1.8%	0.5%	67.9%	40
305	Florida	Jan-47	59.1%	10.8%	0.8%	4.8%	1.8%	22.8%	36
307	Wyoming	Jan-47	28.6%	0.1%	0.3%	1.5%	2.5%	66.9%	30
308	Nebraska	Jan-55	18.6%	0.6%	9.0%	1.7%	1.0%	69.1%	37
309	Illinois	Jan-57	30.2%	10.1%	6.9%	1.3%	1.7%	49.8%	45
310	California	Nov-91	55.2%	8.2%	0.7%	3.8%	1.4%	30.7%	48
312	Illinois	Jan-47	41.0%	8.3%	2.5%	2.3%	1.3%	44.6%	41
313	Michigan	Jan-47	37.3%	5.8%	1.1%	2.7%	2.5%	50.7%	34
314	Missouri	Jan-47	42.6%	9.8%	1.1%	3.1%	2.4%	41.1%	30
315	New York	Jan-47	39.4%	4.1%	2.5%	2.8%	0.8%	50.4%	33
316	Kansas	Jan-47	22.2%	5.4%	0.2%	2.6%	3.0%	66.7%	41
317	Indiana	Jan-47	39.0%	3.6%	2.4%	2.6%	2.4%	50.0%	39
318	Louisiana	Jan-57	33.9%	8.3%	0.4%	2.9%	1.1%	53.4%	37
319	Iowa	Jan-47	28.9%	1.5%	0.4%	2.4%	2.3%	64.4%	78
320	Minnesota	Mar-96	25.1%	0.6%	9.8%	3.1%	0.7%	60.7%	61
321	Florida	Nov-99	32.7%	5.0%	1.6%	2.4%	2.1%	56.1%	40
323	California	Jun-98	36.2%	4.3%	1.2%	3.5%	0.9%	53.9%	47
330	Ohio	Mar-96	38.2%	3.4%	0.7%	2.2%	1.7%	53.8%	32
334	Alabama	Jan-95	31.8%	5.7%	1.2%	2.5%	1.8%	57.0%	46

Table 6
Telephone Number Utilization by Area Code as of June 30, 2001

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
336	North Carolina	Dec-97	42.2%	7.1%	0.9%	3.0%	1.4%	46.7%	46
337	Louisiana	Oct-99	34.8%	10.5%	0.6%	3.3%	1.2%	49.6%	35
339	Massachusetts	May-01	2.0%	0.0%	0.3%	0.0%	0.0%	97.6%	8
340	US Virgin Islands	Jun-97	46.9%	1.2%	12.9%	11.2%	0.8%	26.9%	4
347	New York	Oct-99	30.5%	1.4%	0.6%	1.3%	4.3%	61.9%	28
352	Florida	Dec-95	44.0%	5.5%	0.6%	3.6%	1.6%	44.7%	29
360	Washington	Jan-95	37.3%	1.0%	3.2%	2.7%	2.0%	53.9%	56
361	Texas	Feb-99	28.4%	6.9%	1.3%	2.0%	1.3%	60.1%	29
386	Florida	Feb-01	43.9%	7.3%	1.0%	3.0%	2.6%	42.3%	27
401	Rhode Island	Jan-47	37.2%	1.5%	1.1%	1.7%	0.5%	58.0%	31
402	Nebraska	Jan-47	39.1%	0.6%	3.0%	2.8%	1.2%	53.3%	45
404	Georgia	Jan-47	59.1%	7.1%	1.3%	4.3%	2.5%	25.7%	42
405	Oklahoma	Jan-47	34.1%	8.1%	1.1%	2.4%	1.3%	52.9%	43
406	Montana	Jan-47	21.8%	0.4%	0.2%	1.2%	0.7%	75.7%	34
407	Florida	Apr-88	50.2%	5.3%	0.9%	4.4%	1.4%	37.7%	41
408	California	Jan-59	54.9%	6.5%	1.7%	3.8%	0.7%	32.4%	44
409	Texas	Nov-82	29.4%	15.1%	0.4%	2.8%	1.2%	51.0%	33
410	Maryland	Oct-91	60.2%	3.8%	0.3%	3.4%	0.3%	32.0%	29
412	Pennsylvania	Jan-47	39.3%	1.4%	1.6%	2.4%	0.7%	54.6%	37
413	Massachusetts	Jan-47	45.9%	0.8%	0.8%	1.5%	0.4%	50.7%	34
414	Wisconsin	Jan-47	42.5%	3.8%	1.2%	2.8%	2.0%	47.7%	30
415	California	Jan-47	47.3%	5.6%	1.8%	3.5%	1.2%	40.5%	44
417	Missouri	Jan-50	29.0%	4.6%	0.4%	1.9%	0.8%	63.5%	44
419	Ohio	Jan-47	36.0%	1.6%	1.0%	2.0%	1.5%	58.0%	48
423	Tennessee	Sep-95	36.1%	4.3%	0.9%	3.0%	2.1%	53.6%	41
425	Washington	Apr-97	47.3%	0.8%	1.9%	3.4%	1.9%	44.9%	38
434	Virginia	Jun-01	13.6%	0.0%	3.3%	1.0%	0.9%	81.2%	12
435	Utah	Sep-97	24.4%	0.5%	2.5%	1.2%	1.1%	70.4%	42
440	Ohio	Aug-97	30.4%	2.5%	1.0%	1.8%	0.8%	63.5%	36
443	Maryland	Jun-97	16.2%	0.8%	0.6%	1.3%	2.0%	79.2%	38
469	Texas	Jul-99	15.2%	0.8%	2.3%	1.0%	2.2%	78.4%	34
478	Georgia	Aug-00	39.3%	11.6%	2.0%	4.5%	1.6%	41.0%	26
480	Arizona	Mar-99	63.5%	0.6%	1.5%	4.5%	0.9%	29.0%	31
484	Pennsylvania	Jun-99	7.0%	0.7%	0.8%	0.4%	1.1%	90.1%	44
501	Arkansas	Jan-47	30.4%	7.0%	1.1%	2.1%	0.8%	58.5%	37
502	Kentucky	Jan-47	44.6%	6.3%	0.7%	3.2%	2.7%	42.4%	30
503	Oregon	Jan-47	53.7%	1.4%	1.0%	3.4%	1.6%	38.8%	42
504	Louisiana	Jan-47	42.7%	7.5%	1.2%	3.9%	1.9%	42.8%	36
505	New Mexico	Jan-47	45.7%	1.2%	1.0%	3.1%	1.1%	47.9%	40
507	Minnesota	Jan-54	24.3%	0.4%	11.2%	1.7%	0.8%	61.7%	68
508	Massachusetts	Jul-88	51.5%	0.8%	0.9%	2.3%	0.7%	43.8%	41
509	Washington	Jan-57	41.7%	0.5%	0.8%	2.4%	1.7%	52.9%	41
510	California	Sep-91	43.2%	7.9%	1.6%	3.3%	1.4%	42.5%	39
512	Texas	Jan-47	50.8%	5.6%	1.1%	3.3%	1.6%	37.6%	39
513	Ohio	Jan-47	50.8%	2.0%	1.2%	3.1%	1.4%	41.4%	29
515	Iowa	Jan-47	38.5%	1.1%	1.1%	2.1%	8.3%	48.9%	42
516	New York	Jan-51	56.9%	2.3%	0.9%	2.9%	1.4%	35.5%	47
517	Michigan	Jan-47	32.1%	1.0%	3.1%	3.0%	1.7%	59.2%	44
518	New York	Jan-47	46.5%	1.3%	3.0%	2.5%	1.5%	45.1%	41
520	Arizona	Mar-95	43.2%	2.2%	2.7%	3.1%	1.4%	47.4%	50
530	California	Nov-97	31.3%	2.6%	3.4%	1.4%	1.1%	60.1%	49
540	Virginia	Jul-95	34.3%	0.4%	1.3%	2.4%	1.0%	60.6%	52
541	Oregon	Nov-95	35.7%	0.6%	1.1%	2.7%	1.4%	58.7%	56
559	California	Nov-98	32.3%	5.7%	0.2%	2.2%	1.5%	58.2%	34

Table 6
Telephone Number Utilization by Area Code as of June 30, 2001

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
561	Florida	May-96	50.5%	8.3%	2.0%	3.6%	1.8%	33.8%	38
562	California	Jan-97	37.5%	3.3%	0.6%	2.9%	1.5%	54.1%	47
563	Iowa	Mar-01	26.7%	1.0%	0.8%	1.6%	1.5%	68.3%	35
570	Pennsylvania	Dec-98	34.9%	0.6%	1.5%	2.6%	0.6%	59.7%	47
571	Virginia	Mar-00	14.9%	0.4%	0.4%	1.7%	4.2%	78.4%	22
573	Missouri	Jan-96	26.2%	3.1%	0.3%	2.3%	1.1%	67.0%	31
580	Oklahoma	Nov-97	16.5%	7.5%	0.2%	1.1%	1.4%	73.4%	41
601	Mississippi	Jan-47	28.9%	6.6%	1.6%	2.1%	1.2%	59.7%	41
602	Arizona	Jan-47	63.5%	4.0%	0.6%	3.6%	1.5%	26.7%	39
603	New Hampshire	Jan-47	48.4%	0.6%	1.2%	1.7%	0.9%	47.3%	46
605	South Dakota	Jan-47	20.0%	0.2%	0.9%	1.1%	0.9%	76.8%	63
606	Kentucky	Jan-55	29.1%	2.5%	1.8%	2.4%	2.0%	62.5%	20
607	New York	Jan-54	33.0%	1.5%	2.6%	2.1%	0.3%	60.5%	31
608	Wisconsin	Jan-55	30.0%	1.9%	2.1%	2.2%	1.7%	62.1%	63
609	New Jersey	Jan-57	44.0%	1.5%	0.3%	2.9%	1.3%	49.9%	37
610	Pennsylvania	Jan-94	57.4%	1.9%	0.8%	3.2%	0.4%	36.2%	49
612	Minnesota	Jan-47	58.6%	1.4%	0.6%	3.8%	2.1%	33.5%	42
614	Ohio	Jan-47	38.0%	2.5%	1.2%	2.4%	1.8%	54.0%	31
615	Tennessee	Jan-54	43.7%	4.4%	0.8%	3.3%	1.9%	46.0%	44
616	Michigan	Jan-47	38.3%	1.1%	1.2%	2.1%	1.7%	55.6%	42
617	Massachusetts	Jan-47	56.2%	1.2%	1.0%	2.8%	0.8%	38.1%	40
618	Illinois	Jan-47	27.2%	2.9%	6.3%	1.5%	2.4%	59.7%	47
619	California	Jan-82	41.8%	6.6%	1.6%	3.4%	1.1%	45.5%	40
620	Kansas	Feb-01	13.8%	9.5%	0.4%	1.0%	0.3%	75.2%	27
623	Arizona	Mar-99	46.0%	1.4%	2.3%	2.9%	2.1%	45.2%	32
626	California	Jun-97	37.6%	5.5%	0.9%	2.7%	1.4%	52.0%	47
630	Illinois	Aug-96	40.2%	5.2%	1.7%	2.7%	1.2%	48.9%	38
631	New York	Nov-99	40.0%	1.9%	1.9%	2.3%	1.9%	52.0%	38
636	Missouri	May-99	24.3%	1.2%	0.8%	1.8%	4.0%	68.1%	26
641	Iowa	Jul-00	14.4%	0.2%	1.6%	1.2%	2.2%	80.4%	51
646	New York	Jul-99	47.8%	3.7%	2.9%	3.0%	2.8%	39.8%	36
650	California	Aug-97	40.4%	5.9%	0.8%	2.3%	1.1%	49.5%	38
651	Minnesota	Jul-98	54.5%	2.4%	2.4%	2.6%	1.5%	36.6%	41
660	Missouri	Oct-97	13.7%	1.8%	0.4%	1.1%	1.2%	81.9%	37
661	California	Feb-99	32.8%	7.3%	0.2%	2.2%	1.4%	56.2%	43
662	Mississippi	Apr-99	24.4%	8.6%	2.4%	2.3%	0.7%	61.6%	33
670	CNMI	Jul-97	Not shown to protect carrier confidentiality						1
671	Guam	Jul-97	Not shown to protect carrier confidentiality						3
678	Georgia	Jan-98	26.0%	1.9%	2.8%	2.1%	1.6%	65.6%	54
682	Texas	Oct-00	7.2%	1.0%	0.1%	0.4%	7.0%	84.5%	11
701	North Dakota	Jan-47	17.9%	1.0%	1.3%	1.0%	0.6%	78.1%	50
702	Nevada	Jan-47	57.4%	3.0%	0.6%	4.1%	1.5%	33.5%	34
703	Virginia	Jan-47	57.8%	2.5%	1.0%	4.1%	0.6%	34.0%	38
704	North Carolina	Jan-47	43.8%	8.1%	1.7%	3.5%	2.0%	40.9%	45
706	Georgia	May-92	39.0%	8.3%	6.3%	2.6%	2.1%	41.8%	61
707	California	Jan-59	29.5%	5.8%	0.8%	1.6%	1.2%	61.1%	49
708	Illinois	Nov-89	38.7%	7.1%	2.1%	2.9%	1.1%	48.1%	39
712	Iowa	Jan-47	16.7%	0.4%	2.3%	0.9%	0.9%	78.7%	78
713	Texas	Jan-47	54.4%	9.2%	2.1%	3.6%	0.7%	30.0%	39
714	California	Jan-51	49.2%	8.2%	0.7%	3.8%	1.1%	37.1%	49
715	Wisconsin	Jan-47	24.5%	0.8%	1.2%	1.3%	1.1%	71.1%	82
716	New York	Jan-47	58.2%	3.2%	2.5%	5.4%	0.7%	30.0%	38
717	Pennsylvania	Jan-47	44.7%	1.0%	0.9%	2.2%	0.4%	50.9%	37
718	New York	Sep-84	65.0%	0.2%	2.3%	5.9%	0.8%	25.8%	34
719	Colorado	Mar-88	43.9%	1.0%	0.9%	3.4%	1.3%	49.4%	34

Table 6
Telephone Number Utilization by Area Code as of June 30, 2001

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
720	Colorado	Jun-98	40.8%	2.7%	3.9%	4.8%	2.1%	45.7%	25
724	Pennsylvania	Feb-98	25.4%	0.9%	0.9%	1.4%	0.4%	71.1%	48
727	Florida	Jul-98	46.2%	3.6%	0.7%	4.5%	4.1%	40.9%	37
731	Tennessee	Feb-01	26.7%	6.9%	0.2%	2.0%	1.6%	62.7%	24
732	New Jersey	Jun-97	45.2%	3.3%	0.6%	2.7%	0.5%	47.7%	35
734	Michigan	Dec-97	27.3%	1.1%	0.7%	1.7%	1.6%	67.6%	37
740	Ohio	Dec-97	28.4%	1.8%	0.4%	1.5%	1.5%	66.5%	32
757	Virginia	Jul-96	45.7%	2.2%	0.6%	3.0%	0.9%	47.7%	32
760	California	Mar-97	35.7%	4.1%	0.8%	2.5%	1.7%	55.2%	53
763	Minnesota	Feb-00	42.8%	0.6%	1.6%	3.3%	2.3%	49.3%	40
765	Indiana	Feb-97	24.7%	3.0%	0.9%	1.6%	1.3%	68.5%	49
770	Georgia	Aug-95	60.5%	6.6%	0.7%	4.6%	1.8%	25.9%	36
773	Illinois	Oct-96	48.5%	7.4%	1.4%	4.1%	1.5%	37.1%	37
774	Massachusetts	May-01	2.2%	0.0%	0.3%	0.0%	2.3%	95.2%	19
775	Nevada	Dec-98	40.1%	10.1%	0.4%	1.8%	1.8%	45.8%	32
781	Massachusetts	Sep-97	37.7%	1.2%	0.7%	1.8%	0.5%	58.0%	42
785	Kansas	Jul-97	23.1%	6.5%	5.1%	1.4%	1.2%	62.6%	39
786	Florida	Mar-98	30.9%	2.3%	3.5%	2.3%	5.3%	55.6%	36
787	Puerto Rico	Mar-96	57.6%	0.5%	1.2%	5.1%	0.2%	35.4%	10
801	Utah	Jan-47	57.0%	2.0%	1.9%	3.7%	2.0%	33.5%	31
802	Vermont	Jan-47	19.5%	0.1%	0.4%	0.7%	0.8%	78.6%	20
803	South Carolina	Jan-47	41.7%	8.0%	2.1%	2.5%	2.4%	43.2%	53
804	Virginia	Jun-73	47.2%	1.9%	1.7%	3.6%	0.8%	44.7%	39
805	California	Jan-57	38.2%	4.9%	0.5%	2.3%	2.0%	52.1%	43
806	Texas	Jan-57	22.0%	5.8%	0.3%	2.0%	1.0%	68.9%	41
808	Hawaii	Jan-57	49.0%	2.4%	0.2%	2.8%	1.5%	44.1%	16
810	Michigan	Dec-93	33.9%	3.1%	1.0%	2.6%	1.6%	57.9%	39
812	Indiana	Jan-47	30.5%	1.2%	0.5%	1.9%	1.7%	64.2%	48
813	Florida	Jan-53	50.3%	4.7%	1.0%	4.0%	4.2%	35.8%	40
814	Pennsylvania	Jan-47	30.6%	0.7%	0.3%	1.5%	1.0%	65.9%	37
815	Illinois	Jan-47	29.6%	3.9%	2.6%	1.6%	1.7%	60.6%	62
816	Missouri	Jan-47	35.3%	4.3%	0.5%	3.1%	2.2%	54.6%	40
817	Texas	Jan-53	38.8%	3.5%	0.9%	3.0%	1.1%	52.7%	46
818	California	Jan-84	48.8%	8.6%	0.9%	3.5%	1.3%	36.9%	48
828	North Carolina	Mar-98	39.1%	5.4%	1.2%	2.6%	1.8%	50.6%	39
830	Texas	Jul-97	18.8%	2.4%	0.4%	1.6%	1.2%	75.6%	38
831	California	Jul-98	31.2%	5.6%	0.2%	2.2%	2.0%	58.8%	37
832	Texas	Jan-99	21.0%	1.9%	0.6%	1.5%	2.7%	72.1%	39
843	South Carolina	Mar-98	41.5%	5.9%	0.3%	2.9%	2.1%	47.2%	45
845	New York	Jun-00	42.1%	0.9%	1.4%	2.2%	0.8%	52.6%	44
847	Illinois	Jan-96	52.0%	5.4%	2.9%	3.0%	1.1%	35.6%	40
850	Florida	Jun-97	42.5%	4.1%	2.0%	3.5%	1.3%	46.6%	41
856	New Jersey	Jun-99	32.3%	2.4%	0.3%	2.1%	0.5%	62.4%	33
857	Massachusetts	May-01	2.5%	0.0%	0.2%	0.0%	6.8%	90.5%	20
858	California	Jun-99	38.4%	3.7%	0.9%	2.4%	1.5%	53.1%	35
859	Kentucky	Apr-00	36.9%	1.6%	1.2%	2.5%	2.2%	55.7%	39
860	Connecticut	Aug-95	41.0%	6.1%	1.9%	2.0%	1.9%	47.1%	31
863	Florida	Sep-99	33.2%	2.9%	0.7%	2.8%	2.5%	57.9%	32
864	South Carolina	Dec-95	41.1%	6.8%	1.3%	3.2%	2.1%	45.5%	30
865	Tennessee	Nov-99	47.0%	6.1%	0.9%	4.1%	2.2%	39.7%	29
870	Arkansas	Apr-97	21.1%	6.4%	1.1%	1.5%	0.7%	69.3%	35
901	Tennessee	Jan-47	45.1%	5.4%	1.4%	3.4%	1.4%	43.3%	34
903	Texas	Nov-90	28.6%	5.2%	0.3%	2.1%	1.2%	62.6%	43
904	Florida	Jan-65	45.4%	7.9%	0.9%	4.1%	1.8%	39.9%	48
906	Michigan	Jan-61	14.1%	0.4%	0.5%	0.6%	1.0%	83.6%	18

Table 6
Telephone Number Utilization by Area Code as of June 30, 2001

Area Code	State/Jurisdiction	Area Code Opened	Assigned	Intermediate	Reserved	Aging	Admin	Available	OCNs
907	Alaska	Jan-57	18.7%	0.4%	1.4%	1.4%	0.5%	77.5%	32
908	New Jersey	Nov-90	31.5%	1.3%	0.7%	1.5%	1.4%	63.7%	45
909	California	Nov-92	52.9%	5.9%	1.5%	3.1%	1.4%	35.2%	43
910	North Carolina	Nov-93	35.5%	3.8%	0.5%	3.1%	1.3%	55.9%	38
912	Georgia	Jan-54	29.9%	7.1%	1.9%	2.6%	1.2%	57.3%	49
913	Kansas	Jan-47	36.0%	8.4%	0.7%	2.4%	2.0%	50.4%	32
914	New York	Jan-47	47.2%	1.9%	1.4%	4.3%	1.0%	44.2%	52
915	Texas	Jan-47	32.9%	4.4%	1.0%	2.7%	1.6%	57.4%	48
916	California	Jan-47	44.6%	4.2%	1.8%	2.8%	1.3%	45.4%	38
917	New York	Jan-92	60.2%	9.4%	0.5%	3.5%	0.9%	25.6%	31
918	Oklahoma	Jan-53	28.5%	8.2%	0.7%	2.2%	0.9%	59.5%	51
919	North Carolina	Jan-54	45.2%	4.4%	1.2%	3.3%	1.5%	44.6%	44
920	Wisconsin	Jul-97	26.7%	1.0%	1.3%	1.4%	1.9%	67.7%	54
925	California	Mar-98	32.1%	5.3%	1.4%	1.9%	1.4%	57.9%	40
928	Arizona	Jun-01	11.9%	0.4%	1.1%	1.5%	0.9%	84.2%	18
931	Tennessee	Sep-97	27.2%	4.2%	0.4%	2.5%	1.7%	63.9%	39
936	Texas	Feb-00	25.1%	8.1%	0.4%	2.0%	0.9%	63.4%	32
937	Ohio	Sep-96	35.8%	3.3%	0.9%	2.1%	1.5%	56.5%	29
940	Texas	May-97	24.2%	4.4%	0.3%	1.7%	1.8%	67.6%	48
941	Florida	May-95	43.2%	2.9%	0.9%	4.3%	1.8%	46.9%	36
949	California	Apr-98	39.0%	4.6%	0.8%	2.9%	1.5%	51.2%	45
952	Minnesota	Feb-00	47.3%	3.1%	3.0%	2.5%	1.8%	42.3%	37
954	Florida	Sep-95	51.8%	11.9%	2.4%	4.1%	2.1%	27.7%	43
956	Texas	Jul-97	36.2%	8.6%	2.3%	3.3%	3.4%	46.2%	25
970	Colorado	Apr-95	39.1%	0.8%	0.7%	2.8%	1.8%	54.8%	37
971	Oregon	Oct-00	4.1%	0.0%	0.5%	0.5%	1.0%	93.9%	19
972	Texas	Sep-96	52.2%	3.4%	1.2%	3.3%	1.7%	38.2%	40
973	New Jersey	Jun-97	49.0%	2.6%	0.9%	2.7%	0.5%	44.3%	42
978	Massachusetts	Sep-97	37.5%	1.2%	1.0%	1.4%	0.5%	58.5%	43
979	Texas	Feb-00	19.5%	6.6%	0.3%	2.0%	2.9%	68.8%	37
980	North Carolina	Apr-01	4.0%	0.6%	0.1%	2.6%	1.3%	91.5%	8
985	Louisiana	Feb-01	29.8%	11.1%	2.0%	4.4%	1.5%	51.3%	24
989	Michigan	Apr-01	27.3%	0.6%	1.2%	1.1%	1.3%	68.4%	25

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar, Inc. as of September 7, 2001, and area code information from NANPA as of October 15, 2001.

Table 7

Number of Carriers Reporting Numbering Resources as of June 30, 2001[1]

State/Jurisdiction	ILECs[2]	CLECs[2]	Cellular/PCS[2]	Paging Carriers[2]	Total Carriers
Alabama	25	16	23	8	72
Alaska	18	3	9	2	32
Arizona	19	23	14	11	67
Arkansas	25	11	10	7	53
California	29	51	23	20	123
Colorado	26	20	17	6	69
Connecticut	2	22	7	8	39
Delaware	1	17	6	8	32
District of Columbia	2	25	5	8	40
Florida	14	44	25	14	97
Georgia	36	43	26	10	115
Guam	0	0	3	1	4
Hawaii	2	3	7	4	16
Idaho	21	11	18	6	56
Illinois	51	37	27	12	127
Indiana	40	32	24	12	108
Iowa	154	35	22	4	215
Kansas	34	19	15	7	75
Kentucky	16	31	22	7	76
Louisiana	20	23	23	8	74
Maine	20	13	8	1	42
Maryland	3	32	11	12	58
Massachusetts	5	33	9	7	54
Michigan	34	32	22	13	101
Minnesota	89	49	18	8	164
Mississippi	12	22	19	4	57
Missouri	41	32	19	8	100
Montana	18	7	8	2	35
Nebraska	42	11	10	6	69
Nevada	14	15	9	11	49
New Hampshire	13	18	10	5	46
New Jersey	3	37	8	10	58
New Mexico	15	7	14	4	40
New York	36	50	20	13	119
North Carolina	25	39	14	8	86
North Dakota	29	11	8	2	50
Northern Marianas Islands	0	0	1	1	2
Ohio	37	30	19	9	95
Oklahoma	37	16	16	9	78
Oregon	30	25	14	8	77
Pennsylvania	37	48	24	12	121
Puerto Rico	1	2	6	1	10
Rhode Island	1	18	6	6	31
South Carolina	21	24	18	7	70
South Dakota	43	10	8	2	63
Tennessee	27	31	23	8	89
Texas	66	63	37	20	186
US Virgin Islands	1	0	2	1	4
Utah	18	13	12	8	51
Vermont	7	8	3	2	20
Virginia	16	38	19	10	83
Washington	25	32	14	8	79
West Virginia	8	12	12	8	40
Wisconsin	94	27	22	11	154
Wyoming	12	6	12	1	31
Total	1,415	1,277	801	409	3,902

[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 operating in multiple states are counted multiple times.

[2] Some carriers obviously misclassified the type of service that they provide. For instance, the CLEC operations of one RBOC classified itself as an ILEC, even in states in which it has only CLEC operations. These misclassifications do not have a significant effect on the utilization statistics in other tables, because they have so few numbering resources.

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar, Inc. as of September 7, 2001.

Table 8
Pooled and Potentially Poolable[1] Thousands-blocks as of June 30, 2001

State	Pooled	Potentially Poolable					
		In One of the Nation's Top 100 MSAs[2]			Statewide		
	ILECs and CLECs	ILECs and CLECs	Cellular/PCS	Total	ILECs and CLECs	Cellular/PCS	Total
Alabama	0	997	614	1,611	3,359	1,935	5,294
Alaska	0	0	0	0	1,288	221	1,509
Arizona	0	1,657	843	2,500	2,259	1,503	3,762
Arkansas	0	721	358	1,079	2,248	1,089	3,337
California	6,166	28,469	3,744	32,213	33,474	4,305	37,779
Colorado	764	890	366	1,256	2,132	1,585	3,717
Connecticut	2,132	2,526	444	2,970	2,754	480	3,234
Delaware	0	586	94	680	1,442	155	1,597
District of Columbia	0	837	94	931	838	94	932
Florida	1,070	5,868	1,680	7,548	9,679	3,571	13,250
Georgia	0	3,462	435	3,897	5,738	1,888	7,626
Hawaii	0	417	60	477	763	247	1,010
Idaho	0	0	0	0	1,123	838	1,961
Illinois	4,081	6,840	902	7,742	11,892	1,590	13,482
Indiana	0	2,381	477	2,858	6,527	1,362	7,889
Iowa	0	97	8	105	1,419	1,548	2,967
Kansas	0	1,777	214	1,991	5,252	589	5,841
Kentucky	0	1,033	190	1,223	4,497	1,257	5,754
Louisiana	0	925	386	1,311	2,357	1,277	3,634
Maine	969	7	8	15	501	337	838
Maryland	0	7,549	584	8,133	8,328	786	9,114
Massachusetts	252	11,462	939	12,401	12,316	1,010	13,326
Michigan	0	7,715	1,061	8,776	11,797	2,534	14,331
Minnesota	0	2,203	344	2,547	3,459	1,092	4,551
Mississippi	0	79	11	90	2,389	705	3,094
Missouri	0	3,951	481	4,432	7,195	1,464	8,659
Montana	0	0	0	0	558	924	1,482
Nebraska	175	242	120	362	1,890	487	2,377
Nevada	0	856	253	1,109	1,223	283	1,506
New Hampshire	1,361	263	183	446	903	449	1,352
New Jersey	0	10,889	985	11,874	12,057	1,169	13,226
New Mexico	0	124	115	239	483	510	993
New York	5,998	8,293	1,324	9,617	10,111	1,834	11,945
North Carolina	0	3,729	914	4,643	7,503	2,340	9,843
North Dakota	0	98	17	115	433	752	1,185
Ohio	0	8,343	1,341	9,684	12,118	2,513	14,631
Oklahoma	0	1,693	135	1,828	3,860	858	4,718
Oregon	416	1,010	164	1,174	2,597	883	3,480
Pennsylvania	3,208	13,485	1,385	14,870	17,633	2,541	20,174
Rhode Island	0	1,370	137	1,507	1,753	148	1,901
South Carolina	0	1,258	473	1,731	2,331	1,368	3,699
South Dakota	0	79	27	106	663	788	1,451
Tennessee	0	1,759	354	2,113	3,942	1,538	5,480
Texas	511	14,765	1,628	16,393	22,581	3,642	26,223
Utah	517	614	218	832	1,124	1,027	2,151
Vermont	0	0	0	0	2,675	91	2,766
Virginia	965	4,557	835	5,392	6,901	2,036	8,937
Washington	0	3,539	648	4,187	5,323	1,591	6,914
West Virginia	0	115	69	184	2,097	524	2,621
Wisconsin	0	1,592	268	1,860	4,556	1,979	6,535
Wyoming	0	0	0	0	260	437	697
Totals	28,585	171,122	25,930	197,052	270,601	64,174	334,775

[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] The values shown in the MSA-related columns may be slightly understated. The number of poolable thousands-blocks in the MSA-related columns is derived from the carrier-submitted NRUF data. The LERG and other information was used to match rate center names with MSAs, so where carriers submitted incorrectly spelled rate center names, those thousands-blocks could not be counted as being in the MSA. The statewide numbers were derived from the NPA of the thousands-block.

Source: Numbering Resource Utilization/Forecast forms filed with NeuStar, Inc. as of September 7, 2001 and July 2001 LERG.

Figure 1
ILECs: Average Utilization Rates by Number of NXXs Held in a Rate Center

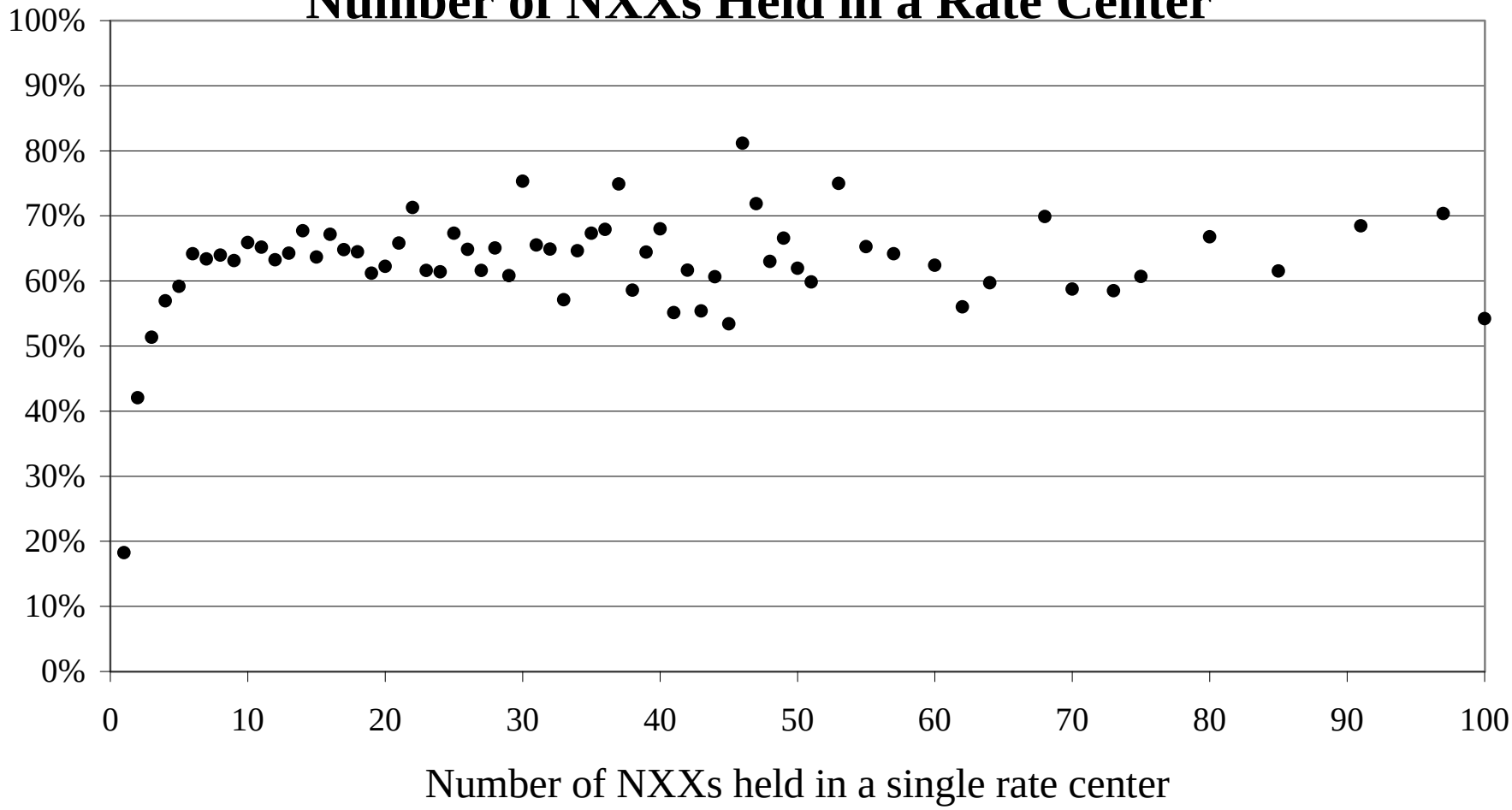

Figure 2
CLECs: Average Utilization Rates by Number of NXXs Held in a Rate Center

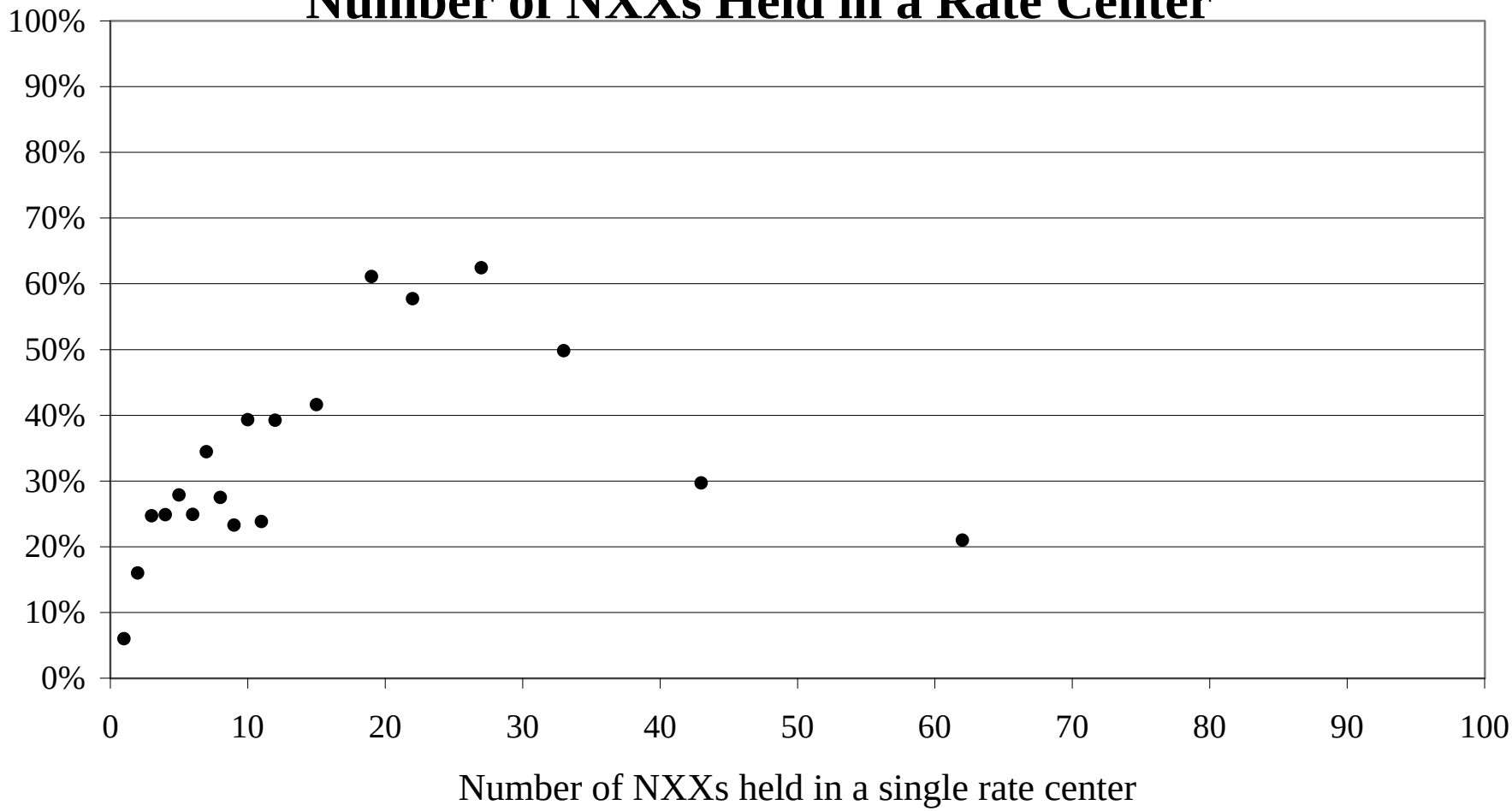

Figure 3
Cellular/PCs Carriers: Average Utilization Rates by Number of NXXs Held in a Rate Center

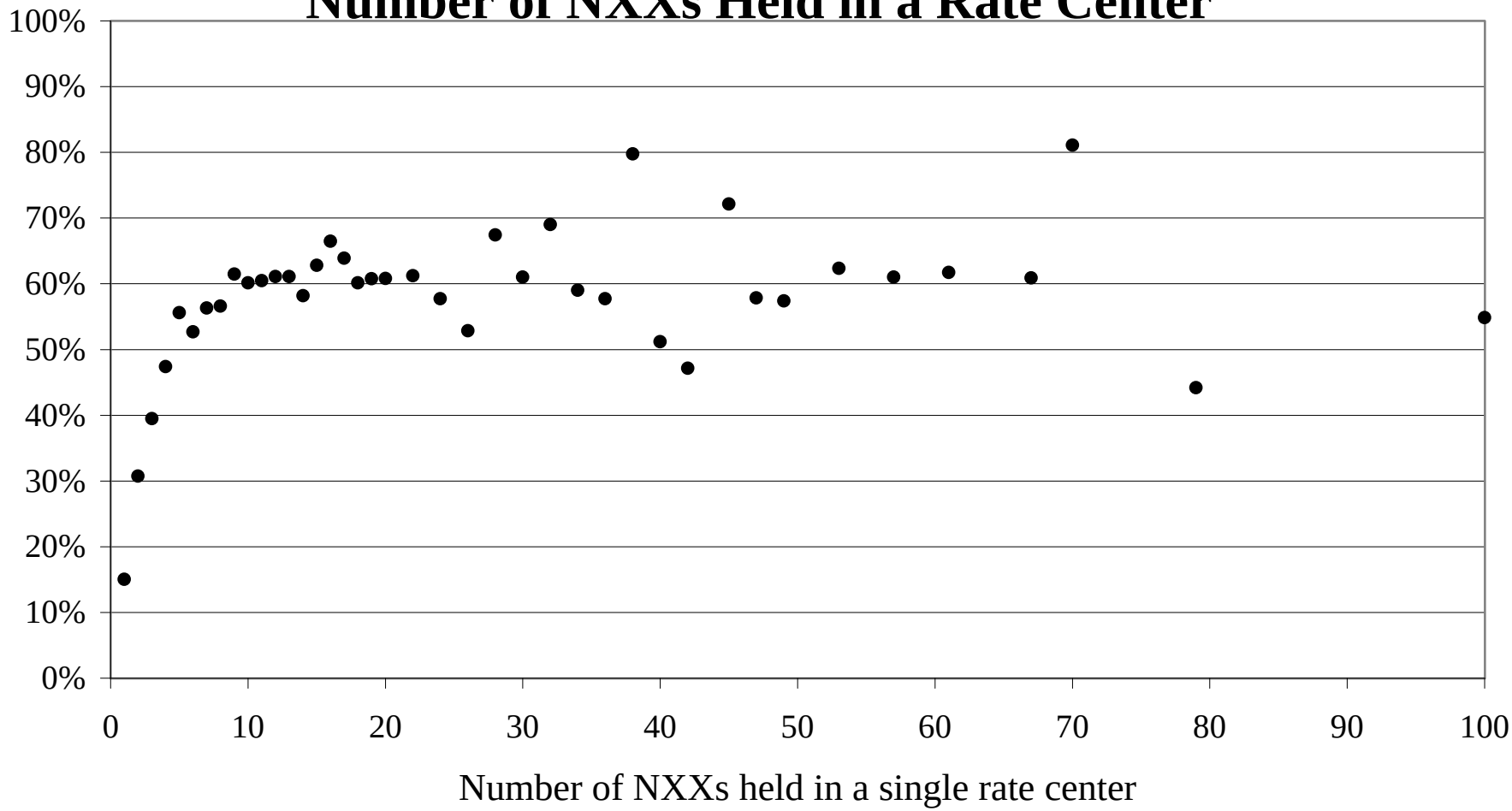

Figure 4
Paging Carriers: Average Utilization Rates by Number of NXXs Held in a Rate Center

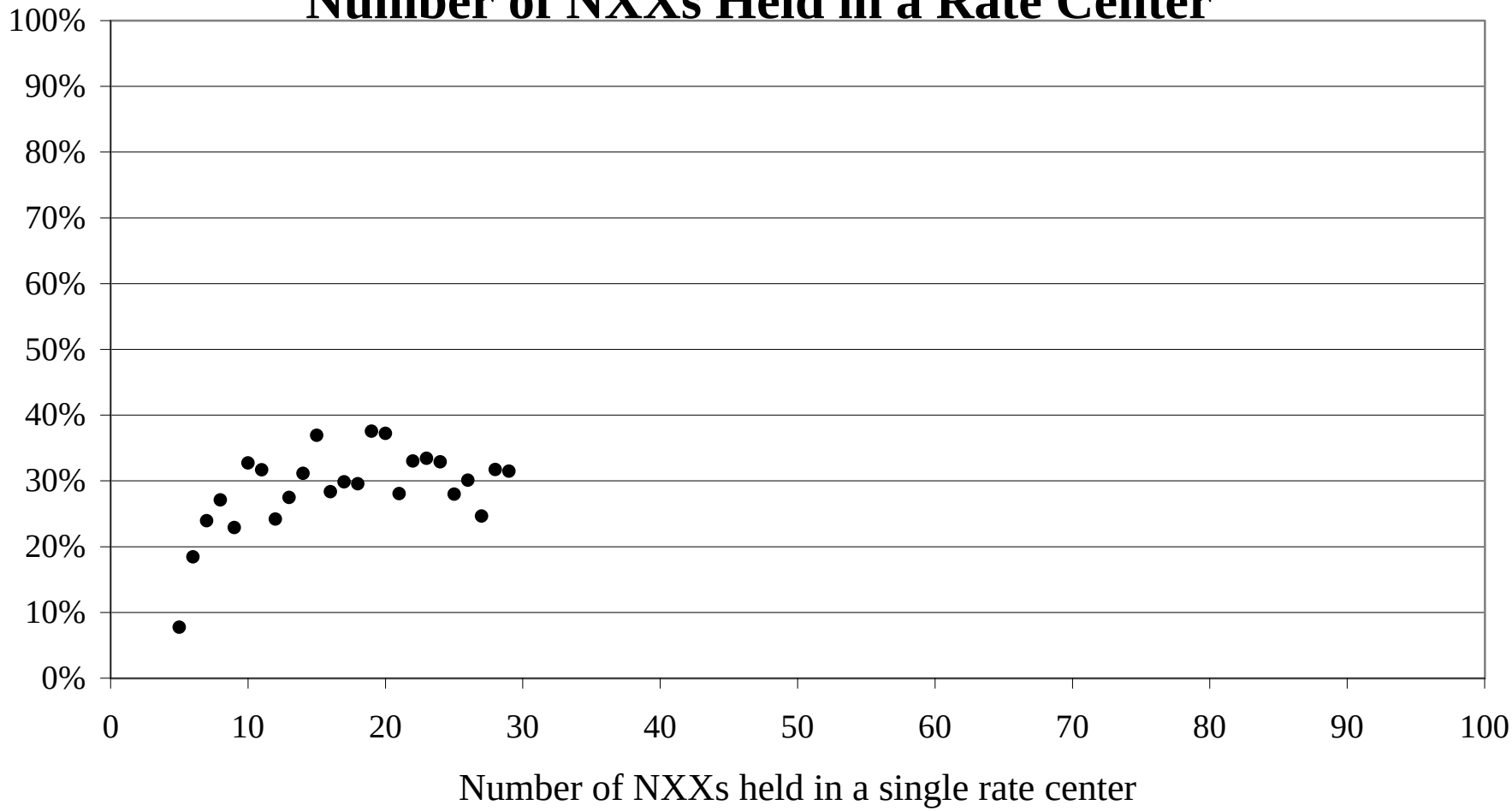

Table 9

Number Utilization for Specialized Non-geographic Area Codes as of June 30, 2001

Specialized Area Codes	Assigned	Intermediate	Reserved	Aging	Admin	Available[1]	Total	Unique NXXs
	(Thousands of telephone numbers)							
500	2,812	630	8	27	40	2,555	6,072	384
	46.3%	10.4%	0.1%	0.4%	0.7%	42.1%	100.0%	
900	115	107	50	73	0	2,085	2,430	173
	4.7%	4.4%	2.0%	3.0%	0.0%	85.8%	100.0%	

Table 10

Alternate Sources of NPA-NXX Assignments

NPA-NXXs that Appear in	NRUF	NANPA	LERG	NXXs
All Three Databases				
NRUF, NANPA and LERG	✓	✓	✓	109,811
Two of the Three Databases				
NRUF and NANPA	✓	✓		2,064
NANPA and LERG		✓	✓	9,199
NRUF and LERG	✓		✓	3,283
Only One Database				
NRUF	✓			341
NANPA		✓		2,993
LERG			✓	3,622
Total NXXs in Database.	115,499	124,067	125,915	

[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.

Sources: June 30, 2001 NRUF database, as of September 7, 2001; NANPA's NPA-NXX assignments database as of September 18, 2001; and the LERG, as of July 1, 2001.

Table 11
Number Utilization Over Time When Same Carriers Reporting Same NXXs

Carrier Type	December 2000	June 2001
ILEC	59.1%	58.9%
CLEC	11.1%	13.1%
Cellular/PCS	47.8%	51.6%
Paging	24.6%	23.5%
Overall	45.0%	46.0%

Source: Numbering Resource Utilization/Forecast Reports data 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

Source: NeuStar, Inc.

Customer Response

Publication: *Numbering Resource Utilization in the United States as of June 30, 2001.*

You can help us provide the best possible information to the public by completing this form and returning it to the Industry Analysis Division of the FCC's Common Carrier 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:
202-418-0520		FCC/CCB/IAD Washington, DC 20554