



National Thousands-Block Pooling Administration

2006 ANNUAL REPORT



Mr. Anthony S. Wimbush
Contracting Officer
FCC Contracts and Purchasing Center
445 12th Street S.W.
Washington, D.C. 20554

RE: Contract #CON01000016

Dear Mr. Wimbush:

I am pleased to submit the *National Thousands-Block Pooling Administration 2006 Annual Report*, submitted pursuant to Contract Data Requirements List (CDRL) 4.6.1. This report covers Pooling Administration (PA) activities from January 1, 2006 through December 31, 2006.

As directed by Section 2.18.1 of the *Thousands-Block Pooling Contractor Technical Requirements*, this report contains:

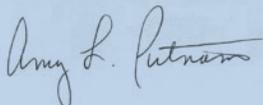
- The highlights and significant milestones we reached during the previous year
- An identification of existing and potential pooling areas
- An aggregated total by pool of service providers participating in the pooled area
- Forecast results, as well as a review of forecasts vs. actual block activation in the past year
- System and performance metrics
- The status of required transferable property
- Industry issue identification and feedback from service providers
- Volume of reports produced, aggregated by regulatory agency, NANC, NANPA, and service providers
- Additional informational offerings.

The report shows why 2006 was another remarkable year, with significant increases in the both the number of applications processed and blocks assigned, and the total number of assigned blocks in the Pooling Administration System. In 2006 we also successfully assumed the additional obligations of Interim Routing Number Authority for pseudo-Automatic Numbering Identification. The report also demonstrates how the entire PA team contributed to the overall effectiveness of the PA operation.

During the past year we continued to accurately and efficiently manage thousands-block number pooling services in a neutral manner pursuant to our contractual obligations. As we have for the past five years, we will continue to work cooperatively and productively with customers, industry groups, and regulatory staff during the remaining months of our contract extension.

Should you have any questions about this report, please do not hesitate to contact me.

Sincerely,



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1. History of NeuStar Pooling Administration from 1997-2005

1.1 Background – 1997 through 2001

In 1997, the Illinois Commerce Commission selected NeuStar, Inc. [then an autonomous business unit known as Communications Industry Services (CIS) within Lockheed Martin Corporation] to administer the trial of thousands-block number pooling in the Illinois 847 Numbering Plan Area (NPA). This trial, the first of its kind, was successfully implemented in June, 1998 and was backed by the Federal Communications Commission (FCC) in its *Memorandum Opinion and Order and Order on Reconsideration, CC 96-98, FCC 98-224*, known as “the Pennsylvania Order.” In the Pennsylvania order, the FCC granted limited authority to continue the Illinois pooling trial and encouraged other states to seek delegated authority to implement pooling trials. Shortly thereafter, NeuStar began administering the trial in New York’s 212 NPA.

On November 30, 1999, NeuStar, Inc. was divested from Lockheed Martin as a separate, privately-held company. As more states requested and received delegated authority to implement thousands-block pooling trials, NeuStar was chosen as administrator in all but six states where trials were ordered. By the end of 2000, NeuStar was managing seventeen trials in seven states.

The FCC released the First Report and Order and Further Notice of Proposed Rulemaking (1st NRO Order) outlining the framework for a nationwide rollout of thousands-block number pooling on March 31, 2000. NeuStar competitively bid for and was awarded the federal contract to administer the national rollout and ongoing pooling administration on June 15, 2001, for a total of five years, renewable annually. Taken together, Section C: Thousands-Block Pooling Contractor Technical Requirements dated November 30, 2000, NeuStar’s response to the Request for Proposal (RFP), FCC rules, and the industry guidelines set forth NeuStar’s responsibilities as national Pooling Administrator.

NeuStar, Inc. is an independent, neutral third party responsible for the fair and efficient overall administration of thousands-block numbering resources. It provides high quality service that is free from bias, personal and organizational conflicts of interest, and unprofessional conduct, and is otherwise in compliance with the FCC’s specified neutrality requirements. NeuStar refrains from

providing services to any person or entity that would result in an actual or potential conflict of interest with the performance of this contract with the FCC or otherwise be in conflict with the neutrality criteria.

Along with the fulfillment of contract obligations to develop an automated Pooling Administration System (PAS) and a national rollout schedule, NeuStar continued implementing state pooling trials.¹ NeuStar implemented a total of 59 additional pooling trials while developing the PAS, between the June 15, 2001 contract award and March 15, 2002, and by October 15, 2001 had successfully transitioned to itself the trials from the six states that had been initiated by another administrator. NeuStar implemented nearly half of those additional pooling trials during the few months prior to the transition to the automated PAS on March 15. In all, the PA made the transition of 97 trials involving 114 NPAs from the state system to PAS.

Over the nine-month period following the contract award, NeuStar developed, tested, and put the PAS into service according to FCC requirements. Rather than include them in the national rollout, NeuStar proactively moved all state pooling trials to PAS at one time, coincident with the turn-up of the PAS. Completing the transition of the pooling trials at one time permitted NeuStar to implement thousands-block number pooling more rapidly in the remaining NPAs as part of the national rollout.

1.2 National Pooling Administration (PA) – Highlights of Past Performance – 2002 through 2005

During the first quarter of each year since 2002, the PA has issued an Annual Report. Following are highlights of PA accomplishments for each previous year of the contract:

1.2.1 Highlights from 2002:

- Conducted First Implementation Meetings (FIMs) in 75 NPAs in the time prescribed by the national rollout schedule established by the FCC. During the FIMs, pools were established and rate centers were designated as mandatory, optional, or excluded according to FCC orders and industry agreement.

¹ NeuStar implemented 25 pooling trials between January 1 and March 15, 2002.

- Created a database of Metropolitan Statistical Areas (MSAs) to assist in the implementation process.
- Managed pools in 187 NPAs.
- Developed and implemented “Native Block Pooling” in over 170 NPAs from January to June of 2002 to enable wireless carriers to get a head start on the pooling process in order to more easily meet the FCC-mandated November 24 pooling deadline.
- Integrated wireless carriers into pooling by the November 24 FCC-mandated deadline.
- Assisted with development of procedures for, and was named administrator for, the modified Unassigned Number Porting trial in Connecticut.
- Produced 259 reports for the FCC, state regulatory agencies, North American Numbering Council (NANC), NANPA and service providers during the reporting period.
- Submitted seventeen issues and thirty-one contributions to INC.
- Managed the 10,023 total assigned thousands-blocks that were in PAS by the end of 2002.
- Was awarded contract renewal from the FCC for year two.
- Produced 170 reports for the FCC, state regulatory agencies, NANC, NANPA and service providers during the reporting period.
- Submitted nine issues and fifteen contributions to INC.
- Managed the 29,027 total assigned thousands-blocks that were in PAS by the end of 2003.
- Was awarded contract renewal from the FCC for year three.

1.2.2 Highlights from 2003:

- The PA completed a successful reorganization that took effect on April 29. As part of this reorganization, Amy Putnam was promoted to Director and continues in that position today.
- Provided up-to-date Metropolitan Statistical Area (MSA) information to assist the wireless industry with its mandated implementation of number portability.
- Implemented the pooling “Tip of the Month” message.
- Successfully completed the rollout of national thousands-block number pooling by conducting 36 FIMs in 49 NPAs according to the FCC national rollout schedule.
- Concluded the administration of the modified Unassigned Number Porting trial in Connecticut.
- Implemented four FCC-approved change orders.
- Pro-actively prepared and distributed the first *Non-Participating Service Provider Report* to address concerns raised by the FCC and the states.

1.2.3 Highlights from 2004:

- The PA, at the direction of the FCC, implemented changes created by the Office of Management and Budget’s (OMB) Bulletins 03-04 and 04-03. These OMB Bulletins created 49 new Metropolitan Statistical Areas (MSAs) which resulted in an increase of 21% in the number of rate centers in which pooling is mandatory. The Pooling Implementation Managers (PIMs) conducted 14 Supplemental Implementation Meetings (SIMs) in 122 area codes (NPAs) in 38 states where the pooling status changed as a result of the OMB Bulletins. Pooling was implemented in all NPAs involved in the SIMs as of September 30.
- Successfully conducted both operational and technical testing of the PAS pursuant to the Disaster Recovery Plan (DRP).
- Produced 298 reports for the FCC, state regulatory agencies, NANC, NANPA and service providers during the reporting period. In addition, produced a report for the FCC on carriers not participating in pooling in mandatory areas, as well as numerous internal reports.
- Submitted eight issues and ten contributions to INC.
- Implemented three website improvements: a “PAS Enhancements” link on our website which allows users to electronically submit suggestions for improvements to the PAS; a formal process for problem resolution; and an extension of the duration of the PAS time-out feature from 15 to 20 minutes.
- Took part in four state commission workshops, including providing reports; conducted two informational national conference calls for state commission staff to update them on pooling issues and procedures; conducted three (3) in-person pooling education meetings with state commissions, as well as educational conference calls for four states on block application and reclamation procedures.

- Implemented a process to incorporate the requirements of the FCC Debt Collection Improvement Act of 1996, FCC 04-72, MD Docket 02-339 (Red Light Rule), adopted March 25, 2004 into pooling procedures.
- Reclaimed thirty-three thousands-blocks as authorized by state commissions or FCC.
- Conducted the 2004 PA survey in September pursuant to which 114 surveys were returned with no score under 4.1 out of 5.0.
- Performed audits of all of the rate center files, during which the PIM team assured the accuracy of all information relating to each of the rate centers in PAS.
- Created a monthly report known as *Rate Center File Changes*, in which the PIM team regularly reported on modified rate center designations for the benefit of service providers.
- Participated in the FCC “Future of Numbering” symposium, during which PA Director Amy Putnam discussed the “State of the NANP.”
- Prepared and distributed a *Non-Participating Service Provider Report* in July 2004.
- Implemented five FCC-approved change orders and submitted a total of twelve change orders.
- Managed the 61,118 total assigned thousands-blocks that were in PAS by the end of 2004.
- Was awarded contract renewal from the FCC for year four.
- During 2005, the PA continued with production of its non-participating service provider report. The PA completed the process of identifying and notifying non-participating service providers twice during 2005, in January and November.
- Participated in four NANC Issue Management Groups (IMGs).
- On our own initiative, we implemented a complete overhaul of the www.nationalpooling.com website, which culminated on January 24, 2005, enhancing its navigability and updating available information.
- Reclaimed 78 thousands-blocks as authorized by the FCC or state commissions.
- Conducted a performance survey in September; 134 surveys were returned. Scores showed a high level of satisfaction, with overall PA personnel performance scores of 4.5 or higher (with 5 being the highest possible score); an overall score of 4.4 for PAS performance, and an overall score of 4.2 on the website. All scores showed an improvement from the 2004 responses.
- Implemented a process to apply the “Debt Collection Improvement Act of 1996” (aka Red Light Rule). The FCC directed the PA to withhold assignment of numbering resources to any entity identified by the FCC as delinquent in its payments to them. The PA processed 190 denials as a result of the Red Light Rule in 2005.
- In response to requests from state regulatory staff regarding their need to be able to observe daily application activity in their states, the PA made a confidential daily activity report available to requesting states in April. By the end of 2005, eleven states were receiving the report.
- Submitted ten issues and ten contributions to INC.
- Pooling Implementation Management continued the quality control and maintenance of the rate center files and made 1,222 designation modifications to rate centers in PAS.
- Conducted one informational conference call on pooling issues and procedures that included a PAS refresher for state commission staff; participated in five in-person pooling education meetings with state commissions; and responded to over 175 inquiries on block applications, mandatory and optional pooling, safety valve, and reclamation procedures.

1.2.4 Highlights from 2005

- Implemented nine Change Orders (27, 30, 31, 32, 33, 36, 37, 38, 39).
- Submitted eight Change Orders to the FCC.
- Successfully conducted both operational and technical system testing of the National PA Disaster Recovery Plan (DRP) during the week of May 16.
- Completed PAS operating system, database, and application upgrades on August 21.
- Produced 2,572 reports for the FCC, state regulatory agencies, NANC, NANPA, and service providers.

- Managed the 109,420 total assigned thousands-blocks that were in PAS by the end of 2005.
- Was awarded contract renewal for year five and two contract extensions from the FCC.

1.3 The NeuStar PA organization

Amy L. Putnam, Esq. is the Director of NeuStar PA. Ms. Putnam reports to Michael O'Connor, Vice President for Customer Relations.

NeuStar PA consists of six functional areas:

1. **Pooling Administration Services Center (PASC)** is responsible for performing the core functions of pooling administration: application processing, reclamation, help desk, quality assurance, and industry interface. Acting Regional Director, Gary Zahn, manages the operation of this center.
2. **Technical Operations (Tech-Ops)** is responsible for the day-to-day operation of the system, website and equipment. Tech/Ops Manager Wayne Louie manages this area.
3. **Pooling Implementation Management (PIM)** initially carried out implementation of the national pooling rollout schedule but has now assumed responsibilities for the ongoing management and quality control of rate center file data, as they are affected by FCC Orders, OMB Bulletins, state directives, and carrier requests, as well as any resulting Supplemental Implementation Meetings (SIMs). The team also works on special projects and backs up the Services Center Group. Mary Ensminger is the Regional Director for Pooling Implementation Management.
4. **External Relations** is responsible for addressing all activities relating to regulatory, compliance, the Numbering Oversight Working Group (NOWG), and carrier relations issues. Shannon Sevigny is the Regional Director for External Relations.
5. **Data Analysis** is responsible for the development and distribution of all periodic and *ad hoc* reports provided to the other functional areas, the FCC, state regulatory agencies, and service providers as well as the ongoing quality management of published and web site reports. Bruce Armstrong is the Senior Data Analyst.
6. **Interim Routing Number Authority** is responsible for administering p-ANIs for VoIP providers, including application processing, help desk, and industry interface. Regional Director Florence Weber, manages the operation of p-ANIs.

Individual NeuStar PA contact information can be found on the web site, at <http://www.nationalpooling.com/contact/pooling/index.htm>.

2. 2006 NeuStar PA Highlights and Significant Milestones

“Perfect! You are all the greatest!”

Following is a synopsis of the major pooling accomplishments of NeuStar, as national Pooling Administrator (PA), during the 2006 reporting period.

PA productivity at a glance (For details, see *Section 2.2.*)

Applications processed (Part 3s):	127,965
Blocks assigned:	62,606
Disconnects processed:	8,302
Donations processed:	10,768
Central Office Codes opened:	3,102
Red Light Rule Denials:	247
Total Reclaimed Blocks:	66

The total number of assigned blocks in the Pooling Administration System (PAS) as of December 31, was 162,234.

Pooling Administration System (PAS)

In 2006, the PA implemented four Change Orders (38, 41, 43 and 46). The PA submitted five Change Orders to the FCC (46, 47, 48, 49 and 50), proposing a variety of system or process changes that are not addressed in our current contract with the FCC. The FCC acted on five change orders (41, 43, 44, 46 and 47) and the PA withdrew two change orders (42 and 45). (For details, see *Section 2.3.2.*)

The PA successfully completed operational disaster recovery testing during the week of January 16, 2006 and technical system disaster recovery testing on January 21, 2006. (For details, see *Section 6.2.*)

Comprehensive and timely reporting

We produced 5,841 reports for the FCC, state regulatory agencies, NANC, NANPA and service providers during the reporting period. (For details see *Section 9.0.*)

Industry support and customer focus

We completed the one-time scrub of the entire PAS database authorized in Change Order 41, which showed that data relating to 5.68% of the blocks in PAS did not match that in the NPAC. (See *Section 2.3.3* for details.)

In 2006, the PA participated in the three NANC meetings, attended all Industry Numbering Committee (INC) meetings, Network Routing Resources Information Committee (NRRIC) meetings, and Common Interest Group on Routing and Rating (CIGRR) meetings, and submitted 12 issues and 19 contributions to INC. (For details see *Section 9.0.*)

Pooling Implementation Management continued the quality control and maintenance of the pooling area files that are so critical to service providers. (For details, see *Section 2.4.*)

Regulatory and Compliance

In 2006, the PA conducted one informational conference call on pooling issues and one PAS refresher and website overview for state commission staff; conducted five pooling educational meetings with state commissions; and responded to approximately 190 inquiries from state regulators on issues such as block applications, mandatory and optional pooling, safety valve and reclamation procedures. The PA also responded to the issuance of FCC and state delegated authority orders and fulfilled all 2006 reporting requirements on time. (For details, see *Section 2.5.*)

p-ANI Administration

On September 8, 2006, the FCC appointed the national Pooling Administrator to serve as the Interim Routing Number Authority (IRNA) for pseudo-Automatic Number Identification (p-ANI) for VoIP (Voice over Internet Protocol). In November 2006, we delivered a functional system and process in compliance with the “p-ANI Interim Assignment Guidelines for ESQK”. (For details, see *Section 2.6.*)

2.1 Pooling Administration Staff Reorganization

In August, 2006, the PA made the following personnel changes with FCC approval, at the Pooling Administration Services Center:

- **Gary Zahn** – promoted from Senior Pooling Administrator to Acting Regional Director PASC;
- **Dara Sodano** – promoted from Industry Interface Representative to Acting Senior Pooling Administrator handling the states of New York and Florida;
- **Tara Farquhar** – promoted from Pooling Administrator to Acting Industry Interface Representative.
- **Florence Weber** reassigned from Regional Director PASC to Regional Director for Interim Routing Number Authority administration to manage p-ANI.
- **Kevin Gatchell** added responsibilities of Reclamation Manager to his current duties as Senior Pooling Administrator handling the states of California, Maine and Washington.

In addition, on December 1, 2006, the following personnel changes were effective:

- **Diane Mueller** was promoted from Administrative Assistant to Pooling Administrator to handle the states of Colorado, Iowa, Idaho, Michigan, Nebraska, New Mexico, Nevada, Ohio, Oregon and Utah.
- **Evelyn Freeman** was hired as the Administrative Assistant at the Pooling Administration Services Center.

A listing of current Pooling Administration Services Center personnel and their contact information can be found on www.nationalpooling.com under “Contacts.”

2.2 Pooling Administration, Concord CA

This section describes PA activity in 2006 including information about applications processed, blocks assigned and NXX codes opened. Pooling productivity statistics from the beginning of national thousands-block number pooling can be found in Section 10.0, *Trends in Pooling Since 2002*.

2.2.1 Pooling Administration Productivity for 2006

In 2006, there were 127,965 applications (Part 3s) processed by the PA shown in Table 1.

Table 1 – Processed Applications in 2006

Approvals	114,197
Denials	9,215
Suspensions	4,553

Table 2 – Total Number of Applications Processed by Activity Type

	Approved	Denied	Suspended	Total
Block Modifications	39,538	1,115	0	40,653
Block Disconnects	8,302	319	0	8,621
Individual Blocks	54,024	5,541	0	59,565
Block Transfers	625	52	0	677
LRN Blocks	1,841	576	981	3,398
Dedicated Blocks	1,283	89	146	1,518
Pool Replenishment Blocks	5,458	735	2,139	8,332
Manual	3,126	788	1,287	5,201
Totals	114,197	9,215	4,553	127,965

Table 3 sets forth the number of whole NXX codes opened by the PA in 2006 and for what purpose.

Table 3 – NXX Codes Opened by the PA in 2006

Purpose	Total
LRN	968
Dedicated Customer	128
Pool Replenishment	2,006
TOTAL	3,102

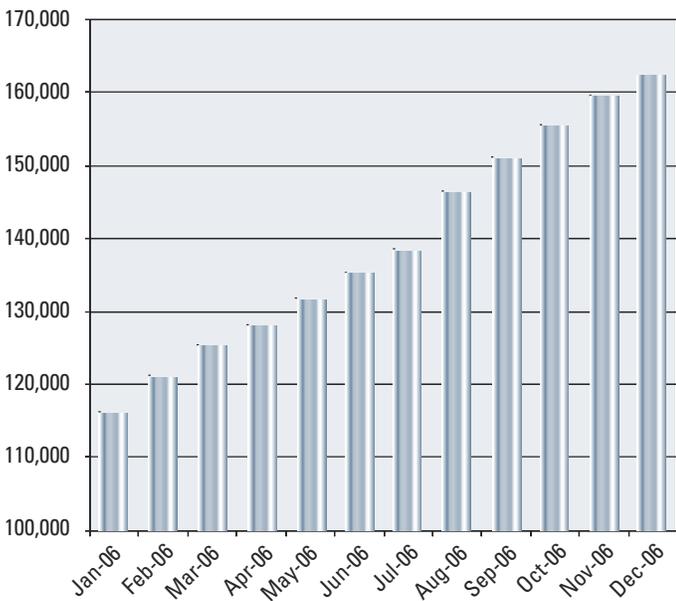
The PA also issued 8,979 Part 5s as a result of disconnects, reclamations, and block exchanges during 2006. Although the PA is not required to report on application withdrawal requests, there were 2,099 Part 3s during 2006 that were denied based upon service providers’ requests to withdraw their applications.

The PA processed 99.99% of applications within 7 calendar days during 2006. Only 15 applications were not processed within 7 calendar days during the entire year, which is nearly the same as in 2005 even with the 25% increase in applications processed.

During 2006, the level of activity managed by the PA continued to grow. The total number of thousands-blocks assignments increased by almost 12% in 2006 over 2005. Also, the number of applications (Part 3s) processed per month increased by 25% in 2006 over 2005.

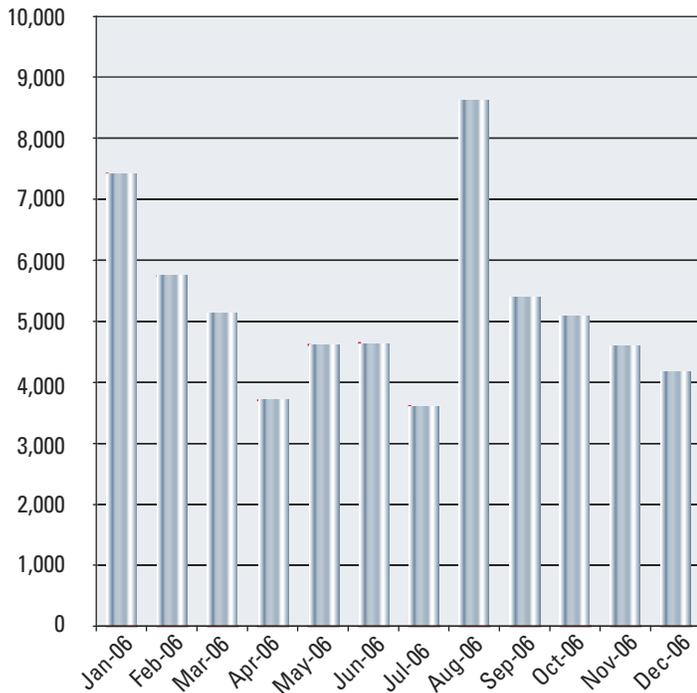
Chart 1 below shows the cumulative number of assigned thousand-blocks in the PAS during 2006.

Chart 1 – Cumulative Total Assigned Blocks



In order to represent the actual increases in the monthly volume of assignments, Chart 2 depicts the monthly block assignments during 2006.

Chart 2 – 2006 Monthly Block Assignments



The total number of applications processed is a measure of the actual work performed by the pooling administrators, because not every application results in an immediate assignment of a thousands-block. Although a large majority of applications for numbering resources are processed and approved immediately, some are suspended for future action and some are denied entirely.

Chart 3 below provides a complete overview of all applications processed in the PAS for 2006, which includes approvals, denials and suspended applications.

Chart 3 – 2006 Pooling Applications (Part 3s)

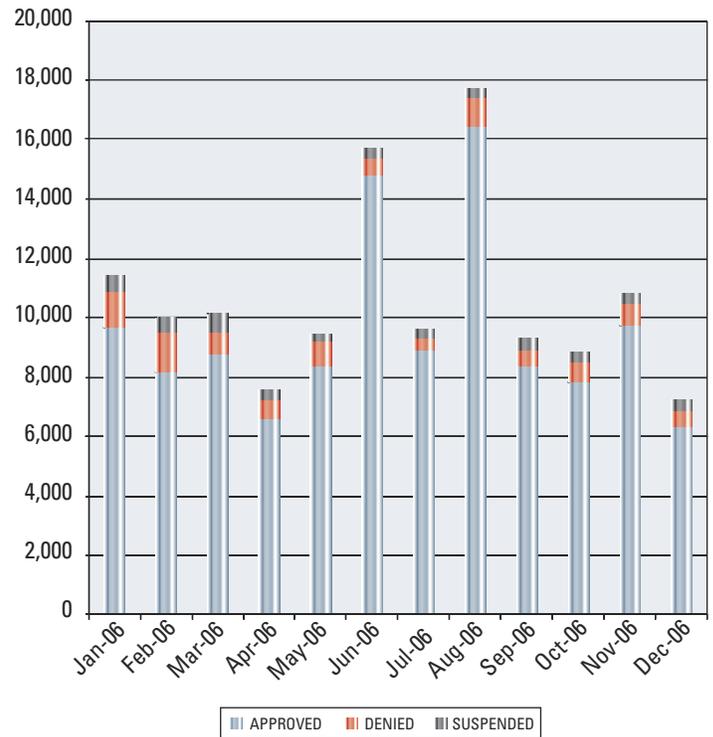


Table 4 – The Top 10 States for Applications (Part 3s) in 2006

State	Part 3s
CA	15,970
TX	10,512
NY	8,399
FL	8,162
MI	6,930
PA	5,924
OH	5,241
IL	5,137
MA	4,747
NC	3,753

Table 5 – The Top 10 NPAs for Applications (Parts 3s) in 2006

State/NPA	Part 3s
NY 347	1,618
OH 740	1,534
NC 704	1,406
PA 724	1,371
MI 248	1,312
GA 678	1,181
MA 508	1,153
CA 310	1,143
CA 760	1,083
MI 734	1,068

Table 6 – The Top 10 States for Blocks Assigned in 2006

State	Blocks Assigned in 2006
CA	7,465
TX	5,695
NY	4,694
FL	3,891
PA	3,170
IL	2,678
MA	2,550
MI	2,524
OH	2,267
NJ	2,232

Table 7 – The Top 10 NPAs for Blocks Assigned in 2006

State/NPA	Blocks Assigned in 2006
NY 347	1,034
MA 508	688
GA 678	687
NC 704	677
PA 724	628
TX 832	612
TX 214	587
TX 281	557
PA 484	550
MA 978	541

2.2.2 Pool Replenishment

During 2006, as inventories of many pools began to exhaust in the absence of additional voluntary donations, the PA took increased action to replenish pool inventories, and instituted steps to focus carriers' attention on keeping adequate inventories to meet demand.

Section 2.14 of the technical requirements states that the "contractor shall maintain a six-month inventory pool for each pooling area in order to meet the forecasted resource needs of participating service providers" and that the contractor shall use the service provider forecasts to size and manage each pooling area. During 2006, an average of 405 pooling rate areas² (approximately 3% of the total) per month had less than a six-month inventory. Of these 405 pooling rate areas, an average of 134 rate areas per month had zero blocks.

While the PA has no authority to actually replenish the inventory pool because it is not authorized to obtain resources directly, we manage the process by determining when a pooling rate area inventory will fall below the aggregated six month service provider forecasts, which establishes that it is necessary for service providers to replenish the pool. For replenishment, the PA has to rely on the service providers that can meet the MTE (Months to Exhaust) and utilization requirements to open a code and donate blocks to the pool.

There were 2,006 NXXs opened for pool replenishment in 2006.

The PA performed the following actions throughout 2006 to increase service provider participation in pool replenishment:

- Sent bimonthly email notifications to all service providers with forecasts in any deficient pooling rate area. Notifications provided the number of aggregate block forecasts by that service provider and the number of NXXs needed in that rate area.
- Periodically contacted all service providers having numbering resources in a deficient rate area, but without a forecast on file in that rate area, asking for donations.
- Reported the number of rate areas with less than six months demand to the NOWG each month.
- Reported the number of rate areas with zero inventory and positive forecasts to the NOWG each month.
- Provided the INC with an issue relating to pool replenishment concerns with a list of potential solutions for its consideration.

² A "pooling area" is defined as a rate area with either a mandatory or optional designation.

Table 8 – Top 10³ States for Pool Replenishment in 2006

State	NXX Codes Opened
CA	258
NY	247
TX	183
FL	143
IL	94
MO	92
MI	69
VA	62
PA	60
KY	47
NC	47

Table 9 – Top 10 NPAs for Pool Replenishment in 2006

NPA	State	NXX Codes Opened
347	NY	62
832	TX	36
660	MO	34
947	MI	34
210	TX	31
951	CA	31
407	FL	27
702	NV	27
818	CA	27
270	KY	26

2.2.3 Website

In 2006, NeuStar continued to review website content to maintain current information. We posted the Safety Valve Quick Sheet, which was developed by NANPA from state input, to assist service providers with regulatory procedures involving safety valve petitions. In addition, we updated the New Service Provider Checklist and added a link to the Interim Routing Number Authority website. (For more details on IRNA see *Section 2.6.*)

2.2.4 Reclamation

NeuStar PA initiates reclamation according to the Thousands-Block Number (NXX-X) Pooling Administration Guidelines (TBPAG) which directs that, “[a] thousands-block assigned to a service provider should be placed into service by the applicable activation deadline, that is, six-months after the original effective date returned on the Part 3 and entered on the BCD/BCR screen in BIRRDs.” Each thousands-block assignment has an associated “Part 3 effective date,” which is the date the numbers in the thousands-block become available

³ There are actually eleven states listed because two states have the same quantity of NXX does opened and are tied for tenth.

to be assigned to customers. The block holder confirms that the thousands-block is in-service by submitting a Part 4 to the PA. If the PA does not receive the Part 4 during the first five months following the original effective date identified on the Part 3, the PA sends a reminder notice to the block holder.

If the Part 4 is not received within six months of the original Part 3 effective date, the Part 4 is considered delinquent and the thousands-block is eligible to be reclaimed. By the 10th calendar day of each month, the PA sends a list of delinquent Part 4s for the thousands-blocks from the previous month to the appropriate state commission or FCC. The FCC Report and Order and Further Notice of Proposed Rulemaking released March 31, 2000 (1st NRO Order) delegated authority to the state commissions to determine whether a thousands block should be reclaimed or not. The FCC makes reclamation decisions for those states that have opted not to exercise their reclamation authority.

The PA website provides detailed information about the reclamation process, as well as contact information for the participating state commissions and FCC.

In 2006, state commissions or FCC authorized the PA to reclaim 66 thousands-blocks.

2.3 Pooling Administration System (PAS)

2.3.1 PAS Performance

As detailed in *Section 6.0*, PAS had no unscheduled downtime in 2006, which means we far exceeded our requirement of 99.9% availability.

2.3.2 Pooling Administration System (PAS) Improvements/Change Orders

Improvements to PAS are generally driven by changes to FCC rules, industry guidelines, or specific service provider or regulatory requests. If such changes or suggested improvements require a change to the PA contract, change orders are submitted to the FCC.

The PA must provide the FCC, state regulatory agencies and the NANC with a written notice “within a period of not more than 30 calendar days” summarizing the changes required and “the potential impact of the changes upon service and cost.”⁴ The PA met these requirements for all potential changes in 2006.

⁴ Section 2.5.3 of Attachment B, Section J: Thousands-Block Pooling Contractor, Technical Requirements, dated November 30, 2000.

The Numbering Oversight Working Group (NOWG) currently reviews PA change order proposals and makes recommendations on them to the FCC. To facilitate the review process, the Regional Director-External Relations serves as the liaison with the NOWG to address any questions that may arise from its review of the change order documentation.

The PA submitted five change orders to the FCC in 2006, proposing a variety of system or process changes that are not addressed in the current contract with the FCC. Table 10 provides a description of each 2006 change order, and its status as of December 31, 2006.

As set forth in Table 11, the FCC acted upon five (5) change orders and the PA withdrew two (2).

Table 10 – Change Orders Submitted by the PA in 2006

Number	Type	Description	Date Submitted	NOWG Recommendation	FCC Status as of December 31, 2006	Contract Modification Number
46	INC Issue 517	Denying NXX assignment to a service provider that has opted into pooling	9/19/06	Approved	Accepted 10/23/2006	0023
47	INC Issue 516	Update the TBPAG Part 4 form	10/10/06	Approved	Accepted 12/21/06	0025
48	FCC	Assignment to PA of the Interim p-ANI Administrator	10/13/06	Approved	Pending	
49	INC Issue 523	Pooled blocks pending verification of LERG assignee responsibilities	12/15/06	Approved	Pending	
50	INC Issue 527	Blocks with effective dates earlier than the NXX activation date of associated LRN	12/15/06	Approved	Pending	

Table 11 – Change Orders Acted Upon in 2006

Number	Type	Description	Date Submitted	NOWG Recommendation	Status	Contract Modification Number
41	INC Issue 364 & LNPA WG PIM 24	LNPA WG PIM 24 and CO/NXX Issue #364- "Modification to Procedures for Code Holder/LERG Assignee Exit."	5/4/05	Approved	Accepted 5/24/06	0017
42	NOWG Recommendation	NOWG Request for Monthly Meeting with PA	7/8/05	Approved	Withdrawn by PA 1/19/06	
43	INC Issue 475	Updated Appendix 1: Thousands-Block Forecast Report Directions	8/12/05	Approved	Accepted 5/19/06	0016
44	INC Issue 486	Contaminated or Pristine Assigned Block Returns	12/7/05	Approved	Accepted 12/21/06	0025
45	2004 NOWG Survey	PAS users' proposals from the 2004 NOWG Survey	12/28/05	Approved	Withdrawn by PA 12/21/06	
46	INC Issue 517	Denying NXX Assignment to a service provider that has opted into pooling	9/19/06	Approved	Accepted 10/23/06	0023
47	INC Issue 516	Update the TBPAG Part 4 form	10/10/06	Approved	Accepted 12/21/06	0025

Table 12 provides information relating to the four change orders we implemented in 2006.

Table 12 – Change Orders Implemented in 2006

Number	Description of Changes	Approved	Contract Modification Number	Implemented
38	FTP Only - Ability to Request Multiple Effective Dates ⁵ – FTP Service Provider Users now have the ability to request multiple effective dates for Individual Block Requests.	7/14/05	0012	January 23, 2006
41	LNPA WG PIM 24 and CO/NXX Issue #364 – The PA did a scrub of the entire PAS database of blocks available compared to data in NPAC to identify contamination discrepancies. The PA provided a summary of its finding to the industry.	5/24/06	0017	October 26, 2006
43	Updated Appendix 1: Thousands Block Forecast Directions - Directions on the Forecast form have been updated in PAS to add clarification to the requestor as well as the PA's phone number was added to the form.	5/19/06	0016	June 5, 2006
46	Denying NXX Assignment to a service provider that has opted into pooling – Daily information is supplied to NANPA that will allow NANPA to determine OCNs that are currently participating in pooling in optional pooled rate areas.	10/23/06	0023	December 18, 2006

2.3.3 Change Order 41

Change Order 41, which was approved in 2006, did not involve changes to the PAS, but took five months of extensive research and effort by the PA to complete. FCC approval of Change Order 41 authorized the PA to perform a one-time scrub of the entire PAS database to reduce the likelihood that carriers would receive over-contaminated blocks, or incorrectly identified contaminated blocks in lieu of pristine blocks. In its recommendation to the FCC, the NOWG had said: “Due to the critical nature of this issue, the NOWG recommends that the FCC stipulate upon approval of this change order that the PA initiate work within 30 days and then complete their tasks within 120 days or less.” Upon approval of that change order in May, the PA developed a project plan and timeline, attempting to meet, as closely as possible, the very tight timeframe requested by the NOWG. Recognizing how aggressive the schedule was, we nevertheless accommodated any carrier that requested an extended timeframe to respond to us with information concerning blocks with conflicting information.

At the start of the project, there were 189,552 thousands-blocks available in PAS. As a first step, the PA queried the PAS for information about all currently available or pending blocks, including NPA, NXX-X and contamination status provided by the appropriate service provider.

The PA provided the list of the 189,552 blocks to the Number Portability Administration Center (NPAC), which returned

⁵ The remainder of Change Order 38 was implemented in 2005.

the contamination level for each block as indicated in the NPAC. The PA then compared the NPAC data against the block contamination status in PAS. Out of the 189,552 available blocks in PAS, 10,758 (5.68%) showed differing information in PAS and the NPAC, which meant that the information carriers submitted either to PAS or to the NPAC was incorrect.

Overall, 787 distinct Operating Company Numbers (OCNs) were affected. The PA personnel spent several months contacting each carrier with blocks on the discrepancy list to determine whether the data in PAS or in the NPAC needed to be updated, researching the legal viability of carriers that did not respond, and negotiating between carriers for the disposition of over-contaminated blocks. In cases where the PA received no response from a carrier, the PA contacted the state regulators for assistance. Of the 10,758 available blocks showing conflicting information, there were 506 blocks that appeared to be over 10% contaminated, and 10,252 that had conflicting information in the two databases about whether the block was or was not contaminated.

Ultimately, the blocks were updated in either PAS or the NPAC. Out of the 10,252 available blocks with a conflicting contamination status, 89% were incorrect in PAS, and the PA updated PAS on the carriers’ behalf. The remaining 11% of those blocks were incorrect in the NPAC, and the carriers had to perform those updates. Out of the 506 blocks that appeared to be over 10% contaminated, roughly half were removed from the pool, while the remaining blocks were updated with the correct contamination status in PAS.

The PA received several explanations from carriers as to why there was a discrepancy between PAS and the NPAC. These included:

- Lack of communication between the carriers' departments;
- The service providers did not realize they needed to do intra-service provider ports prior to donating blocks;
- The service providers did not have a process in place to notify the PA when the contamination status of a previously donated block went from contaminated to non-contaminated;

- Some service providers mistakenly believed that updating NRUF automatically updated the NPAC; and
- Some service providers thought they could donate the block even though it was over 10% contaminated, if the numbers were ported to another carrier.

Table 13 is a summary chart of the work that was completed by the PA as a result of Change Order 41:

Table 13 – Summary Chart of Work as a Result of Change Order 41

NPAC Region	Total Blocks Started	Non-Contaminated PAS Contaminated NPAC	Percentage of Total Blocks	# of Blocks Changed in PAS to Contaminated	# of Blocks Changed in NPAC	Other	Distinct OCNs
MA	30,101	724	2.41%	670	52	2	102
NE	23,083	532	2.30%	486	44	2	102
SW	27,097	451	1.66%	408	42	1	77
WC	18,174	319	1.76%	286	33	0	40
WE	21,241	305	1.44%	270	35	0	94
SE	30,366	505	1.66%	426	75	4	87
MW	39,490	602	1.52%	545	57	0	112
Total	189,552	3,438	1.81%	3,091	338	9	

NPAC Region	Total Blocks Started	Contaminated PAS Non-Contaminated NPAC	Percentage of Total Blocks	# of Blocks Changed in PAS to Uncontaminated	# of Blocks Changed in NPAC	Other	Distinct OCNs
MA	30,101	1,196	3.97%	1,060	136	0	85
NE	23,083	906	3.92%	823	82	1	131
SW	27,097	797	2.94%	701	96	0	78
WC	18,174	790	4.35%	770	18	2	44
WE	21,241	763	3.59%	610	152	1	90
SE	30,366	1,247	4.11%	1,039	188	20	70
MW	39,490	1,115	2.82%	1,056	58	1	98
Total	189,552	6,814	3.59%	6,059	730	25	

Table 13 (continued)

NPAC Region	Total Blocks Started	Over 10% Contaminated	Percentage of Total Blocks	# of Blocks Changed to Under 10% Ccontaminated	# of Blocks Changed to Non-contaminated	# of Blocks Returned to SP	Other*
MA	30,101	72	0.24%	29	7	36	0
NE	23,083	54	0.23%	16	6	31	1
SW	27,097	79	0.29%	21	2	47	9
WC	18,174	85	0.47%	32	16	33	4
WE	21,241	36	0.17%	10	7	14	5
SE	30,366	91	0.30%	41	0	46	4
MW	39,490	89	0.23%	32	1	46	10
Total	189,552	506	0.27%	181	39	253	33
Overall discrepancy percentage			5.68%				
10,758	Total Blocks in error						
29	Codes not identified in this report as not opened in the NPAC						
787	Total Overall Distinct OCNs (includes all regions)						

* Other column includes miscellaneous items: Blocks that did not fit into the main categories such as SPs need further research or taken back due to over contamination.

PA Change Order #41 includes a recommendation that, “[o]ne year after the reconciliation has been completed; the NOWG and the PA will seek input from the industry as to any increase or decrease in the frequency in which SPs are encountering erroneous block contamination.” We will work with the NOWG on this matter, and this information will be used to determine if the PA needs to conduct another PAS and NPAC reconciliation in the future.

2.3.4 PAS Training and Refresher

In 2006, the PA continued its ongoing efforts to provide educational support for service providers and regulators who use PAS and the pooling website. There continues to be extraordinary demand for these refresher overview sessions. In 2006, the PA conducted seven refresher overview sessions of the PAS and the pooling website (compared to two sessions in 2005).

The first three sessions were conducted for service providers on May 9, 11 and 23 with a total of 109 service providers registered. Each session reached audience capacity almost as soon as it was announced. Shortly after each session the PA distributed a survey to participants in order to obtain feedback on the presentation and address any questions that participants may have had. Based on the feedback and questions raised during the sessions, the PA created a “Questions & Answers” (Q&A) document, which was distributed via email and posted to the national pooling

website. On a scale of 1.0 to 5.0, with 1.0 the lowest and 5.0 the highest, the 27 respondents gave the training an overall satisfaction score of 4.4.

Three additional sessions for service providers were conducted November 2 and 9, with a total of 128 service providers registered. Again, each session filled up as soon as it was announced. We yet again provided a Q&A document after the sessions and this time the 28 respondents to the survey gave the training an overall satisfaction score of 4.3.

We also conducted a session for regulators on November 7. (See Section 2.5.1.2 for details.)

“I thought the overview was great, very helpful and informative. The presenters were clear, knew the material, and were willing and able to answer any questions. Great job!”

“It was a very informative overview. I do not know what else could be done to improve it.”

“I appreciate the time and effort the PA put into making the refresher available.”

2.3.5 Help Desk and Trouble Tickets

“Both the online and phone support continue to be excellent and much appreciated.”

2.3.5.1 Help Desk

The Customer Support Representative (CSR or Help Desk) is the human interface between the PAS and our customers. The CSR responds to both internal and external questions and requests for technical support, and attempts to promptly confirm the cause of the problem.

The CSR:

- Opens, logs, and monitors trouble tickets to ensure that problems are resolved in a timely manner, and is able to quickly identify the appropriate person to whom to escalate issues, as needed:

- Works with carriers to troubleshoot problems over the phone and at the desktop, to assist in resolving technical problems;
- Answers a variety of inquiries from customers, including questions regarding use of forms and the PAS, and assists users with locating documentation; and
- Creates, deletes, and maintains user accounts and passwords.

In 2006, the Customer Support Desk handled approximately 5,200 calls from customers.

2.3.5.2 Trouble Tickets

In 2006, there were 18 trouble tickets submitted to the Help Desk on items such as pooling process related questions and PAS errors. Table 14 provides information on the 2006 trouble tickets and the activity necessary to correct the issue.

While these trouble tickets were open, the PA created workarounds for the reporting customer until the tickets were successfully resolved.

Table 14 – 2006 Trouble Ticket Activity

Ticket Number	Date Opened	Date Closed	Days Opened	Ticket Type	Testing and build required
HD100914	1/9/2006	1/30/2006	21	Opened by PA related to system error	*YES
HD100915	1/10/2006	1/11/2006	1	SP deficiency/ misunderstanding	NO
HD100916	1/11/2006	1/30/2006	9	Opened by SP related to system deficiency	*YES
HD100917	1/11/2006	11/16/2006	309	Opened by PA related to user error	***NO
HD100918	1/26/2006	3/27/2006	59	Opened by PA related to system defect	**YES
HD100919	3/21/2006	5/15/2006	54	Opened by PA related to system defect	NO
HD100920	3/27/2006	3/27/2006	1	SP deficiency/ misunderstanding	NO
HD100921	4/3/2006	4/3/2006	1	SP deficiency/ misunderstanding	NO
HD100922	4/7/2006	5/15/2006	37	Opened by SP related to system defect	*YES
HD100923	4/11/2006	5/15/2006	33	Opened by PA related to system defect	*YES
HD100924	4/13/2006	5/15/2006	31	Opened by PA related to system defect	*YES
HD100925	5/4/2006	5/15/2006	10	Opened by SP related to system defect	*YES
HD100926	6/14/2006	9/12/2006	89	Opened by SP related to system deficiency	**YES
HD100927	6/15/2006	6/16/2006	1	SP deficiency/ misunderstanding	NO
HD100928	6/16/2006	9/12/2006	87	Opened by SP related to system defect	**YES
HD100929	6/28/2006	6/28/2006	1	SP deficiency/ misunderstanding	NO
HD100930	7/13/2006	7/13/2006	1	SP deficiency/ misunderstanding	NO
HD100931	12/11/2006	12/11/2006	1	Opened by SP related to System Performance	NO

* Testing and PAS build required.

** Significant research, testing with System Engineering and PAS build required.

*** After a significant amount of testing, we were unable to duplicate the error. Ticket was closed as System Engineering felt that the error was caused by the user hitting the back button on their web browser.

2.4 Pooling Implementation Management

2.4.1 Rate Area File Quality Control and Maintenance

The Pooling Implementation Management (PIM) team manages the quality control and maintenance of the rate area files located on the website. The rate area files identify the participation status designation of all rate areas in each NPA, including where service providers are either required to participate in pooling (Mandatory), are required to participate when a second service provider enters the rate area (Mandatory Single Service Provider), may participate in pooling (Optional), or where there is currently no pooling (Excluded).

The six current status designations of rate areas as defined in the *NPA/Rate Area Reports* are as follows:

- 1. Mandatory (M)** — This rate center is located in a top 100 MSA and service providers with numbering resources in this rate area that have not been granted a specific exemption must pool in this rate area.
- 2. Mandatory State (M)** — Pooling was implemented in this rate center pursuant to a state commission order. This rate center is not in a top 100 MSA, but has one or more pooling-capable service providers, and is considered a mandatory pooling rate center.
- 3. Mandatory Single Service Provider (M*)** — This rate center is located in a top 100 MSA, but has only one service provider that has numbering resources. This rate center will be considered optional under these conditions and designated as M*. When a second service provider receives numbering resources in this rate center, the designation will be changed to M for Mandatory.
- 4. Mandatory State Single Service Provider (M*)** — Pooling has been implemented in this rate center pursuant to a state commission order. This rate center is not in a top 100 MSA and has only one service provider that has numbering resources. This rate center will be considered optional under these conditions and designated as M*. When a second service provider receives numbering resources in this rate center, the designation will be changed to M for Mandatory State.
- 5. Optional (O)** — This rate center is not in a top 100 MSA and any service provider with numbering resources in this rate center may elect to pool at its option. Service providers may voluntarily participate in thousands-block number pooling in an Optional rate center outside the top 100 MSAs.
- 6. Excluded (X)** — This rate center is not in a top 100 MSA

and no service provider is currently participating in pooling. This rate center is not included in the Pooling Administration System.

The PIM team not only developed the mechanism for recording all of the pooling information associated with every NPA, including the status designation for each rate center, but also was responsible for the maintenance and tracking of all changes related to pooling that occurred as a result of FCC and state orders and Office of Management and Budget (OMB) directives.

Table 15 – Total Number of Distinct Pooling Rate Areas in PAS by Year

Status Designation	2002	2003	2004	2005	2006
M*	0	683	885	675	583
M	4,090	4,782	5,796	4,679	4,765
O	1,695	5,763	5,870	6,335	6,439
M	1,448	2,053	1,607	1,479	1,636
M* ⁶					216
X	3,648	7,260	6,381	5,489	5,004
Total	10,881	20,541	20,539	18,657	18,643
Total Pooling Area	7,233	13,281	14,158	13,168	13,639
Total Mandatory Pooling Areas	5,538	7,518	8,288	6,833	7,200

2.4.2 Rate Area File Changes

Because of the frequent changes in the rate area files for various reasons explained in *Section 2.4.1*, and in response to industry suggestions, we established a link on the PA web site to a monthly report of the most recent changes made to these rate area files, <http://numberpool.org/cgi-bin/viewrateareachange.cgi>. Prior to the establishment of this report, service providers had to compare the previous month's data in NPA rate area files in order to determine whether any changes or additions had taken place.

These reports are posted within the first five working days of every month; twelve months of reports are populated on the web site, available for viewing at all times. During 2006, the PIMs initiated a change in the formatting of the monthly change report to an html design, since we recognized the need for customers to be able to convert rate area files and monthly change reports to easily usable files. This update in the process enabled service providers to copy and post rate area-associated files into Excel.

⁶ New in 2006 as a result of additional state delegated authority implementation

In addition, the Public Service Commission of Wisconsin sent a letter on September 20 to the PA asking that the pooling status designation for all excluded rate areas be updated to optional in all five of their NPAs. The PIM completed the updates to the 251 affected rate areas from excluded status to optional status on the website and in PAS by September 25.

The following table shows how many rate areas were changed during each month in 2006.

Table 16 – Summary of Rate Area Designation Changes for 2006

Reason	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
Changes in Status													
M* to M	15	16	16	4	8	11	16			5	2	7	100
O to M													0
O to M					38	102					5	102	247
O to M*					118						88		206
X to M						14						14	28
X to M*													0
X to M*						10						10	20
X to O	6	15	15	16	5	69	11	19	253	34	12	2	457
New Rate Centers													
							1	16		2		2	21
Deleted Rate Centers													
	1		5			2	2	1				3	14
Totals	22	31	36	20	169	208	30	36	253	41	107	140	1,093

2.4.3 Supplemental Implementation Meetings

On February 24, 2006, the FCC released an Order and Fifth Notice of Proposed Rulemaking, CC Docket No. 99-200, DA 06-14 granting petitions for delegated authority to implement additional mandatory thousands-block number pooling in West Virginia, Nebraska, Oklahoma, Michigan and Missouri. Further details of this order can be found in Section 2.5.2.

As a result of these delegated authorities from the FCC, PIMs facilitated Supplemental Implementation Meetings (SIMs) with affected service providers in order to explain their obligations related to these orders and their responsibilities with regard to pooling. These meetings were held in May, June and November and the milestone timelines were successfully facilitated by the PIMs during these sessions.

Table 17 – 2006 SIMs Milestone Timelines

Milestones for Nebraska 402	Dates
Regulatory Mandate	04/25/06
Supplemental Implementation Meeting	05/03/2006
Forecast Report Date	09/25/0226
Block Protection Date	09/25/0226
Block Donation Identification Date to Pooling Administrator	09/25/0226
PA Assessment of Industry Inventory Surplus / Deficiency	10/09/2006
Block Donation Date	10/25/2006
Pooling Start / Allocation Date	11/01/2006
Mandated Implementation Date	N/A

Table 17 (continued)

Milestones for Michigan 989	Dates
Regulatory Mandate	04/25/06
Supplemental Implementation Meeting	06/01/06
Forecast Report Date	10/20/06
Block Protection Date	10/20/06
Block Donation Identification Date to Pooling Administrator	10/20/06
PA Assessment of Industry Inventory Surplus / Deficiency	11/03/06
Block Donation Date	11/22/06
Pooling Start / Allocation Date	12/01/06
Mandated Implementation Date	N/A

Milestones for West Virginia 304	Dates
Regulatory Mandate	09/14/06
Supplemental Implementation Meeting	11/08/06
Forecast Report Date	02/12/07
Block Protection Date	02/12/07
Block Donation Identification Date to Pooling Administrator	02/12/07
PA Assessment of Industry Inventory Surplus / Deficiency	03/12/07
Block Donation Date	03/26/07
Pooling Start / Allocation Date	04/09/07
Mandated Implementation Date	N/A

The FCC released a second order on November 9, 2006, DA 06-2299, granting authority to four more states, Ohio, New York, Washington and New Mexico. The Public Utilities Commission of Ohio issued an order on November 28 authorizing the PA to designate all optional and excluded rate areas in the 740 and 937 NPAs as mandatory. The SIM is scheduled for January 9, 2007. Further details on regulatory action resulting from this order can also be found in *Section 2.5.2*.

2.4.4 Seeking Voluntary Donations

The PIMs assisted the pooling administrators with maintaining an adequate industry inventory in the rate area pools. The PIMs requested voluntary donations from service providers participating in pooling in rate areas that have less than a six month's inventory of blocks.

The PIMs established a new process for seeking voluntary donations, wrote methods and procedures, and developed a program that identified all service providers that had not forecasted resources in rate areas where there was less than a six month industry inventory (meaning that those

pools needed to be replenished). These service providers are participating in pooling in these rate areas and had requested resources in the past. Therefore, on a monthly basis, the PIMs generated emails to the identified service providers inquiring about their ability to make block donations or returns in the identified rate areas so that an entire code would not have to be requested from the NANPA for purposes of pool replenishment.

This process involved (1) mechanizing some of the functions; (2) enhancing the email notifications in order to give the service providers additional time to respond to the requests; and (3) requesting that service providers that had no blocks to donate or to return, become a new LERG assignee, and submit a request for a full NXX on behalf of Pooling Administration.

The PIM team runs a query each month to produce a list of rate centers for which some of the service providers that were providing service had not forecasted any additional requirements for resources. Other service providers had forecasted blocks, so replenishment was necessary and those service providers that had not forecasted any blocks were contacted to request that they donate unused blocks from their current inventory. Table 18 shows the quantity of rate centers in each month that the report was run, that required replenishment, but for which some service providers had forecasted no requirements:

Table 18 – Quantity of Pooling Areas Requiring Replenishment with Some Service Providers Having No Forecasts

Month	Total Rate Areas
January	439
February	883
March	826
April/May	373
June	951
September	460
October	530
November	473
December	406

2.4.5 NRUF/Semi-Annual Forecast Report:

The NRUF (Numbering Resource Utilization/Forecasting) report (Form 502) is used by the North American Numbering Plan Administration (NANPA) to monitor and project exhaust in area codes as well as in the NANP, overall. Service providers participating in pooling are required by Section 6.0 of the Thousands-Block Pooling Administration Guidelines (TBPAG) to submit their NRUF to the NANPA on a semi-annual basis on or before February 1 for the period ending on December 31, and on or before August 1 for the period ending on June 30 of each year. Service providers submit the Thousands-Block Forecast Report (Appendix 1) to Pooling Administration for each of their separate OCNs at the thousands-block level, per rate area, for every NPA in which they have resources, as of June 30 and December 31, each year. This semi-annual report (due February 1 and August 1) includes a five-year forecast of demand for blocks-by-year. The data provided by the service providers in these forecasts was treated confidentially by the PA.

Data provided by the service providers was aggregated by the PIMs at the rate area level for all NPAs in pooling and used by the PA to provide a rate area NRUF to NANPA and to determine if a critical industry inventory insufficiency existed within any rate area. The PA forwarded its aggregated NRUF data to the NANPA and a separate consolidated forecast report to the FCC according to the required deadlines, within 21 calendar days of both the February 1, and August 1 dates. The quantities of worksheets and NPAs have grown since the first cycle fulfilled by the PA in February 2002 from 21 states, 84 NPAs and 60 worksheets, to a total of 275 NPAs in August 2006, covering 52 jurisdictions for which 237 worksheets were submitted to NANPA.

Table 19 – NRUF/Forecast Results for 2006

Date	Worksheets	Npas	Jurisdictions	Forecasts – Year 1 Blocks Forecasted	Blocks Available	Codes Forecasted
Feb-06	237	275	52	78,695	192,734	3,405
Aug-06	237	275	52	27,569	187,614	700

2.5 Regulatory and Compliance

2.5.1 Regulatory update and Training

2.5.1.1 Regulatory Update Conference Call

The PA conducted a conference call on August 17, 2006 that was attended by 36 regulatory staff from 24 states and the District of Columbia and Puerto Rico. Topics included updates on the PA organization, pool replenishment, delegated authority petitions, website updates, and status of the Change Order 41 activities.

2.5.1.2 PAS Refresher and Website Overview

On November 7, 2006, the PA conducted a PAS refresher and website overview for state regulatory staff attended by 16 state regulatory staff participants from 12 states. Questions and answers from the session were sent to all regulatory staff contacts on November 16.

2.5.2 Regulatory Orders

In 2006, the FCC issued two orders granting petitions for additional delegated authority to add more mandatory thousands-block number pooling in specific NPAs within their jurisdictions.

First, on February 24, 2006, the FCC released an Order and Fifth Notice of Proposed Rulemaking, CC Docket No. 99-200, DA 06-14, granting petitions for delegated authority to implement mandatory thousands-block number pooling in West Virginia, Nebraska, Oklahoma, Michigan, and Missouri.

In these five states there were eight NPAs affected:

- West Virginia 304
- Nebraska 402
- Oklahoma 580
- Michigan 989
- Missouri 417, 573, 636, 660

Following this delegated authority from the FCC, we conducted conference calls with regulatory staff for each affected state during the week of February 27 to discuss the process for implementation. Since the FCC merely delegated authority to the states to order additional pooling according to provisions of the order, the state commissions had to issue a regulatory directive in order for the industry and the PA to implement further mandatory thousands-block number pooling.

Thereafter, Nebraska, Michigan and West Virginia issued orders directing the PA to implement additional pooling in their states. The timelines that were established by the industry for these states can be found in Section 2.4.3. In addition, the state of Missouri initiated a rulemaking and Oklahoma opened a proceeding to investigate the ability of carriers to implement additional mandatory pooling.

A brief synopsis of the activity in each state follows:

- **Nebraska** – A SIM was held on May 3, 2006. Of 249 optional rate areas, 179 were designated as mandatory on 5/10/06 and the remainder became mandatory on 11/01/06. Two rural carriers received extensions.
- **Michigan** – A SIM was held on June 1, 2006 and mandatory pooling status began on 12/01/06.
- **Oklahoma** – An industry workshop was held on September 21 and was attended by the PA. A technical conference was then held on November 11. Staff issued two data requests and planned another technical conference for January 17, 2007. The PA participated as a Subject Matter Expert.
- **Missouri** – The commission initiated a rulemaking that will apply to all carriers, existing and future. A public hearing was held on December 4 and the proposed rule was approved and sent to the Secretary of State.
- **West Virginia** – The Commission issued an Order on September 14 making all optional rate areas mandatory. The SIM was held on November 8, with a pool start date of April 9, 2007.

The FCC released a second order, DA 06-2299, on November 9, 2006 granting authority to four more states, Ohio, New York, Washington and New Mexico, to implement mandatory thousands-block number pooling in specific NPAs within those jurisdictions.

In these four states there were ten NPA areas affected:

- Ohio 740, 937
- New York 212/646, 315, 518, 631, 845
- Washington 360, 509
- New Mexico 505

In 2006, Ohio and Washington issued directives toward further implementation of mandatory pooling pursuant to their delegated authority. A brief synopsis of the activity in these states follows:

- **Ohio** – The Public Utilities Commission of Ohio issued an order on November 28 authorizing the PA to designate all optional and excluded rate areas in the 740 and 937 NPAs as mandatory. The SIM is scheduled for January 9, 2007.
- **Washington** – The Washington Utilities and Transportation Commission on December 7, 2006 issued a NOTICE OF OPPORTUNITY TO FILE WRITTEN COMMENTS AND OPPORTUNITY TO MAKE ORAL COMMENTS on January 24, 2007 in Docket UT-060012. The PA is scheduled to appear at the meeting on January 24, 2007.
- **Additional states** – Currently, the states of New York and New Mexico have not taken any action to implement their delegated authority. There is still one petition for additional delegated authority pending before the FCC. On October 10, Kentucky filed a petition with the FCC for delegated authority to undertake additional mandatory thousands-block number pooling in the 270 NPA.

2.5.3 Non-Participating Service Provider Report

In April 2006, the PA completed the process of identifying and notifying non-participating service providers and produced a non-participating service provider report. The report covered mandatory rate centers from both the national rollout and from state pooling trials. The PA provided the list to the FCC and affected state regulatory agencies of all service providers that were not participating in pooling in mandatory pooling rate areas.

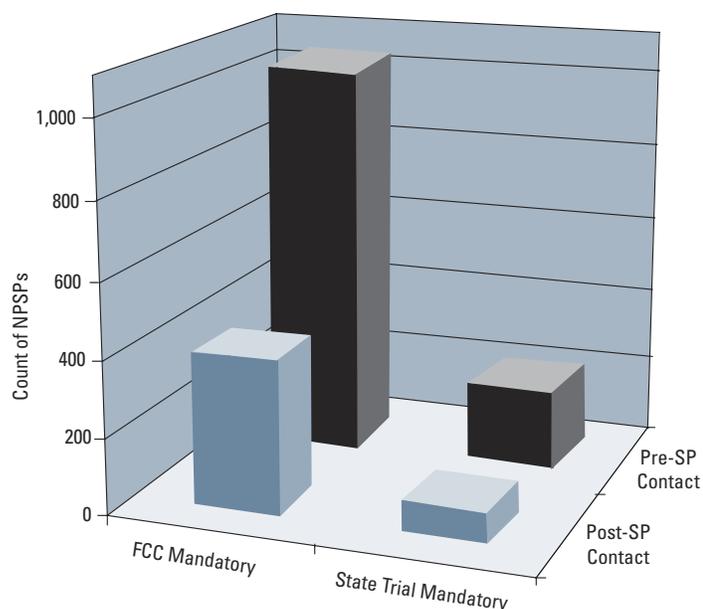
Prior to submitting the report to the FCC and the states, the PA attempted to contact all service providers on the initial

report to inform them of their status, and service providers were given ample time to correct any problems by entering a current forecast or by donating blocks. The laborious process of early notifications gave service providers an opportunity to correct any inadvertent omissions before we submitted the report to the FCC and the states. The direct result of the PA's efforts to notify and work with non-participating service providers was an overall reduction of 63% in non-compliant service providers. Also pooling participation increased, resulting in far fewer instances of non-compliance due to an increase in the completion of forecasts and the donation of additional blocks in mandatory pooling areas.

In addition to providing this report to the FCC, the PA provided a report to each affected state. In 2006, the PA sent a report to the following 37 states and the District of Columbia and Puerto Rico: Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Iowa, Illinois, Indiana, Kansas, Kentucky, Louisiana, Massachusetts, Maryland, Michigan, Minnesota, Missouri, Mississippi, North Carolina, New Jersey, New Mexico, Nevada, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Virginia, Vermont, Washington, Wisconsin and West Virginia.

Chart 4 depicts the relative difference in the number of non-participating service providers before and after the notification process.

Chart 4 – 2006 Non-participating Service Provider Report



An additional benefit of this process was to identify potentially stranded numbering resources. In our attempts to communicate with all service providers that were not participating in pooling, we could not contact a number of companies. We conducted extensive research in an attempt to reach these companies (following up on LERG contact information, using phone directories, and performing internet searches). In many cases, it was determined that the company had apparently ceased business operations. In cases where strong evidence suggested that the company was no longer operating, we forwarded information about these numbering resources (i.e., CO Codes) to NANPA for potential code reclamation. As a result of the April report, 155 CO codes were identified to NANPA as potentially reclaimable.

2.5.4 Daily Activity Reports for State Regulators

In response to suggestions received from state regulatory staff regarding their need to be able to observe daily application activity in their states, the PA made a confidential daily activity report available to requesting states beginning in April, 2005. The report is sent automatically by email and consists of daily Part 1A and Part 3 activity for the state. By the end of 2006, 20 states were receiving the report, an increase from 11 in 2005. In all, there were 5,540 daily activity reports sent to state commissions in 2006.

2.5.5 Educational Sessions

In 2006, the PA conducted educational sessions on pooling processes and procedures, as well as on pooling status, with Commissioners and staff in Puerto Rico, Montana, Wisconsin, Alabama and California. These sessions are intended to assist regulatory commissioners and staff, as well as, ultimately, the industry, by explaining procedures such as safety valve, reclamation, forecasting, and application processing. By conducting these sessions we hope to make it easier for regulators to respond to thousands-block pooling issues in their states.

In addition to these meetings, the PA responded to approximately 190 inquiries from regulatory staff and commissioners about block applications, pooling area designations and required participation, as well as safety valve and reclamation procedures.

2.5.6 Debt Collection Improvement Act of 1996, FCC 04-72, MD Docket 02-339, adopted March 25, 2004 (Red Light Rule)

The “Red Light Rule” provides that anyone filing an application or seeking a benefit from the FCC or one of its components (including the Universal Service Administrative Corporation, the Telecommunications Relay Service, or the North American Numbering Plan Administrator) who is delinquent in debts owed to the FCC will be barred from receiving a license or other benefit until the delinquency has been resolved. As a result, the PA was directed to withhold assignment of numbering resources to an entity identified by the FCC as delinquent in its payments to them.

The PA processed 247 denials in 2006 as a result of the Red Light Rule.

2.5.7 Contract Data Requirements List (CDRL) and Inventory Report Compliance

The following are the Contract Data Requirements List (CDRL) and inventory reports required by the PA during the 2006 calendar year and when those required reports were submitted:

1. Annual (CDRL 4.6.1)

Requirement: CDRL 4.6.1. The contractor shall provide an Annual Report per Section 2.18.1.

Completed: 2005 Annual Report sent to FCC and posted to website March 31, 2006.

2. Semi-Annual (CDRL 4.5.2)

4.6.2.1 Forecasted Demand

Requirement: The contractor shall provide a forecasted demand report per Section 2.14.1.

Fulfilled: The semi-annual reports were sent to NANPA on 2/21 and 8/21.

4.6.2.2 Rate Area Inventory Pool Status

Requirement: The contractor shall provide a rate area inventory pool report per Section 2.18.

Fulfilled: The semi-annual report was sent to the FCC on 2/23 and 8/21.

3. Quarterly (CDRL 4.6.3)

4.6.3.1 Pooling Matrices

Requirement: The contractor shall provide a pooling matrices report per Section 2.18.2.

Fulfilled: Pooling matrices reports were sent to the FCC on 1/17, 4/14, 7/17 and 10/13.

4. Monthly (CDRL 4.6.4)

4.6.4.1 Thousands-Block Pooling

Requirement: The contractor shall provide a monthly report to the FCC on thousands-block pooling assignments per Section 2.18.

Fulfilled: Thousands block pooling reports were sent to the FCC and posted to the website on 1/17, 2/15, 3/13, 4/14, 5/15, 6/15, 7/17, 8/15, 9/15, 10/13, 11/13 and 12/15.

4.6.4.2 System Performance

Requirement: The contractor shall provide a monthly report to the FCC on system performance per Section 2.19.

Fulfilled: The system performance reports were sent to the FCC on 1/17, 2/15, 3/13, 4/14, 5/15, 6/15, 7/17, 8/15, 9/15, 10/13, 11/13 and 12/15.

4.6.4.3 Staffing

Requirement: The contractor shall provide a monthly report to the FCC on staffing per Section 2.3.

Fulfilled: Staffing reports were sent on 1/3, 1/27, 3/3, 4/3, 5/1, 6/1, 6/29, 8/1, 8/31, 10/2, 10/27, and 12/1.

5. By Request (CDRL 4.6.5)

Requirement: The contractor shall, from time to time, be requested to provide ad hoc reports per Section 2.18.3.

Fulfilled: The PA responded to 64 ad hoc report requests per Section 2.18.3.

6. Inventory

Requirement: Per Section 3.21, Inventory data (hardware model, serial numbers and descriptions) on equipment shall be reported as part of the contractor’s annual reporting requirements, as well as any upgrades or replacements, including the license numbers of any Commercial Off-the-Shelf (COTS) software.

Fulfilled: The annual inventory report was sent to the FCC on 4/19. Quarterly certifications were completed in cooperation with the FCC property management division.

⁷ © 2005 by Alliance for Telecommunications Industry Solutions (ATIS), created by the Emergency Services Interconnection Forum (ESIF).

2.6 Interim Routing Number Authority (p-ANI) Administration

On June 3, 2005 the FCC issued its First Report and Order (FCC docket 05-196) mandating that providers of Voice over Internet Protocol (VoIP) services supply enhanced 9-1-1 (E9-1-1) service capabilities to its customers. On July 25, 2005 the Alliance for Telecommunications Industry Solutions (ATIS) Emergency Service Interconnection Forum (ESIF) submitted to the industry and to the NANC a document entitled “Routing Number Authority (RNA) for p-ANIs (pseudo Automatic Number Identification) Used for Routing Emergency Calls – p-ANI Assignment Guidelines and Procedures.”⁷⁷ On August 5, 2005 the NANC Future of Numbering Working Group (FoN) established the “p-ANI Issue Management Group” (IMG) to address the request from the ESIF and to provide a recommendation to the NANC. The p-ANI IMG recommended to the NANC that the current national Pooling Administrator should act as the Interim RNA. The NANC forwarded that recommendation to the FCC on September 8, 2005. One year later, on September 8, 2006, the FCC appointed NeuStar, the current national Pooling Administrator, to serve as the Interim Routing Number Authority (IRNA) Administrator for p-ANIs.

In less than two months after being designated as the Interim RNA, we delivered to the industry, a functional system and process in compliance with the “p-ANI Interim Assignment

Guidelines for ESQK.” This included a dedicated ESQK website (www.esqk.com); the development of a web-based application to allow users to register and submit requests online, view available and assigned ESQK ranges in real time; and user guides to assist users in navigating the application. In accordance with the Interim Guidelines, we canvassed the industry to ascertain which p-ANIs had been assigned and received from the 211 NXXs and 511 NXXs in order to accurately establish the inventory of available ESQKs and were able to determine which 211 and 511 NXXs have been already assigned to ensure we did not duplicate assignments.

As the PA, we actively participated in the p-ANI IMG meetings, and contributed to the development of the “p-ANI Interim Assignment Guidelines for ESQK.” Since our appointment as the Interim RNA, we have continued to work with the Industry Numbering Committee (INC) on developing the permanent p-ANI assignment guidelines by providing contributions and participating in the discussions.

In 2006, the IRNA received four registration requests of which three were approved and one was denied. There have been no applications. The IRNA Regional Director is responding to general inquiries regarding p-ANIs and attending meetings to offer assistance and expertise.

3. Identification of Existing and Potential Pooling Areas

In this section, Pooling Administration summarizes the number of existing pooling areas. While we do not include a distinct list of separate “potential” pooling areas, there are currently 5,004 rate areas in which no carrier is pooling, and which could therefore be considered “potential” pooling areas. (See Section 3.2)

The PA designates each rate area according to one of the following definitions:

1. **Mandatory (M)** — This rate center is located in a top 100 MSA and service providers with numbering resources in this rate center that have not been granted a specific exemption must pool in this rate center.
2. **Mandatory State (M)** — Pooling was implemented in this rate center pursuant to a state commission order. This rate center is not in a top 100 MSA, but has one or more pooling-capable service providers, and is considered a mandatory pooling rate center.
3. **Mandatory Single Service Provider (M*)** — This rate center is located in a top 100 MSA, but has only one service provider that has numbering resources. This rate center will be considered optional under these conditions and designated as M*. When a second service provider receives numbering resources in this rate center, the designation will be changed to M for Mandatory.
4. **Mandatory State Single Service Provider (M*)** — Pooling has been implemented in this rate center pursuant to a state commission order. This rate center is not in a top 100 MSA and has only one service provider that has numbering resources. This rate center will be considered optional under these conditions and designated as M*. When a second service provider receives numbering resources in this rate center, the designation will be changed to M for Mandatory State.
5. **Optional (O)** — This rate center is not in a top 100 MSA and any service provider with numbering resources in this rate center may elect to pool at its option. Service providers may voluntarily participate in thousands-block number pooling in an Optional rate center outside the top 100 MSAs.
6. **Excluded (X)** — This rate center is not in a top 100 MSA and no service provider is currently participating in pooling. This rate center is not included in the Pooling Administration System.

3.1 Identification of existing pooling areas

Table 20 identifies the 13,639 pooling areas (i.e., distinct rate areas), and their status designation, by state, as of December 31, 2006. A pooling area is defined as either “mandatory” or “optional.” Rate areas with a designation of “excluded” are not considered pooling areas.

Table 20 – Pooling Areas and Their Status Designation

State	Mandatory (M)	Mandatory (M) (State)	Mandatory (M*) (Single SP)	Mandatory (M*) (State Single SP)	Optional (O)	Total
AK					2	2
AL	62		7		160	229
AR	33		14		131	178
AZ	26		21		30	77
CA	436	83	18		150	687
CO	19	5	7		99	130
CT	70	19				89
DC	1					1
DE	8				22	30
FL	119	25	2		93	239
GA	70		10		119	199
HI	1				5	6
IA	55	52	54		332	493
ID	9		10		63	82
IL	210		44		493	747
IN	203	74	19		173	469
KS	45		41		155	241
KY	42		5		255	302
LA	61		7		144	212
MA	234	30				264
MD	112	53				165
ME	37	101	13		35	186
MI	205	116	9	10	226	566
MN	41		9		185	235
MO	133	103	25		468	729
MS	31		8		124	163
MT					114	114
NC	130	24	8		198	360
ND					71	71
NE	21	43	11	206	178	459
NH	32	92			14	138
NJ	187		1		21	209

Table 20 (continued)

State	Mandatory (M)	Mandatory (M) (State)	Mandatory (M*) (Single SP)	Mandatory (M*) (State Single SP)	Optional (O)	Total
NM	10		5		44	59
NV	20		5		38	63
NY	411	196	3		149	759
OH	332		40		271	643
OK	91	15	50		142	298
OR	35	103	1		4	143
PA	409	97	7		127	640
PR	49		1		36	86
RI	25					25
SC	79		28		88	195
SD					75	75
TN	100		9		157	266
TX	272	7	53		483	815
UT	18	10	5		43	76
VA	119	184			11	314
VT		101				101
WA	58	103	2		28	191
WI	100		28		474	602
WV	4		3		156	163
WY					53	53
Total	4,765	1,636	583	216	6,439	13,639

3.2 Identification of “potential” pooling areas

Table 21 identifies the breakdown by state of the 5,004 rate areas that were designated as “excluded” from pooling as of December 31, 2006 and could be considered “potential” pooling areas. This chart does not include any rate areas designated as “mandatory” or “optional.”

Table 21 – Excluded Rate Areas

State	Excluded (X)
AK	279
AL	81
AR	204
AZ	57
CA	52
CO	81
CT	0
DC	0
DE	0
FL	42
GA	162
HI	0
IA	324
ID	64
IL	242
IN	57
KS	333
KY	70
LA	73
MA	2
MD	0
ME	63
MI	69
MN	413
MO	0
MS	76
MT	146
NC	71
ND	229
NE	0

State	Excluded (X)
NH	11
NJ	0
NM	104
NV	31
NY	0
OH	96
OK	232
OR	111
PA	137
PR	0
RI	0
SC	45
SD	198
TN	75
TX	462
UT	65
VA	55
VT	40
WA	48
WI	0
WV	65
WY	39
Total	5,004

3.3 Summary of Existing and Potential Pooling Areas

3.3.1 Pooling Rate Area Facts

As of December 31:

- There were a total of 18,643 distinct rate areas;
- There were 13,639 pooling rate areas;
- There were 5,004 rate areas designated as excluded from pooling;
- There were 7,200 pooling rate areas designated as mandatory because of a state pooling trial order, the national rollout or an FCC additional delegated authority directive. This represents 53% of the total pooling rate areas.
- 799 of the total number of mandatory rate areas are

single-service provider mandatory,¹ meaning that each is geographically located within a top-100 MSA, but pooling is presently optional there because only one service provider is operating in each of those rate areas. At the point that another service provider receives resources there, the rate area's status will be changed to mandatory and pooling will be required.

- Approximately 47% of the pooling rate areas in PAS, or 6,439, are designated as optional.
- In 2006, 1,093 rate areas were changed in some way, e.g., status changes as a result of service provider requests, state commission delegated authority orders, OMB and census MSA changes, and rate areas additions, deletions, and consolidations.
- On September 20, 2006, the Wisconsin Public Service Commission sent a letter requesting the PA to update the status of all Wisconsin rate areas in all five of their area codes that were designated as excluded ('X') to optional ('O'). All 251 excluded rate areas were updated to optional and added to PAS with an effective date of September 25, 2006.

- All states, as well as the District of Columbia and Puerto Rico, have implemented thousands-block number pooling.
- Only five states have no mandatory pooling areas: Alaska, Montana, North Dakota, South Dakota, and Wyoming.
- In Connecticut, Maryland, Rhode Island, and the District of Columbia, all rate areas are designated as mandatory.
- Twelve jurisdictions: Connecticut, Delaware, Hawaii, Maryland, Missouri, Nebraska, New Jersey, New York, Rhode Island, Wisconsin, the District of Columbia and Puerto Rico, have no excluded rate areas.

3.3.2 Summary of all Rate Areas by Status Designation

Table 22 combines the information contained in Sections 3.1 and 3.2. It summarizes the total for each status designation for all 18,643 rate areas in each state by either its pooling status (mandatory or optional) or excluded designation as of December 31, 2006.

¹ 583 of these single service provider rate centers are FCC-mandated Top-100 MSA rate centers and 216 result from state delegated authority.

Table 22 – Summary of All Rates by Status Delegation

State	Mandatory (M)	Mandatory (M) (State)	Mandatory (M*) (Single SP)	Mandatory (M*) (State Single SP)	Optional (O)	Excluded (X)	Total
AK					2	279	281
AL	62		7		160	81	310
AR	33		14		131	204	382
AZ	26		21		30	57	134
CA	436	83	18		150	52	739
CO	19	5	7		99	81	211
CT	70	19					89
DC	1						1
DE	8				22		30
FL	119	25	2		93	42	281
GA	70		10		119	162	361
HI	1				5		6
IA	55	52	54		332	324	817
ID	9		10		63	64	146
IL	210		44		493	242	989
IN	203	74	19		173	57	526

Table 22 (continued)

State	Mandatory (M)	Mandatory (M) (State)	Mandatory (M*) (Single SP)	Mandatory (M*) (State Single SP)	Optional (O)	Excluded (X)	Total
KS	45		41		155	333	574
KY	42		5		255	70	372
LA	61		7		144	73	285
MA	234	30				2	266
MD	112	53					165
ME	37	101	13		35	63	249
MI	205	116	9	10	226	69	635
MN	41		9		185	413	648
MO	133	103	25		468		729
MS	31		8		124	76	239
MT					114	146	260
NC	130	24	8		198	71	431
ND					71	229	300
NE	21	43	11	206	178		459
NH	32	92			14	11	149
NJ	187		1		21		209
NM	10		5		44	104	163
NV	20		5		38	31	94
NY	411	196	3		149		759
OH	332		40		271	96	739
OK	91	15	50		142	232	530
OR	35	103	1		4	111	254
PA	409	97	7		127	137	777
PR	49		1		36		86
RI	25						25
SC	79		28		88	45	240
SD					75	198	273
TN	100		9		157	75	341
TX	272	7	53		483	462	1,277
UT	18	10	5		43	65	141
VA	119	184			11	55	369
VT		101				40	141
WA	58	103	2		28	48	239
WI	100		28		474		602
WV	4		3		156	65	228
WY					53	39	92
Total	4,765	1,636	583	216	6,439	5,004	18,643

4. Aggregated Total by Pool of the Service Providers Participating in the Pooled Areas

Table 23 is a summary of the aggregated total by pool of the service providers participating in the pooled areas in 2006. There are 1,955 distinct service providers¹ participating in 13,639 distinct pooled areas in 241 NPA complexes² covering 52 jurisdictions – 50 states, the District of Columbia, and Puerto Rico.

Table 23 – Aggregated Total by Pool of the Service Providers Participating in the Pooled Areas in 2006

State	NPA Complex	Service Providers	Pooled Areas
NJ	201/551	39	22
DC	202	31	1
CT	203	31	32
AL	205	30	62
WA	206	28	5
ME	207	28	186
ID	208	36	82
CA	209	29	54
TX	210	29	1
NY	212/646/917	40	13
CA	213	38	3
TX	214/469/972	48	43
PA	215/267	41	36
OH	216	23	4
IL	217	29	190
MN	218	24	54
IN	219	28	45
IL	224/847	31	42
LA	225	25	34
MS	228	17	11
GA	229	21	30
MI	231	26	77
OH	234/330	35	105
FL	239	24	14

State	NPA Complex	Service Providers	Pooled Areas
MD	240/301	48	63
MI	248/947	35	20
AL	251	31	34
NC	252	24	64
WA	253	29	13
TX	254	29	60
AL	256	30	67
IN	260	25	74
WI	262	29	60
MI	269	35	76
KY	270	29	127
VA	276	27	70
TX	281/713/832	44	45
DE	302	30	30
CO	303/720	33	16
WV	304	30	163
FL	305	26	1
FL	305/786	41	4
WY	307	17	53
NE	308	13	178
IL	309	26	84
CA	310/424	43	16
IL	312	32	1
MI	313	30	6
MO	314	25	7
NY	315	32	149
KS	316	20	14
IN	317	31	36
LA	318	22	73
IA	319	21	72
MN	320	27	59
FL	321	26	5

¹ Distinct Operating Company Numbers (OCNs) that have at least one block in PAS.

² The term "NPA Complex" is used because in some rate areas there are multiple NPAs serving one geographic area.

Table 23 (continued)

State	NPA Complex	Service Providers	Pooled Areas
FL	321/407	41	17
CA	323	38	12
TX	325	21	53
AL	334	25	66
NC	336	42	76
LA	337	22	51
MA	339/781	35	40
NY	347/718	30	2
NY	347/718/917	39	11
MA	351/978	37	58
FL	352	26	44
WA	360	48	70
TX	361	25	57
FL	386	35	21
RI	401	23	25
NE	402	46	281
GA	404/678/770	47	2
OK	405	31	80
MT	406	18	114
CA	408	32	11
TX	409	28	39
MD	410/443	45	102
PA	412/878	28	24
MA	413	30	61
WI	414	22	4
CA	415	35	14
MO	417	29	155
OH	419/567	34	161
TN	423	34	64
WA	425	30	14
TX	430/903	41	129
TX	432	17	21
VA	434	24	47
UT	435	26	54
OH	440	31	62
GA	478	21	27
AR	479	17	35

State	NPA Complex	Service Providers	Pooled Areas
AZ	480	26	1
PA	484/610	47	84
AR	501	25	49
KY	502	30	35
OR	503	10	7
OR	503/971	37	47
LA	504	24	8
NM	505	26	59
MN	507	31	86
MA	508/774	39	85
WA	509	43	89
CA	510	30	13
TX	512	34	33
OH	513	30	25
IA	515	32	70
NY	516	36	11
MI	517	41	75
NY	518	32	135
AZ	520	24	27
CA	530	34	90
VA	540	36	89
OR	541	39	89
CA	559	25	57
FL	561	38	7
CA	562	35	9
IA	563	18	67
PA	570	34	125
VA	571/703	41	19
MO	573	31	216
IN	574	31	47
OK	580	25	105
NY	585	29	77
MI	586	31	11
MS	601/769	36	54
AZ	602	24	1
NH	603	34	138
SD	605	15	75
KY	606	19	98

Table 23 (continued)

State	NPA Complex	Service Providers	Pooled Areas
NY	607	23	105
WI	608	37	159
NJ	609	33	39
MN	612	34	1
OH	614	32	16
TN	615	36	49
MI	616	34	36
MA	617/857	37	20
IL	618	35	195
CA	619	32	11
KS	620	23	109
AZ	623	24	1
CA	626	39	10
IL	630	32	26
NY	631	35	53
MO	636	24	46
IA	641	30	139
CA	650	30	15
MN	651	37	14
MO	660	22	230
CA	661	38	32
MS	662	42	98
GA	678/770	52	41
TX	682/817	42	24
ND	701	23	71
NV	702	25	16
NC	704/980	41	52
GA	706	55	72
CA	707	35	75

State	NPA Complex	Service Providers	Pooled Areas
IL	708	30	32
IA	712	36	145
CA	714	41	13
WI	715	32	253
NY	716	31	79
PA	717	34	90
CO	719	24	35
PA	724/878	40	150
FL	727	34	5
TN	731	23	49
NJ	732/848	35	36
MI	734	41	33
OH	740	44	159
FL	754/954	37	5
VA	757	23	34
CA	760	43	83
MN	763	34	11
IN	765	38	122
FL	772	32	8
IL	773	31	10
NV	775	22	47
KS	785	25	89
PR	787/939	11	86
UT	801	24	22
VT	802	18	101
SC	803	46	68
VA	804	25	55
CA	805	40	40
TX	806	23	58

Table 23 (continued)

State	NPA Complex	Service Providers	Pooled Areas
HI	808	15	6
MI	810	33	47
IN	812	40	145
FL	813	40	8
PA	814	31	131
IL	815	44	167
MO	816	34	75
CA	818	40	16
NC	828	30	68
TX	830	31	75
CA	831	28	24
SC	843	31	69
NY	845	47	96
FL	850	34	48
NJ	856	33	32
CA	858	30	8
KY	859	35	42
CT	860	27	57
NJ	862/973	39	42
FL	863	36	23
SC	864	30	58
TN	865	25	30
AR	870	21	94
TN	901	27	14
FL	904	32	18
MI	906	9	50
AK	907	1	2
NJ	908	36	38
CA	909	40	21

State	NPA Complex	Service Providers	Pooled Areas
NC	910	25	64
GA	912	22	27
KS	913	31	29
NY	914	39	28
TX	915	23	6
CA	916	37	16
OK	918	31	113
NC	919	33	36
WI	920	34	126
CA	925	26	17
AZ	928	24	47
TN	931	35	60
TX	936	22	39
OH	937	31	111
TX	940	40	59
FL	941	37	11
CA	949	35	7
CA	951	36	20
MN	952	35	10
TX	956	25	29
CO	970	26	79
TX	979	25	44
LA	985	28	46
MI	989	35	135

5. Forecast Results and a Review of Forecasts versus Actual Block Activation in the Past

This section identifies forecast results by NPA, and specifically contains a review of forecasts compared to actual block assignments for the current year and the previous year. In summary for 2006, there were:

- 241 NPA complexes;
- 9,442 distinct rate areas with forecasts;
- 147,370 forecasted blocks; and
- 62,606 blocks assigned.
- 42.5% of forecasted blocks were assigned.

Section 5.1 Forecasted Versus Actual Block Assignments by NPA for 2006

Table 24 shows that 147,370 blocks were forecasted and 62,606 blocks were assigned in 241 NPA complexes during the 2006 calendar year. This resulted in 42.5% of the forecasted blocks being assigned. Carriers forecasted a need for blocks in 9,442 rate areas out of the 13,639 pooling rate areas, or in 69% of them. This means that 4,197 pooling rate areas had no blocks forecasted during 2006.

Table 24 – Forecasted Versus Actual Block Assignments by NPA for 2006

NPA Complex	Blocks Forecasted	Blocks Assigned	Percent Assigned
201/551	841	412	49.0%
202	387	267	69.0%
203	862	298	34.6%
205	788	337	42.8%
206	452	194	42.9%
207	568	288	50.7%
208	1,084	229	21.1%
209	402	192	47.8%
210	871	508	58.3%
212/646/917	3,576	671	18.8%
213	168	83	49.4%
214/469/972	1,830	1,062	58.0%

NPA Complex	Blocks Forecasted	Blocks Assigned	Percent Assigned
215/267	1,273	694	54.5%
216	337	96	28.5%
217	545	157	28.8%
218	602	84	14.0%
219	434	185	42.6%
224/847	1,279	591	46.2%
225	294	141	48.0%
228	186	54	29.0%
229	187	81	43.3%
231	314	84	26.8%
234/330	880	355	40.3%
239	509	244	47.9%
240/301	1,284	671	52.3%
248/947	1,284	711	55.4%
251	302	108	35.8%
252	326	155	47.5%
253	570	179	31.4%
254	339	154	45.4%
256	704	232	33.0%
260	338	147	43.5%
262	572	249	43.5%
269	522	172	33.0%
270	407	186	45.7%
276	138	56	40.6%
281/713/832	2,256	1,331	59.0%
302	594	335	56.4%
303/720	684	426	62.3%
304	462	256	55.4%
305	149	96	64.4%
305/786	836	438	52.4%
307	601	52	8.7%
308	41	9	22.0%

Table 24 (continued)

NPA Complex	Blocks Forecasted	Blocks Assigned	Percent Assigned	NPA Complex	Blocks Forecasted	Blocks Assigned	Percent Assigned
309	406	103	25.4%	414	197	66	33.5%
310/424	1202	633	52.7%	415	463	235	50.8%
312	206	112	54.4%	417	448	170	37.9%
313	1,012	275	27.2%	419/567	905	256	28.3%
314	423	205	48.5%	423	1,168	235	20.1%
315	738	313	42.4%	425	667	212	31.8%
316	280	106	37.9%	430/903	714	332	46.5%
317	693	313	45.2%	432	131	73	55.7%
318	404	184	45.5%	434	197	82	41.6%
319	162	72	44.4%	435	913	108	11.8%
320	1,806	100	5.5%	440	814	407	50.0%
321	210	96	45.7%	478	151	55	36.4%
321/407	1,036	531	51.3%	479	235	124	52.8%
323	741	392	52.9%	480	411	265	64.5%
325	140	70	50.0%	484/610	1,468	748	51.0%
334	457	152	33.3%	501	252	132	52.4%
336	591	293	49.6%	502	476	248	52.1%
337	258	106	41.1%	503	58	11	19.0%
339/781	916	450	49.1%	503/971	757	374	49.4%
347/718	324	147	45.4%	504	337	165	49.0%
347/718/917	2,660	1,113	41.8%	505	1,390	274	19.7%
351/978	1,067	543	50.9%	507	352	153	43.5%
352	638	210	32.9%	508/774	1,832	938	51.2%
360	1,335	263	19.7%	509	1,443	263	18.2%
361	300	104	34.7%	510	460	211	45.9%
386	397	175	44.1%	512	718	417	58.1%
401	503	272	54.1%	513	631	291	46.1%
402	458	154	33.6%	515	209	133	63.6%
404/678/770	588	283	48.1%	516	577	255	44.2%
405	382	212	55.5%	517	505	198	39.2%
406	529	99	18.7%	518	767	319	41.6%
408	524	330	63.0%	520	323	175	54.2%
409	225	102	45.3%	530	504	207	41.1%
410/443	1,675	881	52.6%	540	488	211	43.2%
412/878	478	228	47.7%	541	983	289	29.4%
413	523	166	31.7%	559	494	200	40.5%

Table 24 (continued)

NPA Complex	Blocks Forecasted	Blocks Assigned	Percent Assigned	NPA Complex	Blocks Forecasted	Blocks Assigned	Percent Assigned
561	598	246	41.1%	662	456	188	41.2%
562	437	225	51.5%	678/770	1,484	777	52.4%
563	108	48	44.4%	682/817	959	483	50.4%
570	471	235	49.9%	701	926	55	5.9%
571/703	1,032	580	56.2%	702	573	389	67.9%
573	628	323	51.4%	704/980	1,209	688	56.9%
574	289	150	51.9%	706	679	322	47.4%
580	208	87	41.8%	707	730	389	53.3%
585	792	322	40.7%	708	780	302	38.7%
586	435	153	35.2%	712	145	95	65.5%
601/769	501	189	37.7%	714	835	403	48.3%
602	346	166	48.0%	715	226	80	35.4%
603	1,030	242	23.5%	716	740	329	44.5%
605	141	80	56.7%	717	900	471	52.3%
606	203	94	46.3%	719	376	147	39.1%
607	244	126	51.6%	724/878	1,297	630	48.6%
608	226	97	42.9%	727	396	172	43.4%
609	629	266	42.3%	731	156	68	43.6%
612	187	61	32.6%	732/848	974	434	44.6%
614	487	231	47.4%	734	1,121	331	29.5%
615	909	456	50.2%	740	1,128	421	37.3%
616	416	174	41.8%	754/954	613	300	48.9%
617/857	817	453	55.4%	757	726	377	51.9%
618	588	197	33.5%	760	1,136	514	45.2%
619	677	380	56.1%	763	279	119	42.7%
620	153	76	49.7%	765	642	274	42.7%
623	207	117	56.5%	772	396	140	35.4%
626	466	243	52.1%	773	757	408	53.9%
630	833	357	42.9%	775	242	117	48.3%
631	1,140	437	38.3%	785	187	42	22.5%
636	448	209	46.7%	787/939	848	145	17.1%
641	174	75	43.1%	801	1,210	349	28.8%
650	439	164	37.4%	802	254	145	57.1%
651	341	130	38.1%	803	509	253	49.7%
660	191	111	58.1%	804	679	356	52.4%
661	503	242	48.1%	805	677	288	42.5%

Table 24 (continued)

NPA Complex	Blocks Forecasted	Blocks Assigned	Percent Assigned	NPA Complex	Blocks Forecasted	Blocks Assigned	Percent Assigned
806	189	94	49.7%	908	618	264	42.7%
808	267	132	49.4%	909	925	400	43.2%
810	573	242	42.2%	910	472	196	41.5%
812	559	208	37.2%	912	237	74	31.2%
813	561	277	49.4%	913	485	219	45.2%
814	314	161	51.3%	914	722	333	46.1%
815	1,236	448	36.2%	915	274	133	48.5%
816	596	344	57.7%	916	642	274	42.7%
818	870	458	52.6%	918	404	188	46.5%
828	323	137	42.4%	919	817	363	44.4%
830	412	254	61.7%	920	551	228	41.4%
831	270	115	42.6%	925	418	179	42.8%
843	449	201	44.8%	928	290	150	51.7%
845	773	338	43.7%	931	675	308	45.6%
850	522	188	36.0%	936	226	117	51.8%
856	566	269	47.5%	937	612	210	34.3%
858	332	174	52.4%	940	220	104	47.3%
859	408	192	47.1%	941	424	201	47.4%
860	817	331	40.5%	949	370	173	46.8%
862/973	1,229	587	47.8%	951	736	359	48.8%
863	525	217	41.3%	952	285	98	34.4%
864	517	219	42.4%	956	402	239	59.5%
865	367	186	50.7%	970	822	277	33.7%
870	223	101	45.3%	979	294	118	40.1%
901	425	204	48.0%	985	354	145	41.0%
904	608	360	59.2%	989	617	168	27.2%
906	153	16	10.5%	Totals	147,370	62,606	42.5%
907	52	2	3.8%				

Section 5.2 Forecasted versus Actual Block Assignments – Comparison between 2005 and 2006

In previous years, the forecasted-versus-actual-blocks-assigned percentage has been below 30%. Because there was such a marked change in this percentage in 2006, up to 42.5%; and because this is the first year that there has been such a significant increase since pooling began in 2002, we performed an analysis.

The comparison revealed that there were 50,500 fewer blocks forecasted in 2006 than in 2005. This difference in percentage between forecasted versus actual blocks assigned may be attributed both to significantly lower and more accurate service provider forecasts, and also to increased education of service providers by the PA on pool replenishment and forecasting. The PA has been working diligently with the service providers and industry forums, including the INC and NOWG, on forecasting and pool replenishment concerns.

In one example, the PA discovered that a service provider was forecasting one block per month for a twelve month period in all rate areas that it served. This significantly increased

the number of rate areas in need of pool replenishment and could have accelerated the exhaust of the affected NPAs. We contacted the service provider and learned that it actually needed only one block during that twelve month period in those rate areas. The service provider believed it had to forecast a block in every month to ensure that the block would be available when it was needed. The PA educated the service provider on how to forecast so that it could accurately forecast for its actual need while not skewing the future pool replenishment activity in those rate areas, possibly causing the unnecessary opening of NXXs.

In 2006, the number of pooling rate areas with no forecast also increased. In 2005, approximately 21% of pooling rate areas, or 2,733, had no forecast. In 2006, there were 4,197 pooling rate areas with no forecast, representing approximately 31% of the pooling rate areas. Therefore, while the ratio of blocks forecasted to blocks assigned has become greater, the number of pooling rate areas with no forecasts at all has also increased.

Table 25 illustrates the comparison between forecasts and actual activated blocks in 2005 and 2006.

Table 25 – Forecasts and Actual Activated Blocks in 2005 and 2006

Year	Total NPA areas with Forecasts	Total Rate Centers with Forecasts	Total Forecasted Blocks	Total Blocks Assigned	Percentage of Assigned/Forecasted Blocks
2005	241	10,435	197,878	55,990	28.3%
2006	241	9,442	147,370	62,606	42.5%

6. System and Performance Metrics

6.0 System and Performance Metrics

Section 3.3.1 of Section J: *Thousands-Block Pooling Contractor Technical Requirements*, states that the pooling system shall, at a minimum, adhere to the following availability and reliability requirements:

1. Available 24 hours a day, 7 days a week.
2. Availability shall meet or exceed 99.9% of scheduled uptime.
3. Unscheduled maintenance downtime in any 12-month interval shall be less than nine (9) hours.
4. The mean time to repair (MTTR) for all unscheduled downtime in any 12-month interval shall be less than one hour during core business hours and four (4) hours for non-core business hours.
5. Scheduled maintenance downtime in any 12-month interval shall be less than 24 hours.

6.1 Pooling Administration System (PAS) Performance

As outlined in Table 26 NeuStar PA exceeded the following availability and reliability requirements in 2006.

Table 26 – 2006 NeuStar PA Performance

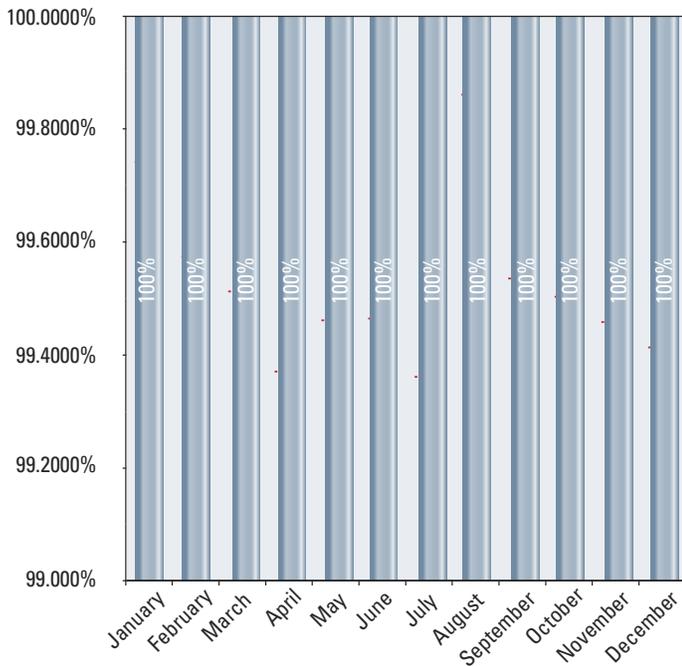
Requirement	2006 Performance	Exceeded Requirement
Availability shall meet or exceed 99.9% of scheduled uptime	Available 100% of scheduled uptime	YES
Unscheduled maintenance downtime in any 12-month interval shall be less than nine (9) hours	Zero hours of unscheduled downtime	YES
The mean time to repair (MTTR) for all unscheduled downtime in any 12-month interval shall be less than one hour during core business hours and four (4) hours for non-core business hours.	Zero hours MTTR required	YES
Scheduled maintenance downtime in any 12-month interval shall be less than 24 hours.	Zero hours of scheduled maintenance downtime	YES

Out of the total of 8,760 possible hours of availability in 2006, NeuStar would have met the requirement for 99.9% uptime if there had been nine (9) hours of downtime, or approximately 44 minutes per month. However, we had *no unscheduled downtime in 2006*, resulting in 100% availability, far exceeding the requirement. This ensured that service providers and regulators were able to access PAS and the website 24 hours a day, seven (7) days a week.

Table 27 – Summary of PAS Scheduled System Performance in 2006

Month	Number of Possible Scheduled Available Hours	Number of Hours Available	Percent Scheduled Hours Available
January	744	744	100
February	672	672	100
March	744	744	100
April	720	720	100
May	744	744	100
June	720	720	100
July	744	744	100
August	744	744	100
September	720	720	100
October	744	744	100
November	720	720	100
December	744	744	100

Chart 5 – Total PAS Scheduled Availability for 2006 (January 01, 2006 – December 31, 2006) – 100%



6.2 Disaster Recovery Operational and Technical Testing

The PA successfully completed operational disaster recovery testing during the week of January 16, 2006 and technical system disaster recovery testing on January 21, 2006. Operational testing, which took place in the Concord office, included review and revision of the NeuStar and building evacuation plans, as well as an evacuation drill and a test of the dedicated phone lines for disaster recovery.

On January 21, we tested the PAS components, including the web server, application server, load balancer/ftp server, and the database server, as well as the actual Oracle database. Testing involved taking apart the PAS and then rebuilding it from scratch as if it had been destroyed in a disaster. The pooling technical staff simulated the complete destruction of the PAS by removing the data on the hard drives, then rebuilding the entire operating system and database from scratch, and restoring all current PAS data from backup files. We had requested a maintenance downtime window from the FCC as a precaution, in case we observed a need for maintenance during the rebuild, or if any problem with the primary system that would require failover occurred during the test. However, we successfully completed all the tests in our test plan with no downtime.

7. Status of Required Transferable Property

NeuStar Pooling Administration Services affirms that all PA inventory that was billed to the FCC is considered transferable property, and is available for transfer. A list can be found in the FCC-approved *Transition Plan* dated October 27, 2006. The complete transferable property inventory report is updated and reviewed quarterly with the FCC Property Management Division and all transferable property is appropriately labeled with FCC asset tags.

8. Industry Issue Identification/Feedback

8.0 Introduction

The PA identifies significant issues and both provides and receives feedback about them through several channels during the year: participation in the North American Numbering Council (NANC) meetings, interaction with the NOWG, and participation in industry forums. This section contains information on industry pooling issues and feedback that was provided to the PA in 2006.

8.1 North American Numbering Council (NANC)

NeuStar, as national PA, participated in the three meetings of the NANC in 2006, by reporting on the status of thousands-block pooling administration and events affecting the performance of the PA. In addition we provided status reports in May, July, and September in lieu of the previously scheduled meetings. In 2006, the PA received one on-going action item from the NANC, to report on the status of NPA 310 block availability until area code relief was implemented in April.

The PA also participated in two NANC subgroups — the Future of Numbering Working Group and pseudo-Automatic Number Identification (p-ANI) Working Group. The following describes those committees:

8.1.1 Future of Numbering Working Group

The NANC formed the Future of Numbering group (FON) in December 2004. The mission of this working group is to explore changes to the environment, including new and future technologies and the impact of market place and/or regulatory changes and innovations on telephone numbering. The group identifies common criteria and gathers data to identify trends and their impact upon numbering resources. If necessary, it will analyze those trends and requirements to determine the feasibility and benefit of each, and report its findings to the NANC. The PA participated in the FON issue management group in 2006.

8.1.2 p-ANI

On June 3, 2005 the FCC issued its First Report and Order (FCC docket 05-196) mandating that providers of VoIP services supply enhanced 9-1-1 (E9-1-1) service capabilities to their customers. On July 25, 2005 the Alliance for Telecommunications Industry Solutions (ATIS) Emergency Service Interconnection Forum (ESIF) submitted to the industry and to the NANC a document entitled: “Routing Number Authority (RNA) for p-ANIs Used for Routing Emergency Calls — p-ANI Assignment Guidelines and Procedures.”¹ On August 5, 2005, the NANC Future of Numbering Working Group established the p-ANI Issue Management Group (IMG) to address the request from the ESIF and to provide a recommendation to the NANC. The p-ANI IMG recommended to the NANC that the PA should act as the Interim 9-1-1 RNA, and the NANC forwarded that recommendation to the FCC on September 8, 2005.

On September 8, 2006, the FCC appointed NeuStar, the current Pooling Administrator, to serve as the Interim Routing Number Authority (IRNA) for the p-ANI. On September 19, 2006 the IMG regrouped to work on a recommendation to the FCC for permanent p-ANI administration. The PA participated in the IMG meetings and assisted the group in its development of its recommendation by reporting any pertinent findings that were derived from the interim administration of ESQK and p-ANI functions. The IMG provided the NANC with a timeline for developing a recommendation at the November 30 meeting. The INC currently is working on developing the guidelines for the permanent p-ANI solution.

8.2 Industry Numbering Committee (INC) Issues

The PA participated in the following industry forums in 2006:

- **Industry Numbering Committee (INC)** — the PA submitted 12 new issues and 19 new contributions;
- **Network Routing Resources Information Committee (NRRIC)** — the PA continued to work on Issue 0253 — Substantive Updates to NIIF 0015, Intercompany

¹ © 2005 by Alliance for Telecommunications Industry Solutions (ATIS), created by the Emergency Services Interconnection Forum (ESIF).

Responsibilities Within the Telecommunications Industry Document and Issue 0264 - Update the NIIF Mergers and Acquisitions Document;

- **Common Interest Group on Rating and Routing (CIGRR)** — the PA contributed Issue C143 — Prevent a Modification on BCD Screen When There is No Established NXD-X Record;
- **Local Number Portability Working Group (LNPA WG)** — the PA participated in all meetings and the major focus was on Change Order #41.

As the national PA, our participation at these industry forums included:

- Working on issues that affected pooling administration and answering questions relating to the thousands-block pooling process;
- Actively participating in discussions; and
- Developing and submitting new issues based on input we received from the industry, regulators, and internal sources.

Table 28 – 2006 PA INC Issues & Contributions

INC Meeting	Issue Number	Supporting Contribution Number	Issue/Contribution Title
INC 86	500		Returning a Non-Pooled Dedicated Customer Code
		CO/NXX-338	Updating the Appendix C When Returning a Non-Pooled Dedicated Customer Code
INC 86	501		Becoming the New LERG Assignee Due to Ported TNs
		CO/NXX-339	Edits to the Appendix C When Becoming the New LERG Assignee Due to Ported TNs
INC 86	502		Pooled NXX Codes Returned in Error
		CO/NXX-340	Pooled NXX Codes Returned in Error
INC 86	503		Clarification on LERG Assignee/Block Holder Part 4 Submissions
		LNPA-512	Edits to TBPAG for LERG Assignee/Block Holder Part 4 Submissions
INC 86	504		Block Assignments Created/Activated in the NPAC
		LNPA-513	Block Assignments Created/Activated in the NPAC

INC Meeting	Issue Number	Supporting Contribution Number	Issue/Contribution Title
INC 86	508		Opting into Pooling in Voluntary Rate Centers
		LNPA-514	Opting into Pooling in Voluntary Rate Centers
INC 87	511		Part 4 Submissions for NPA-NXXs that Become Pooled (Joint Issue w/NANPA)
		CO/NXX-341	Part 4 Submissions for NPA-NXXs that Become Pooled
INC 87	512		Abandoned Thousands-Blocks
		LNPA-517	PA Process for Abandoned Thousands-Blocks
INC 88	515		Contamination Level of Abandoned Thousands-Blocks
		LNPA-520	PA Process for Abandoned Thousands-Blocks
INC 88	516		Update the TBPAG Part 4 Form
		LNPA-521	Edits to the TBPAG Part 4 Form
INC 88	519		Pool Replenishment
		LNPA-522	Pool Replenishment
INC 89	523		Pooled Blocks Pending Verification of LERG Assignee Responsibilities
		LNPA-526	Pooled Blocks Pending Verification of LERG Assignee Responsibilities
INC 89		LNPA-523	Block Assignments Created /Activated in the NPAC
INC 90		LNPA-528	Further Revisions to Proposed Resolution Statement
INC 91		LNPA-531	Edits to the TBPAG Appendix 2 in relation to Change order 41
INC 91		CO/NXX-357	TBPAG/pANI Comparison
INC 91		CO/NXX-358	Possible gaps identified between the Interim p-ANI Guidelines (sections 5 and 6) and the TBPAG (section 8.0)
12/13/06 Interim Meeting		CO/NXX-364	TBPAG Section 5.0
12/13/06 Interim Meeting		CO/NXX-365	TBPAG Section 8.0

8.3 Working with the Numbering Oversight Working Group (NOWG)

The Numbering Oversight Working Group (NOWG), a working group of the NANC:

- reviews PA Change Orders and provides a recommendation to the FCC for the disposition of the proposed change order,
- completes the annual performance review of the PA and provides it to the FCC,
- and, new in 2006, holds a monthly performance review meeting with the PA.

The Regional Director–External Relations acts as the liaison between the PA and the NOWG, responding to pooling-related questions as they arise, and providing input to the NOWG on any issue that may need its attention.

In 2006, the PA withdrew Change Order 42 and voluntarily began participation in monthly performance meetings with the NOWG. The NOWG, with input from the PA, developed a monthly standing agenda which the PA updated for each monthly meeting. The entire PA management team participated in the monthly conference calls and in the annual performance review process.

The agenda items that were reviewed monthly were:

- Rate centers with less than 6 months inventory based on forecast
- Number of rate centers with no blocks available and with blocks forecasted within 6 months
- Number of codes opened for pool replenishment
- Rate centers with blocks in a pending status (unavailable for assignment)
- Number of applications processed monthly (running 12 month total)
- Number of Manual Part 1s passed thru to the NANPA (running 12 month total)
- Percent of applications not processed within 7 calendar days

- Reasons that applications were not processed within 7 calendar days
- Percent of calls returned within one business day
- Formal complaints and corrective action plans to resolve complaints
- FCC and/or NANC News
- INC readout (initial closure and new issues)
- Change Orders
- Pooling Implementation activities
- Customer Focus
- Issue Tracking Table

The PA and the NOWG met 12 times in 2006, on January 27, February 23, March 30, April 27, May 25, June 29, July 27, August 31, September 28, October 26, November 21 and December 21.

Also in 2006, the NOWG reviewed the PA performance for calendar year 2005. The performance review of the PA included assessments of:

- Annual operational review
- Change order review process
- PA NANC reports
- Interaction with the industry

The PA received an overall performance rating of “More than Met” from the NOWG. This performance assessment was based on results from the 2005 Performance Feedback survey, written comments and reports, the operational review that was conducted in our Concord, CA office on April 4 and 5, and NOWG observations and interactions with the PA.

As a result of the 2005 PA annual operations review, the NOWG made six suggestions for continuous improvement of pooling administration that the PA took under consideration. The PA worked, and continues to work, cooperatively with the NOWG to make desired industry improvements while also meeting our contractual requirements.

Table 29 – NOWG Suggestions for PA improvements and the PA Response

NOWG Suggestion	PA Response
Monthly meetings with the NOWG	Starting January 2006, the PA voluntarily began participation in monthly meetings with the NOWG.
Proactively manage rate center inventories to ensure resources are available when needed	The PA continually reviews rate center inventories, sending out emails twice a month to the industry on pools needing to be replenished. In addition, the PA asks for voluntary donations.
PA should initiate new ideas and processes for keeping pools replenished	The PA has brought in an issue to the INC to address pool replenishment.
Customer focus vs. contractual focus	While the PA must maintain contractual focus based on obligations within the FCC contract, we make every effort to respond to customer issues that are outside our contractual responsibilities.
Pass Through Capability from PAS to NAS	This suggestion has been included with the solicitation for the new PA contract.
Implementation of an Issues Tracking Table	A PA tracking table has been developed and is reviewed monthly with the NOWG.

The NOWG provides recommendations to the FCC on all PA change orders. In 2006, the NOWG made recommendations on PA change orders 45, 46, 47, and 48 to the FCC. The NOWG recommended approval of all four change orders.

The PA provided input and made recommendations to the NOWG survey for the 2006 performance evaluation to be distributed in January 2007.

8.4 Formal Complaints

Pursuant to Section 2.7.4 of the *Thousands Block Pooling Contractor Technical Requirements*, if a performance problem is identified by a telecommunications industry participant, the PA must notify the FCC of the problem within one business day. The PA must then investigate the problem and report back within a period of not more than 10 business days from the date of the complaint, to the FCC and to the telecommunications industry participant on the results of such investigation and any corrective action taken or recommended to be taken.

In 2006, NeuStar, as national PA, responded to one formal industry complaint about pooling and one complaint that was not related to pooling. Both were referred to the appropriate regulatory authority.

Formal Complaint – Pooling Issue:

On August 15, we received a complaint via email from a carrier regarding the PA's response to a customer being put out of service. We conducted an investigation and informed the FCC on August 29 that we concluded that the NeuStar PA employee involved in this situation followed proper procedures in assisting the carrier in promptly addressing the situation and getting service restored to the end-users. No further action was taken by the complainant or the FCC.

Formal Complaint – Not a Pooling Issue:

On February 6, we received a complaint via our website from a wireless carrier's customer trying unsuccessfully to port his number to a VoIP provider. We contacted the consumer, and ascertained what the situation involved. , Since the problem did not relate to pooling administration, we contacted the Michigan Commission staff and were advised to refer him to their toll free number to file a complaint, which we did. Since there is nothing further that we could do as the Pooling Administrator, no further action was necessary. We notified the FCC about the complaint and its disposition on February 7.

8.5 Tip of the Month

The PA, on its own initiative, created the *Tip of the Month* (Tip) in July 2003 and feedback from recipients continues to be positive. Topics for the tip are generated from issues raised and suggestions received from regulators and service providers, INC action items, and internal intelligence, when processes need to be clarified. The tip is sent via email to the PAS distribution list on the first business day of each month. The tip provides helpful information regarding the PAS and thousands-block pooling process, as well as serving as a useful reference for all PAS users. Archive files for tips from previous years can be found on our website at <http://www.nationalpooling.com/tools/archives/tips-archive/index.htm>.

Table 30 – 2006 Tips of the Month

Month	Topic
January	Outlined the initial block assignment criteria per section 4.3.1 of the TBPAG.
February	Reminded carriers of the requirements for requesting a full NXX for a dedicated customer as described in section 3.2 of the TBPAG.
March	Reminded carriers that there is a frequently asked questions document located on the www.nationalpooling.com website.
April	Outlined the procedures for Code Holder exit as described in appendix C of the TBPAG.
May	Described some helpful hints for filling out the Part 1B form.
June	Outlined the process for requesting available thousands-blocks posted in red (not activated in the PSTN) as described in section 7.4.4 of the TBPAG.
July	Reminded carriers of their LERG Assignee responsibilities as far as acknowledging that a code is active in the PSTN.
August	Reminded carriers when ordering additional blocks that will be routed via a new LRN, to use an effective date after the LRN effective date.
September	Reminded carriers of the donation process for thousands-blocks as outlined in section 7.2.7 of the TBPAG. A supplemental tip of the month was also sent out regarding PSTN reminders to SPs.
September Supplemental	PSTN Reminders and Follow-up
October	Described the NPAC process for block transfers.
November	Reminded carriers of the different methods for receiving and tracking Part 3 forms.
December	Reminded carriers of the donations process for thousands-blocks as outlined in section 7.2.7 of the TBPAG and also some helpful hints from Change Order 41.

9. Volume of Reports Produced Aggregated by Regulatory Agency, NANC, NANPA and Service Providers

This section provides the total number of reports sent to the FCC and state regulatory agencies (See Section 9.1) and the total number of reports provided to NANC, NANPA, and service providers (See Section 9.2).

9.1 Total number of reports produced for FCC and state regulatory agencies

Table 31 – Total Number of Reports Produced for FCC and State Regulatory Agencies

Regulatory Agency	Total Number of Reports
FCC	50
State	5,659

The total number of reports includes:

- FCC: CDRL requirements and ad hoc reports.
- State regulators: daily application activity reports, pooling status, educational sessions, and miscellaneous ad hoc reports.

9.2 Total number of reports produced for NANC, NANPA and Service Providers

Table 32 – Total Number of Reports Produced for NANC, NANPA and Service Providers

Group	Total Number of Reports
NANC	6
NANPA	52
Service Providers	74

The total number of reports includes:

- NANC: Meeting reports for January, March, and November, as well as status reports for May, July, and September PA activity.
- NANPA: Reports for NPA relief and jeopardy meetings.
- Service Providers: Rate center change reports, implementation meeting reports, monthly meeting reports to the NOWG, and miscellaneous ad hoc reports. This does not include reports run by service providers and regulators for their own use.

10. Trends in Pooling Since 2002

10.0 Introduction

When NeuStar began administering number pooling trials in 1998, nearly every NPA was experiencing acceleration of exhaust dates. On September 30, 1999, there were 73 NPAs in jeopardy. Today there are 27 NPAs in a jeopardy status and only two of these, Illinois 217 and Kentucky 270, have been declared in jeopardy since the rollout of national thousands-block number pooling began in 2002.

One example of how pooling has contributed to NPA conservation is the delay in exhaust of the Illinois 847 NPA. In June 1998, when NeuStar implemented this first trial of thousands-block number pooling, the 847 NPA was expected to exhaust within three months. However, NANPA did not declare the final exhaust of the NPA until three years later on August 31, 2001.

While these developments are not solely attributable to thousands-block number pooling, the PA estimates that 36,491 NXXs have been saved by pooling, which is the equivalent of 46 NPAs. (See *Section 10.1* below for further details)

Since NeuStar began the national rollout of thousands block number pooling in March 2002, participation in pooling has dramatically increased. This increase can be attributed to the completion of the national rollout, the addition of wireless to pooling in November, 2002, new service offerings, modifications to the rate area designations as a result of OMB changes to the MSA lists, service providers voluntarily pooling in optional rate areas, and regulatory enforcement. (See *Section 10.4* below for further details)

10.1 NXXs Saved by Pooling

Table 33 illustrates by NPA complex the 36,491 NXXs that have been saved in 50 states and the District of Columbia and Puerto Rico with number pooling. NXXs were saved in all but one pooled NPA area, Alaska 907, and this is simply because there is limited participation in pooling in that NPA.

Table 33 – NXXs Saved by Pooling

NPA Complex	Total of NXXs Saved
201/551	250
202	13
203	182
205	117
206	27
207	268
208	107
209	246
210	15
212/646/917	222
213	42
214/469/972	206
215/267	330
216	21
217	217
218	51
219	152
224/847	549
225	55
228	26
229	56
231	229
234/330	201
239	86
240/301	371
248/947	248
251	41
252	140

NANPA declares "jeopardy" in area codes for which the supply of NXXs could exhaust before relief can be provided. An NPA complex is one pooling area that is covered by more than one NPA, most often an overlay situation.

Table 33 (continued)

NPA Complex	Total of NXXs Saved	NPA Complex	Total of NXXs Saved
253	66	352	149
254	40	360	210
256	120	361	59
260	105	386	99
262	197	401	134
269	246	402	54
270	159	404/678/770	22
276	66	405	155
281/713/832	256	406	96
302	125	408	108
303/720	72	409	62
304	272	410/443	688
305	18	412/878	197
305/786	76	413	257
307	63	414	25
308	20	415	102
309	105	417	134
310/424	274	419/567	212
312	16	423	117
313	67	425	68
314	48	430/903	135
315	191	432	25
316	26	434	83
317	162	435	87
318	93	440	158
319	36	478	33
320	78	479	36
321	43	480	10
321/407	150	484/610	583
323	156	501	55
325	23	502	83
334	79	503	15
336	164	503/971	106
337	80	504	30
339/781	381	505	145
347/718	30	507	128
347/718/917	181	508/774	830
351/978	496	509	155

Table 33 (continued)

NPA Complex	Total of NXXs Saved	NPA Complex	Total of NXXs Saved
510	132	623	10
512	135	626	120
513	79	630	290
515	37	631	435
516	144	636	138
517	154	641	67
518	270	650	109
520	40	651	47
530	354	660	84
540	174	661	144
541	207	662	208
559	202	678/770	269
561	125	682/817	136
562	96	701	19
563	23	702	25
570	228	704/980	332
571/703	155	706	189
573	313	707	337
574	102	708	347
580	91	712	47
585	207	714	205
586	128	715	53
601/769	102	716	216
602	12	717	306
603	605	719	54
605	20	724/878	540
606	72	727	74
607	70	731	94
608	79	732/848	405
609	281	734	303
612	16	740	278
614	113	754/954	90
615	173	757	141
616	182	760	401
617/857	237	763	23
618	389	765	215
619	97	772	120
620	79	773	136

Table 33 (continued)

NPA Complex	Total of NXXs Saved
775	64
785	60
787/939	42
801	161
802	160
803	161
804	156
805	287
806	28
808	26
810	288
812	121
813	114
814	166
815	464
816	127
818	224
828	117
830	120
831	101
843	120
845	356
850	117
856	235
858	81
859	69
860	215
862/973	429
863	126
864	171
865	83
870	86
901	44
904	114

NPA Complex	Total of NXXs Saved
906	38
907	0
908	194
909	257
910	157
912	59
913	47
914	219
915	18
916	134
918	122
919	185
920	187
925	130
928	67
931	174
936	38
937	187
940	58
941	117
949	82
951	273
952	33
956	98
970	172
979	64
985	139
989	186
Grand Total	36,491

10.2 Trends in Thousands – Block Number Pooling

This section contains summaries of thousands-block number pooling statistics since the beginning of national pooling in 2002.

10.2.1 Table 34 contains certain pooling statistics that illustrate the increased productivity of the PA between 2002 and 2006.³

Table 34 – Pooling Growth Chart

	2002 Statistics	2003 Statistics	2004 Statistics	2005 Statistics	2006 Statistics
NXXs Opened for LRNs	206	475	787	945	968
NXXs Opened for Dedicated Customers	37	98	258	135	128
NXXs Opened for Pool Replenishment	194	240	933	1,305	2,006
Blocks Assigned by PA During Year	8,141	21,613	36,936	55,990	62,606
Total Assigned Blocks in PAS at Year End	10,023	29,027	61,118	109,420	162,234
Applications Processed	13,942	42,177	69,472	102,304	127,965

10.2.2 Total Applications Processed (Part 3s) – 2002 through 2006

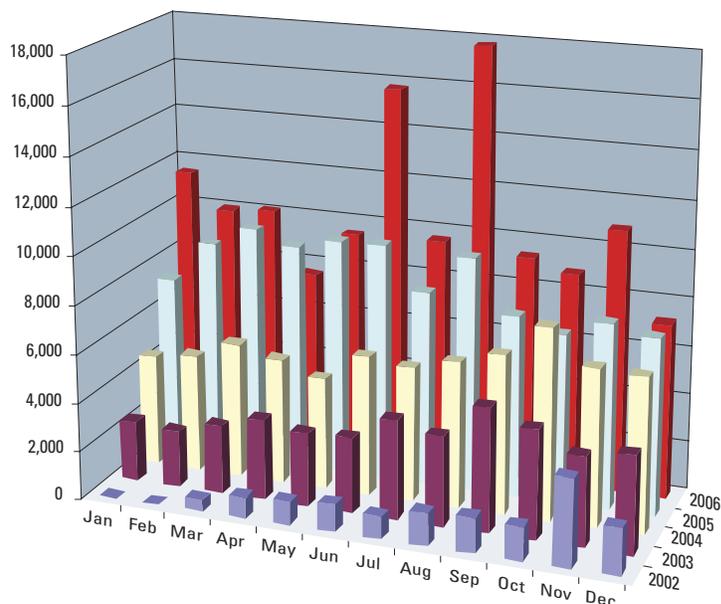
The total number of applications (Part 3s) processed is the best measure of the actual work performed by the pooling administrators, because not every Part 3 results in an immediate assignment of a thousands-block. Although a large majority of applications for numbering resources are processed and approved immediately, some are suspended for future NANPA action and some are denied entirely.

Table 35 and Chart 6 contain the total numbers of Part 3s processed since national pooling began in March 2002. Overall, since 2002, the average number of applications processed per month has increased over 614%.

Table 35 – Total Applications Processed Since 2002⁴

Month	2002	2003	2004	2005	2006
Jan	N/A	2,484	4,591	7,324	11,439
Feb	N/A	2,339	4,872	9,062	10,001
Mar	461	2,819	5,585	9,878	10,150
Apr	845	3,336	5,177	9,363	7,588
May	960	3,022	4,628	9,776	9,501
Jun	1,130	3,100	5,771	9,792	15,737
Jul	932	4,102	5,551	8,022	9,590
Aug	1,335	3,698	6,002	9,666	17,778
Sep	1,454	5,115	6,547	7,520	9,319
Oct	1,359	4,471	7,891	6,970	8,831
Nov	3,564	3,692	6,470	7,648	10,826
Dec	1,902	3,999	6,387	7,283	7,205
TOTAL	13,942	42,177	69,472	102,304	127,965

Chart 6 – PA Applications (Part 3)



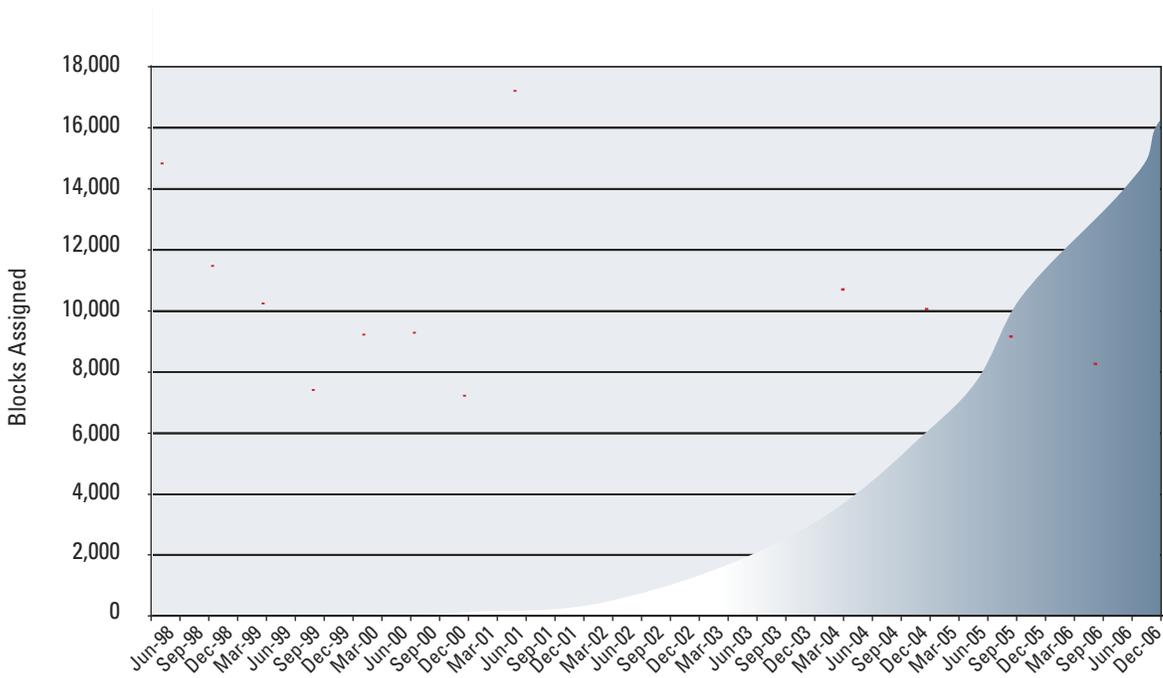
³ Totals have been audited and updated and may not equal previous years' reports.

⁴ See Footnote Number 3.

10.2.3 Cumulative Thousands Blocks Assigned Since 1998

Chart 7 illustrates the cumulative number of total blocks assigned since thousands-block pooling began in Illinois in June 1998.

Chart 7 – Cumulative Thousands Blocks Assigned Since Pooling Began



10.3 Trends in Thousands-Block Pooling By State and NPA Since 2002

During the past five years, the PA has processed a significant number of applications and assigned a considerable number of blocks. Below are several charts identifying the states and NPAs with the highest activity levels for applications, assignments, and reclamation.

10.3.1. Top 10 NPAs for Total Number of Applications since 2002 (Part 3s)

Table 37 – Top 10 NPAs for Total Number of Applications Since 2002 (Part 3s)

State/NPA	Total Applications
CA 310	3,987
NY 347	3,887
CA 909	3,410
NY 646	3,322
CA 714	3,136
NC 704	3,042
CA 760	2,838
NY 845	2,791
MA 508	2,707
NY 631	2,678

10.3.2 Top 10 States for Number of Applications since 2002 (Part 3s)

Table 38 – Top 10 States for Number of Applications Since 2002 (Part 3s)

State	Total Applications
CA	48,128
NY	26,148
TX	23,191
FL	20,515
IL	17,083
PA	16,141
MI	15,162
NJ	11,876
MA	11,859
OH	11,078

10.3.3 Top 10 NPAs for Total Number of Block Assignments since 2002

Table 39 – Top 10 NPAs for Total Number of Block Assignments Since 2002

State/NPA	Total Block Assignments
NY 347	2,586
NY 646	2,202
CA 310	2,066
CA 909	1,859
NY 631	1,799
MA 508	1,702
CA 714	1,674
GA 678	1,604
NC 704	1,602
TX 832	1,586

10.3.4. Top 10 States for Number of Block Assignments since 2002

Table 40 – Top 10 States for Number of Block Assignments Since 2002

State	Total Block Assignments
CA	26,258
NY	16,240
TX	13,935
FL	11,944
IL	9,852
PA	9,774
MI	7,337
NJ	7,204
MA	7,009
OH	5,881

10.3.5 – Top 10 States for Reclamation between 2003 and 2006

Table 41 – Top 10 States for Reclamation Between 2003 and 2006

Rank	State	Blocks Reclaimed
1	CA	38
2	NY	32
3	OR	32
4	PA	24
5	FL	18
6	MS	17
7	MI	13
8	TX	10
9	NJ	10
10	WV	9

10.4. Summary of Pooled Areas since 2002

Table 42 represents a summary of the aggregated total of the number of pooling areas, those designated as mandatory or optional, as well as the number of the service providers participating in the pooled areas since 2002. Since the first year of pooling, the total number of rate areas in pooling has increased 107%, from 6,578 at the end of 2002 to 13,639 at the end of 2006, and the number of service providers has increased 68.7%, from 1,159 at the end of 2002 to 1,955 at the end of 2006.

Table 42 – Summary of Pooled Areas Since 2002

Year	Total Number of Distinct Service Providers	Pooled Areas	Total Number of NPA Areas	Total Number of Jurisdictions ¹
2002	1,159	6,578	158	42
2003	1,631	13,322	237	51
2004	1,608	12,448	239	52
2005	1,745	13,168	241	52
2006	1,955	13,639	241	52

¹Jurisdictions include states, the District of Columbia, and Puerto Rico.



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