National Pooling and P-ANI Administration

2014

Annual Report

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Section 1 - Description of Neustar Pooling and P-ANI Administration

1.1 Background

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. (Neustar) 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 beginning of national pooling, in March 2002, Neustar was managing twenty-two state pooling trials in eighty-three NPAs. We transitioned over five thousand blocks to our then-newly-designed Pooling Administration System (PAS).

Neustar competitively bid for and was awarded the first federal contract to administer the national rollout and ongoing administration of thousands-block pooling on June 15, 2001, for a total of five years, renewable annually. Contract number CON01000016 expired on June 14, 2006. By the end of that contract Neustar was managing nearly 14,000 rate area pools in all fifty states, the District of Columbia and Puerto Rico. The FCC issued eight contract

modifications between June 15, 2006 and July 12, 2007 to extend Neustar's pooling administration contract through August 14, 2007.

Neustar again competitively bid for and was awarded the second national pooling contract on July 31, 2007, for a possible total of five years, with a base period of two years renewable annually for the remaining three. This second contract became effective on August 15, 2007, with the base period ending on August 14, 2009. The FCC issued the following contract modifications in accordance with FAR 52.217-9 to continue that contract:

- Contract Modification #8 on August 10, 2009, exercising Option Period I from August 15, 2009 through August 14, 2010.
- Contract Modification #13 on August 23, 2010, exercising Option Period II from August 15, 2010 through August 14, 2011.
- Contract Modification #18 on July 18, 2011, exercising Option III from August 15, 2011 through August 14, 2012.
- Contract Modification #22 on August 14, 2012, extending the contract for six months from August 15, 2012 through February 14, 2013.
- Contract Modification #24 on February 14, 2013, extending the contract for four months through June 14, 2013.
- Contract Modification #25 on June 13, 2013, extending the contract for one month from June 15, 2013 through July 14, 2013.

In June 2013, Neustar successfully bid for its third national pooling contract which was awarded on July 12. The current contract is for a base period of one year that began on July 15, 2013 with three possible one year extensions, ending in July 2017. The one-year base period expired on July 14, 2014 and the FCC exercised Option Year One on June 25, 2014. Option Year One will expire on July 14, 2015.

1.2 Neutrality

Neustar Pooling Administration (PA) is an independent, neutral third party, as defined in Section H.3.3, Neutrality Requirements, of the pooling contract. As such, the PA is responsible for the fair and efficient overall administration of pooled numbering resources. The PA is a non-governmental entity that is impartial and not aligned with any particular telecommunication industry segment, and complies with 47 C.F.R. § 52.12.

Neustar Neutrality Compliance Procedures require Neustar to conduct neutrality refresher training in the first quarter of each year. All Neustar Board members, designated contractors, and all employees, including pooling employees, must participate in a training session.

Neustar is subject to a number of neutrality audits that are performed on a quarterly and semi-annual basis. In connection with these audits, all of its employees, including its directors, its officers, and pooling employees, must, on a quarterly basis, review the neutrality requirements

and sign a neutrality certification stating that they are familiar with the neutrality requirements and have not violated them. Failure to comply with applicable neutrality requirements could result in government fines, corrective measures, curtailment of contracts, or even contract revocation. PA compliance with the FCC's neutrality rules is ensured by the Neustar Neutrality Officer John Manning and the FCC.

The PA also participates in the quarterly neutrality audits conducted by Ernst & Young, as more fully discussed in Section 1.5.

1.3 Description of National Pooling Administration (PA)

The PA performs the day-to-day number resource assignment and administrative activities with a long-term focus, which includes maintaining a system to support all day-to-day and long-term pooling functions.

As such, the PA:

- Provides a standardized application of all administrative pooling guidelines,
- Develops tools and has implemented a system containing both hardware and software to facilitate the assignment, tracking, and data reporting requirements,
- Maintains interfaces with the NANPA, the NPAC, service providers, industry forums, (e.g., INC, CIGRR, etc.) and regulatory agencies, and
- Maintains and plans for adequate pool inventory numbering resources.

The PA also interacts with the NANPA and the NPAC vendor, while impartially administering thousands-block number pools by assigning, managing, forecasting, reporting, and processing data that allows service providers in rate centers designated for thousands-block number pooling to receive telephone numbers in blocks of 1,000. In addition, we maintain accurate rate center designations.

For further information on the PA requirements, see Attachment A of FCC Contract No. FCC13C0007.

1.4 Description of Routing Number Administration (RNA)

In addition to pooling administration, the PA was the Interim Routing Number Administrator (IRNA) from 2006 to March 18, 2012. We assumed the permanent Routing Number Administrator (RNA) function as of March 19, 2012.

By letter dated September 8, 2006, the FCC directed the PA to begin assigning Emergency Service Query Keys (ESQKs) under certain limited circumstances as the Interim Routing Number Administrator (IRNA). When the FCC awarded the new PA contract in August 2007, it included the provision that the new national PA would act as the permanent Pseudo-Automatic Number

Identification (p-ANI) Administrator (a/k/a Routing Number Administrator or RNA) once the FCC determined the permanent process.

On June 17, 2011, the FCC approved Neustar's Change Order Proposal #19 addressing implementation of the permanent RNA function. Neustar Pooling Administration assumed the responsibility as the permanent RNA on March 19, 2012. As the RNA, we are responsible for managing and assigning non-dialable p-ANIs, which are used to support the routing of wireless and VoIP 9-1-1 calls. The p-ANIs are assigned out of the 211 NXX and 511 NXX on a national basis, as well as in Puerto Rico and the Virgin Islands.

Upon approval of the Change Order in 2011, the RNA established a nine-month transition period, during which the new Routing Number Administration System (RNAS) and website www.nationalpani.com were developed, tested, and implemented. During the transition period, the RNAS inventory was populated with non-dialable p-ANI assignment data received from the p-ANI assignors and p-ANI users. At the end of transition, assignment of non-dialable 211/511 p–ANIs in all states, the District of Columbia and Puerto Rico transitioned to Neustar as the permanent RNA with no other entity administering or self-assigning 211/511 non-dialable p-ANIs. The Virgin Islands were added to the RNAS on September 24, 2012. The RNA functions are included in the current Pooling Administration Services contract, FCC13C0007.

In compliance with the current contract, the RNA:

- Provides processes for a standardized application of all administrative p-ANI guidelines;
- Maintains a system containing both hardware and software to facilitate the assignment, tracking, and data reporting requirements; and,
- Maintains and plans for adequate p-ANI inventory.

For further information on the RNA requirements, see Change Order 19 on our website, www.nationalpooling.com, under Documents.

1.5 Neutrality Audits

In April 2011, the PA began participating in the quarterly neutrality audits conducted by Ernst & Young (E&Y). This audit ensures that the PA is not treating one service provider or group of service providers unfairly by delaying action on their applications.

After the end of each quarter, the PA provides to E&Y a list of all assignments (initial, growth, and CO Code) that occurred within the previous quarter, as well as a list of all assignments that had a Part 4 due within the previous quarter. The auditors review the data and select 25 random assignments and 25 entries from the reclamation list for further review. For those selected, the PA provides the following documentation:

Assignments:

- Initial - the Part 1A and the Part 3
- Growth – the Part 1A, MTE and the Part 3
- CO Code – the Part 1, Part 1A, PA MTE, SP MTE, PA suspended Part 3 and Part 3 with an assignment

Reclamation:

- Part 4 form, reminder notice and 2nd overdue notice if applicable.
- The Part 1A and Part 3 if the block was returned.

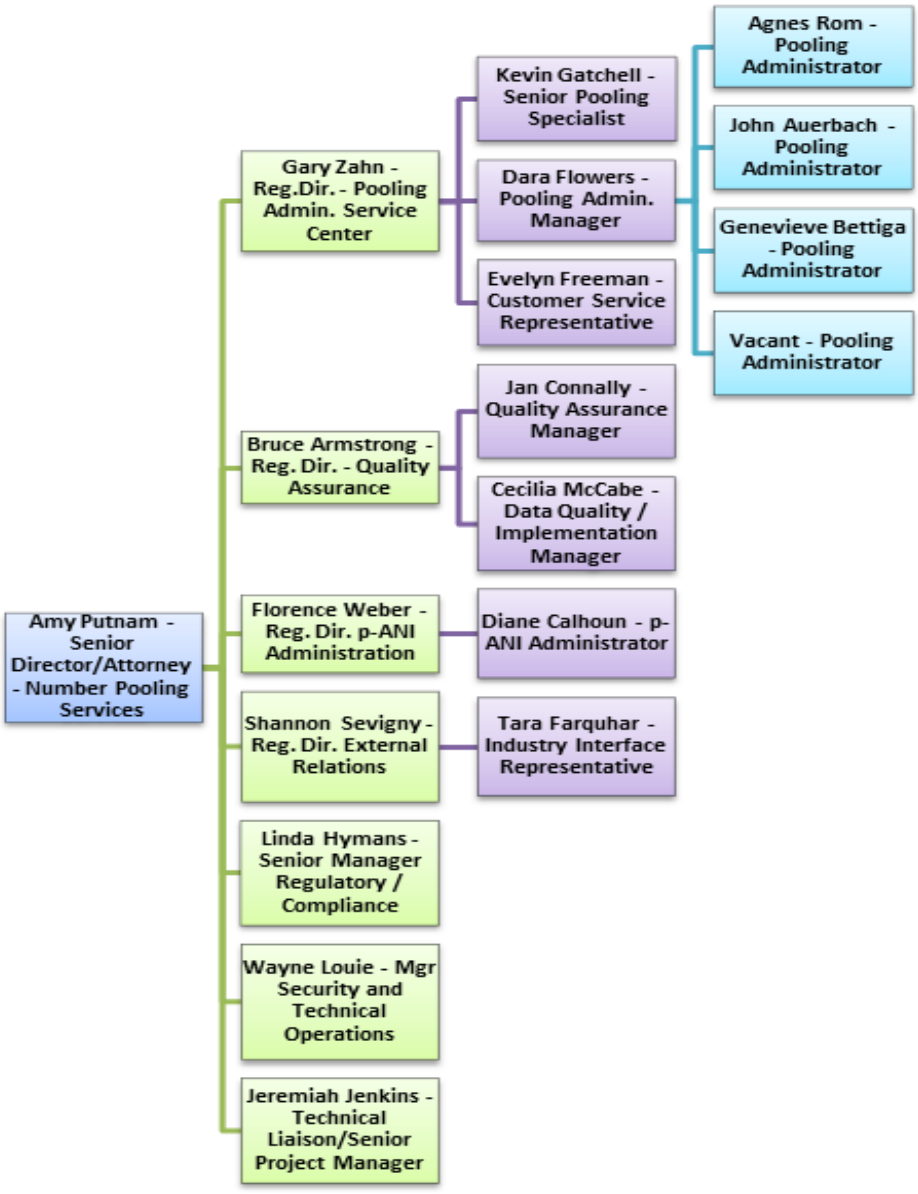
E&Y then examines the documentation to ensure that the PA:

- Adhered to the seven calendar day processing window for block and CO Code applications,
- Has proper documentation on file for the applications,
- Followed reclamation notice procedures, and
- Took effective corrective actions when necessary.

In 2014, auditors found no issues with PA processing of block or code applications or reclamation activities.

1.6 Neustar Pooling Administration Organization Chart

Figure 1: Pooling Administration Organization Chart



Section 2 - 2014 Neustar Pooling and p-ANI Administration Highlights and Significant Milestones

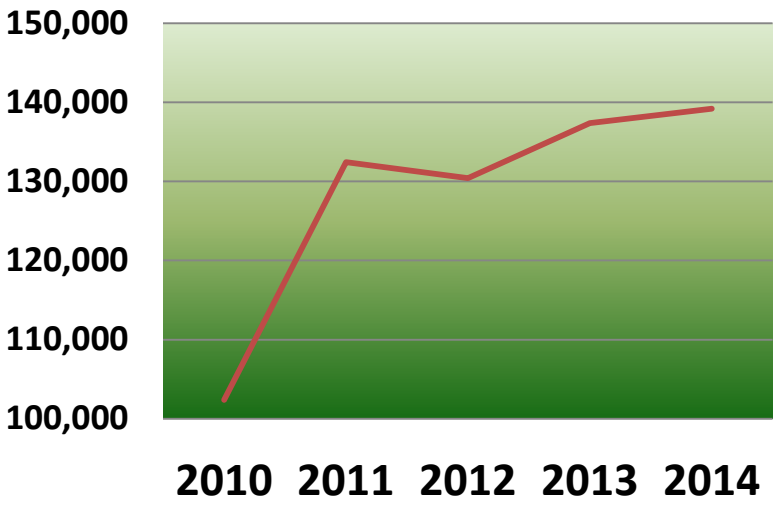
> "Thank you all so much for the valuable assistance you have given me this year. I really appreciate your help and hard work. You are truly professionals at your jobs."
>
> 2014 Customer Email Comment

The following are Neustar Pooling Administration (PA) and P-ANI Administration (P-ANI) 2014 highlights and significant milestones:

Pooling Contract:

- On July 1, 2014, the FCC exercised its first one-year option period beginning July 15, 2014 and expiring July 14, 2015.
- We submitted the one remaining Contract Data Requirements List (CDRL) plan, CDRL 4.9, *Transition Plan*, to the FCC on time.

Pooling Administration (PA) Highlights for 2014:



In 2014, the PA staff processed:

- 139,181 Part 3s, which is the highest annual total of applications processed since national pooling began. Only one of those applications was not processed within 7 calendar days.
- This total represents 1.3% more than the 2013 previous record total of 137,375.

- 119,001 approvals.
- 16,137 suspensions.
- 1,321 withdrawals.
- 2,722 block or code request denials.
  - 249 were Red Light Rule denials.
- 4,030 donations.
- 36,114 requests for new resources (containing both multiple block and code requests).
  - Assigned 59,440 blocks.
  - Opened 3,381 NXX codes.
- 54,699 change requests.
- 18,708 disconnect requests.
- Was authorized to reclaim 21 blocks.

Pooling Administration System (PAS) System (See Section 6.1)**:**

- PAS was available for use 99.98% of the time, which exceeds the contract performance metric of 99.9%.
- PAS was unavailable for three instances of unscheduled down time for a total of 2 hours and 3 minutes: January 29, May 19, and December 15.
- We conducted maintenance on PAS six times; on February 14, May 16, July 11, November 10, November 21 and December 5, and used 4 hours 39 minutes of scheduled, FCC-approved down time in conjunction with the maintenance activities.

Reporting (See Section 9)**:**

- We produced 62 requested ad hoc reports in less than one business day, although we are allowed up to three business days.
- We produced 595 reports for the FCC, states, the North American Numbering Council (NANC), North American Numbering Plan Administration (NANPA), service providers and other.
- We submitted all 119 required Contract Data Requirements List (CDRL) reports on time and posted them to the website.
- We submitted all 46 additional contract-required reports on time and posted them to the website.
- We submitted the remaining CDRL Plan, the *Transition Plan*, on time on March 14.

Industry Support:

- We participated in 98 industry meetings either in-person or by conference call. (See Section 8.2)
- We answered 100% of the 2,514 received calls within 1 business day.

- The Help Desk handled 1,118 calls. (See Section 8.7.1)
- We opened and closed six pooling trouble tickets. (See Section 8.8.1)
- We submitted 7 new issues and 9 new contributions at the Industry Numbering Committee (INC). (See Section 8.2)
- We provided 13 pooling status reports to the NANPA for its meetings. (See Section 2.4)
- We attended 9 NANPA meetings relating to NPA relief and jeopardy, providing an up-to-date pooling status for the affected NPAs. (See Section 2.4)
- We made 753 changes to rate center information, of which 40% changed the pooling status designation from Excluded to Optional. (See Section 2.4.2)
- The PA staff met monthly with the Numbering Oversight Working Group (NOWG) in 2014, providing updates on various PA activities and providing responses to questions. We also participated in the annual performance review and worked cooperatively with the NOWG to make desired industry improvements while also meeting our contractual requirements. (See Section 8.3)

Customer Focus:

- We continued sending Tips-of-the-Quarter. (See Section 8.5.1)
- We noted 116 significant PA and P-ANI customer focus items. (See Section 8.3)
- We had no formal complaints. (See Section 8.4)

Training:

- We facilitated two state regulatory commission educational sessions on pooling issues.
- There were 224 views of the pooling training videos in 2014. (See Section 2.3.3)

Special Projects:

- During 2014, Neustar continued development on an enhanced Pooling Administration System (PAS). Work for the new system included writing the system functional requirements and developing user testing procedures. Release of the new system occurred in January 2015. (See Section 2.6.2)
- We completed an MSA-designations review project which involved rearrangements of MSAs in the top 100 but no change in the composition of the list. (See Section 2.4.2.2)

- To complete our responsibilities for the VoIP trial that ended on December 17, 2013, we prepared a final summary report for the FCC in 2014. We also notified the FCC about a VoIP trial block on the reclamation list in July 2014. (See Section 2.6.1)
- We continued the *Seeking Donations Project* that was initiated in May 2010. In 2014, we secured block donations for 66 of the requested 86 rate centers being changed from Excluded to Optional, thereby saving the opening of 66 whole NXX codes. (See Section 2.6.3)
- We continued the Abandoned Codes/Blocks project. When we are made aware that a company has abandoned pooled codes and blocks, we work with state regulators to reclaim any numbering resources identified as abandoned. We also work with NANPA for pooled code reclamation and the NPAC to disconnect any LRNs or ported TNs from the NPAC for these companies. (See Section 2.6.7)

P-ANI Administration Highlights for 2014:

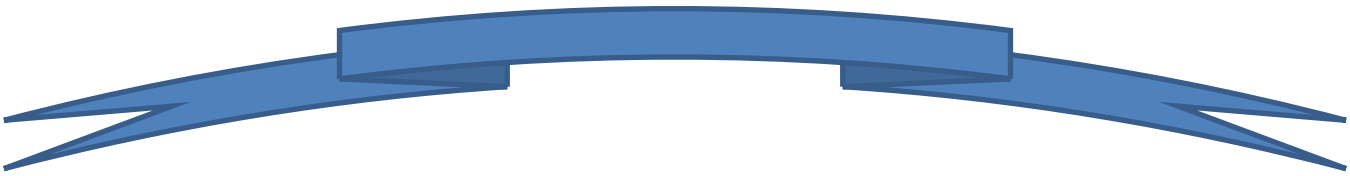
- 22,781 applications processed (Part 3s issued).
- 99.99% of those applications processed on time.
- 3,810 new p-ANI range assignments made.
- 9,780 modifications made to existing p-ANI ranges.
- 9,124 p-ANI range returns processed.
- 7 requests to cancel p-ANI returns processed.
- 5 requests denied.
- 55 requests withdrawn.
- 0 requests suspended.

Other P-ANI Activities in 2014:

- We worked with carriers to resolve data discrepancies.(See Section 2.7.3.1)
- We continued working on reconciling 82 duplicate assignment issues. (See Section 2.7.3.3)
- We processed carriers' annual reports and semi-annual forecasts. (See Section 2.7.3.2)
- We participated in the Emergency Services Interconnection Forum (ESIF), where the Sr. Director is co-chair of the ECDR subcommittee, and attended INC meetings, to offer assistance and expertise. (See Section 8.2)
- Completed and posted the 2014 P-ANI Activity and Projected Exhaust Report. (See Section 2.7.4)
- We continued publishing the P-ANI *Tip of the Month* through April and then began sending the *Tips* quarterly in July. (See Section 8.5.2)

Routing Number Administration System (RNAS) (See Section 6.2):

- RNAS was available for use 99.98% of the time, which exceeded the contract performance metric of 99.9%.
- RNAS had three instances of unscheduled down time for a total of 2 hours 8 minutes: on January 29, May 19, and December 15.
- We conducted maintenance on RNAS six times; on February 14, May 16, July 11, November 10, November 21, and December 5. For these maintenance activities, we used 4 hours and 5 minutes of FCC-approved scheduled downtime.



Following is a synopsis of our major accomplishments during the 2014 reporting period. Details for these activities are found throughout the report.

2.1 Pooling Administration

2.1.1 Contract

The one-year base period for Neustar's contract FCC13C0007 expired on July 14, 2014. The FCC exercised its first one-year option, for the period July 15, 2014 to July 14, 2015.

The PA is required by the new contract to submit a variety of plans that are enumerated in Section 4, *Contract Data Requirements List* (CRDL) (Deliverables) of Attachment A of the contract. The *Transition Plan*, the last remaining CDRL plan, was submitted on time on March 14.

2.1.2. Personnel

Pooling Administrator (PA) Ms. Dora Wirth retired for a second time on January 31, 2014 after 13 exceptional years at Neustar. Ms. Wirth had been the Pooling Administrator for AK, CO,ID, IA, MS, ND, NE, NV, OK, OR, UT and WV. As of December 31, 2014, that position remains vacant. There were no other changes in PA personnel in 2014.

2.2 Pooling Administration

This section describes PA activity in 2014, including information about applications processed, blocks assigned, and NXX codes opened. Productivity statistics for the past five years can be found in Section 10, *Trends in Pooling Since 2010*.

2.2.1 Pooling Administration Productivity for 2014

In 2014, the PA continued its exceptional level of performance. We processed a record number of applications (Part 3s), exceeding 2013's record number of 137,375 by 1,806 Part 3s. Table 2-1 identifies areas of activity:

Table 2-1
PA Productivity at a Glance

ACTIVITY	2014 TOTAL
Applications processed (Part 3s):	139,181
Applications not processed in 7 calendar days:	1
Blocks assigned:	59,440
Change requests to existing blocks or codes:	54,699
Disconnects processed:	18,708
Withdrawals:	1,321
Block or code requests denied:	2,722
Donations processed:	4,030
Central office codes opened:	3,381
Red Light Rule denials:	249
Total blocks reclaimed:	21

Table 2-2 shows a breakdown of applications (Part 3s) by disposition type, including approvals, denials, suspensions, and withdrawals. This annual total is the highest since national pooling began.

Table 2-2
Applications (Part 3s) Processed

Approvals	119,001
Denials	2,722
Suspensions	16,137
Withdrawals	1,321
TOTAL	**139,181**

Table 2-3 and Figure 2 contain the total number of applications processed by activity type.

Table 2-3
2014 Applications Processed by Type

	Approved	Denied	Suspended	Withdrawn	Total
Block Modifications	47,727	48	-	587	48,362
Block Disconnects	8,534	66	8,595	25	17,220
Block Cancel Disconnect	9	-	-	-	9
Individual Blocks	48,372	1,612	-	284	50,268
Block Reservations	64	10	-	9	83
Process/Cancel Block Reservations	40	-	-	1	41
Code Modifications	3,047	78	3,064	148	6,337
Code Disconnects	124	403	950	11	1,488
LRN Blocks	458	151	395	50	1,054
Dedicated Customer Blocks	790	53	78	19	940
Pool Replenishment Blocks	9,790	300	3,055	187	13,332
Manual	46	1	-	-	47
Totals	**119,001**	**2,722**	**16,137**	**1,321**	**139,181**

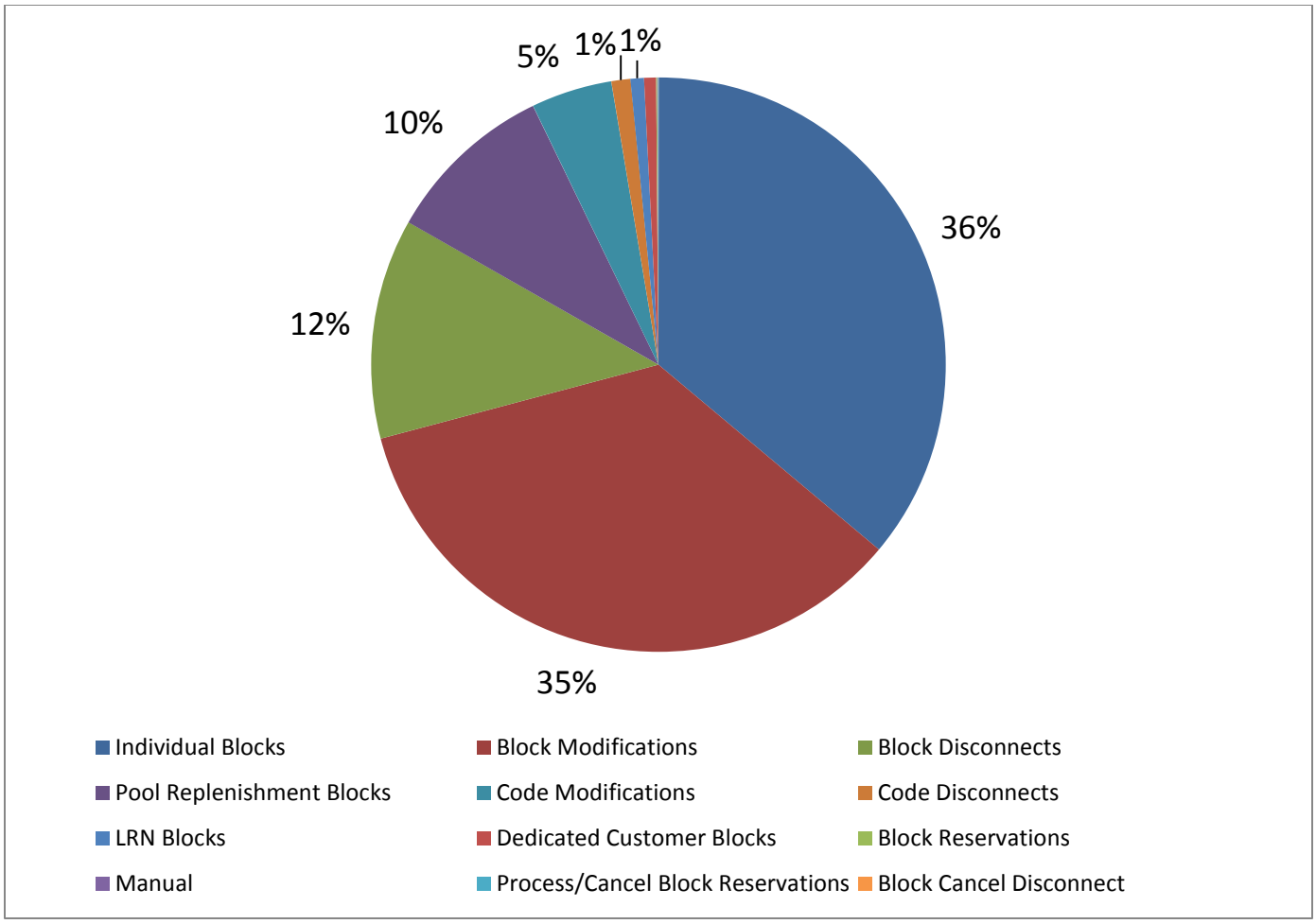


Figure 2: 2014 Pooling Applications by Type

Table 2-4 shows the number of NXX codes opened by the PA in 2014 and for what purpose.

Table 2-4
NXXs Opened by Purpose

PURPOSE	TOTAL	PERCENT OF TOTAL
LRN	352	10%
Dedicated Customer	79	2%
Pool Replenishment	2,950	88%
TOTAL	3,381	100%

The PA also issued 8,790 Part 5s for block disconnects, reclamations, and exchanges during 2014, of which 8,534 were actual block disconnects.

The PA processed all except one of the 139,181 applications (Part 3s) within seven calendar days, which far exceeds the performance metric of 99%.

There were 451,859 assigned blocks in PAS at the end of 2014, as compared with 401,186 at the end of 2013, an increase of 50,673 assigned blocks -- a 12.6% increase in the number of assigned blocks in PAS at the end of 2014 as compared to 2013.

Figure 3 below shows the monthly cumulative number of assigned thousand-blocks in PAS for 2014.

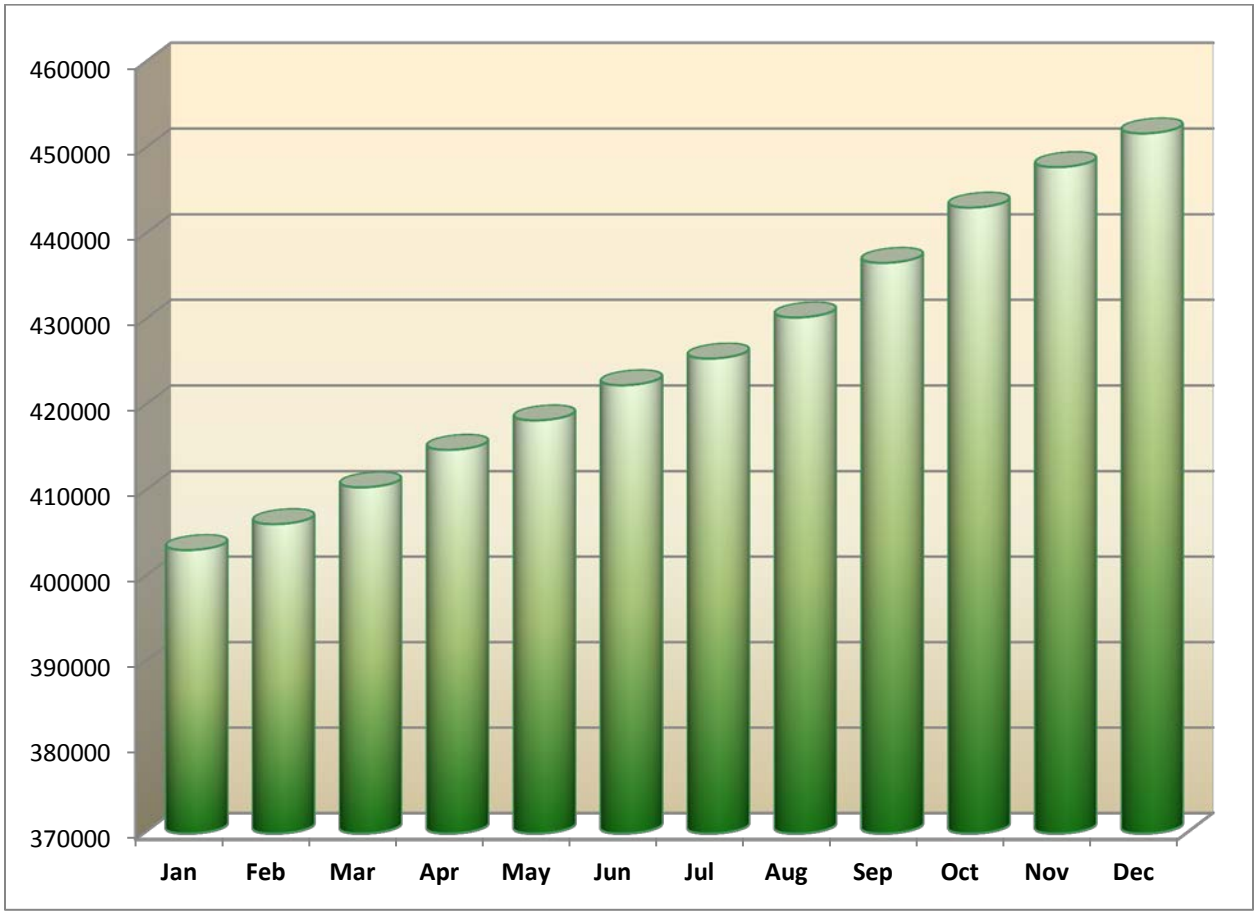


Figure 3: Monthly Cumulative Blocks Assigned in PAS in 2014

Figure 4 below depicts the monthly block assignments made by the PA during each month in 2014.

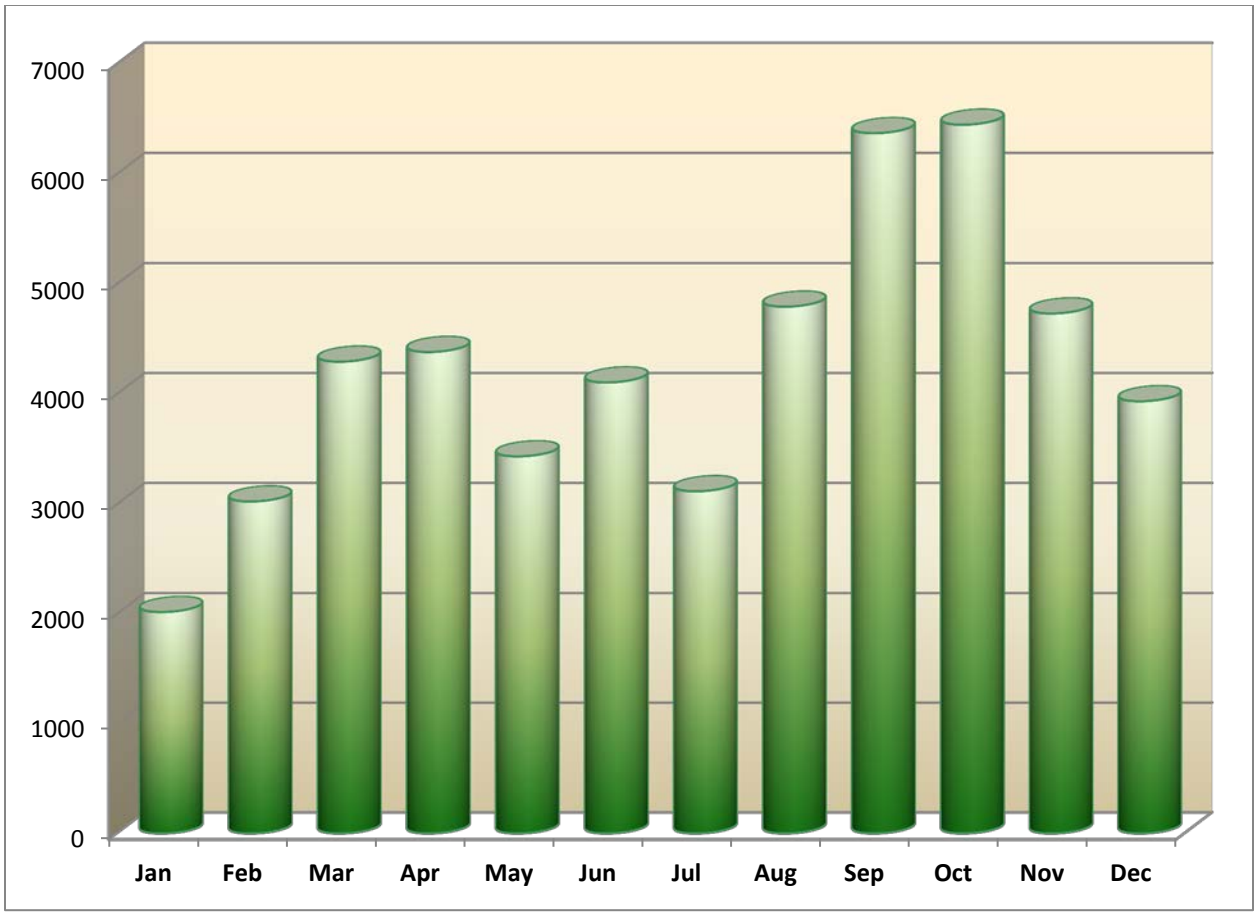


Figure 4: Blocks Assigned by the PA in Each Month in 2014

The total number of applications (Part 3s) processed is a measure of the actual processing work performed by the pooling administrators, because not every application results in the 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 or withdrawn entirely.

In addition to processing, as a routine part of their job performance, the PAs also:

- Respond to questions and requests for assistance from service providers,
- Review documentation to assure entitlement to initial requests,
- Interact with state commission staff about certification issues and answer questions about the pooling process,
- Assist service providers with questions relating to PAS,
- Walk new users through the pooling processes,
- Search for new block holders for blocks being returned with greater than 10% contamination,
- Search for new code holders for pooled codes being returned with blocks assigned,

- Search for new code holders for pooled codes and blocks that have been abandoned,
- Assist with answering Help Desk calls,
- Work closely with the NPAC Pooling Coordinators to ensure that block requests are handled in accordance with industry guidelines, and
- Work closely with the NANPA Code Administrators to ensure that NXX requests are handled in accordance with INC guidelines.

Figure 5 below provides a complete overview of all applications processed in PAS for 2014, including approvals, denials, withdrawals, and suspended applications.

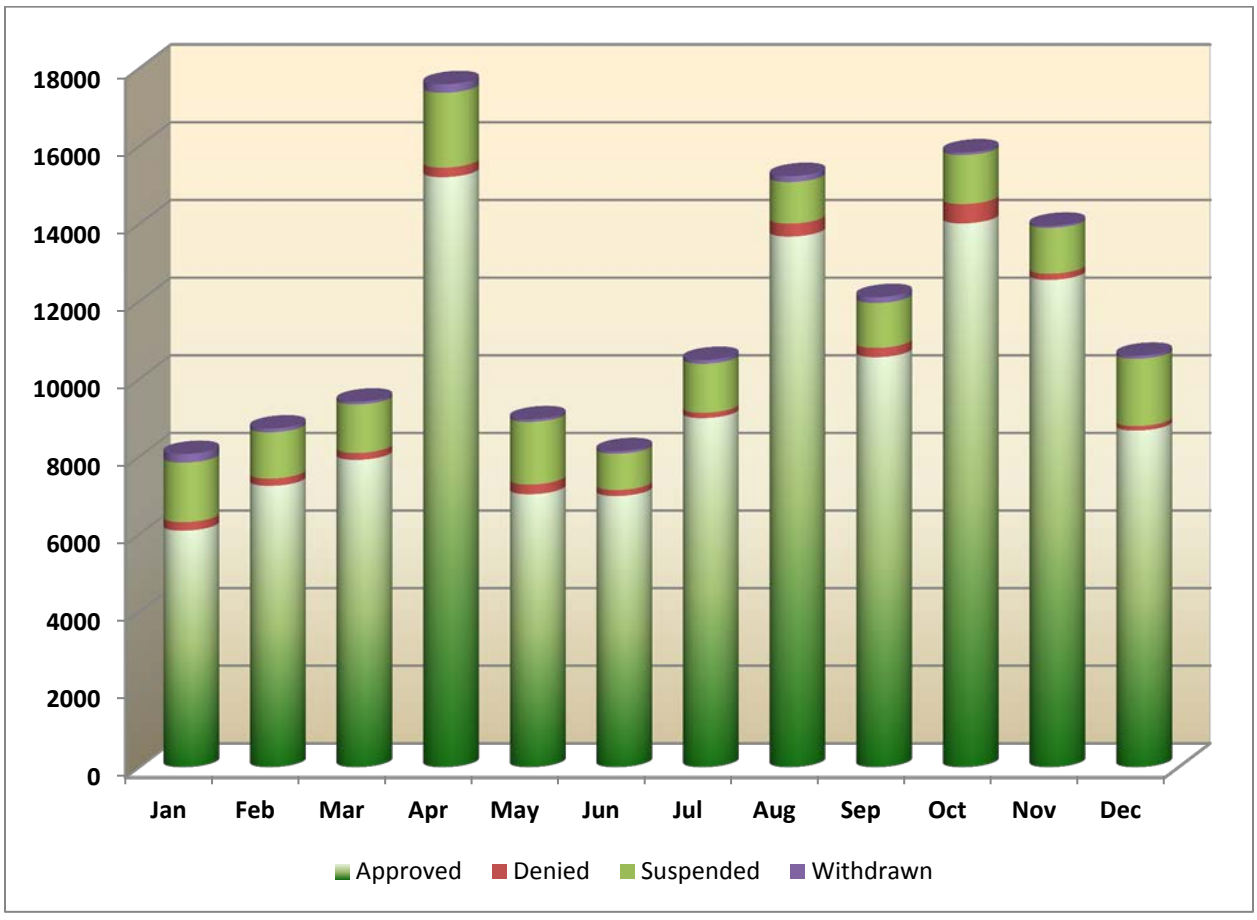


Figure 5: Overview of All 2014 Applications Processed by Status

Tables 2-5 and 2-6 list the ten states and Numbering Plan Areas (NPAs) for which the highest number of applications (Part 3s) occurred in 2014:

Table 2-5
Ten States with Highest Number of Applications (Part 3s)

State	Total Part 3s
TX	14,670
CA	14,657
FL	9,734
IL	7,416
NY	6,419
OH	5,499
GA	4,876
PA	4,873
MA	4,602
AL	3,839

Table 2-6
Ten NPAs with Highest Number of Applications (Part 3s)

NPA	State	Total Part 3s
832	TX	1,778
978	MA	1,233
207	ME	1,223
267	PA	1,164
443	MD	1,138
781	MA	1,134
918	OK	1,058
440	OH	1,046
774	MA	1,022
484	PA	1,021

2.2.2 Pool Replenishment

During 2014, the PA continued to make pool replenishment options available to service providers when required to keep inventories adequate to meet forecasted demand.

While the PA has no authority to actually replenish the inventory pools, because it is not authorized to obtain resources directly, we manage the process by determining when a pooling rate center inventory will either be equal to or 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 both the MTE (Months-to-Exhaust) and utilization requirements to open an NXX code and then have them provide blocks from that NXX code to the pool.

There was a 35% increase in the number of applications for blocks for pool replenishment in 2014 with 3,434 applications as compared to 2013 with 2,536 applications. The number of codes opened for pool replenishments from those applications increased by 46% with 2,950 CO codes opened in 2014 and 2,022 CO codes opened in 2013.

Table 2-7 is an overview of pool replenishment statistics in 2014.

Table 2-7
2014 Pool Replenishment Overview

Average number of rate centers per month that had less than a six-month inventory	1,165
Percentage of total number of rate centers per month that had less than a six-month inventory	6.3%
Average number of rate centers per month that had no blocks available with forecast	593
Number of CO code requests for pool replenishment	3,434
Number of CO codes opened for pool replenishment	2,950

Tables 2-8 and 2-9 show the ten states and NPAs which had the most pool replenishment activity in 2014.

Table 2-8
Ten States with the Most Pool Replenishment Activity

State	Codes Opened
CA	512
TX	310
NY	214
FL	209
OH	139
IL	120
MI	115
CO	90
GA	89
MO	73

Table 2-9
Ten NPAs with the Most Pool Replenishment

NPA	State	Codes Opened
281	TX	45
308	NE	37
415	CA	36
214	TX	35
929	NY	35
224	IL	34
303	CO	33
586	MI	32
480	AZ	31
619	CA	30

2.2.3 Reclamation in 2014

The PA initiates reclamation according to the *Thousands-Block Number (NXX-X) Pooling Administration Guidelines* (TPBAG), 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 individual numbers in the thousands-block become available 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. The PA also sends a second reminder to the SP on the day after the Part 4 was due.

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.[1] There were a cumulative total of 5,407 blocks that the PA had to address on the overdue Part 4 reports in 2014. This represents a decrease of 12% of the 2013 total of 6,145. Of those, a cumulative total of 1,577 blocks were new to the lists in 2014, which is an 18% decrease from the 2013 total of 1,921. A state may authorize the PA to initiate block reclamation, but then may halt the reclamation process if, for example, it is determined that numbers in the blocks are actually in service.

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

In 2014, regulators authorized the PA to initiate reclamation for 21 thousands-blocks.

Table 2-10 identifies the states where blocks were authorized to be reclaimed and the number authorized in each state in 2014.

Table 2-10
State and Number of Blocks Reclaimed

State	Blocks for which Reclamation was Initiated
California	15
Michigan	1
Mississippi	1
Oregon	1
South Carolina	1
Washington	1

[1] 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.

West Virginia	1
TOTAL	**21**

2.3 Pooling Administration System (PAS)

2.3.1 PAS Performance

PAS was available 99.98% of the time in 2014, which means the PA once again notably exceeded the contract requirement of 99.9% availability. PAS was unavailable for three instances of unscheduled down time for a total of 2 hours and 3 minutes.

We conducted maintenance on PAS six times: on February 14, May 16, July 11, November 10, November 21 and December 5, and used 4 hours 39 minutes of scheduled, FCC-approved down time in conjunction with the maintenance activities.

As with RNAS, we completed disaster recovery testing on November 21 with no down time.

For more detailed information on the RNA performance, see Section 6.1.

2.3.2 PAS Change Orders/Improvements

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 or system, a change order proposal is submitted to the FCC. The PA must provide "a written assessment regarding the impact of scope of work, time and costs to the INC, the NANC and the FCC within 30 days of any changes to the INC Guidelines that have such an impact.[2]

The NOWG reviews PA change order proposals and provides recommendations to the FCC. To facilitate the review process, the Regional Director, External Relations, who serves as the liaison with the NOWG, is available to address any questions that may arise from their review of any change order proposal.

The PA submitted no change order proposals to the FCC in 2014.

2.3.3 Training Videos

While we did not add any new training videos in 2014, we continue to see robust viewing of the existing videos. By far, the most popular video is "New to Pooling Quick Start," which

[2] FCC contract No. FCC13C0007, Section 2.5.4 of Attachment A dated May 15, 2013.

accounted for 50% of the views. In all there were 224 total views of training videos in 2014. This total does not include downloaded or shared videos as there is no method for tracking those.

Table 2-11 contains the 2014 training video names and the number of times each video was viewed.

Table 2-11
2014 PAS Training Video Views

Training Video	Number of Times Viewed
New to Pooling Quick Start	112
Mass Modifications	18
Change Order 20	8
How to Complete the MTE Worksheet	35
PAS Effective Date Scenarios for Block Requests and Donations	8
PAS Password Reset	11
Change Orders 9 and 10	1
Change Order 11	1
Redesigned Nationalpooling.com Website Training video	11
Overview of PAS and the Pooling Website for Service Provider and Service Provider Consultant Users	14
Overview of PAS and the Pooling Website for Regulatory Users	5
TOTAL VIEWS	**224**

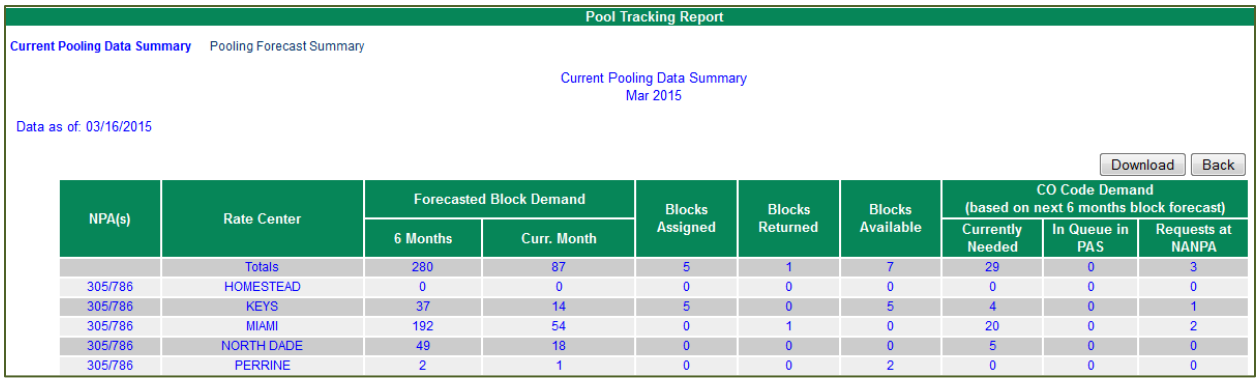
2.3.4 Pooling Help Desk

The Customer Support Representative (CSR or Help Desk) is the human interface between PAS and our customers. The Help Desk responds to both internal and external questions and requests for technical support, and attempts in real time to confirm and resolve the cause of a problem. In 2014, the Customer Support Desk handled 1,118 calls from customers. For more details on Help Desk calls, please see Section 8.7.1.

2.4 Pooling Implementation Management

The Data Quality and Implementation Manager (DQIM) manages the quality control and maintenance of the rate center data located on the website, completes the semi-annual forecasting reports, updates PAS in the event of area code relief, and provides status updates for the industry at NANPA meetings. The DQIM also manages quarterly neutrality audits conducted by Ernst & Young (E&Y) to ensure that the PA is not treating one service provider or group of service providers unfairly by delaying action on their applications.

In 2014, the DQIM also attended 9 NANPA meetings, and provided 13 pooling status reports to the NANPA for its meetings.



Pool Tracking Report

Current Pooling Data Summary Pooling Forecast Summary

Current Pooling Data Summary
Mar 2015

Data as of: 03/16/2015

Download Back

NPA(s)	Rate Center	Forecasted Block Demand		Blocks Assigned	Blocks Returned	Blocks Available	CO Code Demand (based on next 6 months block forecast)		
		6 Months	Curr. Month				Currently Needed	In Queue in PAS	Requests at NANPA
	Totals	280	87	5	1	7	29	0	3
305/786	HOMESTEAD	0	0	0	0	0	0	0	0
305/786	KEYS	37	14	5	0	5	4	0	1
305/786	MIAMI	192	54	0	1	0	20	0	2
305/786	NORTH DADE	49	18	0	0	0	5	0	0
305/786	PERRINE	2	1	0	0	2	0	0	0

2.4.1 Rate Center Data Quality Control and Maintenance

The NPA/Rate Center Reports identify the pooling participation level status designation of all rate centers 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 center (Mandatory Single Service Provider), where pooling is not required, but either the state or a carrier has requested that the rate center be opened in PAS (Optional), or where no carrier has chosen to pool (Excluded).

The six current status designations of rate centers as defined in the *NPA/Rate Center Reports* are:

- **Mandatory (M)**
- **Mandatory State (M)**
- **Mandatory Single Service Provider (M*)**
- **Mandatory State Single Service Provider (M*)**
- **Optional (O)**
- **Excluded (X)**

For status designation definitions see Section 3.

Table 2-12 shows the total number of distinct pooling rate centers in PAS that were maintained by the DQIM from 2010 through 2014.

Table 2-12
Total Number of Distinct Pooling Rate Centers in PAS – 2010 through 2014

STATUS DESIGNATION	2010	2011	2012	2013	2014
M*	427	420	397	408	359
M	4,885	4,891	4,914	5,044	5,086
O	6,074	5,679	5,774	6,089	6,098
M	3,116	3,498	3,525	3,505	3,729
M*	646	841	808	773	804
X	3,401	3,217	3,122	2,719	2,452
Total	**18,549**	**18,546**	**18,540**	**18,538**	**18,528**
Total Pooling Rate Centers	**15,148**	**15,329**	**15,418**	**15,819**	**16,076**
Total Mandatory Pooling Rate Centers	**8,001**	**8,389**	**8,439**	**8,549**	**8,815**

2.4.2 Rate Center Information Changes

The DQIM is responsible for the accurate recording of all pooling information associated with every NPA, including the status designation for each rate center. In addition, the DQIM monitors and makes all of the changes related to pooling rate centers that occur as a result of FCC and state orders and Office of Management and Budget (OMB) directives.

2.4.2.1 Changes to Rate Center Information

Changes to rate center file information have been available in real-time through the website since September 2008. In 2014, the PA made 753 rate center information changes. Of those, all 753 were rate center status designation changes, of which 40% were from Excluded to Optional.

Table 2-13 shows the type of information change and how many rate centers were changed during each month in 2014.

Table 2-13
Summary of Rate Center File Changes for 2014

RATE CENTER CHANGES 2014													
REASON	*JAN*	*FEB*	*MAR*	*APR*	*MAY*	*JUN*	*JUL*	*AUG*	*SEP*	*OCT*	*NOV*	*DEC*	*TOTALS*
Changes in Status:													
M* to M	2	7	6	11	4	6				4	6	7	53
M* to M	2	6	3	5	4	49	3	10	3	45	2	6	138
M to M*													0
M to M*													0
M to M													0
M* to M*													0
O to M													0
O to M*													0
O to M	140												140
O to M*	120												120
O to M*													0
X to M													0
X to M*													0
X to M*													0
X to O	8	34	24	11	6	36	19	51	5	5	69	34	302
													0
													0
New Rate Centers													0
													0
Rate Center Name Change													0
													0
MSA/LATA Changes													0
TOTALS	**272**	**47**	**33**	**27**	**14**	**91**	**22**	**61**	**8**	**54**	**77**	**47**	**753**

2.4.2.2 Changes to Metropolitan Statistical Area (MSA) Rank and Name

If there are changes to Metropolitan Statistical Area (MSA) information, the OMB generally releases a bulletin about it early in the year. The PA monitors the website so that we know when bulletins are issued, and then investigates the impact on the status designations of rate centers in the pools. The OMB usually releases any updates to the definitions and/or

composition (*i.e.,* counties or other political divisions) of Metropolitan Statistical Areas once per year. These bulletins can contain any or all of the following:

- Changes to the composition of a specific MSA
- Creation of new MSAs
- Deletion of an MSA where a political division has been reassigned to another or newly-created MSA
- Renaming of MSAs based on city populations (each MSA name contains up to three principal cities in decreasing order of population). This usually amounts to reordering of city names or the removal or addition of principal city names.

The federal Office of Management and Budget (OMB) issued no bulletins in 2014, but the updated 2013 Census estimate was issued and thus allowed the recalculation of the top 100 MSAs based on these new census figures.

We utilized these new census figures to complete an MSA-designations review project which involved rearrangements of MSAs in the top 100 but not the composition of the list.

2.4.2.3 Supplemental Implementation Meetings (SIMs)

There were no SIMs during 2014.

2.4.4 NRUF/Semi-Annual Forecast Report

The NRUF (Numbering Resource Utilization/Forecasting) report (Form 502) is used by the NANPA to monitor and project exhaust in individual area codes as well as in the NANP overall. Service providers participating in pooling are required by Section 6.0 of the TBPAG to submit their respective NRUFs 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 also submit the Thousands-Block Forecast Report (Appendix 1 in the TBPAG) to the PA for each of their separate Operating Company Numbers (OCNs) at the thousands-block level, per rate center, for every NPA in which they have resources, as of June 30 and December 31, each year. This semi-annual report includes a five-year forecast of demand for blocks by year. The data provided by the service providers in these forecasts is treated as confidential by the PA.

During 2014, the PA aggregated the data provided by the service providers at the rate center level for all NPAs in pooling. We used this data to provide a rate center level NRUF to NANPA and to determine if a critical industry inventory insufficiency existed within any rate center. The PA forwarded its aggregated NRUF data to the NANPA, and provided a separate consolidated forecast report to the FCC according to the required deadlines, well before the required February 21 and August 21 dates. Table 2-14 contains the PA NRUF/forecast results for both semi-annual reporting periods in 2014.

Table 2-14
NRUF/Forecast Results for 2014

Date	NPAs	Jurisdictions	Blocks Forecasted	Blocks Available	Codes Forecasted
February	296	52	58,057	169,386	3,375
August	298	52	37,629	162,724	2,513

2.5 Regulatory and Compliance

2.5.1 Regulatory Update Conference Calls

In 2014, the PA participated in five regulatory update conference calls: on February 20, May 1, August 21, October 23, and December 18. Topics included updates on pooling

administration activities, delegated authority petitions, p-ANI administration, the PA survey, and relevant INC issues.

2.5.2 Regulatory Educational Sessions

In 2014, the PA conducted two educational sessions about pooling for state regulatory personnel. Our goal in conducting training sessions for regulators is to make it easier for them to respond to thousands-block pooling issues in their states. During the pooling educational sessions, we reviewed various pooling processes and procedures such as reclamation, forecasting, and applications processing, in addition to the information and reports available through the website.

Table 2-15 summarizes the regulatory educational sessions facilitated by the PA in 2014.

Table 2-15
Regulatory Training Sessions in 2014

Date	State	Type	Description
May 8	Wisconsin	Conference call	Pooling overview
May 14	Texas	In-Person	Pooling overview

2.5.3 Regulatory Support

The PA continued to provide support for state regulators as they addressed number conservation and NPA relief planning issues. We also attended NANPA meetings relating to NPA relief and jeopardy, and responded to emails and telephone inquiries regarding issues such as application processing, certification, and reclamation.

2.5.3.1 Addition Delegated Authority

The Public Service Commission of Montana (Montana Commission) filed a petition on November 22, 2011 seeking additional delegated authority to implement mandatory thousands-block pooling. The FCC granted the petition on May 23, 2013. We conducted the Supplemental Implementation Meeting (SIM) on September19, 2013 during which the pool start date was determined to be January 13, 2014. During 2014, we continued responding to inquiries from state regulatory staff about the implementation process and petitions for exemption or delay.

2.5.4 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. The FCC determined that numbering resources constitute a benefit, and has 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 249 denials as a result of the Red Light Rule in 2014, which is a slight increase from the 240 in 2013.

2.5.5 Reporting Compliance

The PA contract directs that certain Contract Data Requirements List (CDRL) reports be submitted each year.

2.5.5.1 Contract Data Requirements List (CDRL) – Recurring Reports

The following CDRL reports must respectively be submitted annually, semi-annually, quarterly, or monthly. Table 2-16 contains the CDRL recurring reports that were submitted by the PA during the 2014 calendar year according to the established deadlines. In 2014, the PA submitted 119 CDRL reports, which are available on the PA website.

Table 2-16
Recurring CDRL Reports Submitted in 2014

Report Name	Section Reference	Required Interval	Dates Submitted
Staffing Report	CDRL 4.6.4.3 per Section 2.3	1st working day of the month	Jan 2, Feb 3, Mar 3, Apr 1, May 1, Jun 2, Jul 1, Aug 1, Sep 2, Oct 1, Nov 3, Dec 1
Thousands –Block Pooling Report	CDRL 4.6.4.1 per Section 2.21	Monthly	Jan 15, Feb 13, Mar 14, Apr15, May 15, Jun 16,

Report Name	Section Reference	Required Interval	Dates Submitted
	Also see 2.22.4.5		Jul 15, Aug 15, Sep 15, Oct 15, Nov 17, Dec 15
System Performance Report	CDRL 4.6.4.2 per Section 2.22 Also see 2.22.4.5	Monthly	Jan 15, Feb 13, Mar 14, Apr15, May 15, Jun 16, Jul 15, Aug 15, Sep 15, Oct 15, Nov 17, Dec 15
Ad Hoc Reports	CDRL 4.6.5 per Section 2.22.4.5, as modified by Contract Mod #3	Monthly	Jan 15, Feb 13, Mar 14, Apr15, May 15, Jun 16, Jul 15, Aug 15, Sep 15, Oct 15, Nov 17, Dec 15
Pooling Matrices Report	CDRL 4.6.3.1 Per Section 2.21.2 Also see 2.22.4.5	Quarterly	Jan 15, Apr 15, Jul 15, Oct 15
Forecasted Demand	CDRL 4.6.2.1 Per Section 2.17.1	Semi-Annual	Feb 19 and Aug 4
Rate Area Inventory Pool Status	CDRL 4.6.2.2 and Section 2.16.5	Semi-Annual	Feb 19 and Aug 4
Annual	CDRL 4.6.1 Per Section 2.21.1	Annual	Mar 28
By Request *(Ad Hoc)*	CDRL 4.6.5 Per Section 2.21.3	Within three business days	January (8 reports) February (4 reports) March (5 reports) April (5 reports) May (5 reports) June (7 reports) July (6 reports) August (4 reports) September (4 reports) October (5 reports) November (5 reports) December (4 reports)

2.5.5.2 Other Required Reports

Table 2-17 lists the 46 other reports required by the contract that the PA submitted in 2014.

Table 2-17
Other Required Reports Submitted in 2014

Report Name	Section Reference	Required Interval	Where	Dates Submitted
Staffing Report	SOC	Monthly	To FCC only	Apr 1, May 1, Jun 2, Jul 1, Aug 1, Sep 2, Oct 1, Nov 3, Dec 1
Monthly Pooling Metrics	Section 2.22.4.5	Monthly	To PA Website only	Jan 15, Feb 13, Mar 14, Apr15, May 15, Jun 16, Jul 15, Aug 15, Sep 15, Oct 15, Nov 17, Dec 15
p-ANI Monthly Report	Change Order 19 Section 4	Monthly	To FCC	Jan 15, Feb 13, Mar 14, Apr15, May 15, Jun 16, Jul 15, Aug 15, Sep 15, Oct 15, Nov 17, Dec 15
RNAS Performance	Change Order 19 Section 4	Monthly	To FCC	Jan 15, Feb 13, Mar 14, Apr15, May 15, Jun 16, Jul 15, Aug 15, Sep 15, Oct 15, Nov 17, Dec 15
Inventory	Per Section 3.21	Annual	To FCC	Jul 9

2.6 Special Projects in 2014

2.6.1 VoIP Trial

After the VoIP trial ended in December 17, 2013, we prepared a final summary report for the FCC in 2014. We also notified the FCC about a VoIP trial block on the reclamation list in July 2014.

2.6.2 System Enhancements

During 2014, we devoted a significant amount of our time and effort to enhancing PAS by incorporating a long list of enhancements. As part of our new contract proposal, we studied all

recommendations suggested by service providers, regulators, and PA personnel, seeking clarification from contributors and feasibility from our development staff, and finalized the list of enhancements to be incorporated into the system.

We then engaged the expertise of the individuals in our group to discuss, write, and edit final system requirements for the entire PAS functionality, including all enhancements. These documents described every detail and nuance of the quality system we are known for producing, and ended up with 110 individual documents totaling over 1,300 pages. These documents were delivered to the development team and prioritized to allow for an orderly testing process.

After we completed the requirements documents, our team members tested each and every requirement implemented in the new system prior to moving it to production with the goal of introducing the completely new upgraded system, including the enhancements, by January 2015. We incorporated new processes to test each individual functionality as it was completed by our corporate development and Quality Engineering teams, providing immediate feedback on the success or failure of each integral part. This process was performed over most of the year until all system functions were completed; a final end-to-end testing procedure was completed prior to the rollout date. This was all done while maintaining our everyday work commitments.

2.6.3 Seeking Donations Project

In a proactive effort to prevent the unnecessary opening of NXX codes, we developed a process beginning in late May 2010 that could conserve numbers in rate centers when an incoming service provider (SP) requests that the rate center designation be changed from “Excluded” to “Optional”. In this circumstance, we seek voluntary block donations from existing SP(s) in that rate center so that the incoming SP can request blocks instead of opening a new code.

In 2014, the PA attempted to secure donations for 86 rate centers being changed from Excluded to Optional. We were able to obtain donations for 66 of those rate centers, thereby potentially saving the opening of 66 NXX codes.

At times a carrier will also contact us to request that we seek donations in a pooling rate center that has no blocks available but is not “excluded” from pooling, to prevent the opening an NXX code. This is especially useful in low population areas where blocks added to the available pool may never be utilized. In 2014, we were asked to request voluntary donations in seven optional pooling rate centers that did not have any available locks. We requested donations and successfully received eight donations for four of the rate centers. This process saved four NXX codes from being opened.

2.6.4 Metropolitan Statistical Areas (MSAs) Designation Project

In July, upon determining that the 2013 Census estimates were available, we reviewed the population estimates for all Metropolitan Statistical Areas (MSAs) and made all of the appropriate updates. While the composition of the top 100 MSAs did not change, there were many rearrangements in placement on the list.

2.6.7 Abandoned Codes/Blocks:

When we are made aware that a company has abandoned pooled codes and blocks, we work with state regulators to obtain permission to reclaim the numbering resources as abandoned. We also work with NANPA for pooled code reclamation and the NPAC to disconnect any LRNs or ported TNs from the NPAC for these companies. The following is a summary of abandoned code/block activity for this period:

- 8 companies abandoned pooled codes and/or blocks.
- 265 emails were sent out looking for new code or block holders.
- 78 pooled codes were transferred to new code holder.
- 1,832 pooled blocks were transferred to new block holders.
- 2 pooled codes were disconnected because no company took over the code.
- 54 blocks were disconnected and put back into the available pool.

2.7 Routing Number Administration (a/k/a P-ANI)

2.7.1 Background

> You guys have been so fast; I'm getting accustomed to your great service!
>
> 2014 customer comment

The PA assumed the responsibility of assigning Emergency Service Query Keys (ESQKs) under certain limited circumstances as the Interim Routing Number Administrator (IRNA) on September 8, 2006. When the FCC awarded the second PA contract in August, 2007, it included the provision that the new national PA would act as the permanent p-ANI Administrator (a/k/a Routing Number Administrator or RNA) at such time as the FCC directs the permanent process.

The PA began the development process for the first national Routing Number Administration System (RNAS), the P-ANI Administration website, and p-ANI administration processes when the FCC approved the permanent process in Change Order 19 on June 17, 2011. RNAS went live on March 19, 2012, and is accessible from the dedicated p-ANI website. The website is not only the gateway to the RNAS but contains public information such as reports and documents. The P-ANI Administrator also trains users to understand what types of documentation are required to assure that applicants are eligible in the areas in which they are requesting p-ANIs, and responds to requests for ad hoc reports and inquiries.

2.7.2 2014 P-ANI Administration Highlights:

neustar

2.7.2.1 Productivity for 2014:

In 2014, the P-ANI Administrator not only processed applications but also carriers' annual reports and forecasts. The forecasts are used to develop the *P-ANI Activity and Projected Exhaust Report* found in Section 2.8.4. We processed annual report files for 61 unique NENA ID/OCN combinations and 6 Forecast files.

Table 2-18 addresses the count of p-ANIs requested, assigned, returned, or modified on a monthly basis. This is not to be confused with the number of applications processed, which can be found in Table 2-19.

Table 2-18
Total Number of p-ANIs by Activity Type

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Requested	4,092	3,274	2,426	4,395	2,724	4,798	5,238	4,541	2,146	3,188	975	1,510	**39,307**
Assigned	4,002	3,234	2,423	4,248	2,694	4,757	5,104	4,527	2,123	3,264	975	1,443	**38,794**
Returned	9,666	1,006	9,105	8,064	3,489	4,852	3,801	4,219	1,919	477	459	5,838	**52,895**
Modified	26	5	43,177	20	41	5	318	61	0	1,938	242	99	**45,932**

Table 2-19
Applications Processed by Request Type

	Approved	Denied	Suspended	Withdrawn	Total
Cancel p-ANI Return Request	7	0	0	0	**7**
P-ANI Modification Request	9,780	0	0	0	**9,780**
New p-ANI Request	3,810	5	0	55	**3,870**
P-ANI Return Request	9,124	0	0	0	**9,124**
Total	**22,721**	**5**	**0**	**55**	**22,781**

The following table is a summary of p-ANI inventory as of December 31, 2014.

Table 2-20
P-ANI Inventory as of December 31, 2014

STATUS	TOTAL p-ANIs	211	511
ASSIGNED	713,689	347,982	365,707
AGING	88,300	10,704	77,596

STATUS	TOTAL p-ANIs	211	511
AVAILABLE	5,255,124	2,670,534	2,584,590
UNAVAILABLE	2,887	780	2,107
TOTALS	6,060,000	3,030,000	3,030,000

2.7.3 Other 2014 P-ANI Administration Activities

In addition to processing requests for p-ANI ranges, the P-ANI Administrator performed many other functions during 2014.

2.7.3.1 Data Reconciliation

In 2014, we continued to reconcile the p-ANI data by working with the affected carriers to resolve data discrepancies found during the initial reporting period where no p-ANI user reported on a p-ANI range that the assignor reported as assigned, and where more than one carrier reported on the same p-ANI range or part of a p-ANI range.

We continued to try to locate p-ANI users who never filed an initial report where the assignor reported a p-ANI range as being assigned to that carrier. There were 4,561 p-ANI ranges initially identified; at the end of 2014, only 58 p-ANI ranges remain to be resolved. The p-ANI ranges were resolved by either showing the p-ANI range as assigned or made available.

There were 287 sets of duplicate or overlapping p-ANI ranges found that affected multiple p-ANI ranges and 14 carriers in all. This was a result of multiple carriers reporting on the same p-ANI range or part of a p-ANI range either for the same selective router and same PSAP, same selective router but different PSAP, different selective router but same PSAP, or different selective router and different PSAP. The p-ANI ranges were eventually resolved when the carrier provided the correct NPA, provided the correct p-ANI range, returned the p-ANI range, or swapped it out for a new p-ANI range. At the end of 2014, only one set of overlapping p-ANI ranges remains to be resolved.

2.7.3.2 Annual Report

P-ANI Assignees are required to report to the P-ANI Administrator on all of their assigned p-ANI ranges via the *P-ANI Annual Report* (Appendix 2) on an annual basis. For 2014, there were 61 unique NENA ID and OCN combinations that filed an Annual Report. During this process, we were able to identify p-ANI ranges that were never reported during the initial reports filing and show those p-ANI ranges as assigned. We also worked with the carriers to identify p-ANI ranges that were not in use and could be returned back to the available inventory as a result of this filing.

2.7.3.3 Duplicate Assignment Issues

In 2014, we were notified that 82 p-ANI ranges that were being assigned by the P-ANI Administrator were already in use by another carrier, although data reported to us had not indicated that. We worked with the affected carriers to determine if the range was actually in use or not. If the range was not in use, then it was removed from the applicable databases by the old carrier so that the new carrier could proceed with using the range. If the range was in use, then the assignment was replaced with a new range, and the original range was then updated to show as assigned to the other carrier.

2.7.3.4 Customer Support:

For all new p-ANI requests, an applicant must demonstrate that its company is permitted under applicable law to access p-ANI resources in the area for which the p-ANI resources are sought, by submitting its FCC license, state certification, or copies of pages 2 and 36 of its FCC Form 477. If the carrier fails to provide the correct document with its request for p-ANIs, we send a courtesy email requesting the appropriate documentation. We also work with the carriers who are having difficulties locating the correct documentation in order to help alleviate any delays in obtaining these critical resources. In 2014, we sent 311 courtesy emails and provided 128 documents to carriers.

2.7.4 2014 P-ANI Activity and Projected Exhaust Report

The ATIS Industry Numbering Committee developed the *P-ANI Administration Guidelines*, which contain the following language:

> "The RNA shall:
>
> ***a)*** prepare and publish a "p-ANI Activity and Projected Exhaust Report" that includes the following information:
>
> ***1.*** national p-ANI utilization information;
> ***2.*** p-ANI utilization by NPA;
> ***3.*** the number of p-ANIs requested on a monthly basis;
> ***4.*** the number of p-ANIs assigned on a monthly basis;

5. the number of p-ANIs returned on a monthly basis;
6. the number of p-ANIs modified on a monthly basis;
7. the number of p-ANI requests processed and the disposition of each; and
8. forecast reports for projected future p-ANI resource usage."

This report contains the required information for January 1 to December 31, 2014. Table 2-21 addresses national p-ANI utilization, p-ANI utilization by NPA, and forecast reports for projected future p-ANI resource usage.

The RNA posted this report to the website www.nationalpani.com, notified the INC and RNAS users that this information was available, and included it in the subsequent annual report required by the FCC contract.

Table 2-21
Projected Exhaust of 211/511 p-ANIs

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
201	NJ	9,069	180	2074	3
202	DC	538	12	3635	4
203	CT	8,156	195	074	3
205	AL	3,112	290	2,071	1
206	WA	397	60	2340	3
207	ME	6,735	60	2234	1
208	ID	2,739	355	2062	3
209	CA	5,039	410	2049	2
210	TX	6,456	525	2039	4
212	NY	4,218	30	2539	1
213	CA	2,503	310	2069	2
214	TX	4,981	440	2047	1
215	PA	1,253	80	2247	2
216	OH	1,267	240	2091	1
217	IL	4,145	345	2059	4
218	MN	2,644	370	2060	4
219	IN	4,187	180	2101	4
224	IL	7,668	430	2042	3
225	LA	449	110	2191	3
228	MS	1,296	65	2301	4
229	GA	1,649	195	2107	1

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
231	MI	3,499	295	2069	4
239	FL	361	180	2122	1
240	MD	433	48	2421	3
248	MI	5,957	50	2294	4
251	AL	944	170	2125	1
252	NC	2,354	190	2106	4
253	WA	804	220	2100	2
254	TX	5,469	560	2039	4
256	AL	1,905	260	2083	3
260	IN	1,759	90	2216	3
262	WI	32	150	2146	1
269	MI	1,349	48	2402	3
270	KY	2,028	170	2119	3
276	VA	1,169	110	2184	1
281	TX	8,597	548	2034	4
301	MD	1,823	80	2240	1
302	DE	1,690	120	2166	3
303	CO	2,551	270	2078	3
304	WV	6,205	110	2138	2
305	FL	349	180	2122	1
307	WY	1,339	170	2123	4
308	NE	1,587	390	2060	1
309	IL	3,941	240	2080	4
310	CA	2,726	250	2082	1
312	IL	3,070	250	2081	3
313	MI	437	30	2665	1
314	MO	8,161	230	2064	2
315	NY	5,651	300	2061	4
316	KS	4,130	310	2064	1
317	IN	4,106	160	2112	2
318	LA	1,824	110	2178	1
319	IA	1,773	60	2317	4
320	MN	1,464	120	2167	2
321	FL	1,070	180	2118	1
323	CA	3,349	220	2089	3
325	TX	5,864	500	2041	2

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
330	OH	4,627	130	2131	2
334	AL	3,611	200	2095	4
336	NC	1,031	115	2178	4
337	LA	784	100	2205	1
340	VI	360	55	2370	1
352	FL	763	225	2098	2
360	WA	1,894	250	2085	2
361	TX	5,402	450	2045	2
386	FL	1,171	285	2079	1
401	RI	1,251	12	3575	2
402	NE	5,805	579	2038	3
404	GA	1,399	180	2116	2
405	OK	9,759	280	2050	3
406	MT	1,891	180	2114	3
407	FL	917	210	2104	4
408	CA	2,398	250	2083	2
409	TX	2,683	430	2053	2
410	MD	3,114	60	2294	2
412	PA	1,407	80	2245	2
413	MA	3,546	85	2207	3
414	WI	5,931	250	2069	2
415	CA	1,690	110	2179	2
417	MO	2,486	160	2122	2
419	OH	4,707	160	2109	3
423	TN	2,092	105	2184	3
425	WA	723	240	2093	2
430	TX	1,125	350	2067	4
432	TX	2,991	365	2060	3
434	VA	2,249	120	2161	4
435	UT	775	165	2130	3
440	OH	998	95	2213	1
443	MD	10	30	2679	2
469	TX	3,866	250	2078	3
470	GA	68	30	2677	2
475	CT	1,213	20	2952	2
478	GA	1,023	200	2108	4

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
479	AR	2,437	165	2119	2
480	AZ	20	30	2679	1
484	PA	10	80	2263	4
501	AR	4,840	210	2085	1
502	KY	589	140	2152	3
503	OR	1,952	140	2142	4
504	LA	816	80	2253	4
505	NM	1,845	245	2087	1
507	MN	2,540	190	2105	4
508	MA	7,032	145	2102	2
509	WA	1,746	250	2086	1
510	CA	2,098	240	2088	3
512	TX	7,553	475	2039	1
513	OH	4,383	100	2169	1
515	IA	4,253	163	2110	3
516	NY	963	20	2965	4
517	MI	336	50	2406	2
518	NY	4,917	120	2139	3
520	AZ	1,295	230	2094	2
530	CA	7,305	310	2054	4
540	VA	4,731	120	2140	1
541	OR	3,833	180	2103	4
559	CA	3,613	220	2087	2
561	FL	1,103	210	2103	4
562	CA	2,601	210	2096	4
563	IA	1,586	60	2320	4
567	OH	80	25	2810	4
570	PA	5,367	90	2176	3
573	MO	1,419	175	2119	1
574	IN	1,651	90	2217	4
575	NM	947	235	2094	1
580	OK	774	290	2079	2
585	NY	1,369	20	2945	3
601	MS	2,930	70	2257	4
602	AZ	1,407	250	2087	2
603	NH	1,208	50	2389	4

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
605	SD	1,222	230	2095	3
606	KY	1,315	170	2123	4
607	NY	2,065	80	2237	1
608	WI	2,875	280	2074	1
609	NJ	9,814	220	2059	2
610	PA	2,814	100	2185	4
612	MN	2,585	180	2110	4
614	OH	1,792	90	2215	2
615	TN	2,102	125	2156	1
616	MI	4,652	150	2115	2
617	MA	1,080	85	2236	3
618	IL	9,464	355	2043	3
619	CA	2,547	120	2158	2
620	KS	1,958	230	2091	2
623	AZ	40	30	2678	2
626	CA	2,658	140	2137	4
630	IL	3,493	300	2068	1
631	NY	1,296	20	2948	1
636	MO	1,055	165	2128	4
641	IA	2,179	60	2310	1
650	CA	2,995	240	2084	4
651	MN	423	140	2153	4
660	MO	699	170	2127	3
661	CA	1,594	120	2166	2
662	MS	5,043	40	2387	4
678	GA	722	150	2142	3
682	TX	5,824	330	2056	4
701	ND	924	190	2113	2
702	NV	400	80	2258	1
703	VA	1,500	90	2219	3
704	NC	1,274	65	2301	1
706	GA	2,776	174	2112	4
707	CA	5,520	219	2079	1
708	IL	7,260	310	2054	1
712	IA	1,820	60	2316	1
713	TX	2,565	350	2063	4

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
714	CA	3,990	240	2080	3
715	WI	2,861	230	2088	3
716	NY	1,583	70	2276	1
717	PA	1,600	100	2197	1
718	NY	3,974	0	N/A	N/A
719	CO	2,683	335	2065	3
720	CO	419	220	2102	1
724	PA	1,603	100	2197	4
727	FL	498	85	2242	2
731	TN	1,131	120	2170	1
732	NJ	8,566	175	2078	2
734	MI	6,319	120	2127	1
740	OH	4,480	220	2084	3
754	FL	63	50	2412	3
757	VA	3,107	140	2134	3
760	CA	5,147	290	2064	1
763	MN	456	110	2191	3
765	IN	7,039	160	2094	1
769	MS	981	25	2774	4
770	GA	1,461	160	2129	4
772	FL	296	155	2140	1
774	MA	108	10	4002	1
775	NV	1,413	100	2199	4
781	MA	2,475	75	2247	3
785	KS	4,401	275	2070	3
786	FL	152	90	2234	3
787	PR	355	10	3977	3
801	UT	908	180	2119	1
802	VT	1,555	150	2136	4
803	SC	2,250	110	2174	2
804	VA	4,044	130	2136	3
805	CA	3,824	230	2083	2
806	TX	9,396	409	2039	4
808	HI	1,592	160	2128	1
810	MI	295	60	2341	2
812	IN	4,634	110	2153	3

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
813	FL	641	190	2115	4
814	PA	2,727	110	2170	1
815	IL	3,532	260	2076	2
816	MO	3,038	230	2087	3
817	TX	4,808	420	2049	1
818	CA	903	110	2187	3
828	NC	2,468	122	2157	3
830	TX	2,539	370	2060	1
831	CA	2,414	220	2093	4
832	TX	5,871	440	2045	1
843	SC	2,157	95	2201	4
845	NY	2,467	30	2597	2
847	IL	5,311	250	2072	4
850	FL	1,275	210	2102	1
856	NJ	4,971	160	2107	4
858	CA	3,115	254	2079	2
859	KY	1,668	140	2144	4
860	CT	10,672	120	2091	3
863	FL	695	170	2127	3
864	SC	1,811	80	2240	2
865	TN	1,078	60	2328	2
870	AR	3,898	190	2098	3
901	TN	1,648	170	2121	4
903	TX	9,885	415	2037	2
904	FL	614	175	2124	4
906	MI	1,111	70	2283	4
907	AK	1,461	165	2125	2
908	NJ	9,677	175	2072	4
909	CA	3,489	240	2082	4
910	NC	1,714	130	2154	3
912	GA	2,102	169	2119	4
913	KS	1,434	200	2106	4
914	NY	1,631	40	2472	1
915	TX	665	250	2090	2
916	CA	2,998	230	2087	4
918	OK	4,829	305	2063	3

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
919	NC	1,286	100	2200	1
920	WI	2,885	250	2081	2
925	CA	2,343	240	2087	3
928	AZ	1,129	230	2095	1
931	TN	2,420	100	2189	4
936	TX	286	355	2069	3
937	OH	3,146	140	2133	2
940	TX	3,515	440	2050	2
941	FL	626	135	2157	3
947	MI	2,124	70	2268	2
949	CA	1,345	110	2183	3
951	CA	2,899	230	2087	2
952	MN	300	140	2154	3
954	FL	580	210	2105	2
956	TX	4,512	410	2051	4
970	CO	1,409	275	2081	3
972	TX	3,914	400	2053	1
973	NJ	10,929	190	2061	3
978	MA	3,896	90	2192	4
979	TX	2,763	430	2053	1
980	NC	40	40	2512	1
985	LA	630	120	2174	2
989	MI	3,061	95	2191	2

2.7.5 Routing Number Administration System (RNAS)

RNAS is the first national p-ANI database and is vitally important to our customers for obtaining E9-1-1 resources. Because RNAS stores all of the information relating to p-ANI administration and provides many essential reporting features that generally contain real-time data, reliability is essential.

In 2014 there were 3 instances of unscheduled down time totaling 2 hours and 8 minutes, which is less than the RNAS total from 2013. The RNAS availability in 2014 was 99.98%, which exceeded the contract performance metric of 99.9%.

Neustar conducted maintenance on RNAS six times: on February 14, May 16, July 11, November 10, November 21, and December 5 using only 4 hours 5 minutes of approved scheduled downtime.

As with PAS, we completed disaster recovery testing on November 21 with no down time. For more detailed information on the RNA performance, see Section 6.2.

2.8 Continued Focus on Outstanding Customer Focus

The PA is constantly focused on customer satisfaction. We strive to respond affirmatively to our customers' questions and suggestions for improvement, while meeting or exceeding contract requirements. Since 2006, we have provided the Numbering Oversight Working Group (NOWG) with an ongoing list of noteworthy specific ways we have responded to the more significant requests of our customers. This list does not include all the day-to-day questions and requests that the pooling staff members field as part of their daily workload. In 2014, we had 116 of these customer focus items, of which 56 were related to pooling activities and 60 were related to p-ANI activities.

A strong indication of our firm commitment to customer satisfaction is that we did not receive any formal complaints in 2014. Others include:

Processing all but one of the Applications (Part 3s) on Time

According to Section 7.4.4 of the *Thousands-Block Pooling Administration Guidelines* we are required to process applications within seven calendar days. According to Section 5.0 of Clause C.1 of our requirements, we have met our contractual obligation as long as 99% of the applications are processed within the seven-day timeframe. In 2014 we processed all but one of a record number 139,181 Part 3s, on time and usually well before the deadline.

Issuing Pooling and P-ANI Tips-of-the-Quarter

We continued to send the pooling *Tip of the Quarter* to our PAS email distribution each quarter to help our customers understand pooling administration processes.

The RNA began sending a *P-ANI Tip of the Month (p-ANI Tip)* in April of 2012 to help our customers understand the p-ANI administration processes. After the April 2014 *P-ANI Tip*, we began sending the p-ANI tips on a quarterly basis, beginning on the first business day of the month of July.

PAS and RNAS Exceptional Availability

Another area that shows our strong commitment to customer support relates to PAS and RNAS maintenance and builds. Although our contract permits us to make the systems unavailable to our customers during maintenance, we work diligently to ensure that we complete the updates and builds with little-to-no down time. The contract requirements permit up to nine hours of unscheduled maintenance and up to 24 hours of scheduled maintenance in any 12 month period. In 2014 we once again exceeded those requirements with both systems.

Exceeding Reporting Requirements for Responding to Requests for Ad Hoc Reports

The PA has specific timeframes for reporting, as detailed in Tables 2-16 and 2-17. We responded to all requests for ad hoc reports within 24 hours of each request rather than taking the permitted three business days to respond.

Resolving p-ANI Range Discrepancies

We have continued to work with the stakeholders to resolve hundreds of conflicting data issues including double assignments and retrieval of unused p-ANIs that were activated but never used.

Training Videos

Our training videos were first made available on our website on September 29, 2010, and were so popular that we subsequently assisted NANPA with development of its own training video program. Details on training videos can be found in Table 2-11. In 2014 there were 224

training video views. This no-cost service makes it possible for every customer to access the training videos 24 hours a day, seven days a week.

Section 3 - Identification of Existing and Potential Pooling Areas

In this section, Pooling Administration (PA) discusses the number of existing pooling areas. As of December 31, 2014, there are 16,076 distinct pooling rate centers (i.e., pooling areas), which constitute 85.3% of the 18,528 total distinct rate centers. While we do not include a distinct list of separate "potential" pooling areas, there are currently 2,452 rate centers in which no carrier is pooling, and which could therefore be considered "potential" pooling areas. (See Section 3.2)

The PA designates each rate center 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 (PAS).

3.1 Identification of Existing Pooling Areas

Table 3-1 below identifies the 16,076 distinct pooling rate centers (*i.e.*, pooling areas), and their status designations, by state, as of December 31, 2014. Pooling rate centers are identified as either "mandatory" or "optional." Rate centers with a designation of "excluded" are not considered pooling areas.

Table 3-1
Summary of Existing Pooling Areas by Status Designation

State	Mandatory (M)	Mandatory State (M)	Optional	Mandatory Single SP (M*)	Mandatory State Single SP (M*)	Total
AK		66			194	**260**
AL	67	72	119	2	14	**274**
AR	42		241	5		**288**
AZ	27		44	20		**91**
CA	439	83	178	15		**715**
CO	22	5	134	4		**165**
CT	74	15				**89**
DC	1					**1**
DE	8		22			**30**
FL	132	14	124			**270**
GA	75		220	5		**300**
HI	1		5			**6**
IA	50	68	407	37		**562**
ID	14	73		5	53	**145**
IL	221		604	33		**858**
IN	216	254	12	9	28	**519**
KS	74		346	19		**439**
KY	45	131	136	2	32	**346**
LA	58		207	3		**268**
MA	234	30				**264**
MD	112	53				**165**

State	Mandatory (M)	Mandatory State (M)	Optional	Mandatory Single SP (M*)	Mandatory State Single SP (M*)	Total
ME	50	101	85			**236**
MI	221	104	277	8	9	**619**
MN	57		286	6		**349**
MO	138	400		20	163	**721**
MS	38	88	84	6	15	**231**
MT		143			117	**260**
NC	143	21	233	8		**405**
ND			95			**95**
NE	28	165	170	4	84	**451**
NH	32	92	25			**149**
NJ	188		21			**209**
NM	12		64	3		**79**
NV	21		43	4		**68**
NY	407	249	79		12	**747**
OH	380	159	161	4	4	**708**
OK	96	15	164	44		**319**
OR	36	103	72			**211**
PA	415	340	12		9	**776**
PR	47		36	1		**84**
RI	25					**25**
SC	87		115	25		**227**
SD			100			**100**
TN	117		165	11		**293**
TX	301	7	629	25		**962**
UT	28		38	15	1	**82**
VA	121	182	66			**369**
VT		101	40			**141**
WA	54	149	1	3	16	**223**
WI	125	290	121	13	53	**602**
WV	7	156	59			**222**
WY			58			**58**
Grand Total	**5,086**	**3,729**	**6,098**	**359**	**804**	**16,076**

3.2 Summary by State of "Potential" Pooling Areas

The chart below breaks down by state the 2,452 rate centers that were designated as "excluded" from pooling as of December 31, 2014, and could be considered "potential" pooling areas. These rate centers are not presently open for pooling in PAS, but can be made available at the request of a service provider or a state. This chart does not include any rate centers designated as "mandatory" or "optional." The 20 states with no excluded rate centers are listed in Section 3.3.2.

Table 3-2
Summary of Excluded Rate Centers by State

State	Excluded
AK	0
AL	36
AR	92
AZ	39
CA	24
CO	46
CT	0
DC	0
DE	0
FL	11
GA	60
HI	0
IA	249
ID	0
IL	128
IN	6
KS	135
KY	26
LA	9

State	Excluded
MA	2
MD	0
ME	13
MI	15
MN	289
MO	0
MS	8
MT	0
NC	27
ND	205
NE	0
NH	0
NJ	0
NM	84
NV	28
NY	0
OH	31
OK	210
OR	44

State	Excluded
PA	0
PR	0
RI	0
SC	13
SD	169
TN	48
TX	315
UT	50
VA	0
VT	0
WA	0
WI	0
WV	6
WY	34
Grand Total	**2,452**

3.3 Summarized Information about Existing and "Potential" Pooling Areas

3.3.1 Pooling Rate Center Facts:

Total Number of Distinct Rate Centers	18,528
Total Number of Distinct Rate Centers Available for Pooling	16,076
Percentage of Distinct Rate Centers Available for Pooling	86.77%
Total Number of Mandatory Distinct Rate Centers	8,815
Percentage of Distinct Rate Centers that are Mandatory	47.58%
Total Number of Distinct Mandatory Single-Service Provider Rate Centers	1,163
Percentage of Distinct Rate Centers that are Mandatory Single-Service Provider	6.28%
Total Number of Distinct Optional Rate Centers	6,098
Percentage of Distinct Rate Centers that are Optional	32.91%
Total Number of Distinct Rate Centers Excluded from Pooling	2,452
Percentage of Distinct Rate Centers that are Excluded from Pooling	13.23%
Total Number of Rate Center Designations Changed in 2014 (see Section 2.4.2.1 for detail)	753

3.3.2 Summary of State/Jurisdiction Pooling Status

States or jurisdictions where number pooling has been implemented.	All states, the District of Columbia and Puerto Rico
States or jurisdictions that have only mandatory pooling rate centers.	Alaska, Connecticut, District of Columbia, Idaho, Maryland, Missouri, Montana, and Rhode Island
States that have no mandatory pooling rate centers.	North Dakota, South Dakota, and Wyoming
States or jurisdictions that have no excluded rate centers.	Alaska, Connecticut, Delaware, District of Columbia, Hawaii, Idaho, Maryland, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, Pennsylvania, Puerto Rico, Rhode Island, Vermont, Virginia, Washington, and Wisconsin
States or jurisdictions that implemented additional mandatory pooling prior to December 31, 2014, either under delegated authority for state pooling trials prior to the rollout of national pooling, or as a result of additional delegated authority after the national rollout.	Alabama, Alaska, Arizona, California, Colorado, Connecticut, Florida, Idaho, Illinois, Iowa, Indiana, Kentucky, Massachusetts, Maryland, Maine, Michigan, Missouri, Mississippi, Montana, North Carolina, Nebraska, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Tennessee, Texas, Utah, Virginia, Vermont, Washington, West Virginia, and Wisconsin

3.3.3. Complete Summary of all Rate Centers by Status Designation

The following chart combines the information contained in Sections 3.1 and 3.2. It summarizes the total for each status designation for all 18,538 rate centers in each state by their respective pooling status designations (mandatory, optional, or excluded) as of December 31, 2014.

Table 3-3
Summary of all Rate Centers by Status Designation

State	Mandatory (M)	Mandatory State (M)	Optional	Mandatory Single SP (M*)	Mandatory State Single SP (M*)	Excluded (X)	Total
AK		66			194		**260**
AL	67	72	119	2	14	36	**310**
AR	42		241	5		92	**380**
AZ	27		44	20		39	**130**
CA	439	83	178	15		24	**739**
CO	22	5	134	4		46	**211**
CT	74	15					**89**
DC	1						**1**
DE	8		22				**30**
FL	132	14	124			11	**281**
GA	75		220	5		60	**360**
HI	1		5				**6**
IA	50	68	407	37		249	**811**
ID	14	73		5	53		**145**
IL	221		604	33		128	**986**
IN	216	254	12	9	28	6	**525**
KS	74		346	19		135	**574**
KY	45	131	136	2	32	26	**372**
LA	58		207	3		9	**277**
MA	234	30				2	**266**
MD	112	53					**165**
ME	50	101	85			13	**249**
MI	221	104	277	8	9	15	**634**
MN	57		286	6		289	**638**
MO	138	400		20	163		**721**

State	Mandatory (M)	Mandatory State (M)	Optional	Mandatory Single SP (M*)	Mandatory State Single SP (M*)	Excluded (X)	Total
MS	38	88	84	6	15	8	**239**
MT		143			117		**260**
NC	143	21	233	8		27	**432**
ND			95			205	**300**
NE	28	165	170	4	84		**451**
NH	32	92	25				**149**
NJ	188		21				**209**
NM	12		64	3		84	**163**
NV	21		43	4		28	**96**
NY	407	249	79		12		**747**
OH	380	159	161	4	4	31	**739**
OK	96	15	164	44		210	**529**
OR	36	103	72			44	**255**
PA	415	340	12		9		**776**
PR	47		36	1			**84**
RI	25						**25**
SC	87		115	25		13	**240**
SD			100			169	**269**
TN	117		165	11		48	**341**
TX	301	7	629	25		315	**1,277**
UT	28		38	15	1	50	**132**
VA	121	182	66				**369**
VT		101	40				**141**
WA	54	149	1	3	16		**223**
WI	125	290	121	13	53		**602**
WV	7	156	59			6	**228**
WY			58			34	**92**
Grand Total	**5,086**	**3,729**	**6,098**	**359**	**804**	**2,452**	**18,528**

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

Following is a list of the aggregated total by pool of the service providers participating in the pooled areas in 2014. There are 2,668 distinct service providers participating in 16,076 distinct pooled rate centers in 242 NPA and NPA complexes covering 52 jurisdictions -- 50 states, the District of Columbia, and Puerto Rico.

Table 4-1
Aggregated Total by Pool of the Service Providers Participating in the Pooled Area

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
201/551	51	22
202	40	1
203/475	32	32
205	40	66
206	41	5
207	52	236
208	51	145
209	37	56
210	37	1
212/646/917	56	1
213	46	3
214/469/972	67	43
215/267	50	36
216	34	4
217	36	226
218	38	94
219	34	45
224/847	38	42

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
225	35	34
228	29	11
229	31	70
231	34	86
234/330	42	116
239	28	14
240/301	62	63
248/947	42	20
251	39	42
252	33	89
253	37	10
254	46	105
256/938	41	91
260	30	76
262	33	60
269	41	76
270/364	52	170
272/570	52	180

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
276	38	78
281/346/713/832	60	45
302	35	30
303/720	42	16
304/681	37	222
305/786	49	5
305/786	49	5
307	23	58
308	29	170
309	34	130
310/424	44	16
312/872	41	1
313	38	6
314	30	7
315	44	149
316	24	14
317	38	36
318	33	115
319	32	92
320	43	92
321	31	5
321/407	43	17
323	42	12
325	32	55
331/630	38	25
334	43	75
336	54	82
337	35	70
339/781	31	40
347/718/917/929	49	11
347/718/929	39	2
351/978	37	58

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
352	32	48
360	59	75
361	36	63
385/801	27	20
386	37	28
401	22	25
402/531	56	281
404/470/678	51	1
405	36	82
406	36	260
408/669	46	11
409	41	41
410/443/667	48	102
412/878	38	23
413	28	61
414	29	4
415	48	14
417	43	155
419/567	49	175
423	48	70
425	38	14
430/903	58	150
432	22	36
434	31	66
435	33	62
440	41	62
442/760	55	83
458/541	49	150
470/678/770	55	41
478	40	36
479	25	58
480	33	1

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
484/610	53	90
501	30	57
502	35	35
503/971	51	61
504	29	5
505	34	29
507	41	138
508/774	37	85
509	52	119
510	38	13
512/737	53	35
513	37	25
515	42	72
516	47	11
517	53	76
518	47	135
520	32	27
530	49	116
534/715	72	253
539/918	45	122
540	51	117
559	38	57
561	42	7
562	43	9
563	30	78
571/703	53	19
573	39	216
574	37	53
575	32	50
580	36	115
585	36	77
586	37	11

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
601/769	43	98
602	28	1
603	38	149
605	22	100
606	36	99
607	37	105
608	56	159
609	41	39
612	41	1
614	38	16
615	38	49
616	41	36
617/857	40	20
618	42	202
619	43	11
620	51	197
623	30	1
626	44	10
631	47	53
636	31	46
641	37	153
650	38	15
651	45	11
657/714	44	13
660	33	224
661	48	32
662	49	122
682/817	55	24
701	37	95
702/725	35	16
704/980	43	56
706/762	74	100

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
707	44	75
708	35	32
712	43	167
716	42	79
717	44	107
719	37	55
724/878	48	162
727	39	5
731	33	59
732/848	41	36
734	49	33
740	49	187
747/818	41	16
754/954	43	5
757	25	34
763	49	10
765	48	138
772	36	8
773/872	36	10
775	32	52
779/815	51	190
785	44	194
787/939	13	84
802	25	141
803	57	79
804	31	55
805	52	40
806	32	82
808	18	6
810	38	47
812	56	171
813	45	8

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
814	44	178
816	41	73
828	38	69
830	47	79
831	36	24
843	44	85
845	60	96
850	37	67
856	45	32
858	36	8
859	43	42
860/959	29	57
862/973	52	42
863	43	23
864	42	63
865	32	33
870	34	173
901	32	14
904	35	19
906	18	93
907	21	260
908	44	38
909	48	21
910	40	71
912	44	52
913	39	34
914	51	28
915	30	7
916	45	16
919/984	45	38
920	55	126
925	37	17

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
928	33	61
931	42	68
936	42	46
937	43	123
940	54	70
941	40	11
949	42	7
951	43	20

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
952	45	3
956	38	30
970	41	94
979	47	50
985	35	44
989	44	135

Section 5 - Forecast Results and a Review of Forecasts versus Actual Block Activation in 2014

This section identifies forecast results by NPA, and contains a review of forecasts compared to actual block assignments for the current year and the previous years, as specifically required by the contract.

In 2014, 45.7% of the blocks forecasted were assigned, which is the third highest percentage since we began pooling.

The relevant numbers are:

- 241 NPA and NPA complexes;
- 12,338 distinct rate areas with forecasts;
- 129,820 forecasted blocks; and
- 59,274 blocks assigned.

5.1 Forecasted versus Actual Block Assignments by NPA or NPA complex for 2014

The table below shows 129,820 blocks were forecasted and 59,274 blocks were assigned in 241 NPA and NPA complexes during the 2014 calendar year. This resulted in 45.7% of the forecasted blocks being assigned. The lowest historical percentage was 21.3% in 2004.

Carriers forecasted a need for blocks in 12,338 of the 16,076 pooling rate centers, or in 77% of them. In 3,738 pooling rate centers, no blocks were forecasted during 2014. When compared with 2013, the number of blocks assigned increased by 26% while the number of blocks forecasted increased by 5%. The Arizona 623 NPA had the lowest percentage of blocks assigned compared to total forecast, at 6.3%, while the Michigan 906 NPA had the highest ratio at 91.7%.

Table 5-1
Forecasted versus Actual Block Assignments by NPA or NPA Complex for 2014

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
201/551	NJ	635	307	48.35%
202	DC	384	268	69.79%
203/475	CT	571	381	66.73%
205	AL	491	317	64.56%
206	WA	340	154	45.29%
207	ME	378	220	58.20%
208	ID	478	226	47.28%
209	CA	566	331	58.48%
210	TX	775	387	49.94%
212/646/917	NY	1,152	482	41.84%
213	CA	316	237	75.00%
214/469/972	TX	2,111	840	39.79%
215/267	PA	1,271	427	33.60%
216	OH	379	242	63.85%
217	IL	364	150	41.21%
218	MN	421	187	44.42%
219	IN	402	240	59.70%
224/847	IL	1,160	523	45.09%
225	LA	236	131	55.51%
228	MS	128	39	30.47%
229	GA	202	81	40.10%
231	MI	241	64	26.56%
234/330	OH	859	490	57.04%
239	FL	339	104	30.68%
240/301	MD	933	412	44.16%
248/947	MI	540	240	44.44%
251	AL	247	150	60.73%
252	NC	303	144	47.52%
253	WA	261	113	43.30%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
254	TX	338	179	52.96%
256/938	AL	444	262	59.01%
260	IN	270	132	48.89%
262	WI	633	187	29.54%
269	MI	365	80	21.92%
270/364	KY	491	81	16.50%
272/570	PA	677	216	31.91%
276	VA	259	126	48.65%
281/346/713/832	TX	2,511	1,274	50.74%
302	DE	403	275	68.24%
303/720	CO	1,121	560	49.96%
304/681	WV	687	323	47.02%
305/786	FL	1,095	587	53.61%
307	WY	265	121	45.66%
308	NE	759	467	61.53%
309	IL	391	140	35.81%
310/424	CA	888	444	50.00%
312/872	IL	521	306	58.73%
313	MI	473	218	46.09%
314	MO	600	265	44.17%
315	NY	560	350	62.50%
316	KS	1,363	432	31.69%
317	IN	659	351	53.26%
318	LA	632	266	42.09%
319	IA	172	79	45.93%
320	MN	470	116	24.68%
321	FL	199	115	57.79%
321/407	FL	714	365	51.12%
323	CA	777	376	48.39%
325	TX	161	98	60.87%
331/630	IL	532	281	52.82%
334	AL	331	178	53.78%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
336	NC	411	227	55.23%
337	LA	334	210	62.87%
339/781	MA	615	287	46.67%
347/718/917/929	NY	2,287	736	32.18%
347/718/929	NY	205	74	36.10%
351/978	MA	600	274	45.67%
352	FL	525	178	33.90%
360	WA	569	180	31.63%
361	TX	263	145	55.13%
385/801	UT	822	408	49.64%
386	FL	247	129	52.23%
401	RI	130	100	76.92%
402/531	NE	857	337	39.32%
404/470/678	GA	844	371	43.96%
405	OK	736	229	31.11%
406	MT	381	125	32.81%
408/669	CA	537	342	63.69%
409	TX	192	106	55.21%
410/443/667	MD	1,018	531	52.16%
412/878	PA	616	196	31.82%
413	MA	320	167	52.19%
414	WI	437	180	41.19%
415/628	CA	977	513	52.51%
417	MO	673	377	56.02%
419/567	OH	601	401	66.72%
423	TN	466	216	46.35%
425	WA	313	152	48.56%
430/903	TX	652	232	35.58%
432	TX	204	110	53.92%
434	VA	197	101	51.27%
435	UT	219	94	42.92%
440	OH	388	264	68.04%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
442/760	CA	898	427	47.55%
458/541	OR	754	347	46.02%
470/678/770	GA	1,713	808	47.17%
478	GA	234	100	42.74%
479	AR	338	127	37.57%
480	AZ	1054	327	31.02%
484/610	PA	1,176	463	39.37%
501	AR	396	216	54.55%
502	KY	372	176	47.31%
503/971	OR	780	393	50.38%
504	LA	350	178	50.86%
505	NM	326	161	49.39%
507	MN	688	209	30.38%
508/774	MA	983	544	55.34%
509	WA	649	252	38.83%
510	CA	545	315	57.80%
512/737	TX	1,025	473	46.15%
513	OH	397	292	73.55%
515	IA	316	114	36.08%
516	NY	613	233	38.01%
517	MI	328	93	28.35%
518	NY	491	283	57.64%
520	AZ	598	267	44.65%
530	CA	364	213	58.52%
534/715	WI	509	285	55.99%
539/918	OK	732	207	28.28%
540	VA	503	229	45.53%
559	CA	577	397	68.80%
561	FL	418	249	59.57%
562	CA	387	178	45.99%
563	IA	121	57	47.11%
571/703	VA	785	358	45.61%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
573	MO	626	256	40.89%
574	IN	257	122	47.47%
575	NM	206	90	43.69%
580	OK	218	122	55.96%
585	NY	346	236	68.21%
586	MI	517	387	74.85%
601/769	MS	460	200	43.48%
602	AZ	731	121	16.55%
603	NH	371	165	44.47%
605	SD	381	242	63.52%
606	KY	233	67	28.76%
607	NY	352	207	58.81%
608	WI	513	275	53.61%
609	NJ	625	228	36.48%
612	MN	652	165	25.31%
614	OH	448	346	77.23%
615/629	TN	400	241	60.25%
616	MI	241	112	46.47%
617/857	MA	798	445	55.76%
618	IL	336	187	55.65%
619	CA	466	354	75.97%
620	KS	919	368	40.04%
623	AZ	734	46	6.27%
626	CA	417	255	61.15%
631	NY	996	254	25.50%
636	MO	450	220	48.89%
641	IA	113	46	40.71%
650	CA	485	261	53.81%
651	MN	679	128	18.85%
657/714	CA	585	300	51.28%
660	MO	449	201	44.77%
661	CA	555	265	47.75%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
662	MS	734	205	27.93%
682/817	TX	896	415	46.32%
701	ND	315	175	55.56%
702/725	NV	669	372	55.61%
704/980	NC	625	371	59.36%
706/762	GA	686	263	38.34%
707	CA	982	243	24.75%
708	IL	535	276	51.59%
712	IA	280	85	30.36%
716	NY	751	337	44.87%
717	PA	752	338	44.95%
719	CO	524	266	50.76%
724/878	PA	867	208	23.99%
727	FL	488	261	53.48%
731	TN	141	106	75.18%
732/848	NJ	707	294	41.58%
734	MI	498	260	52.21%
740	OH	533	288	54.03%
747/818	CA	629	373	59.30%
754/954	FL	461	286	62.04%
757	VA	285	193	67.72%
763	MN	987	116	11.75%
765	IN	532	201	37.78%
772	FL	183	75	40.98%
773/872	IL	958	344	35.91%
775	NV	178	120	67.42%
779/815	IL	632	316	50.00%
785	KS	755	327	43.31%
787/939	PR	521	298	57.20%
802	VT	290	65	22.41%
803	SC	460	189	41.09%
804	VA	354	232	65.54%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
805	CA	586	227	38.74%
806	TX	204	102	50.00%
808	HI	343	219	63.85%
810	MI	372	165	44.35%
812/930	IN	475	261	54.95%
813	FL	500	283	56.60%
814	PA	588	131	22.28%
816	MO	982	347	35.34%
828	NC	247	140	56.68%
830	TX	483	177	36.65%
831	CA	146	107	73.29%
843	SC	385	170	44.16%
845	NY	678	283	41.74%
850	FL	393	205	52.16%
856	NJ	577	188	32.58%
858	CA	302	179	59.27%
859	KY	263	156	59.32%
860/959	CT	444	241	54.28%
862/973	NJ	623	286	45.91%
863	FL	283	125	44.17%
864	SC	347	234	67.44%
865	TN	254	148	58.27%
870	AR	359	173	48.19%
901	TN	442	247	55.88%
904	FL	407	250	61.43%
906	MI	24	22	91.67%
907	AK	215	113	52.56%
908	NJ	379	154	40.63%
909	CA	585	274	46.84%
910	NC	465	253	54.41%
912	GA	417	203	48.68%
913	KS	847	310	36.60%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
914	NY	621	177	28.50%
915	TX	300	176	58.67%
916	CA	462	315	68.18%
919/984	NC	551	340	61.71%
920	WI	588	254	43.20%
925	CA	455	200	43.96%
928	AZ	420	154	36.67%
931	TN	155	102	65.81%
936	TX	388	103	26.55%
937	OH	533	405	75.98%
940	TX	226	109	48.23%
941	FL	250	117	46.80%
949	CA	399	266	66.67%
951	CA	586	244	41.64%
952	MN	559	52	9.30%
956	TX	557	400	71.81%
970	CO	1,059	244	23.04%
979	TX	353	93	26.35%
985	LA	237	92	38.82%
989	MI	439	148	33.71%
Totals		**129,820**	**59,274**	**45.66%**

5.2 NPAs/States with Forecasted-Versus-Actual Blocks Assigned Below 25%

Table 5-2 below shows that there were 13 NPA/NPA complex areas where fewer than 25% of the blocks forecasted were assigned in 2014. This is down from the 24 NPA/NPA complex areas where fewer than 25% of the blocks forecasted were assigned in 2013.

Table 5-2
NPAs/States with Forecasted versus Actual Blocks Assigned under 25%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
623	AZ	734	46	6.27%
952	MN	559	52	9.30%
763	MN	987	116	11.75%
270/364	KY	491	81	16.50%
602	AZ	731	121	16.55%
651	MN	679	128	18.85%
269	MI	365	80	21.92%
814	PA	588	131	22.28%
802	VT	290	65	22.41%
970	CO	1,059	244	23.04%
724/878	PA	867	208	23.99%
320	MN	470	116	24.68%
707	CA	982	243	24.75%

5.3 NPA/States with Forecasted Versus Actual Blocks Assigned Above 50%

Table 5-3 below shows that there were 106 NPA/NPA complex areas where the ratio between blocks forecasted and blocks assigned was above 50% in 2014. This is an increase from previous years.

In 2014, 11 of those areas had a percent assigned over 75%. This is a significant increase as there were no areas with a percent assigned over 75% in 2013.

Table 5-3
NPA/States with forecasted versus actual blocks assigned above 50%
(Sorted from highest to lowest)

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
906	MI	24	22	91.67%
614	OH	448	346	77.23%
401	RI	130	100	76.92%
937	OH	533	405	75.98%
619	CA	466	354	75.97%
731	TN	141	106	75.18%
213	CA	316	237	75.00%
586	MI	517	387	74.85%
513	OH	397	292	73.55%
831	CA	146	107	73.29%
956	TX	557	400	71.81%
202	DC	384	268	69.79%
559	CA	577	397	68.80%
302	DE	403	275	68.24%
585	NY	346	236	68.21%
916	CA	462	315	68.18%
440	OH	388	264	68.04%
757	VA	285	193	67.72%
864	SC	347	234	67.44%
775	NV	178	120	67.42%
203/475	CT	571	381	66.73%
419/567	OH	601	401	66.72%
949	CA	399	266	66.67%
931	TN	155	102	65.81%
804	VA	354	232	65.54%
205	AL	491	317	64.56%
216	OH	379	242	63.85%
808	HI	343	219	63.85%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
408/669	CA	537	342	63.69%
605	SD	381	242	63.52%
337	LA	334	210	62.87%
315	NY	560	350	62.50%
754/954	FL	461	286	62.04%
919/984	NC	551	340	61.71%
308	NE	759	467	61.53%
904	FL	407	250	61.43%
626	CA	417	255	61.15%
325	TX	161	98	60.87%
251	AL	247	150	60.73%
615/629	TN	400	241	60.25%
219	IN	402	240	59.70%
561	FL	418	249	59.57%
704/980	NC	625	371	59.36%
859	KY	263	156	59.32%
747/818	CA	629	373	59.30%
858	CA	302	179	59.27%
256/938	AL	444	262	59.01%
607	NY	352	207	58.81%
312/872	IL	521	306	58.73%
915	TX	300	176	58.67%
530	CA	364	213	58.52%
209	CA	566	331	58.48%
865	TN	254	148	58.27%
207	ME	378	220	58.20%
510	CA	545	315	57.80%
321	FL	199	115	57.79%
518	NY	491	283	57.64%
787/939	PR	521	298	57.20%
234/330	OH	859	490	57.04%
828	NC	247	140	56.68%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
813	FL	500	283	56.60%
417	MO	673	377	56.02%
534/715	WI	509	285	55.99%
580	OK	218	122	55.96%
901	TN	442	247	55.88%
617/857	MA	798	445	55.76%
618	IL	336	187	55.65%
702/725	NV	669	372	55.61%
701	ND	315	175	55.56%
225	LA	236	131	55.51%
508/774	MA	983	544	55.34%
336	NC	411	227	55.23%
409	TX	192	106	55.21%
361	TX	263	145	55.13%
812/930	IN	475	261	54.95%
501	AR	396	216	54.55%
910	NC	465	253	54.41%
860/959	CT	444	241	54.28%
740	OH	533	288	54.03%
432	TX	204	110	53.92%
650	CA	485	261	53.81%
334	AL	331	178	53.78%
305/786	FL	1,095	587	53.61%
608	WI	513	275	53.61%
727	FL	488	261	53.48%
317	IN	659	351	53.26%
254	TX	338	179	52.96%
331/630	IL	532	281	52.82%
907	AK	215	113	52.56%
415/628	CA	977	513	52.51%
386	FL	247	129	52.23%
734	MI	498	260	52.21%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
413	MA	320	167	52.19%
850	FL	393	205	52.16%
410/443/667	MD	1,018	531	52.16%
708	IL	535	276	51.59%
657/714	CA	585	300	51.28%
434	VA	197	101	51.27%
321/407	FL	714	365	51.12%
504	LA	350	178	50.86%
719	CO	524	266	50.76%
281/346/713/832	TX	2,511	1274	50.74%
503/971	OR	780	393	50.38%
310/424	CA	888	444	50.00%
779/815	IL	632	316	50.00%
806	TX	204	102	50.00%

5.4 Analysis of Forecasted-versus-Actual-Blocks Assigned Percentage since 2010

For the five years since 2010, the 2014 forecasted-versus-actual-blocks-assigned percentage of 45.7% ranks third highest. The highest percentage was 57.5% in 2011. The volume of total assigned blocks is the highest since we began pooling and forecasted blocks are the highest as compared with the other reported years below.

The following chart illustrates the ratio between forecasts and actual assigned blocks from 2010 through 2014 ranked from highest percentage to lowest.

Table 5-4
Summary of Forecasts and Actual Assigned Blocks from 2010 through 2014

Rank from Highest to Lowest	Year	Total Forecasted Blocks	Total Blocks Assigned	Percentage of Assigned/ Forecasted Blocks
1	2011	90,421	51,978	57.5%
2	2010	95,387	46,360	48.6%

Rank from Highest to Lowest	Year	Total Forecasted Blocks	Total Blocks Assigned	Percentage of Assigned/ Forecasted Blocks
3	2014	129,820	59,274	45.7%
4	2012	113,077	47,014	41.6%
5	2013	124,093	47,193	38%

Section 6 - Pooling Administration (PA) and Routing Number Administration (RNA) Systems Performance

6.1 Pooling Administration System (PAS) Performance in 2014

6.1.1 Summary of PAS Performance in 2014

The Pooling Administration System (PAS) is the nucleus of the thousands-block pooling operation and is vitally important to our customers. Because PAS stores all of the information relating to thousands-block administration and provides many essential reporting features that contain real-time data, reliability is essential.

Section 3.3 of Attachment A, Thousands-Block Pooling Administrator *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.

In 2014, we continued to significantly exceed the PAS performance metric of 99.9% scheduled uptime. PAS was available for use **99.98%** of scheduled uptime. Because PAS is available 24 hours a day, seven days a week, there were a possible 8,760 hours that PAS could be available in 2014. PAS users experienced *unscheduled* down time for 2 hours and 3 minutes in 2014. The PAS has exceeded the performance metric every year of each FCC contract.

PAS became unavailable without warning three times in 2014 for a total of 2 hours and 3 minutes: for 56 minutes on January 29; for 38 minutes on May 19; and for 29 minutes on December 15.

The two instances of scheduled PAS unavailability in 2014 totaled 4 hours and 39 minutes: for 57 minutes on July 11; and for 3 hours and 42 minutes on December 5.

Table 6-1 summarizes PAS system performance in 2014.

Table 6-1

Summary of Actual PAS Performance in 2014

MONTH	NUMBER OF POSSIBLE AVAILABLE HOURS	NUMBER OF HOURS AVAILABLE	TOTAL UNAVAILABILITY	SCHEDULED (S) OR UNSCHEDULED (U)
January	744	743 hours 4 minutes	56 minutes	U
February	672	672		
March	744	744		
April	720	720		
May	744	743 hours 22 minutes	38 minutes	U
June	720	720		
July	744	743 hours 3 minutes	57 minutes	S
August	744	744		
September	720	720		
October	744	744		
November	720	720		
December	744	739 hours 49 minutes	3 hours 42 minutes	S
			29 minutes	U

6.1.2 PAS Performance Metrics

In 2014, as outlined in Table 6-2, PAS consistently exceeded the required performance metrics as set forth in Attachment C of the Contract:

Table 6-2

PAS PERFORMANCE METRICS

REQUIRED SERVICE	PERFORMANCE STANDARD	ACCEPTABLE QUALITY LEVEL	ACCOMPLISHMENT
PAS Availability (See PWS 3.3)	Pooling Administration System is available	99.9%	CONSIDERABLY EXCEEDED THE REQUIREMENT WITH A SCHEDULED AVAILABILITY LEVEL OF 99.98%
Maintenance (See PWS 3.3)	Unscheduled maintenance of the PAS is less than 9 hours in any 12 month period	100%	MET THE REQUIREMENT WITH TWO INSTANCES OF UNSCHEDULED DOWNTIME RESULTING IN THE UNAVAILABILITY OF PAS IN 2014 FOR ONLY 2 HOURS AND 3 MINUTES.
Maintenance (See PWS 3.3)	Scheduled maintenance of the PAS is less than 24 hours in any 12 month period	100%	MET THE REQUIREMENT WITH 4 HOURS AND 39 MINUTES TOTAL APPROVED DOWNTIME RELATED TO SCHEDULED MAINTENANCE DURING 2014

6.1.3 PAS Updates in 2014

We had a total of six maintenance updates in 2014. Although we requested and were approved for 18 hours of scheduled downtime outside of normal business hours for these activities, our customers experienced only 4 hours and 39 minutes of PAS unavailability, during non-working hours.

Table 6-3

PAS Update Descriptions

DATE	ACTIVITY TYPE	TIME APPROVED/USED
February 14	Maintenance	Approved for 1 hour; Used ZERO
May 16	Maintenance	Approved for 3 hours; Used ZERO
July 11	Maintenance	Approved for 4 hours; Used 57 minutes

November 10	Maintenance	Approved for 2 hours; Used ZERO
November 21	Maintenance	Approved for 2 hours; Used ZERO
December 5	Maintenance	Approved for 6 hours; Used three hours and 42 minutes

In our continuing focus on customer service, we provide detailed email notifications about upcoming PAS builds two weeks prior to the builds to give our customers ample time to prepare for PAS updates, and a second email notification the day of the build.

6.2 Routing Number Administration System (RNAS) Performance in 2014

6.2.1 Summary of RNAS Performance in 2014

As with PAS, the Routing Number Administration System (RNAS) is the nucleus of the routing number (E9-1-1) administration (p-ANI) operation because RNAS stores all of the information relating to p-ANI administration and provides essential reporting features that contain real-time data, reliability is essential. RNAS is subject to the same availability requirements as PAS.

In 2014, we continued to significantly exceed the RNAS performance metric of 99.9% scheduled uptime. RNAS was available for use **99.98%** of scheduled uptime. Because RNAS is available 24 hours a day, seven days a week, there were a possible 8,760 hours that RNAS could be available in 2014. It experienced *unscheduled* down time for only 2 hours and 8 minutes. The RNAS has exceeded the performance metric every year since implementation in March 2012.

RNAS became unavailable without warning three times in 2014: for 56 minutes on January 29; for 38 minutes on May 19; and for 34 minutes on December 15.

The two instances of scheduled RNAS unavailability in 2014 totaled 4 hours and 5 minutes: for 23 minutes on July 11; and for 3 hours and 42 minutes on December 5.

Following is a summary of RNAS performance in 2014:

Table 6-4

Summary of RNAS Performance in 2014

MONTH	NUMBER OF POSSIBLE AVAILABLE HOURS	NUMBER OF HOURS AVAILABLE	TOTAL UNAVAILABILITY	SCHEDULED (S) OR UNSCHEDULED (U)
January	744	743 hours 4 minutes	56 minutes	U
February	672	672		
March	744	744		
April	720	720		
May	744	743 hours 22 minutes	38 minutes	U
June	720	720		
July	744	743 hours 37 minutes	23 minutes	S
August	744	744		
September	720	720		
October	744	744		
November	720	720		
December	744	739 hours 44 minutes	3 hours 42 minutes	S
			34 minutes	U

6.2.2 RNAS Performance Metrics

In 2014, as outlined in Table 6-7, RNAS consistently exceeded the required performance metrics as set forth in Section 3.3 of Attachment A of the contract for PA systems:

Table 6-5
RNAS PERFORMANCE METRICS

REQUIRED SERVICE	PERFORMANCE STANDARD	ACCEPTABLE QUALITY LEVEL	ACCOMPLISHMENT

RNAS Availability (See PWS 3.3)	Routing Number Administration System is available	99.9%	CONSIDERABLY EXCEEDED THE REQUIREMENT WITH A SCHEDULED AVAILABILITY LEVEL OF 99.98%
Maintenance (See PWS 3.3)	Unscheduled maintenance of the RNAS is less than 9 hours in any 12 month period	100%	MET THE REQUIREMENT WITH THREE INSTANCES OF UNSCHEDULED DOWNTIME RESULTING IN THE UNAVAILABILITY OF RNAS IN 2014 TOTALING 2 HOURS AND 8 MIN.
Maintenance (See PWS 3.3)	Scheduled maintenance of the RNAS is less than 24 hours in any 12 month period	100%	MET THE REQUIREMENT BY USING ONLY 4 HOURS AND 5 MINUTES OF APPROVED DOWNTIME AS A RESULT OF SCHEDULED MAINTENANCE DURING 2014

6.2.3 RNAS Maintenance in 2014

Of the six maintenance instances for RNAS in 2014, all performed outside of normal working hours, only two required downtime, as referenced above.

Table 6-6
RNAS Maintenance in 2014

DATE	ACTIVITY TYPE	TIME APPROVED/USED
February 14	Maintenance	Approved for 1 hour; Used ZERO
May 16	Maintenance	Approved for 3 hours; Used ZERO
July 11	Maintenance	Approved for 4 hours; Used 23 minutes
November 10	Maintenance	Approved for 2 hours; Used ZERO
November 21	Maintenance	Approved for 2 hours; Used ZERO
December 5	Maintenance	Approved for 6 hours; Used 3 hours and 42 minutes

6.3 PA and RNA Systems Disaster Recovery Testing

The PA successfully completed technical disaster recovery testing for both PAS and RNAS on November 21 with no downtime for either system. Testing included switching PAS and RNAS to the backup site in Charlotte and returning them to the primary location in Sterling as well as other tests designed to ensure Neustar's ability to reestablish the PAS and RNAS functions in the event of a catastrophic failure. The system testing followed office process testing conducted in the Concord office to assess evacuation procedures and the ability of personnel to access the system from off site.

Section 7 - Status of Required Transferable Property

Neustar Pooling Administration Services affirms that all equipment defined in the annual inventory report required per Section 3.21 of the contract is considered transferable property, and is available for transfer upon direction from the FCC. The transferable property inventory report is appropriately labeled with FCC asset tags, updated, reviewed, and certified quarterly by the Manager of Security and Technical Operations (MSTO) with the FCC Property Management Division.

Section 8 - Industry Issue Identification/Feedback

The PA works with the industry through several channels during the year: participation in the North American Numbering Council (NANC) meetings, interaction with the Numbering Oversight Working Group (NOWG), and participation in industry forums. This section contains information on the industry forums the PA participated in, and the issues that the PA submitted, as well as the feedback the PA received from the NOWG for 2014.

8.1 North American Numbering Council (NANC)

Neustar, as national PA, participated in four meetings of the North American Numbering Council (NANC) in 2014 and reported on the status of thousands-block pooling administration and events affecting the performance of the PA.

The PA also participated in two NANC subgroups -- the Future of Numbering (FoN) Working Group and the Internet Protocol Issue Management Group (IP IMG). The following describes this committee:

8.1.1 Future of Numbering (FoN) Working Group

The NANC formed the Future of Numbering (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 attended the FoN working group and subcommittee meetings in 2014.

8.1.2 Internet Protocol Issue Management Group (IP IMG)

The NANC Internet Protocol Issue Management Group (IP-IMG) was formed by the NANC, during the March 27, 2014 NANC meeting. Per the IP-IMG mission statement, the IP-IMG monitors and tracks the IP (Internet Protocol) numbering related issues/contributions that are currently being worked by industry committees identified by the IP-IMG, and tracks the progress of test bed activities, with the goal of examining

and identifying areas related to numbering that may need to be raised to the NANC. The PA attended the IP IMG meetings in 2014.

8.2 Industry Forums

As the national PA, our participation at industry forums includes:

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

The PA participated in the following industry forums in 2014:

- **Industry Numbering Committee (INC)** – the PA attended all six face-to-face meetings and eight virtual meetings. The PA submitted seven new issues and nine new contributions. Six issues (see Table 8-1) and eight contributions (See Table 8-2) submitted in 2014 were pooling-related. One issue (see Table 8-3) and one contribution (See Table 8-4) submitted in 2014 were p-ANI-related.

- **Common Interest Group on Rating and Routing (CIGRR)** – the PA participated in the 4 CIGRR meetings and 14 conference calls. The PA continued to work one previously submitted issue in 2014, which was closed. (see Table 8-5) We continued to review the BCR no NXD and 3E validation reports prior to the reports being sent to the Administrative Operating Company Numbers (AOCNs). When requested we also researched other data comparison requests sent by iconectiv TRA. We continue to address issues and concerns from participants (some resulting in INC issues).

- **Local Number Portability Working Group (LNPA WG)** – The Local Number Portability Administration Working Group (LNPA WG) is the body that makes the decisions and recommendations that form the basis of the regulatory orders issued by the FCC pertaining to LNP. The LNPA WG is also responsible for the business functionality of the national LNP system and how Service Providers inter-operate with it. Therefore, the activity of the LNPA WG has a direct bearing on the processes and systems that each Service Provider uses to participate in LNP. The PA participated in all LNPA WG meetings monthly as a subject matter resource in 2014.

- **Emergency Services Interconnection Forum (ESIF)** – the PA, as the permanent Routing Number Administrator, participated in both in-person and conference call ESIF meetings in 2014. Amy Putnam continued as the co-chair of the ESIF-ECDR (Emergency Call & Data Routing) subcommittee.

Table 8-1
2014 Pooling INC Issues

INC Meeting Number	Issue Number	Supporting Contribution Number	Issue/Contribution Title
INC 134	774	774contr01_v01	Add definition of "Exiting the Market" to the TBPAG
INC 136	777	INC-2014-00043R00	Update COCAG Appendix C Section 5.2 regarding Dedicated Customer Code Returns not placed In Service
INC 137	779	INC-2014-00071R000 & INC-2014-00072R000	Revisit Use of Pre-planning Checklist as Proof of Facility Readiness
INC 137	781	INC-2014-00077R000 & INC-2014-00078R000	Criteria Added for Approval of Intra-Company OCN Change
INC 139	784	INC-2014-00111R000	Updates to PSTN Activation Confirmation in the TBPAG
INC 139	785	INC-2014-00113R000 & INC-2014-00114R000	Removal of references to paper forms in the TBPAG and p-ANI Guidelines

Table 8-2
2014 Pooling INC Contributions

INC Meeting # Presented	Contribution Number	Contribution Title	Issue Number/Title
INC 134	774contr01_ v01	Add definition of "Exiting the Market" to the TBPAG	Issue 774: Add definition of "Exiting the Market" to the TBPAG
INC 136	INC-2014-00043R00	Update COCAG Appendix C Section 5.2 regarding Dedicated Customer Code Returns not placed In Service	Issue 777: Update COCAG Appendix C Section 5.2 regarding Dedicated Customer Code Returns not placed In Service
INC 137	INC-2014-00071R000	Edit Section 4.3.1.2 of the TBPAG	Issue 779: Revisit Use of Pre-planning Checklist as Proof of Facility Readiness
INC 137	INC-2014-00072R000	Edit Section 4.2.2 of the COCAG	Issue 779: Revisit Use of Pre-planning Checklist as Proof of Facility Readiness
INC 137	INC-2014-00077R000	Edit the TBPAG, Section 8.5.1 to include certification of assigned numbers	Issue 781: Criteria Added for Approval of Intra-Company OCN Change
INC 137	INC-2014-00078R000	Edit the COCAG, Section 6.3.1 to include certification of assigned numbers	Issue 781: Criteria Added for Approval of Intra-Company OCN Change
INC 139	INC-2014-00111R000	Updates to PSTN Activation Confirmation in the TBPAG	Issue 784: Updates to PSTN Activation Confirmation in the TBPAG
INC 139	INC-2014-00113R000	Removal of references to paper forms in the TBPAG	Issue 785: Removal of references to paper forms in the TBPAG and p-ANI Guidelines

Table 8-3
2014 p-ANI INC Issues

INC Meeting Number	Issue Number	Supporting Contribution Number	Issue/Contribution Title
INC 139	785	INC-2014-00113R000 & INC-2014-00114R000	Removal of references to paper forms in the TBPAG and p-ANI Guidelines

Table 8-4
2014 p-ANI INC Contributions

INC Meeting # Presented	Contribution Number	Contribution Title	Issue Number/Title
INC 139	INC-2014-00114R000	Removal of references to paper forms in the p-ANI Guidelines	Issue 785: Removal of references to paper forms in the TBPAG and p-ANI Guidelines

Table 8-5
2014 Pooling CIGRR Issues

CIGRR Meeting Presented	Issue Number	Issue Title
Aug. 2014	C203	Consider modification to the 7 day entry restriction and rescheduling of records in BIRRDS for BCD/BCR and NXD-X/MBU records

8.3 Working with the Numbering Oversight Working Group (NOWG)

The Numbering Oversight Working Group (NOWG) is a working group of the NANC. The NOWG's responsibilities with the PA include:

- Reviewing PA Change Orders and providing a recommendation to the FCC for the disposition of the proposed change order;
- Completing the annual performance review of the PA and providing it to the FCC;
- Conducting a monthly meeting with the PA to review the previous month's performance.

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 issues or questions that arise during the year. The entire PA management team meets with the NOWG to participate on the monthly calls and in the annual performance review process, including the operational review.

Each month in 2014, the NOWG and PA met via conference call to discuss the PA's performance for the previous month. The 2014 meeting dates were: January 24, February 26, March 14, April 22, May 27, June 24, July 25, August 19, September 15, October 21, November 21, and December 16.

Prior to each monthly meeting, the PA provides information relevant to the NOWG agenda, and then reviews the information with the NOWG during the meeting. The standing agenda items are:

- Number of rate centers with less than 6 months inventory based on forecast
- Number of rate centers with no blocks available with blocks forecasted within 6 months
- Number of codes opened for pool replenishment
- Number of rate centers with blocks with a pending status.
- Applications – number of applications processed monthly (running 12 month total)
- Number of Part 1s passed through from PAS to NAS (running 12 month total)
- Percent of applications (Part 3s) not processed within 7 calendar days
- Reasons that applications were not processed within 7 calendar days, when applicable
- Percent of calls returned within one business day
- Number of blocks on reclamation list (including the new blocks and the total number of blocks)
- Formal complaints and corrective action plans to resolve complaints, if any
- FCC and/or NANC News
- INC read out
- P-ANI activity

- Change orders
- Other Pooling-related activities
- Regulatory update
- Customer focus
- Tracking log
- Next meeting
- Other items of importance that do not fall into any of the above categories
- Open discussion

In addition to the reporting details of the agenda items above, the PA provided the following reports for the NOWG for the monthly meetings:

- NOWG Blocks Report Information Summary
- NOWG Summary Data
- Trouble Tickets
- PA NANC Report

We also provided the NOWG with Mid-Year Highlights of PA performance for the first six-months of the 2014 calendar year.

In all, the PA provided 39 reports and 116 customer focus items to the NOWG for the monthly meetings in 2014.

Since 2006, as part of our monthly meetings, we have provided the NOWG with an ongoing list of noteworthy specific ways in which we responded to the more significant issues and requests from our customers during the year. This list only includes items that required extra time and effort on the part of the PA and p-ANI Administrator and does not include all the day-to-day questions and requests that the pooling staff members field as part of their daily workload. As shown in Table 8-6, we had 116 of customer focus items in 2014.

Table 8-6
2014 Number of Customer Focus Items by Month

MONTH	NUMBER OF CUSTOMER FOCUS ITEMS	POOLING	P-ANI
January	10	6	4
February	9	2	7

MONTH	NUMBER OF CUSTOMER FOCUS ITEMS	POOLING	P-ANI
March	9	4	5
April	15	9	6
May	10	5	5
June	12	5	7
July	10	4	6
August	9	5	4
September	10	8	2
October	12	5	7
November	4	1	3
December	6	2	4
TOTAL	**116**	**56**	**60**

Also in 2014, the NOWG completed the annual performance review of the PA and P-ANI Administrator for 2013 and rated the performance as "More than Met" expectations by using the following inputs:

- 2013 Performance Feedback Survey from service providers and regulators,
- Written comments and reports,
- Annual Operational Review, and
- NOWG observations and monthly interactions with the PA and P-ANI Administrator.

As a result of the annual operational review of 2013 performance, which was held April 2-3, 2014 in our Concord, CA office, the NOWG made five formal suggestions for continuous improvement of pooling administration that the PA took under consideration. (See Table 8-7) The PA worked, and continues to work, cooperatively with the NOWG to make desired industry improvements while also meeting our contractual requirements.

Table 8-7
NOWG Suggestions for PA improvements

NOWG Suggestion	PA improvement
Ongoing review of internal training processes with the PA and RNA personnel to ensure consistency in understanding the processes when responding to service providers and regulators.	The PAM conducts weekly staff meetings, during which she reviews *Methods and Procedures* (M & Ps) and any changes to guidelines or processes with the PAs. During bi-weekly staff meetings, the staff reviews any new issues or process changes, and their implications for each staff member.
Consider adding an RNAS enhancement to make it easier to query ranges of p-ANIs.	This suggestion has been added to a list of possible enhancements to RNAS (*Changes to the p-ANI Look Up tool - Add the "Assignment Date" and the entire "p-ANI Range" that is associated with the p-ANI that is being queried on to the "p-ANI Look Up" screen.)*.
Modify the p-ANI Annual Report form to make the fields un-modifiable so as to reduce the input formatting re-work performed currently by the RNA.	The changes have been made to the p-ANI Annual Report template and posted to the website.
Provide a proposed list and associated feature explanation of the upcoming 2015 PAS enhancements that resulted from service provider and regulator suggestions.	A list of proposed enhancements was provided to the NOWG prior to the PAS enhancement rollout.
Create a PAS trouble ticket log to accompany the monthly reports provided to the NOWG.	We created a trouble ticket log that is now provided during each NOWG monthly meeting.

The NOWG provides recommendations to the FCC on all PA change order proposals; however the PA did not submit any change order proposals to the FCC in 2014.

The PA reviewed the NOWG survey for the 2014 performance for content and prepared it for website posting and distribution on January 2, 2015.

8.4 Formal Complaints

Pursuant to Section 2.9.4 of Clause C.1 of the *Contract for Pooling Administration Services for the Federal Communications Commission,* 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 2014, Neustar, as national PA, received **no formal complaints**.

8.5 Tips

8.5.1 Pooling Tips of the Quarter

After supplying a *Tip of the Month* (*Tip*) for 10 years, in 2013, the PA changed to a *Tip of the Quarter*. 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 at the beginning of each quarter. 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.

Table 8-8 lists all of the Pooling *Tip* topics that were covered by quarter in 2014.

Table 8-8
2014 Tips of the Quarter

Month	Topic
January	Assignments Needing Part 4 Report - To and From Date Range
April	Becoming the New Code Holder as a Result of a Code Return
July	Administrative and Test Numbers are not Considered Assigned When Completing a Part 4 form
October	NANPA validating the Switching Entity/Point of Interconnection (POI) on all new LRN, Pool Replenishment, Dedicated Code Requests Assignment & Code Transfer Requests

8.5.2 P-ANI Tips of the Quarter (formerly "of the Month")

Building on the success of the Pooling *Tips*, the RNA began sending the *P-ANI Tip of the Month (P-ANI Tip)* in April of 2012. The *p-ANI Tip* provides helpful information regarding RNAS and the p-ANI request process, and serves as a useful reference for all RNAS users. Until April, 2014 the *Tip* was sent via email to the RNAS distribution list on the first business day of each month. It is now sent quarterly. Archive files for all *Tips* can be found on our website.

Table 8-9 lists all of the P-ANI *Tip* topics that were covered by month and quarter in 2014.

Table 8-9
2014 Quarterly p-ANI Tips

Month	Topic
January	Returning or Modifying Part of an Existing p-ANI Range
February	24X7 Emergency Company Contact Number & Selective Router CLLI
March	Replacing Dialable p-ANIs with Non-Dialable p-ANIs
April	Mass p-ANI Returns
July	Part 1/3 Report
October	Routing Number Administration System (RNAS) Passwords

8.6 Pooling and Routing Number Administration (RNA) Customer Support / Help Desk

8.6.1 Pooling Administration Customer Support / Help Desk

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

The CSR:

- 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 2014, the CSR handled approximately 1,118 calls from customers, which is a 43% decrease from 2013 total of 1,958. Table 8-10 shows the numbers of calls to the pooling Help Desk by year since 2010.

Table 8-10
Number of Help Desk Calls for Pooling Issues by Year from 2010 through 2014

YEAR	NUMBER OF HELP DESK CALLS
2010	3,084
2011	2,537
2012	1,895
2013	1,958
2014	1,118

8.6.2 Routing Number Administration (RNA) Customer Support / Help Desk

The P-ANI Administration Help Desk processes new user registrations and user profile updates, and responds to p-ANI-related questions and questions regarding RNAS user accounts and passwords. In 2014, the P-ANI Administration Help Desk processed 52 new user registration requests, of which 46 were approved and 6 were denied; and 36 profile updates, of which 34 were approved and 2 were denied. In addition, the Help Desk handled approximately 167 phone calls, which is a 17% increase from the 2013 total of 143 calls. Table 8-11 shows the numbers of calls to the pooling Help Desk by year since 2012.

Table 8-11
Number of Help Desk Calls for P-ANI Issues by Year from 2012 through 2014

YEAR	NUMBER OF HELP DESK CALLS
2012	374
2013	143
2014	167

8.7 Pooling and p-ANI Administration Trouble Tickets in 2014

8.7.1 Pooling Trouble Tickets Opened and Closed in 2014

In 2014, the PA opened and closed six trouble tickets, as shown in Table 8-13. We report trouble tickets details each month in the "Monthly Pooling Metrics Report."

There are six reasons for opening a trouble ticket, as specified in Section 2.22.4 of the Pooling Work Statement:

- PAS deficiency
- Website deficiency
- Facsimile deficiency
- Voicemail deficiency
- Email deficiency
- Contractor ISP deficiency.

In 2014 we also added a category of OTHER for one month because the reason did not fall into any of the other categories.

Of the six trouble tickets opened by the PA in 2014, five were due to a PAS System issue and one was due to "Other". We responded to each issue as quickly as possible to ensure timely access to PAS for customer requests. At no time was any user's information compromised. All six trouble tickets were also closed in 2014. The overall average time that a trouble ticket was open until resolution was 3 hour 30 minutes. Information in Table 8-12 below shows when each ticket was opened, how long it was open for, and when it was closed.

Table 8-12
Pooling Trouble Tickets Opened and Closed in 2014

Ticket Number	Date Opened	Date Closed	Days/Hours/Minutes Opened
1492	1/30/14	1/30/14	7 hours, 34 minutes
1493	1/31/14	1/31/14	6 hours, 42 minutes
1495	5/19/14	5/19/14	29 minutes
1496	5/19/14	5/19/14	3 hours, 2 minutes
1497	10/01/14	10/01/14	2 hours, 47 minutes
1498	12/15/14	12/15/14	29 minutes

Table 8-13 and Figure 6 show the total number of trouble tickets opened, by year, since 2010.

Table 8-13
Number of Pooling Trouble Tickets from 2010 through 2014

YEAR	NUMBER OF TROUBLE TICKETS
2010	15
2011	4
2012	3
2013	2
2014	6

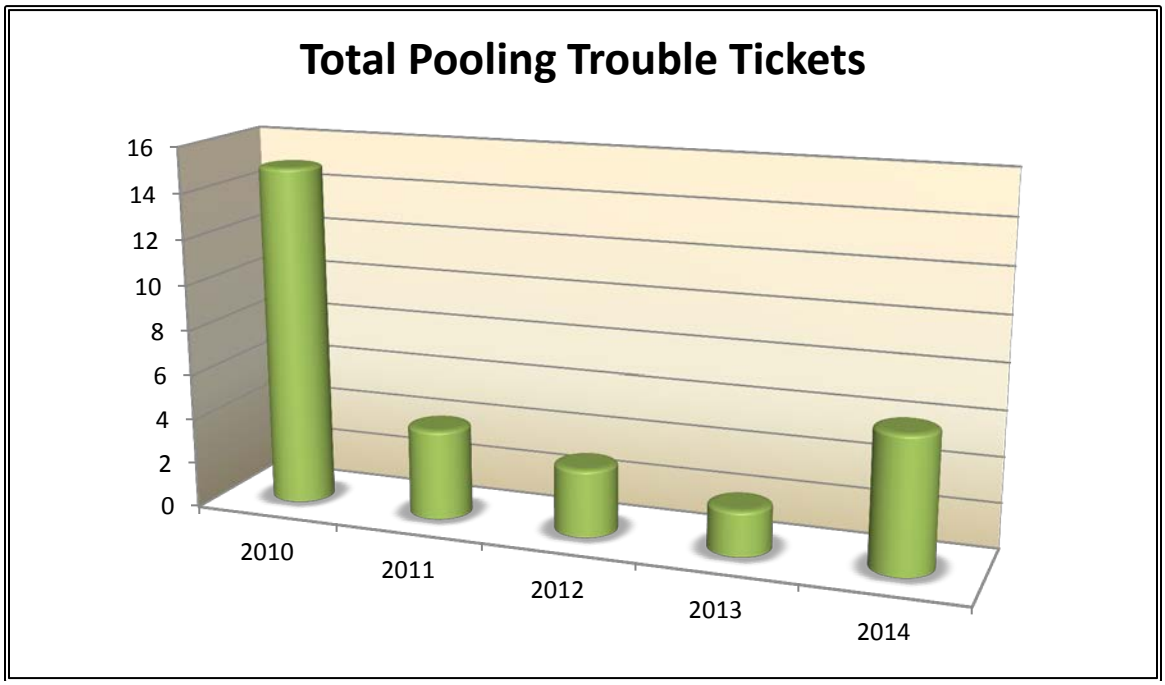


Figure 6: Total Trouble Tickets 2010 through 2014

8.7.2 p-ANI Administration Trouble Tickets in 2014

In 2014, the P-ANI Administrator opened two trouble tickets that were related to an RNAS issue:

- Trouble ticket 1494. A service provider was unable to submit a new p-ANI request for a specific NPA. After troubleshooting this issue, we were not able to determine the cause nor were we able to duplicate the issue, so we worked with the service provider in getting its request submitted.
- Trouble ticket 1508. RNAS was down for 34 minutes as a result of a database server hardware failure.

Information in Table 8-14 below shows when each ticket was opened, how long it was open for, and when it was closed.

Table 8-14
RNAS Trouble Tickets Opened and Closed in 2014

Ticket Number	Date Opened	Date Closed	Days/Hours/Minutes Opened
1494	2/10/14	2/19/14	8 days, 22 hours, 44 minutes
1508	12/15/14	12/15/14	34 minutes

Table 8-15 shows the total number of trouble tickets opened, by year, since 2012.

Table 8-15
Number of RNAS Trouble Tickets from 2012 through 2014

YEAR	NUMBER OF TROUBLE TICKETS
2012	0
2013	0
2014	2

Section 9 - Volume of Reports Produced in 2014 - Aggregated by Regulatory Agency, NANC, NANPA, and Service Providers

This section identifies the total number of non-standard reports related to pooling and p-ANI that were sent to the FCC and state regulatory agencies in 2014 (See Section 9.1), as well as the total number of non-standard reports related to pooling and p-ANI that were provided to NANC, NANPA, and service providers (See Section 9.2). In addition, Section 9.3 summarizes the number of ad hoc reports we produced in 2014 by the report provider. These totals do not include standard reports that were obtained directly from the Pooling Administration website, the Pooling Administration System (PAS), the Routing Number Administration System (RNAS), or the 12 metrics reports that are posted to the website.

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

Table 9-1
Total 2014 Regulatory *Ad Hoc* Reports

Regulatory agency	Total number of reports
FCC	99
States	334
Total	**433**

The total number of reports above includes:

- FCC: Contract Data Requirements List (CDRL), *ad hoc*, and other reports required by the contract.
- States: pooling status, reclamation, educational sessions, and miscellaneous *ad hoc* reports.

9.2 Total number of non-standard reports produced for NANC, NANPA, and Service Providers.

Table 9-2
Total 2014 Industry *Ad Hoc* Reports

Group	Total Number of Reports
NANC	16
NANPA	17
Service Providers	115
Total	**148**

The total number of reports above includes:

- NANC: Meeting reports for March, May, September, and December.
- NANPA: Reports for NANPA industry meetings or requested by NANPA, and two NRUF-cycle reports.
- Service providers: Rate center change reports, implementation meeting reports, monthly meeting reports to the NOWG, and miscellaneous *ad hoc* reports.

9.3 Volume of Ad Hoc Reports Produced by Group

Pursuant to CDRL 4.6.5 and per Contract Section 2.21.3, the PA reports each month how many ad hoc reports we have produced by category. While these reports break down the total number of ad hoc reports produced, they do not distinguish those done by the PA and those done by the P-ANI Administrator.

We produced 62 ad hoc reports in 2014, which is a slight decrease over the 66 reports we provided in 2013.

Table 9.3 below provides a breakdown of the total number of reports produced by category and then further breaks it down by whether it was generated by the PA or the P-ANI Administrator between January 1, 2014 and December 31, 2014. The total number of *ad hoc* reports by group includes:

- FCC: reports provided to the FCC other than those specified in the contract.
- States: reports provided to state regulators that are not directly obtained from the PAS or RNAS or specified in the contract, such as pooling status, and other miscellaneous reports.

- Service providers: reports requested by service providers that are neither specified in the contract, nor directly obtained from the PAS or RNAS.

- Other: reports not covered above, such as reports specially requested by the NANC or the NOWG other than those provided for regular meetings.

Table 9-3
Total Number of 2014 *Ad Hoc* Reports by Category and Report Provider

Group	Total Number of A*d Hoc* Reports	Pooling	P-ANI
FCC	3	3	
States	6	5	1
Service Providers	50	5	45
Other	3	1	2
Total	**62**	**14**	**48**

Section 10 - Trends in Pooling Since 2010[3]

When Neustar began administering number pooling trials in 1998, nearly every NPA was experiencing acceleration of expected exhaust dates. Many required extraordinary jeopardy procedures[4] to maintain enough resources until relief was implemented.

There are currently only 3 NPAs in a jeopardy status, compared to 73 in 1999, and 17 in 2010, Only one, Illinois 217, has been declared in jeopardy since the rollout of pooling began in 2002.

This section contains pooling statistics that illustrate the impacts and activity trends in the pooling environment between 2010 and 2014, with the exception of Section 10.1, which includes NXXs saved since pooling began.

10.1 NXXs Saved by Pooling

The PA calculates that 66,476 NXXs have been saved by pooling, which is the equivalent of almost 85 NPAs. (*See Section 10.1.1 below for further details*)

Table 10-1 illustrates by NPA/NPA complex[5] the 66,476 NXXs that have been saved in all NPA areas, in 50 states and the District of Columbia and Puerto Rico.

[3] Except Section 10.1 and 10.2.3 which is since pooling began.
[4] NANPA declares "jeopardy" in area codes for which the supply of NXXs could exhaust before relief can be provided.
[5] An NPA complex is the combination of all NPAs tied to any specific geographic rate center, including overlay NPAs.

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Table 10-1
NXXs Saved by Pooling

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
201/551	New Jersey	306
202	District of Columbia	20
203/475	Connecticut	274
205	Alabama	240
206	Washington	57
207	Maine	587
208	Idaho	255
209	California	408
210	Texas	20
212/646/917	New York	34
213	California	58
214/469/972	Texas	447
215/267	Pennsylvania	422
216	Ohio	52
217	Illinois	282
218	Minnesota	243
219	Indiana	272
224/847	Illinois	575
225	Louisiana	156
228	Mississippi	75
229	Georgia	108
231	Michigan	469
234/330	Ohio	613
239	Florida	126
240/301	Maryland	517
248/947	Michigan	347
251	Alabama	116
252	North Carolina	321
253	Washington	111
254	Texas	205
256/938	Alabama	301
260	Indiana	290
262	Wisconsin	307
269	Michigan	459
270/364	Kentucky	315
272/570	Pennsylvania	541
276	Virginia	245
281/346/713/832	Texas	431
302	Delaware	317
303/720	Colorado	112
304/681	West Virginia	645
305/786	Florida	103
307	Wyoming	117
308	Nebraska	95
309	Illinois	170
310/424	California	316
312/872	Illinois	20
313	Michigan	101
314	Missouri	74
315	New York	595
316	Kansas	80
317	Indiana	285
318	Louisiana	324
319	Iowa	105
320	Minnesota	230
321	Florida	61
321/407	Florida	180
323	California	188

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
325	Texas	72
331/630	Illinois	337
334	Alabama	274
336	North Carolina	277
337	Louisiana	238
339/781	Massachusetts	474
347/718/917/929	New York	227
347/718/929	New York	39
351/978	Massachusetts	601
352	Florida	324
360	Washington	357
361	Texas	246
385/801	Utah	147
386	Florida	164
401	Rhode Island	149
402/531	Nebraska	363
404/470/678	Georgia	28
405	Oklahoma	281
406	Montana	274
408/669	California	158
409	Texas	164
410/443/667	Maryland	803
412/878	Pennsylvania	251
413	Massachusetts	321
414	Wisconsin	42
415/628	California	199
417	Missouri	400
419/567	Ohio	746
423	Tennessee	289
425	Washington	138
430/903	Texas	458
432	Texas	75

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
434	Virginia	212
435	Utah	121
440	Ohio	355
442/760	California	662
458/541	Oregon	625
470/678/770	Georgia	405
478	Georgia	115
479	Arkansas	102
480	Arizona	16
484/610	Pennsylvania	818
501	Arkansas	177
502	Kentucky	190
503/971	Oregon	274
504	Louisiana	35
505	New Mexico	110
507	Minnesota	261
508/774	Massachusetts	921
509	Washington	377
510	California	202
512/737	Texas	286
513	Ohio	149
515	Iowa	131
516	New York	178
517	Michigan	356
518	New York	530
520	Arizona	85
530	California	548
534/715	Wisconsin	342
539/918	Oklahoma	267
540	Virginia	424
559	California	366
561	Florida	131

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
562	California	124
563	Iowa	75
571/703	Virginia	218
573	Missouri	695
574	Indiana	183
575	New Mexico	142
580	Oklahoma	240
585	New York	361
586	Michigan	174
601/769	Mississippi	374
602	Arizona	12
603	New Hampshire	614
605	South Dakota	86
606	Kentucky	185
607	New York	307
608	Wisconsin	259
609	New Jersey	505
612	Minnesota	22
614	Ohio	171
615/629	Tennessee	267
616	Michigan	357
617/857	Massachusetts	270
618	Illinois	413
619	California	140
620	Kansas	356
623	Arizona	14
626	California	144
631	New York	677
636	Missouri	303
641	Iowa	137
650	California	197
651	Minnesota	88

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
657/714	California	214
660	Missouri	291
661	California	257
662	Mississippi	621
682/817	Texas	253
701	North Dakota	99
702/725	Nevada	55
704/980	North Carolina	402
706/762	Georgia	411
707	California	662
708	Illinois	417
712	Iowa	165
716	New York	362
717	Pennsylvania	527
719	Colorado	182
724/878	Pennsylvania	755
727	Florida	83
731	Tennessee	241
732/848	New Jersey	522
734	Michigan	443
740	Ohio	705
747/818	California	258
754/954	Florida	90
757	Virginia	159
763	Minnesota	47
765	Indiana	583
772	Florida	136
773/872	Illinois	149
775	Nevada	152
779/815	Illinois	654
785	Kansas	328
787/939	Puerto Rico	79

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
802	Vermont	343
803	South Carolina	306
804	Virginia	299
805	California	437
806	Texas	100
808	Hawaii	48
810	Michigan	468
812/930	Indiana	417
813	Florida	142
814	Pennsylvania	456
816	Missouri	291
828	North Carolina	309
830	Texas	328
831	California	167
843	South Carolina	238
845	New York	692
850	Florida	230
856	New Jersey	421
858	California	107
859	Kentucky	183
860/959	Connecticut	433
862/973	New Jersey	565
863	Florida	190
864	South Carolina	325
865	Tennessee	191
870	Arkansas	263
901	Tennessee	67
904	Florida	160
906	Michigan	154
907	Alaska	18

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
908	New Jersey	329
909	California	314
910	North Carolina	367
912	Georgia	160
913	Kansas	108
914	New York	373
915	Texas	36
916	California	179
919/984	North Carolina	267
920	Wisconsin	408
925	California	238
928	Arizona	148
931	Tennessee	302
936	Texas	137
937	Ohio	526
940	Texas	140
941	Florida	151
949	California	100
951	California	311
952	Minnesota	23
956	Texas	189
970	Colorado	464
979	Texas	197
985	Louisiana	250
989	Michigan	589
Totals		**60,744**

10.2 Trends in Thousands-Block Number Pooling

The following sub-sections contain summaries of thousands-block number pooling statistics since 2010.

10.2.1 Pooling Charts

The following charts illustrate the trends in the numbering environment between 2010 and 2014. Table 10-4 shows NXXs opened for LRNs, dedicated customers, and pool replenishment, as well as blocks assigned by the PA during that year, total assigned blocks in the PAS at year end and total applications processed at year end (Part 3s). Figures 7 through 12 are graphic representations of each individual category.

Table 10-4
Pooling Activity from 2010 through 2014 At-A-Glance

	2010 Statistics	2011 Statistics	2012 Statistics	2013 Statistics	2014 Statistics
NXXs Opened for LRNs	688	531	442	532	352
NXXs Opened for Dedicated Customers	134	68	75	57	79
NXXs Opened for Pool Replenishment	1,845	2,175	2,071	2,022	2,950
Blocks Assigned by PA During Year	46,472	43,547	47,074	47,326	59,440
Total Assigned Blocks in PAS at Year End	291,010	334,557	368,661	401,186	451,859
Applications Processed	102,368	132,429	130,407	137,375	139,181

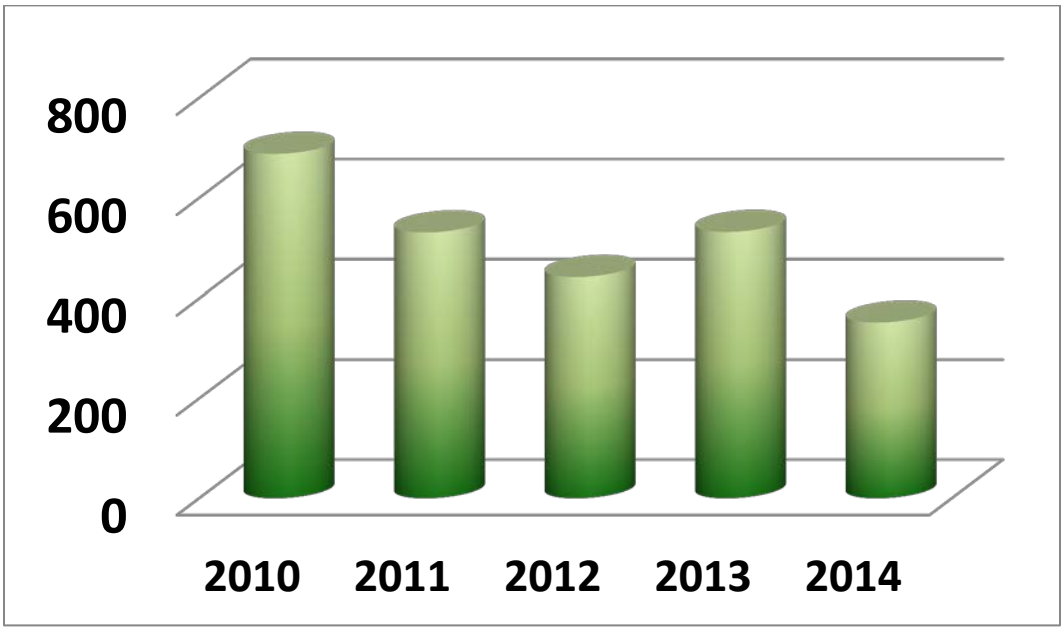

Figure 7: CO Codes Opened for LRNs from 2010 through 2014

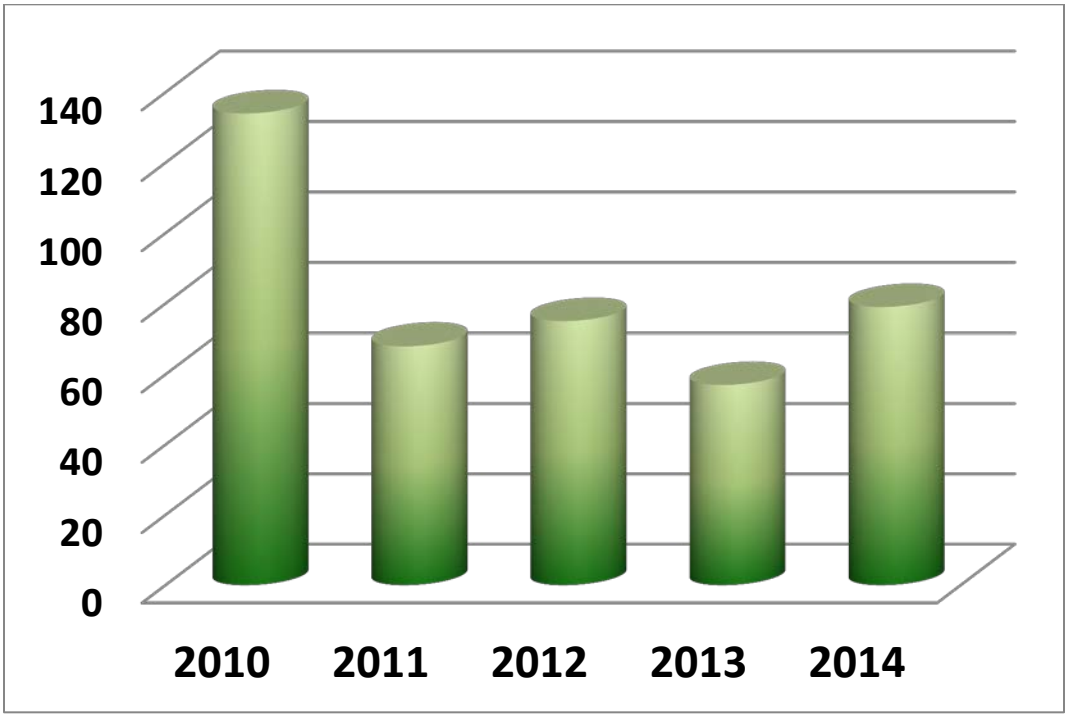

Figure 8: CO Codes Opened for Dedicated Customers from 2010 through 2014

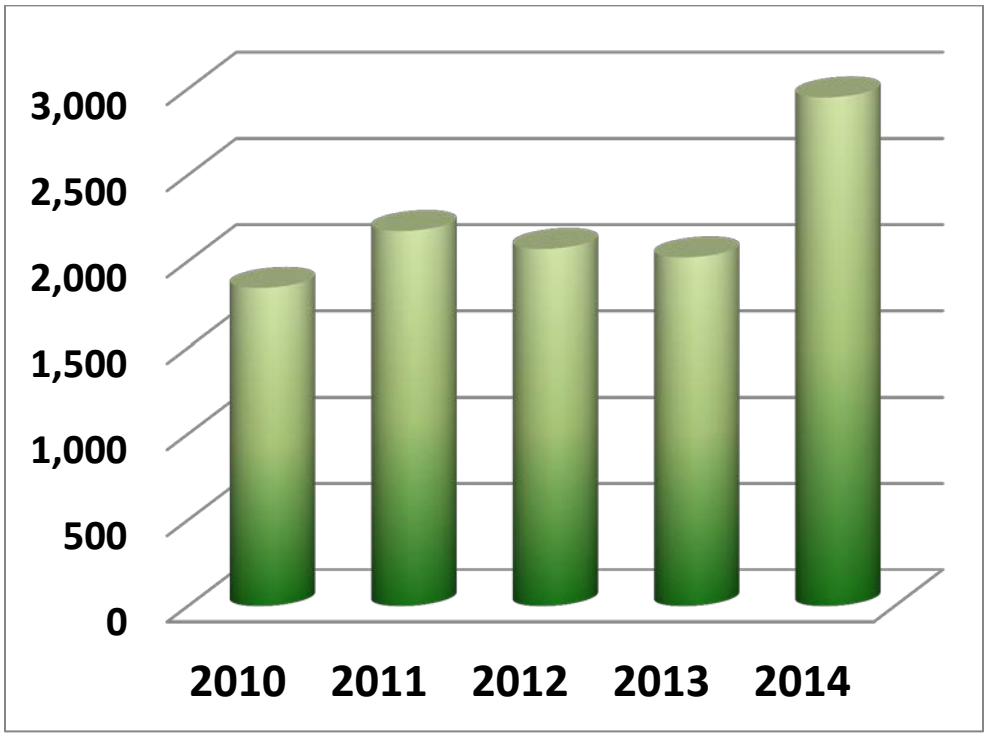

Figure 9: CO Codes Opened for Pool Replenishment from 2010 through 2014

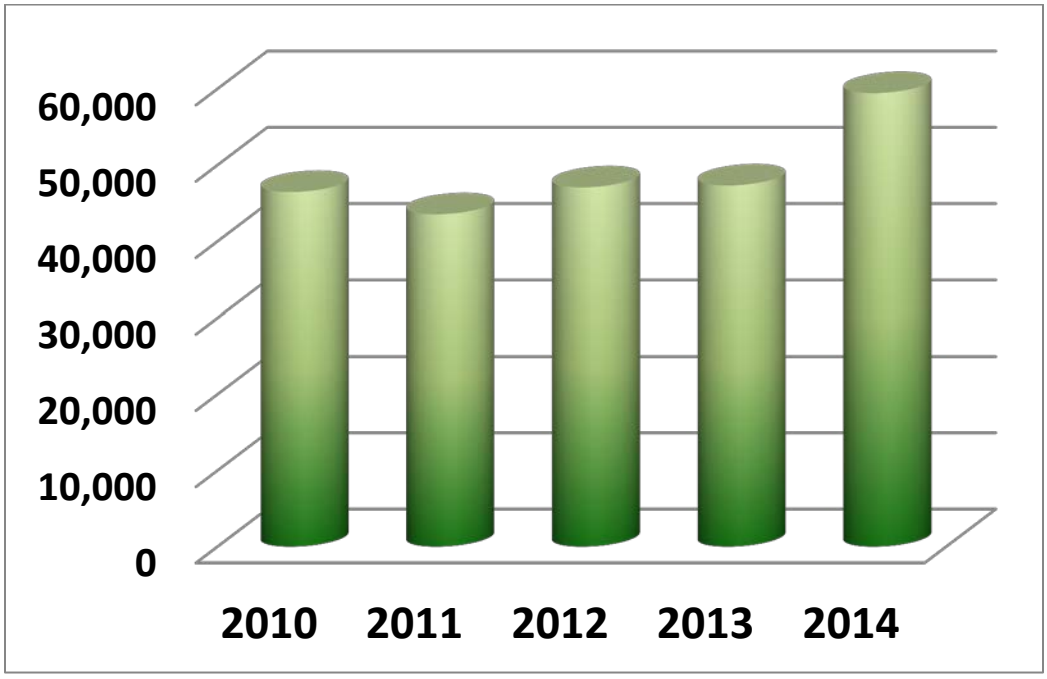

Figure 10: Blocks Assigned During Years 2010 through 2014

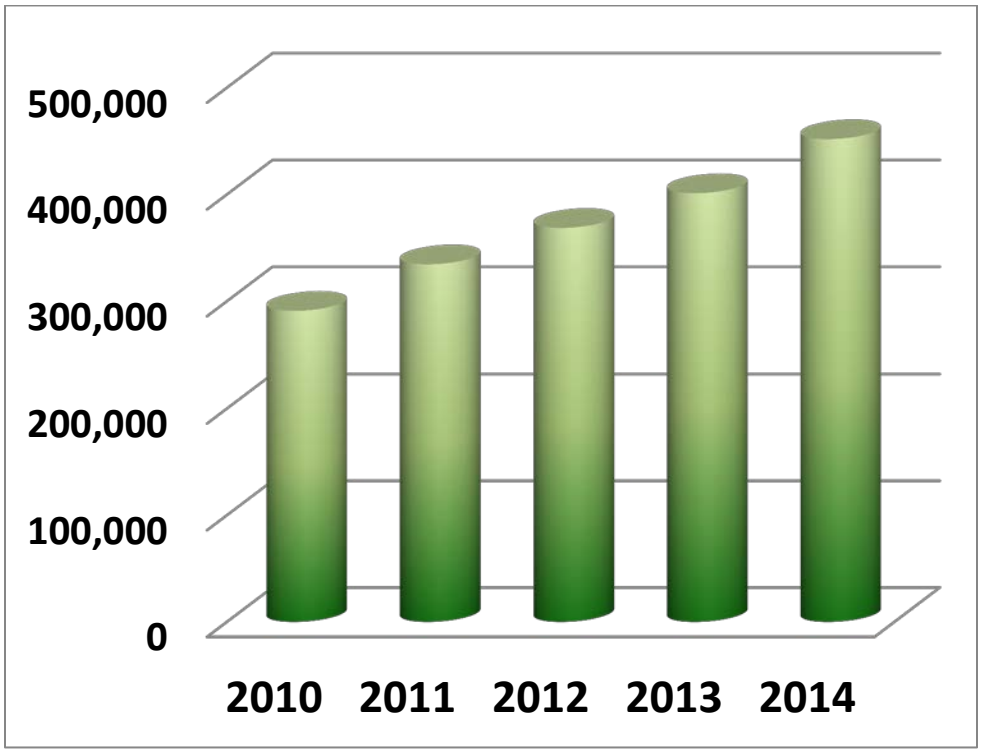

Figure 11: Assigned Blocks at End of Years 2010 through 2014

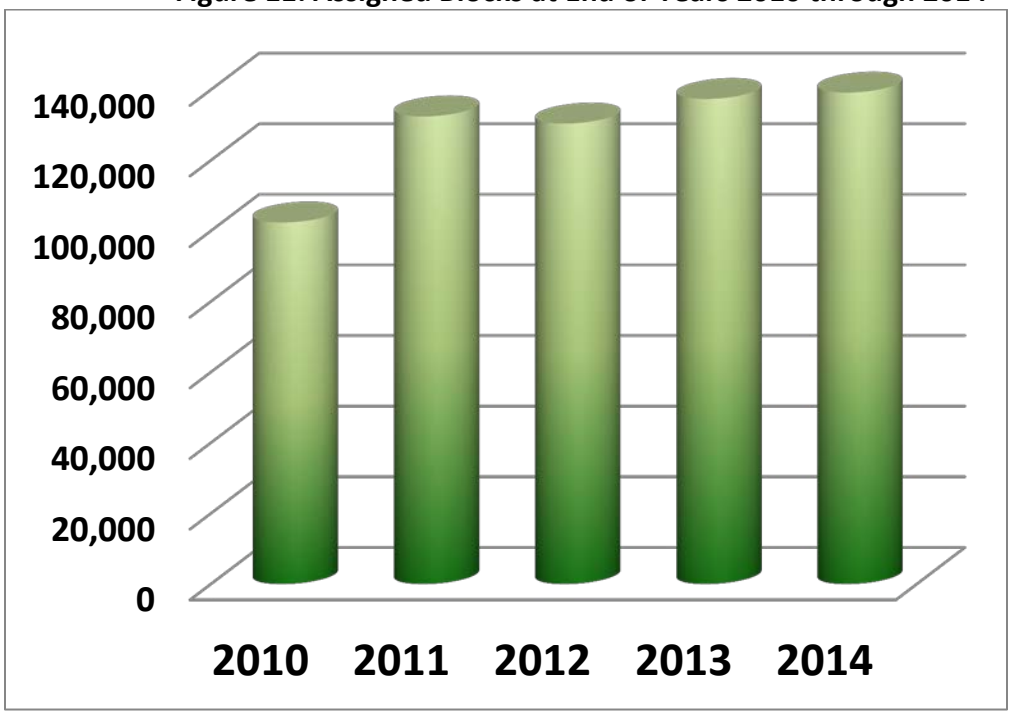

Figure 12: Applications (Part 3s) Processed From Years 2010 through 2014

10.2.2 Total Applications Processed (Part 3s) from 2010 through 2014

The total number of applications (Part 3s) processed is the best measure of the actual processing work performed by the pooling administrators. Although a large majority of applications for numbering resources are processed and approved immediately, some are suspended for future action, and some are withdrawn or denied entirely. Each of these activities generates a Part 3.

Table 10-5 contains the total numbers of Part 3s processed by month from 2010 through 2014.

Table 10-5
Total Applications Processed (Part 3s) Since 2010

	2010	2011	2012	2013	2014
Jan	7,402	7,725	8,220	15,136	8,069
Feb	8,626	11,572	9,357	9,602	8,725
Mar	7,717	13,250	9,958	10,357	9,422
Apr	6,659	10,960	8,266	11,823	17,601
May	9,124	12,422	11,904	12,863	8,977
Jun	13,687	10,061	10,369	25,142	8,145
Jul	7,865	10,512	8,021	8,016	10,493
Aug	8,677	14,633	10,990	9,817	15,232
Sep	7,648	12,600	15,081	8,374	12,113
Oct	8,061	9,057	15,124	10,499	15,849
Nov	8,269	11,296	15,491	7,975	13,954
Dec	8,633	8,341	7,626	7,771	10,601
TOTAL	**102,368**	**132,429**	**130,407**	**137,375**	**139,181**

10.2.3 Cumulative Thousands Blocks Assigned Since 2002

The following graph illustrates the cumulative number of total blocks assigned since 2002.

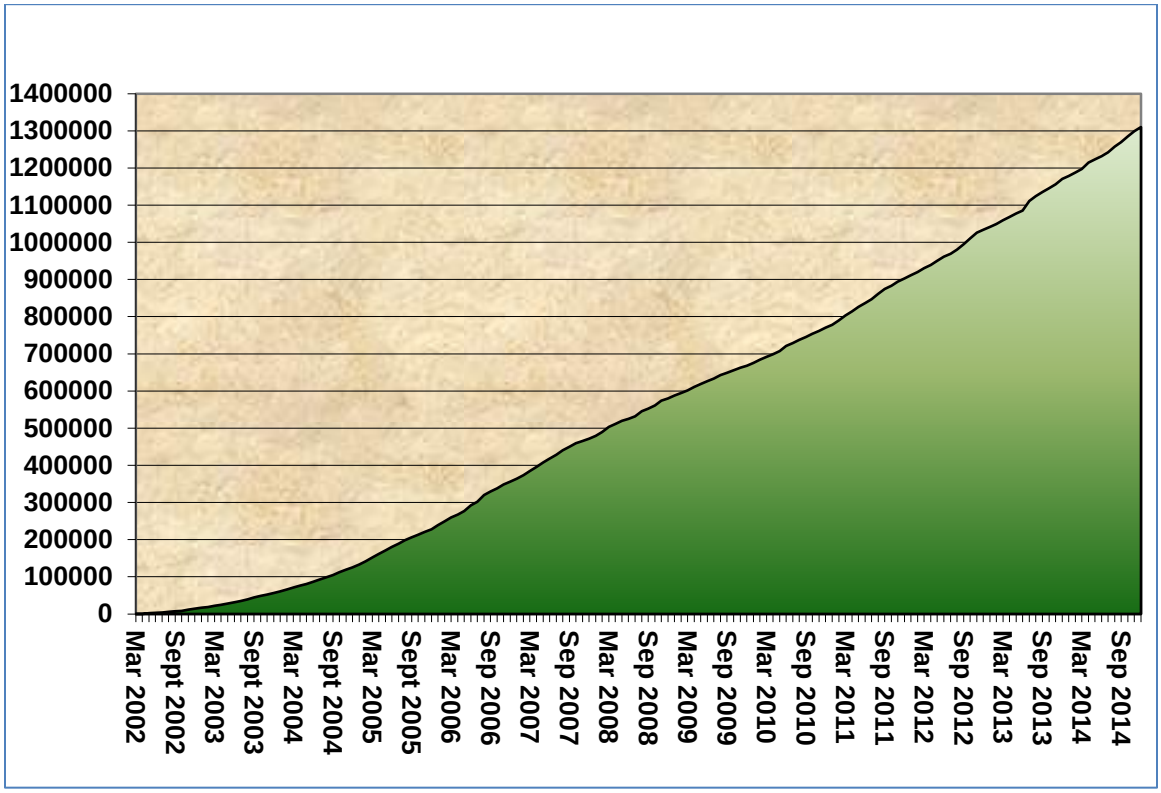

Figure 13: Cumulative Pooling Administration Applications (Part 3s) from March 2002 through December 2014

10.3 Reclamation 2010 through 2014

The PA has been authorized to reclaim 317 blocks since 2010. Table 10-15 shows the total number of blocks reclaimed by state since 2010, ranked from highest to lowest.

Table 10-15
Total Number of Blocks Reclaimed by State from 2010 through 2014

State	2010	2011	2012	2013	2014	Total
CALIFORNIA			124	3	15	142
MICHIGAN	50	0	1		1	52
MARYLAND	17					17
COLORADO				17		17
NEW JERSEY				15		15
INDIANA	5	7				12

State	2010	2011	2012	2013	2014	Total
VIRGINIA	0	0	0	11		11
WASHINGTON	2	2	2	4	1	11
PENNSYLVANIA				9		9
WISCONSIN	1		5			6
ARKANSAS	5					5
TEXAS	2	0	3			5
MASSACHUSETTS				3		3
HAWAII			2			2
ILLINOIS				2		2
OREGON				1	1	2
NEW HAMPSHIRE		1				1
FLORIDA				1		1
DISTRICT OF COLUMBIA				1		1
MISSISSIPPI					1	1
SOUTH CAROLINA					1	1
WEST VIRGINIA					1	1
TOTAL	**82**	**10**	**137**	**67**	**21**	**317**

Table 10-16 shows, by year since 2010, the cumulative number of blocks on the reclamation lists each month, the total number of those blocks that were new each month, and the percent of new blocks to cumulative blocks, as well as how many blocks for which reclamation has been initiated by year. The percent of new blocks to cumulative blocks continued to decline from 31% in 2013 to 29% in 2014. In addition, we initiated reclamation for only 21 blocks, the lowest total in the past five years.

Table 10-16
Summary of Reclamation from 2010 through 2014

Year	Number of Cumulative Blocks on the List	Number of New Blocks on the List[6]	Percent New Blocks to Cumulative Blocks on the List	Number of Blocks for which Reclamation has been Initiated[7]
2010	6,156	2,026	33%	82
2011	10,070	3,655	36%	34
2012	7,631	2,508	33%	214
2013	6,145	1,921	31%	67
2014	5,407	1,577	29%	21

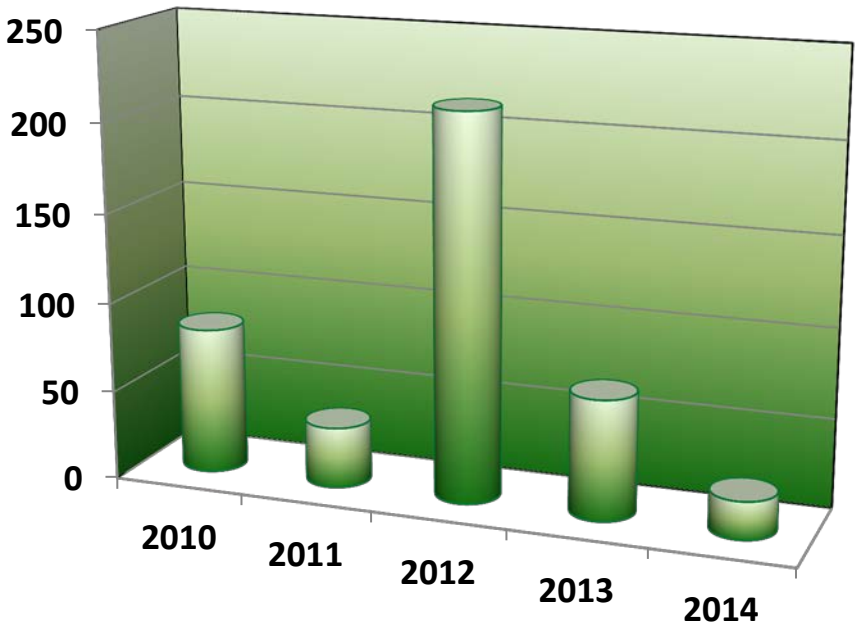

Figure 14: Blocks Reclaimed by Year from 2010 through 2014

[6] We added new overdue Part 4s to the cumulative list in 2009.
[7] While a state may authorize the PA to initiate block reclamation, not all blocks in this category have actually been reclaimed. In some cases the reclamation process is halted if it is determined that the blocks are actually in service. For example, in 2012, the reclamation of 122 blocks was halted by the state commission just prior to the actual reclamation taking place.

10.4 Summary of Pooled Areas since 2010

The following sub-sections contain summary pooled area data since 2010.

10.4.1 Aggregated Pooled Areas – 2010 through 2014

Table 10-17 shows the aggregated total of the number of pooling areas, those designated as mandatory or optional, as well as the number of service providers participating in the pooled areas since 2010. In the past five years of pooling, the total number of rate centers in pooling has increased approximately 6.1%, from 15,148 to 16,076. The number of service providers has increased approximately 8.17% from 2,467 at the end of 2010 to 2,668 at the end of 2014. These new service providers provide a consistent set of new PAS users to be educated and guided through the pooling processes every year.

Table 10-17
Aggregated Total Number of Service Providers and Pooling Areas from 2010 through 2014

Year	Total Number of Distinct Pooling Service Providers	Pooled Areas
2010	2,467	15,148
2011	2,489	15,329
2012	2,505	15,418
2013	2,570	15,819
2014	2,668	16,076

10.4.2 Pooling versus Excluded Rate Centers – 2010 through 2014

The number of pooling rate centers continued to increase in 2014. This is primarily the result of carriers entering excluded rate centers and the final implementation of delegated authority for 260 rate centers in Montana. Of the 753 rate center designation changes we made in 2014, 34.5% were due to implementation of mandatory pooling in Montana.

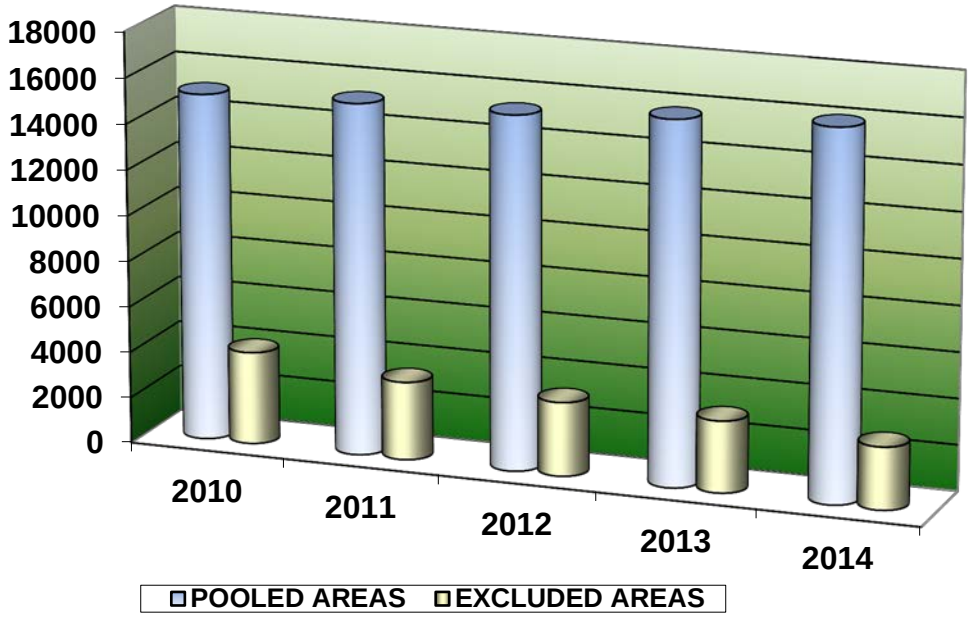

Figure 15: Pooling versus Excluded Rate Centers – 2010 through 2014

10.4.3 Total Number of Distinct Pooling Service Providers – 2010 through 2014

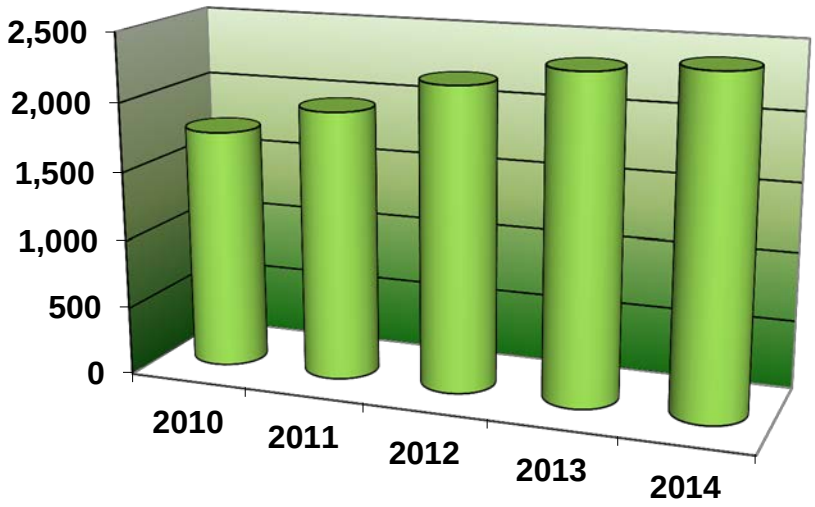

Figure 16: Total Number of Distinct Pooling Service Providers

Table 10-18 depicts the trends in rate center status between 2010 through 2014.

Table 10-18
Pooling Rate Center Facts Comparison by Year - 2010 through 2014

	2010	2011	2012	2013	2014
Total Number of Distinct Rate Centers	18,549	18,546	18,540	18,538	18,528
Total Number of Distinct Rate Centers Available for Pooling	15,148	15,329	15,418	15,819	16,075
Percentage of Distinct Rate Centers that are Available for Pooling	81.70%	82.70%	83.20%	85.30%	86.76%
Total Number of Mandatory Distinct Rate Centers	8,001	8,389	8,439	8,549	8,815
Percentage of Distinct Rate Centers that are Mandatory	43.10%	45.20%	45.50%	46.10%	47.58%
Total Number of Distinct Mandatory Single-Service Provider Rate Centers	1,073	1,261	1,205	1,181	1,163
Percentage of Distinct Rate Centers that are Mandatory Single-Service Provider	5.80%	6.80%	6.50%	6.40%	6.28%
Total Number of Distinct Optional Rate Centers	6,074	5,679	5,774	6,089	6,098
Percentage of Distinct Rate Centers that are Optional	32.70%	30.60%	31.10%	32.80%	32.91%
Total Number of Distinct Rate Centers Excluded from Pooling	3,401	3,217	3,122	2,719	2,452

	2010	2011	2012	2013	2014
Percentage of Distinct Rate Centers that are Excluded from Pooling	18.30%	17.30%	16.80%	14.70%	13.23%
Total Number of Rate Center Designations Changed (see Section 2.4.2 for detail)	960	892	170	703	753