

neustar®



National Pooling and P-ANI
Administration
2015 ANNUAL REPORT



March 31, 2016

Ms. Myrva Freeman
Wireline Competition Bureau
445 12th Street, SW, TW-A626
Washington, DC 20554

RE: 2015 Annual Report for FCC Contract No. FCC13C0007

Dear Ms. Freeman:

Attached please find the *Thousands-Block Pooling Administration 2015 Annual Report*, submitted pursuant to Contract Data Requirements List referenced in Section 4.6.1 of the *Contract for Pooling Administration Services for the Federal Communications Commission*, FCC Contract No. FCC13C0007 (Contract). This report covers Pooling Administration (PA) and P-ANI Administration activities from January 1, 2015 through December 31, 2015, and is required by Attachment A of the Contract. Section 4, *Contract Data Requirements List*, specifically Section 4.6.1, *Annual*, directs that this report contain:

- A brief description of the PA and P-ANI Administrator,
- Highlights/significant milestones reached during previous year,
- Identification of existing and potential pooling areas,
- Aggregated total number by pool of the service providers participating in the pooled areas,
- Forecast results, as well as a review of past forecasts vs. actual block activation,
- System and performance metrics,
- The status of required transferable property,
- Industry issue identification/feedback
- The volume of reports produced aggregated by regulatory agency, NANC, NANPA, and service providers, and
- Additional informational offerings.

Our most significant accomplishment in 2015 was the successful completion of the considerable enhancements for the Pooling Administration System (PAS) ahead of schedule on January 11. We processed 145,828 applications, the third year in a row that we set a record for applications processed. We also exceeded the performance metrics for both the PAS and Routing Number Administration systems (RNAS), maintained strict reporting compliance, completed several special projects not required by our contract, and prepared for interconnected VoIP providers to obtain numbering resources directly from us. We had no formal complaints. Our extraordinary level of contract compliance and unwavering focus on customer support adds up to another exceptional year.

The PA met or exceeded all of its performance goals and objectives in 2015. The goals, most of which are expressed in the contract, include:

- System availability of 99.9% or better;
- 100% of received calls answered within one business day;
- 99% of pooling applications processed within seven calendar days;
- 99% of p-ANI applications processed within five business days;
- Unscheduled maintenance of the PAS and RNAS to be less than 9 hours in any 12 month period;
- Scheduled maintenance of the PAS and RNAS to be less than 24 hours in any 12 month period;
- 100% of the ad hoc report requests to be distributed within three business days;
- All required reports completed per Section 5.0;
- Strong customer focus;
- No formal complaints.

We continued to accurately and efficiently manage thousands-block number pooling services in a neutral manner that not only meets our contractual obligations, but continues to justify the confidence that the FCC and industry have placed in us. Our team is proud of our 2015 accomplishments and will continue to work cooperatively and productively with you, service providers, industry groups, and regulatory staff throughout our contract as we have since 2001.

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

Respectfully submitted,

Amy L. Putnam, Esq.
Sr. Director, Pooling Administration
Neustar, Inc.

Cc: Ann Stevens, Esq., FCC
Marilyn Jones, Esq., FCC
Gary Remondino, COR, FCC
William Reidway, Neustar



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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 six contract modifications between August 15, 2009 and June 13, 2013 to extend Neustar’s pooling administration contract through July 14, 2013.

In June 2013, Neustar successfully bid for its third and current national pooling contract which was awarded on July 12. This 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. The FCC exercised Option Year One on June 25, 2014 and it expired on



July 14, 2015. In 2015, the FCC exercised Option Year 2 on June 3, 2015 and it will expire on July 14, 2016.

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.

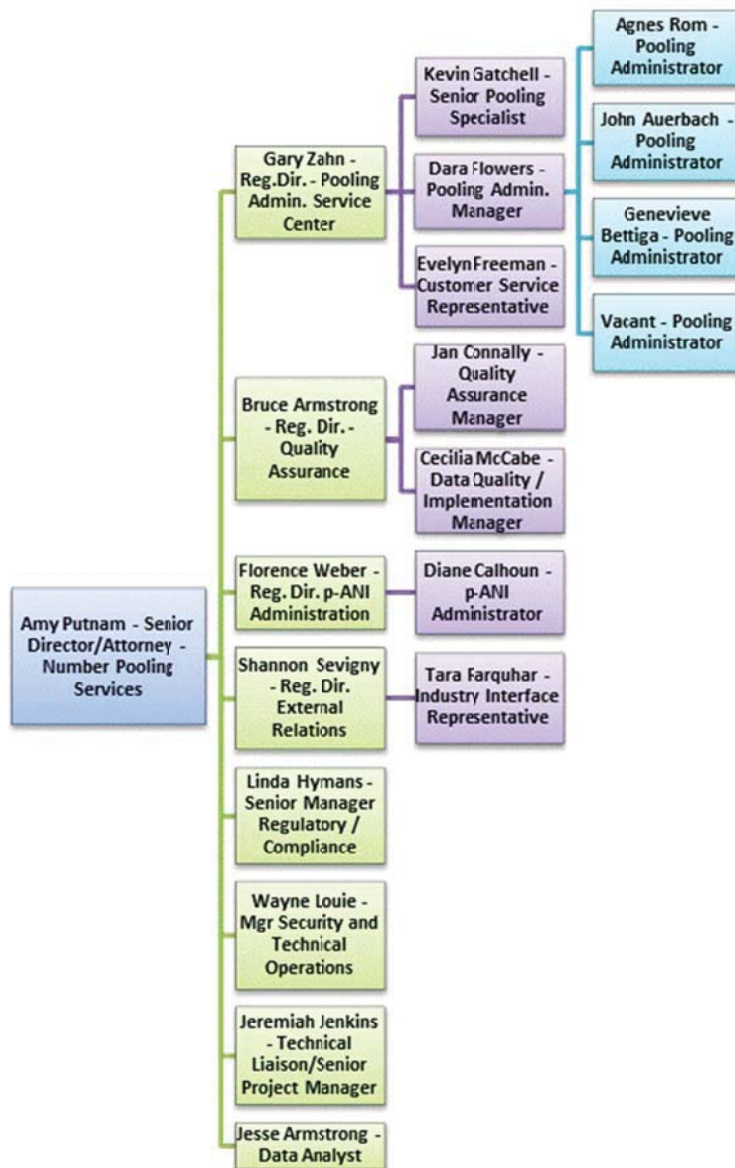
E&Y then examines the documentation to ensure that the PA:

- 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.

Auditors found no issues with PA processing of block or code applications or reclamation activities in 2015.

1.6 Neustar Pooling Administration Organization Chart

Figure 1: Pooling Administration Organization Chart



Section 2

Neustar Pooling and P-ANI Administration Highlights and Significant Milestones

"I just wanted to say "thank you" for always being so easy to work with and so darn helpful whenever I needed it over the years."

2015 Customer Email Comment

The following are the 2015 Neustar Pooling Administration (PA) and P-ANI Administration (P-ANI) highlights and significant milestones:

★ Pooling Contract:

- ★ On June 11, 2015, the FCC exercised its second one-year option period beginning July 15, 2015 and expiring July 14, 2016.

★ Pooling Administration Highlights:

- ★ The PA staff processed:
 - 145,828 Part 3s, which is the highest annual total of applications processed since national pooling began and the third year in a row that we have broken the previous record.
 - This total represents 4.8% more than the 2014 previous record total of 139,181.
 - 117,671 approvals.
 - 22,053 suspensions.
 - 1,501 withdrawals.
 - 4,403 block or code request denials.
 - 160 were Red Light Rule denials.
 - 100% of those applications were processed within 7 calendar days.
 - 53,629 requests for new resources (containing both multiple block and code requests).
 - Assigned 42,723 blocks.
 - Opened 3,716 NXX codes.
 - 50,055 change requests.
 - 30,096 disconnect requests.
 - 13,735 actual block disconnects.



- ★ The PA staff was authorized to reclaim 3 blocks.
- ★ The PA staff answered and responded to 100% of the 2,125 received calls within 1 business day.
- ★ The Help Desk handled 914 calls.

★ **Pooling Administration System (PAS):**

- ★ PAS was available for use 99.98% of the time, which exceeds the contract performance metric of 99.9%.
- ★ PAS was unavailable for only four instances of unscheduled down time for a total of 1 hour 25 minutes.
- ★ We conducted maintenance on PAS nine times and used none of the FCC-approved down time in conjunction with the maintenance activities.
- ★ We submitted two new changes orders and completed implementation of Change Order 24 from the previous contract.
- ★ We opened 32 tickets and closed 30.

★ **Reporting:**

- ★ We produced a total of 637 reports for the FCC, states, the North American Numbering Council (NANC), North American Numbering Plan Administration (NANPA), and service providers, of which 65 were *ad hoc* reports.
- ★ We produced all 65 requested *ad hoc* reports in less than one business day, although we are allowed up to three business days.
- ★ We submitted all 122 required Contract Data Requirements List (CDRL) reports on time and posted them to the website.
- ★ We submitted all 49 additional contract-required reports on time and posted them to the website.

★ **Industry Support:**

- ★ We participated in 98 industry meetings either in-person or by conference call.
- ★ We submitted 4 new issues and 18 new contributions at the Industry Numbering Committee (INC).
- ★ We provided 49 pooling status reports to the NANPA for its meetings.
- ★ We attended 23 NANPA meetings relating to NPA relief and jeopardy, providing an up-to-date pooling status for the affected NPAs.
- ★ We made 298 changes to rate center information, of which 40% changed the pooling status designation from Excluded to Optional.
- ★ The PA staff met monthly with the Numbering Oversight Working Group (NOWG), 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 suggested improvements while also meeting our contractual requirements.

★ **Customer Focus:**

- ★ We continued sending Tips-of-the-Quarter.
- ★ We noted 105 significant PA and P-ANI customer focus items.
- ★ We had no formal complaints.

★ **Training:**

- ★ We facilitated three state regulatory commission educational sessions on pooling issues.
- ★ The pooling training videos were accessed or downloaded 378 times.

★ **Special Projects:**

- ★ We began the review and planning process for implementation of the FCC's Interconnected VoIP Order.
- ★ We completed two MSA-designations review projects, which involved rearrangements of MSAs in the top 100 but no change in the composition of the list.
- ★ We continued the *Seeking Donations Project* that was initiated in May 2010.
- ★ We continued the Abandoned Codes/Blocks project.
- ★ We updated our Methods and Procedures documents.

★ **P-ANI Administration Highlights for 2015:**

★ **The P-ANI Administration staff processed:**

- 32,518 applications processed (Part 3s issued).
- 100% of those applications processed on time.
- 2,482 new p-ANI range assignments made.
- 27,021 modifications made to existing p-ANI ranges.
- 2,901 p-ANI range returns processed.
- 20 requests to cancel p-ANI returns processed.
- 9 requests denied.
- 83 requests withdrawn.
- 2 requests suspended.

★ **Other P-ANI Activities:**

- ★ Worked with carriers to resolve data discrepancies.
- ★ Continued working on reconciling duplicate assignment issues.
- ★ Processed carriers' annual reports and semi-annual forecasts.
- ★ Participated in the Emergency Services Interconnection Forum (ESIF).



- ★ Completed and posted the P-ANI Activity and Projected Exhaust Report.
- ★ Worked with carriers on supporting documentation issues.
- ★ Continued publishing the P-ANI *Tip of the Quarter*.

★ **Routing Number Administration System (RNAS):**

- ★ RNAS was available for use 99.99% of the time, which exceeded the contract performance metric of 99.9%.
- ★ RNAS had only one instance of unscheduled down time for 30 minutes on July 31.
- ★ We conducted maintenance on RNAS seven times and used none of the FCC-approved scheduled downtime.
- ★ RNAS had no trouble tickets opened.

Following is a synopsis of our major accomplishments during the 2015 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, 2015. The FCC exercised its second one-year option, for the period July 15, 2015 to July 14, 2016.

2.1.2. Personnel

In July, 2015, Jesse Armstrong joined the PA staff as a Data Analyst. There were no other changes in PA personnel in 2015.

2.2 Pooling Administration

This section describes PA activity in 2015, 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 2011*.

2.2.1 Pooling Administration Productivity

In 2015, the PA continued its exceptional level of performance. We processed a record number of applications (Part 3s) for the third year in a row, exceeding 2014’s record number of 139,181 by 6,647 Part 3s. Table 2-1 identifies areas of activity:

**Table 2-1
PA Productivity at a Glance**

ACTIVITY	TOTAL
Applications processed (Part 3s):	145,828
Applications not processed in 7 calendar days:	0
Blocks assigned:	42,723
Change requests to existing blocks or codes:	50,055
Disconnects processed (Part 3s):	30,096
Withdrawals:	1,501
Block or code requests denied:	4,603
Central office codes opened:	3,716
Red Light Rule denials:	160
Total blocks reclaimed:	3

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	117,671
Denials	4,603
Suspensions	22,053
Withdrawals	1,501
TOTAL	145,828

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

**Table 2-3
Applications Processed by Type**

	Approved	Denied	Suspended	Withdrawn	Total
Block Modifications	47,235	295	-	445	47,975
Block Disconnects	13,735	543	14,330	85	28,693
Block Cancel Disconnect	5	-	-	2	7
Individual Blocks	41,038	2,665	-	452	44,155
Block Reservations	46	5	-	5	56

	Approved	Denied	Suspended	Withdrawn	Total
Process/Cancel Block Reservations	47	-	-	-	47
Code Modifications	2,813	116	2,905	155	5,989
Code Disconnects	142	313	928	16	1,399
LRN Blocks	551	318	485	48	1,402
Dedicated Customer Blocks	1,050	46	105	16	1,217
Pool Replenishment Blocks	10,798	292	3,300	251	14,641
ISP Disconnects	4	-	-	-	4
ISP Modifications	16	-	-	2	18
ISP Blocks	192	9	-	24	225
Totals	117,672	4,602	22,053	1,501	145,828

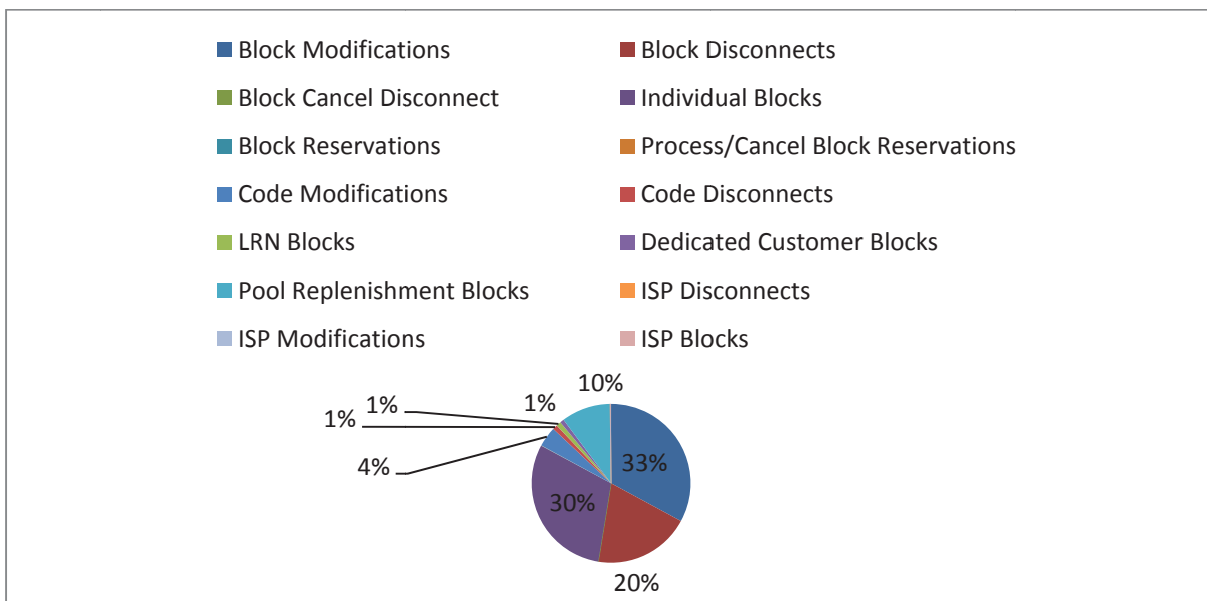


Figure 2: Pooling Applications by Type

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

**Table 2-4
NXXs Opened by Purpose**

PURPOSE	TOTAL	PERCENT OF TOTAL
LRN	425	11%
Dedicated Customer	103	3%
Pool Replenishment	3,188	86%
TOTAL	3,716	100%

The PA also issued 14,154 Part 5s for block disconnects, reclamations, and exchanges during 2015, of which 13,735 were actual block disconnects.

The PA processed 100% of the 145,828 applications (Part 3s) within seven calendar days, which exceeds the performance metric of 99%.

There were 494,582 assigned blocks in PAS at the end of 2015, as compared with 451,859 at the end of 2014, an increase of 42,723 assigned blocks -- a 9.5% increase in the number of assigned blocks in PAS at the end of 2015 as compared to 2014.

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

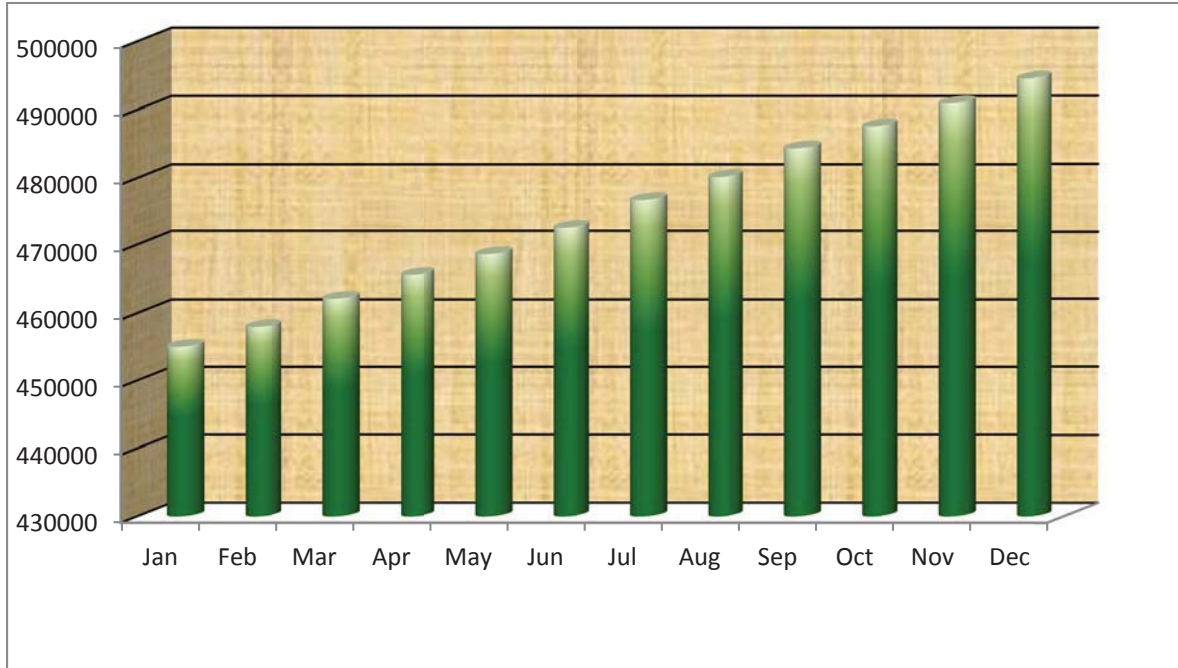


Figure 3: Monthly Cumulative Blocks Assigned in PAS

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

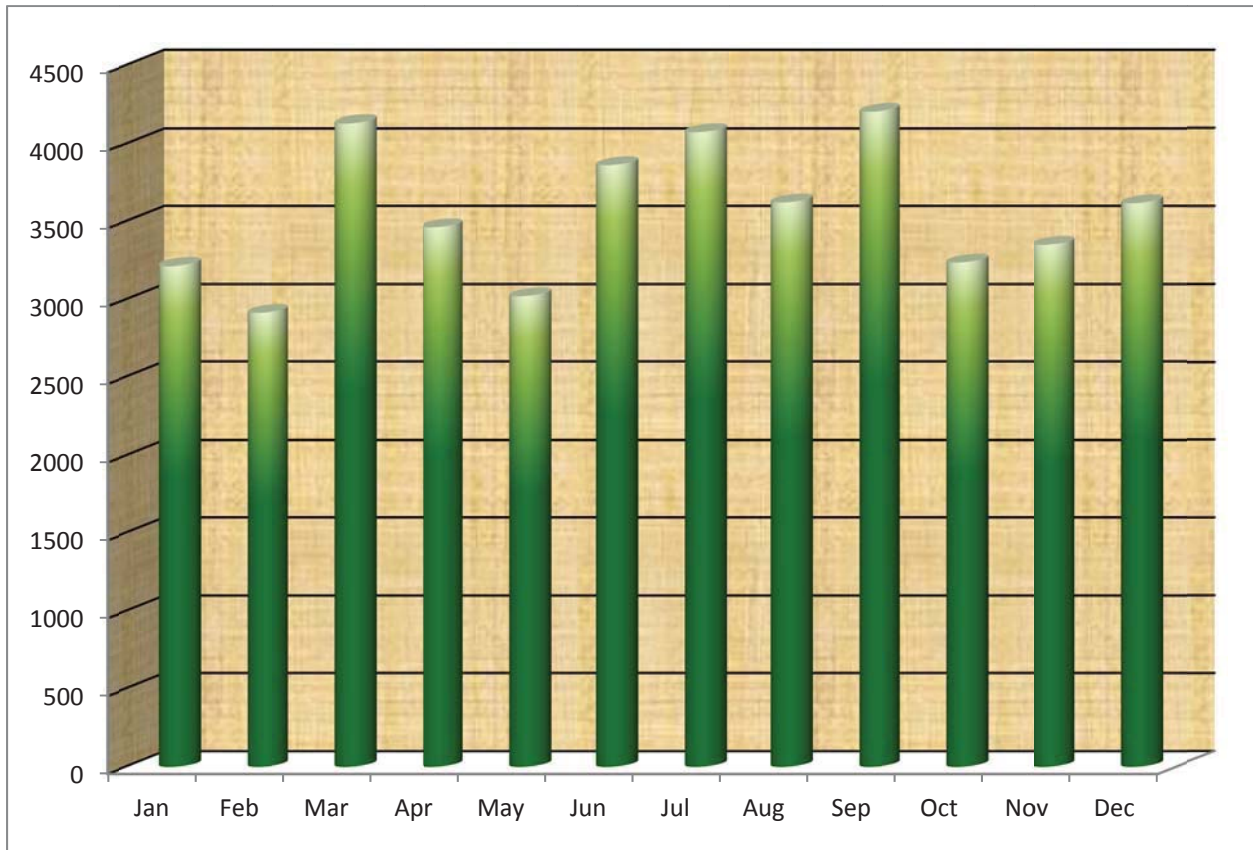


Figure 4: Blocks Assigned by the PA in Each Month

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 2015, including approvals, denials, withdrawals, and suspended applications.

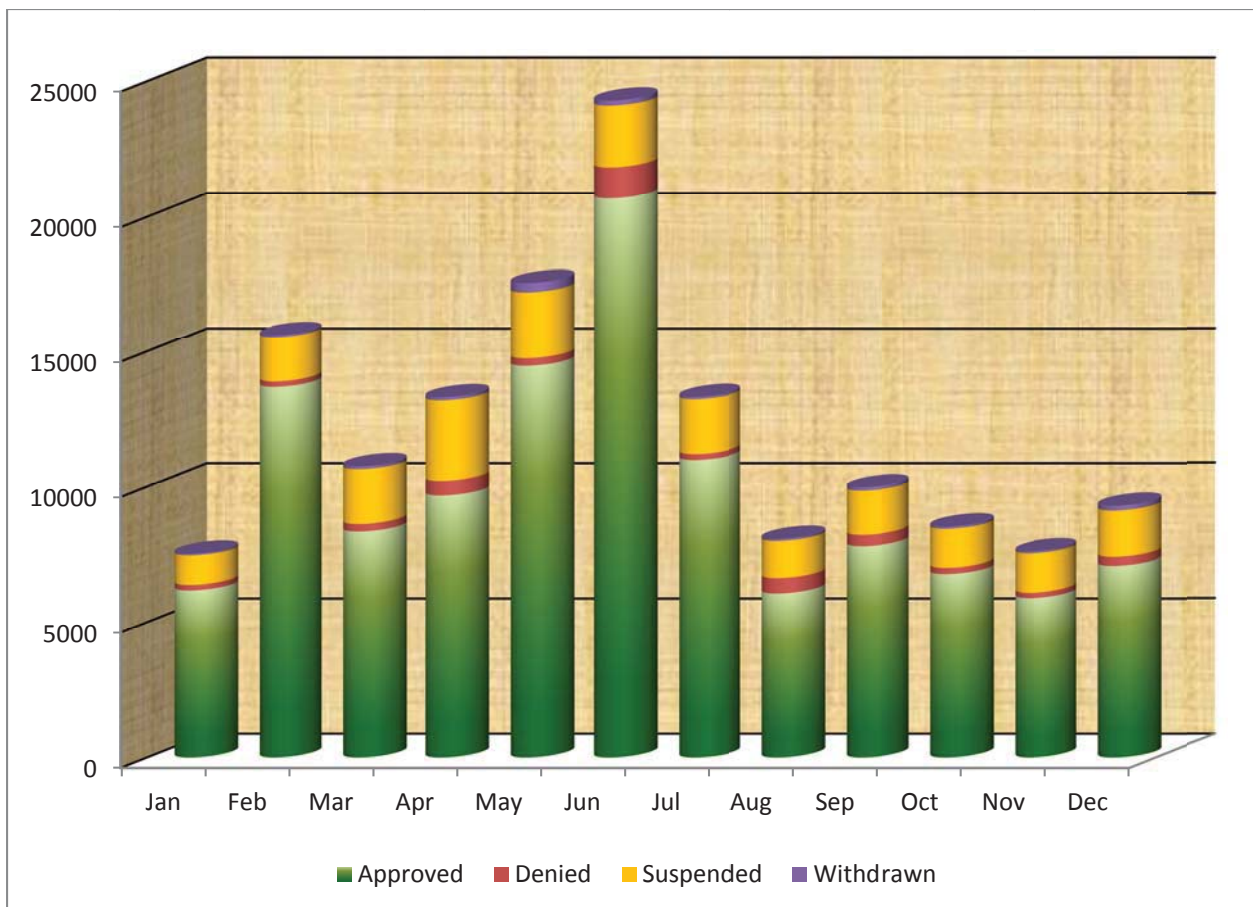


Figure 5: Overview of All 2015 Applications Processed by Status

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:

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

State	Total Part 3s
CA	21,225
TX	13,529
FL	9,686
NY	8,781
MI	7,034
OH	6,130
PA	6,019
IL	5,469
GA	4,637
NJ	4,587

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

NPA	State	Total Part 3s
740	OH	1,539
832	TX	1,513
956	TX	1,501
786	FL	1,295
559	CA	1,292
513	OH	1,188
469	TX	1,103
323	CA	1,097
214	TX	1,078
916	CA	1,077

2.2.2 Pool Replenishment

The PA continued to make pool replenishment options available to service providers when required to keep inventories adequate to meet forecasted demand.

The PA has no authority to actually replenish the inventory pools, because it is not authorized to obtain resources directly. However, 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 1% increase in the number of applications for blocks for pool replenishment in 2015 with 3,710 applications, as compared to 3,434 applications in 2014. The number of codes opened for pool replenishments from those applications increased by 8% in 2015 with 3,188 CO codes opened compared to 2,950 CO codes opened in 2014.

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

**Table 2-7
Pool Replenishment Overview**

Average number of rate centers per month that had less than a six-month inventory	1,414
Percentage of total number of rate centers per month that had less than a six-month inventory	7.6%
Average number of rate centers per month that had no blocks available with forecast	857
Number of CO code requests for pool replenishment	3,710
Number of CO codes opened for pool replenishment	3,188

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

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

State	Codes Opened
CA	635
TX	324
FL	202
NY	181
MI	158
OH	104
IL	104
PA	83
NC	81
AZ	76

**Table 2-9
Ten NPAs with the Most Pool Replenishment**

NPA	State	Codes Opened
346	TX	84
469	TX	65
929	NY	58
470	GA	56
586	MI	47
316	KS	44
657	CA	43
424	CA	41
559	CA	40
916	CA	37

2.2.3 Reclamation

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 The PA had to address 2,790 blocks on the overdue Part 4 reports in 2015. This represents a decrease of 48% from the 2014 total of 5,407. Of those, 815 blocks were new to the lists in 2015, which is also a 48% decrease from the 2014 total of 1,577.

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

The PA cannot reclaim a block without authorization from the appropriate regulatory body, which 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. In 2015, regulators authorized the PA to initiate reclamation for three thousands-blocks with one each in California, Michigan and Florida.

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.

Following is a table of all reclamation activity:

**Table 2-10
Reclamation Activity**

MONTH	TOTAL NUMBER OF BLOCKS WITH OVERDUE PART 4s	TOTAL NUMBER OF NEW BLOCKS WITH OVERDUE PART 4s	TOTAL NUMBER OF BLOCKS RECLAIMED
January	215	65	0
February	199	50	0
March	207	59	0
April	212	62	0
May	227	72	0
June	279	99	0
July	219	43	0
August	230	52	1
September	249	82	1
October	217	46	0
November	317	135	1
December	219	50	0

2.2.4 Pooling Administration Customer Support / Help Desk

The Pooling Customer Support Representative (CSR or 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 2015, the CSR handled approximately 914 calls from customers, which is an 18% decrease from the 2014 total of 1,118. Table 2-11 shows the numbers of calls to the pooling Help Desk by year since 2011.

**Table 2-11
Number of Help Desk Calls for Pooling Issues by Year from 2011 through 2015**

YEAR	NUMBER OF HELP DESK CALLS
2011	2,537
2012	1,895
2013	1,958
2014	1,118
2015	914

2.3 Pooling Administration System (PAS)

2.3.1 PAS Performance

PAS was available 99.98% of the time, which means the PA once again notably exceeded the contract requirement of 99.9% availability. PAS was unavailable for four instances of unscheduled down time for a total of 1 hour 25 minutes; on March 29, June 10, July 31, and October 14.

We conducted maintenance on PAS nine times; on April 10, April 28, May 8, May 18, August 14, October 9, October 18, October 30 and November 30, and used none of the FCC-approved down time in conjunction with the maintenance activities. We completed disaster recovery testing on October 18 with no down time.

The PA opened 32 trouble tickets and closed 30. For details on trouble tickets for PAS see Section 6.1.4.

2.3.2 PAS Enhancements and Change Orders

Improvements to PAS are generally driven by changes to FCC rules, industry guidelines, or specific service provider or regulatory requests. If changes or suggested improvements require a change to the PA contract or system, we submit a change order proposal 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 initial closure of any changes to the INC Guidelines that have such an impact.² Details about the change orders we submitted in 2015 can be found in Section 2.3.2.2.

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



We also completed the comprehensive overhaul of the PAS that was approved as part of our new contract in January 2015. Details of the PAS refresh can be found below in Section 2.3.2.1.

2.3.2.1 PAS Enhancements

The significant amount of time and effort by PA staff on development and testing for the comprehensive refresh of the PAS that began in 2014, continued into 2015. We started in early January with training sessions about the enhancements for regulators on January 6, and for service providers on January 7 and 8. We migrated the data and performed final system testing over the weekend of January 10-11. Although we had notified customers that PAS would not be available until start of business on Monday, January 12, we completed the updates ahead of schedule and made the system available for public use on Sunday, January 11, at 3:15pm.

Some of the enhancements we completed include:

- Major system changes to incorporate the donation process into the existing block disconnect process
- Automation of manual processes
- Modification of processes for handling grandfathered numbering resources
- Enhanced and improved user messages and work items
- Expansion of and modifications to user notifications
- Enhancements to user selection menus
- Providing the ability to attach documents to a request
- Improvements to the PSTN Activation process

During the year we completed post-rollout builds and maintenance to address most of the issues that were revealed after refresh.

2.3.2.2 Change Orders

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

The PA submitted two change orders proposals to the FCC in 2015. In addition to the two change orders, the PA submitted one letter in lieu of a change order.

**Table 2-12
Change Orders Submitted**

Number	Type	Description	NOWG Recommendation	FCC Status
1	Internal	Move RNAS and PAS into the Cloud	Approved	Approved
2	Guideline Changes	Changes to the INC forms based on Issue 497: VoIP Service Providers' Access Requirements for NANP Resource Assignments and Issue 797: Updates to the INC Guidelines Forms	Pending	Pending

The NOWG and FCC approved Change Order #1 but Change Order #2 remained pending in 2015. Table 2-13 provides details on each change order for which there was an FCC decision in 2015.

**Table 2-13
Change Orders Approved by the FCC**

Number	Type	Description	NOWG Recommendation	FCC Status
1	Internal	Move RNAS and PAS into the Cloud	Approved	Accepted-Contract Modification #005-01 on 11/10/15

Companion to the roll out of the PAS enhancements, the final change approved in Change Order #24 from the previous contract were completed in January 2015.

**Table 2-14
Change Orders Implemented**

Number	Description	Implemented
24	Enhancement of the FTP Interface with the Pooling Administration System	January 11, 2015

2.3.3 Training Videos

We added three new training videos in 2015:

- Release of Enhancements to the PAS Training Session for Service Provider and Service Provider Consultant Users,
- Release of Enhancements to the PAS Training Session for Regulatory Users and,
- Chrome Browser Release How it Affects PAS Drop Down Menus. (This was a temporary video in place until the issues were addressed)

We also continue to see robust viewing of the existing videos. In all there were 378 total views of training videos in 2015, 82 Of which were the new videos. By far, the most popular video is “New to Pooling Quick Start,” which accounted for 53% of the views. This total does not include downloaded or shared videos as there is no method for tracking those.

Table 2-15 contains the training video names and the number of times each video was accessed.

**Table 2-15
PAS Training Video Views**

Training Video	Number of Times Viewed
New to Pooling Quick Start	200
Mass Modifications	10
How to Complete the MTE Worksheet	17
PAS Effective Date Scenarios for Block Requests and Donations	8
PAS Password Reset	9
Change Orders 9 and 10	2
Change Order 11	2
Change Order 20	7
Redesigned Nationalpooling.com Website Training video	13
Overview of PAS and the Pooling Website for Service Provider and Service Provider Consultant Users	23
Overview of PAS and the Pooling Website for Regulatory Users	5
(NEW) Release of Enhancements to the PAS Training Session for Service Provider and Service Provider Consultant Users	49
(NEW) Release of Enhancements to the PAS Training Session for	6



Training Video	Number of Times Viewed
Regulatory Users	
(NEW) Chrome Browser Release How it Affects PAS Drop Down Menus (Temporary and no longer available)	27
TOTAL VIEWS	378

2.4 Data Quality and 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 2015, the DQIM attended 23 NANPA meetings, and provided 49 pooling status reports to the NANPA for its meetings.

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) and Excluded (X). For status designation definitions see Section 3.

Table 2-16 shows the total number of distinct pooling rate centers in PAS that were maintained by the DQIM from 2011 through 2015.

**Table 2-16
Total Number of Distinct Pooling Rate Centers in PAS – 2011 through 2015**

STATUS DESIGNATION	2011	2012	2013	2014	2015
M*	420	397	408	359	330
M	4,891	4,914	5,044	5,086	5,101
O	5,679	5,774	6,089	6,098	6,284
M	3,498	3,525	3,505	3,729	3,775
M*	841	808	773	804	758
X	3,217	3,122	2,719	2,452	2,267
Total	18,546	18,540	18,538	18,528	18,515
Total Pooling Rate Centers	15,329	15,418	15,819	16,076	16,248
Total Mandatory Pooling Rate Centers	8,389	8,439	8,549	8,815	8,876

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 2015, the PA made 298 rate center information changes. Of those, all 298 were rate center status designation changes, of which 67% were from Excluded to Optional.

Table 2-17 shows the type of information change and how many rate centers were changed during each month.

**Table 2-17
Summary of Rate Center File Changes for 2015**

RATE CENTER CHANGES 2015													
REASON	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
Changes in Status:													
M* to M													0
M* to M	1	1	1	19	2	18	5		2		3	15	67
M to M*	2	1	2	6		3	2			4		11	31
M to M*													0
M to M													0
M* to M*													0
O to M													0
O to M*													0
O to M													0
O to M*													0
X to M													0
X to M*													0
X to M*													0
X to O	19	65	13	24	7	3	15	9	12	4	15	14	200
New Rate Centers													0
Rate Center Name Change													0
MSA/LATA Changes													0
TOTALS	22	67	16	49	9	24	22	9	14	8	18	40	298

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 PA completed two MSA projects:

- ◆ In July, the Office of Management and Budget (OMB) issued Bulletin 15-01 which revised delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas. After careful review and comparison between the old and new delineations, we found that there were no changes to the rate centers in the top 100 MSAs. The changes that occurred as a result of this bulletin were:
 - One MSA (not in top 100) added a city in its name;
 - 17 micropolitan statistical areas were added;
 - One micropolitan statistical area changed to a metropolitan statistical area but not in top 100.
- ◆ We also monitor the Census Bureau website, and in June, upon determining that the 2014 Census estimates were available, we reviewed the population estimates and made all of the appropriate updates. Consistent with the previous year, the composition of the top 100 MSAs did not change, although there were many rearrangements in placement on the list.

2.4.3 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 their 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 2015, 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, on February 18 and August 7.

Table 2-18 contains the PA NRUF/forecast results for both semi-annual reporting periods in 2015.

**Table 2-18
NRUF/Forecast Results for 2015**

Date	NPAs	Jurisdictions	Blocks Forecasted	Blocks Available	Codes Forecasted
February	300	52	58,057	169,386	3,375
August	304	52	37,629	162,724	2,513

2.5 Regulatory and Compliance

2.5.1 Regulatory Update Conference Calls

The PA participated in five regulatory update conference calls: on March 3, April 30, August 14, October 29, and December 10. Topics included updates on pooling administration activities, delegated authority petitions, p-ANI administration, the FCC VoIP order, updates to PAS, the PA survey, and relevant INC issues.

2.5.2 Regulatory Educational Sessions

In addition to the PAS enhancement training in January, the PA conducted three educational sessions about pooling for state regulatory personnel in 2015. 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 2-19 summarizes the regulatory educational sessions facilitated by the PA.

**Table 2-19
Regulatory Training Sessions**

Date	State	Type	Description
January 22	New York	Conference call	Pooling overview
March 18	Texas	Conference call	Pooling overview
October 9	Wyoming	Conference call	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 responded to emails and telephone inquiries regarding issues such as application processing, certification, and reclamation.

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 160 denials as a result of the Red Light Rule in 2015, which is a 36% decrease from the 249 in 2014.

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 are submitted annually, semi-annually, quarterly, or monthly. Table 2-20 contains the CDRL recurring reports that were submitted by the PA during the 2015



calendar year according to the established deadlines. In 2015, the PA submitted 122 CDRL reports, which are available on the PA website.

**Table 2-20
Recurring CDRL Reports Submitted**

Report Name	Total Reports
Staffing Report	12
Thousands–Block Pooling Report	12
PAS Performance Report	12
Ad Hoc Reports	12
Pooling Matrices Report	4
Forecasted Demand	2
Rate Area Inventory Pool Status	2
Annual	1
By Request (<i>Ad Hoc</i>)	65
TOTAL	122

2.5.5.2 Other Required Reports

Table 2-21 lists the 49 other reports required by the contract that the PA submitted in 2015.

**Table 2-21
Other Required Reports Submitted**

Report Name	Total Reports
Staffing Report	12
Monthly Pooling Metrics	12
p-ANI Monthly Report	12
RNAS Performance	12
Inventory	1
TOTAL	49

2.6 Special Projects

2.6.1. Interconnected VoIP Direct Access Order

On June 22, 2015, the Federal Communications Commission (FCC) released the *Direct Access Report and Order*, FCC 15-70, establishing a process by which they will authorize interconnected VoIP providers to obtain telephone numbers directly from the Numbering Administrators. Prior to the effective date of the order, we:

- reviewed the provisions of the order to determine how it would impact PA methods and procedures;
- discussed relevant topics about the order with the FCC;
- worked with the INC to update applicable parts of the industry guidelines; and
- discussed implications of the order with SBC-IS at the request of the FCC.

On October 29, parts of the order were published in the Federal Register with an effective date of November 30. However, the changes to the Code of Federal Regulations (CFR) required by the order were not included in the October notice and were therefore not effective in 2015. These rules affected (1) the ability of interconnected VoIP providers to receive authorization to obtain numbering resources directly from the national administrators, and (2) number administration.

In anticipation of the final notice about the effective date of the rule changes, we worked through INC to update the applicable guidelines.

2.6.2 Seeking Voluntary Disconnects (formerly 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 disconnects (formerly donations) from existing SP(s) in that rate center so that the incoming SP can request blocks instead of opening a new code.

In 2015, the PA attempted to secure voluntary block disconnects (formerly donations) for 126 rate centers being changed from Excluded to Optional. We were able to obtain disconnects (formerly donations) for 88 of those rate centers, thereby potentially saving the opening of 88 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 already available for 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. We were asked to request voluntary block disconnects (formerly

donations) in 26 optional pooling rate centers that did not have any available blocks. We requested disconnects (formerly donations) and successfully received six disconnects for six of the rate centers. This process saved six NXX codes from being opened.

2.6.3 Metropolitan Statistical Areas (MSAs) Designation Projects

The PA completed two time-consuming projects related to changing population data and rankings of Metropolitan Statistical Areas (MSAs). See Section 2.4.2.2 for details.

2.6.4 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. If there are customers on the codes or blocks, we seek new resource holders so that customers are not put out of service. The following is a summary of abandoned code/block activity for this period:

- 9 companies in 11 states abandoned pooled codes and/or blocks.
- 142 emails were sent out looking for new code or block holders.
- 70 pooled codes were transferred to new code holder.
- 84 pooled blocks were transferred to new block holders.
- 313 blocks were disconnected and put back into the available pool.

2.6.5 Review and Update of Methods & Procedures

During 2015, we undertook the substantial project of thoroughly reviewing and updating all of our internal Methods & Procedures (M&Ps). We included all the new updates implemented in PAS and BIRRDS, removed old processes, and reformatted all of documents.

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

2.7.1 Background

“You are the BEST! Thanks for your patience.”

2015 p-ANI 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 PA would act as the permanent p-ANI Administrator (a/k/a Routing Number Administrator or RNA) at such time as the FCC would direct 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 2015 P-ANI Administration Highlights:

2.7.2.1 Productivity for 2015:

The P-ANI Administrator processed not only 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 80 unique NENA ID/OCN combinations and 48 forecast files.

Table 2-22 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 2-23.

Table 2-22
Total Number of p-ANIs by Activity Type

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Requested	3,155	1,963	2,196	1,839	3,218	1,599	3,975	2,156	2,631	1,300	1,088	862	25,982
Assigned	3,132	1,973	1,921	1,815	2,555	1,581	3,928	2,071	2,613	1,284	1,083	859	24,815
Returned	579	312	934	20,379	358	337	431	534	140	4,434	2,756	527	31,721
Modified	25	12	16,072	0	5	0	30	36	61,053	45	92,647	12,728	182,653

Table 2-23
Applications Processed by Request Type

	Approved	Denied	Suspended	Withdrawn	Total
Cancel p-ANI Return Request	20	0	0	0	20
P-ANI Modification Request	27,021	0	0	6	27,027
New p-ANI Request	2,482	9	2	77	2,570
P-ANI Return Request	2,901	0	0	0	2,901
Total	32,424	9	2	83	32,518

The following table is a summary of p-ANI inventory as of December 31, 2015.

**Table 2-24
P-ANI Inventory as of December 31, 2015**

STATUS	TOTAL p-ANIs	211	511
Assigned	709,419	350,999	358,420
Aging	517	408	109
Available	5,413,796	2,702,908	2,710,888
Unavailable	16,268	15,685	583
Totals	6,140,000	3,070,000	3,070,000

2.7.3 Other 2015 P-ANI Administration Activities

In addition to processing requests for p-ANI ranges, the P-ANI Administrator performed many other functions during 2015.

2.7.3.1 Data Reconciliation

We continued to reconcile the remaining discrepancies found during the initial reporting period.

There were 4,561 p-ANI ranges initially identified where the assignor reported a p-ANI range as being assigned to that carrier, however the carrier never reported on it. At the end of 2014, 58 p-ANI ranges were still at issue, and at the end of 2015, only 7 ranges remain unresolved.

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). For 2015, 80 unique NENA ID and OCN combinations filed an Annual Report. During the review process, we were able to identify p-ANI ranges that had not previously been reported and show those p-ANI ranges as assigned. We also worked with the carriers to identify p-ANI ranges in the filing that were not in use and could be returned to the available inventory.

2.7.3.3 Duplicate Assignment Issues

In 2015, we were notified of 16 p-ANI ranges that appeared in RNAS as available, and had been assigned by the p-ANI Administrator, that were appearing in the 9-1-1 routing system as already in use by another carrier. 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 routing databases by the old carrier so that the new assignee could use the range. If the range was in use, then the assignment was replaced with a new range, and the RNAS data was updated to show the range as assigned to the original 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. If the applicant fails to provide the correct documentation with its request for p-ANIs, we send a courtesy email notifying them of what they need to send. We also work with carriers who are having difficulties locating the correct documentation to help alleviate any delays in obtaining these critical resources. We sent courtesy emails for 277 requests and provided documents for 65 requests.

2.7.4 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 – December 31, 2015 and contains the following tables: Table 1-1 addresses the number of p-ANIs requested, assigned, returned or modified on a monthly basis; Table 1-2 addresses requests processed and the disposition of each; and Table 1-3 addresses national p-ANI utilization, p-ANI utilization by NPA, and forecast reports for projected future p-ANI resource usage.

The RNA administrator posted this report as shown in Table 2-25 to the website www.nationalpani.com, notified the INC and RNAS users that the information was available, and included it in the subsequent annual report required by the FCC contract.

**Table 2-25
Projected Exhaust of 211/511 p-ANIs**

NPA	STATE	Total p-ANI	Forecasted p-ANI	Exhaust Year	Exhaust Qtr.
201	NJ	8,465	236	2064	4
202	DC	618	48	2419	4
203	CT	8,300	65	2195	1
205	AL	3,073	179	2110	3
206	WA	447	45	2450	3
207	ME	7,337	45	2296	2
208	ID	2,891	418	2056	4
209	CA	5,137	325	2061	3
210	TX	6,765	440	2045	1
212	NY	4,272	54	2306	2
213	CA	2,553	225	2093	3
214	TX	5,175	384	2054	3
215	PA	1,325	99	2204	3
216	OH	1,234	190	2114	4
217	IL	4,251	412	2053	1
218	MN	2,681	345	2065	1
219	IN	4,226	160	2114	3
220	OH	50	0	N/A	N/A
224	IL	7,574	410	2045	2
225	LA	525	124	2172	1
228	MS	1,231	159	2133	1
229	GA	1,424	234	2094	2
231	MI	3,529	265	2077	1
234	OH	50	0	N/A	N/A
239	FL	406	194	2116	1
240	MD	493	93	2225	4

NPA	STATE	Total p-ANI	Forecasted p-ANI	Exhaust Year	Exhaust Qtr.
248	MI	5,807	25	2583	3
251	AL	1,004	144	2147	4
252	NC	2,618	177	2113	1
253	WA	713	125	2169	2
254	TX	5,537	480	2045	1
256	AL	1,815	149	2137	1
260	IN	1,802	84	2232	3
262	WI	82	75	2281	3
267	PA	50	45	2458	2
269	MI	1,375	63	2311	3
270	KY	2,468	174	2116	4
272	PA	50	45	2458	2
276	VA	1,192	139	2150	2
281	TX	8,487	534	2037	3
301	MD	1,868	114	2174	1
302	DE	1,754	104	2190	2
303	CO	2,651	189	2107	4
304	WV	6,352	149	2107	3
305	FL	421	167	2132	1
307	WY	1,535	261	2086	3
308	NE	1,617	265	2084	2
309	IL	3,629	204	2095	2
310	CA	2,670	165	2120	1
312	IL	3,095	220	2092	4
313	MI	472	15	3317	4
314	MO	8,214	217	2069	2
315	NY	7,104	325	2055	3
316	KS	4,189	244	2080	4
317	IN	4,102	140	2129	3
318	LA	2,063	134	2149	4
319	IA	1,497	45	2426	1
320	MN	1,476	109	2185	4
321	FL	1,181	187	2116	3
323	CA	3,398	149	2126	2
325	TX	5,927	456	2046	4
330	OH	4,497	150	2118	2
331	IL	50	125	2175	3
334	AL	3,628	155	2121	3

NPA	STATE	Total p-ANI	Forecasted p-ANI	Exhaust Year	Exhaust Qtr.
336	NC	1,411	124	2165	4
337	LA	850	124	2169	2
339	MA	50	0	N/A	N/A
340	VI	350	30	2670	1
346	TX	50	160	2140	3
347	NY	50	0	N/A	N/A
351	MA	50	0	N/A	N/A
352	FL	860	150	2143	3
360	WA	1,845	179	2116	2
361	TX	5,400	394	2052	1
364	KY	50	65	2322	4
385	UT	50	75	2281	1
386	FL	1,224	220	2100	2
401	RI	1,401	78	2253	2
402	NE	5,807	372	2053	1
404	GA	1,532	188	2113	1
405	OK	10,436	269	2051	3
406	MT	2,076	144	2139	2
407	FL	875	209	2107	3
408	CA	2,479	165	2121	1
409	TX	2,771	380	2060	2
410	MD	3,161	69	2259	1
412	PA	1,482	99	2202	1
413	MA	3,676	70	2248	1
414	WI	5,817	160	2104	3
415	CA	1,782	99	2199	1
417	MO	2,570	109	2175	4
419	OH	3,904	135	2134	1
423	TN	2,147	89	2216	3
424	CA	50	15	3345	1
425	WA	763	179	2122	2
430	TX	1,146	334	2071	2
432	TX	3,019	364	2062	3
434	VA	2,334	139	2142	1
435	UT	792	174	2125	2
440	OH	928	139	2152	1
442	CA	50	15	3345	1
443	MD	60	15	3344	2

NPA	STATE	Total p-ANI	Forecasted p-ANI	Exhaust Year	Exhaust Qtr.
458	OR	50	45	2458	2
469	TX	3,968	248	2080	3
470	GA	153	130	2168	3
475	CT	1,263	0	N/A	N/A
478	GA	954	239	2095	3
479	AR	2,604	134	2145	4
480	AZ	65	30	2679	3
484	PA	60	99	2216	2
501	AR	4,920	226	2082	3
502	KY	697	134	2159	1
503	OR	2,040	144	2140	3
504	LA	890	124	2169	1
505	NM	1,910	219	2098	3
507	MN	2,593	145	2135	1
508	MA	7,230	130	2113	1
509	WA	1,671	179	2117	2
510	CA	2,241	251	2086	4
512	TX	7,178	434	2045	3
513	OH	2,721	84	2221	3
515	IA	4,148	185	2101	3
516	NY	1,013	54	2367	3
517	MI	366	69	2300	3
518	NY	5,357	130	2128	3
520	AZ	1,330	174	2122	2
530	CA	7,431	225	2071	4
531	NE	50	160	2140	3
534	WI	50	75	2281	1
539	OK	50	165	2136	4
540	VA	4,802	169	2105	4
541	OR	3,828	144	2127	2
551	NJ	50	100	2215	3
559	CA	3,762	149	2124	4
561	FL	1,146	155	2137	3
562	CA	2,671	149	2131	2
563	IA	1,443	45	2427	2
567	OH	130	0	N/A	N/A
570	PA	5,342	99	2163	1
571	VA	50	45	2458	2

NPA	STATE	Total p-ANI	Forecasted p-ANI	Exhaust Year	Exhaust Qtr.
573	MO	1,506	159	2131	2
574	IN	1,748	228	2095	1
575	NM	1,084	219	2101	2
580	OK	887	244	2093	2
585	NY	1,458	69	2284	3
586	MI	50	15	3345	1
601	MS	3,261	170	2113	2
602	AZ	1,402	174	2122	4
603	NH	1,158	69	2288	1
605	SD	1,263	217	2101	2
606	KY	1,485	207	2104	2
607	NY	2,494	90	2210	3
608	WI	2,935	190	2105	4
609	NJ	8,499	236	2064	3
610	PA	2,929	99	2187	2
612	MN	2,635	159	2124	1
614	OH	1,792	84	2232	4
615	TN	2,062	245	2088	1
616	MI	4,464	145	2122	1
617	MA	1173	54	2364	3
618	IL	8,802	407	2043	3
619	CA	2,622	99	2191	3
620	KS	1,985	189	2110	2
623	AZ	90	30	2679	3
626	CA	2,709	109	2174	3
628	CA	50	0	N/A	N/A
629	TN	50	0	N/A	N/A
630	IL	3,430	260	2079	3
631	NY	1,373	54	2360	4
636	MO	1,153	149	2141	2
641	IA	1,787	45	2420	3
646	NY	50	0	N/A	N/A
650	CA	3,044	159	2122	3
651	MN	504	119	2179	4
657	CA	50	15	3345	1
660	MO	984	134	2157	4
661	CA	1,670	99	2200	1
662	MS	5,191	169	2103	3

NPA	STATE	Total p-ANI	Forecasted p-ANI	Exhaust Year	Exhaust Qtr.
667	MD	50	15	3345	1
669	CA	50	15	3345	1
678	GA	572	244	2095	3
681	WV	50	15	3345	1
682	TX	5,846	280	2066	3
701	ND	939	179	2121	2
702	NV	395	84	2248	2
703	VA	1,583	99	2201	1
704	NC	1,344	94	2213	2
706	GA	2,718	227	2091	1
707	CA	5,643	149	2111	2
708	IL	7,208	344	2052	1
712	IA	1,524	45	2426	3
713	TX	2,527	290	2075	2
714	CA	3,891	159	2116	2
715	WI	2,989	144	2133	1
716	NY	1,672	84	2233	1
717	PA	1,605	119	2170	3
718	NY	3,926	30	2551	4
719	CO	2,970	259	2081	4
720	CO	464	180	2124	3
724	PA	1,612	129	2158	3
725	NV	50	0	N/A	N/A
727	FL	583	114	2185	2
731	TN	1,204	124	2167	3
732	NJ	8,406	194	2075	4
734	MI	6,307	99	2153	2
737	TX	50	160	2140	3
740	OH	4,379	220	2086	1
747	CA	50	15	3345	1
754	FL	113	80	2264	3
757	VA	3,008	221	2092	4
760	CA	5,315	205	2087	3
762	GA	50	130	2168	2
763	MN	506	109	2194	4
765	IN	6,944	160	2097	3
769	MS	1,031	100	2205	3
770	GA	1,585	199	2108	3

NPA	STATE	Total p-ANI	Forecasted p-ANI	Exhaust Year	Exhaust Qtr.
772	FL	311	199	2114	4
773	IL	50	125	2175	3
774	MA	158	0	N/A	N/A
775	NV	1,691	129	2157	4
779	IL	50	125	2175	3
781	MA	2,574	70	2264	4
785	KS	4,432	216	2087	1
786	FL	202	134	2163	3
787	PR	235	0	N/A	N/A
801	UT	968	174	2124	2
802	VT	1,615	149	2138	2
803	SC	2,023	89	2217	4
804	VA	4,130	109	2161	3
805	CA	3,911	149	2123	4
806	TX	9,343	360	2045	3
808	HI	1,632	124	2163	1
810	MI	355	69	2300	3
812	IN	4,479	124	2140	1
813	FL	701	214	2105	1
814	PA	2,962	119	2158	1
815	IL	3,348	220	2091	3
816	MO	3,433	274	2075	2
817	TX	4,857	255	2074	2
818	CA	996	114	2182	3
828	NC	2,328	201	2103	4
830	TX	2,427	344	2066	1
831	CA	2,499	185	2110	3
832	TX	5,779	366	2054	4
843	SC	2,109	74	2257	4
845	NY	2,530	54	2339	3
847	IL	5,241	270	2070	3
848	NJ	50	100	2215	3
850	FL	1,466	154	2135	2
856	NJ	4,932	214	2085	2
857	MA	50	0	N/A	N/A
858	CA	3,187	185	2106	4
859	KY	1,997	124	2160	1
860	CT	10,942	50	2196	1

NPA	STATE	Total p-ANI	Forecasted p-ANI	Exhaust Year	Exhaust Qtr.
862	NJ	50	100	2215	3
863	FL	745	184	2120	3
864	SC	1,623	84	2234	4
865	TN	1,128	79	2254	4
870	AR	4,096	154	2118	2
872	IL	50	125	2175	3
878	PA	50	45	2458	2
901	TN	1,867	149	2137	3
903	TX	10,151	375	2041	2
904	FL	684	199	2112	1
906	MI	1,164	79	2253	2
907	AK	1,624	314	2074	3
908	NJ	6,960	210	2077	1
909	CA	3,564	159	2118	2
910	NC	1,831	79	2245	4
912	GA	1,872	264	2084	3
913	KS	1,427	199	2108	2
914	NY	1,704	54	2354	4
915	TX	675	224	2101	2
916	CA	3,125	149	2128	2
917	NY	50	0	N/A	N/A
918	OK	5,359	409	2051	4
919	NC	1,290	69	2286	1
920	WI	2,911	144	2134	3
925	CA	2,385	247	2086	2
928	AZ	1,702	159	2130	1
929	NY	50	0	N/A	N/A
930	IN	50	0	N/A	N/A
931	TN	2,651	105	2180	1
936	TX	299	290	2083	4
937	OH	2,616	109	2174	2
938	AL	50	30	2680	1
939	PR	50	0	N/A	N/A
940	TX	3,563	355	2061	2
941	FL	550	199	2113	3
947	MI	2,123	69	2274	1
949	CA	1,395	99	2203	4
951	CA	2,863	149	2130	1

NPA	STATE	Total p-ANI	Forecasted p-ANI	Exhaust Year	Exhaust Qtr.
952	MN	350	119	2180	1
954	FL	666	173	2127	4
956	TX	4,621	360	2058	3
959	CT	50	0	N/A	N/A
970	CO	1,444	209	2104	4
971	OR	50	45	2458	2
972	TX	4,010	354	2060	1
973	NJ	10,881	141	2080	3
978	MA	4,028	70	2243	1
979	TX	2,848	380	2060	1
980	NC	90	15	3342	2
984	NC	50	15	3345	1
985	LA	754	124	2170	1
989	MI	3,087	69	2260	1

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.

RNAS had only one instance of unscheduled down time for 30 minutes on July 31.

We conducted maintenance on RNAS seven times; on April 10, May 8, May 18, August 14, October 9, October 18, and October 30. For these maintenance activities, we used none of the FCC-approved scheduled downtime.

As with PAS, we completed disaster recovery testing on October 18 with no down time. For more detailed information on the RNAS performance, see Section 6.2.

The RNA opened no trouble tickets for RNAS in 2015. For more details on trouble tickets for RNAS see Section 6.2.4.

2.7.6 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 2015, the P-ANI Administration Help Desk processed 37 new user registration



requests, of which 28 were approved and 9 were denied; 40 profile updates, of which 35 were approved and 5 were denied. In addition, the Help Desk handled approximately 81 phone calls, which is a 51% decrease from the 2014 total of 167 calls.

Table 2-26 shows the numbers of calls to the pooling Help Desk by year since 2012.

Table 2-26
Number of Help Desk Calls for P-ANI Issues by Year from 2012 through 2015

YEAR	NUMBER OF HELP DESK CALLS
2012	374
2013	143
2014	167
2015	81

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 2015, we had 105 of these customer focus items, of which 57 were related to pooling activities and 48 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 2015. Others include:

★ Processing all 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 2015 we processed all of the record number 145,828 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 and RNAS email distribution each quarter to help our customers understand pooling and p-ANI administration processes.



★ PAS and RNAS Exceptional Availability

Another area that shows our focus on customer support relates to PAS and RNAS performance and availability despite the need for builds and maintenance. Our contract allows us to have up to nine hours of *unscheduled* down time each year. However, we only had one hour and 25 minutes of PAS unscheduled down time and a remarkable 30 minutes of unscheduled down time for RNAS in 2015. This is an improvement of availability for both systems from 2014. Also our contract permits us to make the systems unavailable to our customers during maintenance but we work diligently to ensure that we complete the updates and builds with little-to-no down time. We used none of the FCC-approved maintenance time, and once again exceeded the requirements with both systems.

★ Exceeding Reporting Requirements for Responding to Requests for Ad Hoc Reports

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, including the videos that were new in 2015, can be found in Table 2-15. In 2015 there were 378 training video views, 82 of which were the new videos. 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, 2015, there are 16,248 distinct pooling rate centers (i.e., pooling areas), which constitute 87.7% of the 18,515 total distinct rate centers. While we do not include a list of separate “potential” pooling areas, there are currently 2,267 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 16,248 distinct pooling rate centers (*i.e.*, pooling areas), and their status designations, by state, as of December 31, 2015. 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		69			191	260
AL	56	73	120	2	13	264
AR	46		261	1		308
AZ	27		44	20		91
CA	439	83	178	15		715
CO	21	5	134	3		163
CT	74	15				89
DC	1					1
DE	8		22			30
FL	132	14	124			270
GA	75		221	5		301
HI	1		5			6
IA	50	68	415	37		570
ID	16	79		3	47	145
IL	233		618	21		872
IN	216	254	12	9	28	519
KS	74		347	19		440
KY	45	131	136	2	32	346
LA	58		209	3		270
MA	234	30				264
MD	112	53				165
ME	50	101	89			240
MI	222	105	282	7	8	624

State	Mandatory (M)	Mandatory State (M)	Optional	Mandatory Single SP (M*)	Mandatory State Single SP (M*)	Total
MN	57		340	6		403
MO	138	408		20	155	721
MS	38	88	86	6	15	233
MT		146			114	260
NC	143	21	234	8		406
ND			98			98
NE	28	171	170	4	78	451
NH	32	92	25			149
NJ	188		21			209
NM	12		65	3		80
NV	22		43	3		68
NY	407	253	79		8	747
OH	379	163	162	4		708
OK	98	15	169	42		324
OR	36	103	72			211
PA	415	340	12		9	776
PR	47		36	1		84
RI	25					25
SC	90		115	22		227
SD			100			100
TN	120		174	8		302
TX	301	7	680	25		1,013
UT	28		40	15	1	84
VA	121	182	66			369
VT		101	40			141
WA	54	149	1	3	16	223
WI	125	300	121	13	43	602
WV	7	156	59			222
WY			59			59
Grand Total	5,101	3,775	6,284	330	758	16,248

3.2 Summary by State of “Potential” Pooling Areas

The chart below breaks down by state the 2,267 rate centers that were designated as “excluded” from pooling as of December 31, 2015, 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	35
AR	72
AZ	39
CA	24
CO	46
CT	0
DC	0
DE	0
FL	11
GA	59
HI	0
IA	241
ID	0
IL	114
IN	6
KS	134
KY	26
LA	7
MA	2
MD	0
ME	9

State	Excluded
MI	10
MN	235
MO	0
MS	6
MT	0
NC	26
ND	202
NE	0
NH	0
NJ	0
NM	83
NV	28
NY	0
OH	31
OK	205
OR	44
PA	0
PR	0
RI	0
SC	13
SD	169
TN	39

State	Excluded
TX	264
UT	48
VA	0
VT	0
WA	0
WI	0
WV	6
WY	33
Grand Total	2,267

3.3 Summarized Information about Existing and “Potential” Pooling Areas

3.3.1 Pooling Rate Center Facts:

Total Number of Distinct Rate Centers	18,515
Total Number of Distinct Rate Centers Available for Pooling	16,248
Percentage of Distinct Rate Centers Available for Pooling	87.75%
Total Number of Mandatory Distinct Rate Centers	8,876
Percentage of Distinct Rate Centers that are Mandatory	47.93%
Total Number of Distinct Mandatory Single-Service Provider Rate Centers	1,088
Percentage of Distinct Rate Centers that are Mandatory Single-Service Provider	5.87%
Total Number of Distinct Optional Rate Centers	6,284
Percentage of Distinct Rate Centers that are Optional	33.94%
Total Number of Distinct Rate Centers Excluded from Pooling	2,267
Percentage of Distinct Rate Centers that are Excluded from Pooling	12.24%
Total Number of Rate Center Designations Changed (see Section 2.4.2.1 for detail)	298

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. (No change)	Alaska, Connecticut, District of Columbia, Idaho, Maryland, Missouri, Montana, and Rhode Island
States that have no mandatory pooling rate centers. (No change)	North Dakota, South Dakota, and Wyoming
States or jurisdictions that have no excluded rate centers. (No change)	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, 2015, 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. (No change)	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 18,515 rate centers in each state by their respective pooling status designations (mandatory, optional, or excluded) as of December 31, 2015.

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		69			191		260
AL	56	73	120	2	13	35	299
AR	46		261	1		72	380
AZ	27		44	20		39	130

State	Mandatory (M)	Mandatory State (M)	Optional	Mandatory Single SP (M*)	Mandatory State Single SP (M*)	Excluded (X)	Total
CA	439	83	178	15		24	739
CO	21	5	134	3		46	209
CT	74	15					89
DC	1						1
DE	8		22				30
FL	132	14	124			11	281
GA	75		221	5		59	360
HI	1		5				6
IA	50	68	415	37		241	811
ID	16	79		3	47		145
IL	233		618	21		114	986
IN	216	254	12	9	28	6	525
KS	74		347	19		134	574
KY	45	131	136	2	32	26	372
LA	58		209	3		7	277
MA	234	30				2	266
MD	112	53					165
ME	50	101	89			9	249
MI	222	105	282	7	8	10	634
MN	57		340	6		235	638
MO	138	408		20	155		721
MS	38	88	86	6	15	6	239
MT		146			114		260
NC	143	21	234	8		26	432
ND			98			202	300
NE	28	171	170	4	78		451
NH	32	92	25				149
NJ	188		21				209
NM	12		65	3		83	163
NV	22		43	3		28	96
NY	407	253	79		8		747

State	Mandatory (M)	Mandatory State (M)	Optional	Mandatory Single SP (M*)	Mandatory State Single SP (M*)	Excluded (X)	Total
OH	379	163	162	4		31	739
OK	98	15	169	42		205	529
OR	36	103	72			44	255
PA	415	340	12		9		776
PR	47		36	1			84
RI	25						25
SC	90		115	22		13	240
SD			100			169	269
TN	120		174	8		39	341
TX	301	7	680	25		264	1,277
UT	28		40	15	1	48	132
VA	121	182	66				369
VT		101	40				141
WA	54	149	1	3	16		223
WI	125	300	121	13	43		602
WV	7	156	59			6	228
WY			59			33	92
Grand Total	5,101	3,775	6,284	330	758	2,267	18,515

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 2015. There are 1,073 distinct service providers* participating in 16,248 distinct pooled rate centers in 241 NPA and NPA complexes covering 52 jurisdictions -- 50 states, the District of Columbia, and Puerto Rico.

* This count of distinct service providers consolidates all OCNs for a single company under one parent company.

Table 4-1

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

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
201/551	53	22
202	44	1
203/475	32	32
205	43	66
206	41	5
207	52	240
208	50	145
209	38	56
210	37	1
212/646/917	59	1
213	46	3
214/469/972	66	43
215/267	51	36
216	33	4
217	39	228
218	40	110
219	34	45
220/740	48	187
224/847	38	42
225	36	34
228	28	11
229	31	70
231	39	90

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
234/330	41	116
239	28	14
240/301	61	63
248/947	43	20
251	39	31
252	35	89
253	36	10
254	45	105
256/938	41	91
260	29	76
262	32	60
269	45	76
270/364	54	170
272/570	54	180
276	38	78
281/346/713/832	59	45
302	34	30
303/720	43	14
304/681	37	222
305/786	50	5
307	24	59
308	30	170
309	38	131

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
310/424	46	16
312/872	40	1
313	38	6
314	30	7
315	48	149
316	25	14
317	40	36
318	37	117
319	33	98
320	46	98
321	30	5
321/407	42	17
323	43	12
325	31	55
331/630	39	25
334	42	76
336	57	82
337	34	70
339/781	33	40
347/718/917/929	53	11
347/718/929	40	2
351/978	37	58
352	31	48
360	56	75
361	39	63
380/614	36	16
385/801	28	20
386	36	28
401	25	25
402/531	57	281
404/470/678	53	1
405	33	82
406	41	260
408/669	46	11
409	43	47
410/443/667	53	102

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
412/878	38	23
413	29	61
414	28	4
415/628	49	14
417	43	155
419/567	49	175
423	47	70
425	36	14
430/903	58	158
432	25	36
434	31	66
435	36	64
440	40	62
442/760	54	83
458/541	45	150
470/678/770	57	41
478	39	36
479	26	59
480	30	1
484/610	53	90
501	31	57
502	36	35
503/971	51	61
504	34	5
505	35	29
507	42	170
508/774	37	85
509	53	119
510	39	13
512/737	50	35
513	34	25
515	39	72
516	50	11
517	53	77
518	55	135
520	33	27

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
530	48	116
534/715	75	253
539/918	45	125
540	48	117
559	36	57
561	44	7
562	45	9
563	30	78
571/703	53	19
573	42	216
574	38	53
575	33	51
580	37	117
585	40	77
586	37	11
601/769	45	100
602	27	1
603	38	149
605	22	100
606	37	99
607	39	105
608	56	159
609	41	39
612	41	1
615/629	39	49
616	41	36
617/857	44	20
618	43	212
619	41	11
620	55	198
623	28	1
626	47	10
631	47	53
636	31	46
641	38	155
650	38	15

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
651	47	11
657/714	45	13
660	39	224
661	47	32
662	44	122
682/817	56	24
701	34	98
702/725	36	16
704/980	44	56
706/762	70	101
707	44	75
708	36	32
712	42	167
716	45	79
717	49	107
719	38	55
724/878	50	162
727	40	5
731	37	59
732/848	43	36
734	49	33
747/818	42	16
754/954	45	5
757	27	34
763	51	10
765	50	138
772	37	8
773/872	39	10
775	32	52
779/815	55	191
785	45	194
787/939	14	84
802	25	141
803	56	79
804	31	55
805	50	40

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
806	34	98
808	18	6
810	39	47
812/930	54	171
813	46	8
814	47	178
816	41	73
828	38	70
830	46	80
831	36	24
843/854	45	85
845	61	96
850	38	67
856	45	32
858	35	8
859	42	42
860/959	28	57
862/973	57	42
863	44	23
864	42	63
865	34	33
870	32	192
901	31	14
904	34	19
906	20	93
907	20	260
908	45	38
909	48	21
910	42	71
912	44	52
913	39	34
914	52	28
915	30	7
916	44	16
919/984	48	38
920	55	126

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
925	38	17
928	35	61
931	42	77
936	42	66
937	43	123
940	54	70
941	42	11
949	43	7
951	45	20
952	46	3
956	40	30
970	42	94
979	46	50
985	32	44
989	45	135

Section 5

Forecast Results and a Review of Forecasts versus Actual Block Activation

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 2015, 43.9% of the blocks forecasted were assigned, which is the fourth highest percentage since we began pooling. Table 5-1 below shows the top five years of assigned/forecasted blocks since pooling began.

Table 5-1

TOP FIVE YEARS OF ASSIGNED/ FORECASTED BLOCKS

RANK SINCE POOLING BEGAN	YEAR	PERCENTAGE OF ASSIGNED/ FORECASTED BLOCKS
1	2011	57.1
2	2010	48.6
3	2014	45.7
4	2015	43.9
5	2006	42.5

The relevant numbers are:

- ◆ 241 NPA and NPA complexes;
- ◆ 12,694 distinct rate areas with forecasts;
- ◆ 121,578 forecasted blocks; and
- ◆ 53,415 blocks assigned.

5.1 Forecasted versus Actual Block Assignments by NPA or NPA complex

The table below shows 121,578 blocks were forecasted and 53,415 blocks were assigned in 241 NPA and NPA complexes during the 2015 calendar year. This resulted in 43.9% of the forecasted blocks being assigned. The lowest historical percentage was 21.3% in 2004.

Carriers forecasted a need for blocks in 12,694 of the 16,248 pooling rate centers, or in 78% of them. In 3,554 pooling rate centers, no blocks were forecasted during 2015. When compared with 2014, the number of blocks assigned decreased by 10% while the number of blocks forecasted decreased by 6%. The Minnesota 952 NPA had the lowest percentage of blocks assigned compared to total forecast, at 14.2%, while the Michigan 906 NPA had the highest ratio at 70.0%.

Table 5-2

Forecasted versus Actual Block Assignments by NPA or NPA Complex

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
201/551	NJ	564	380	67.38%
202	DC	333	209	62.76%
203/475	CT	613	367	59.87%
205	AL	384	190	49.48%
206	WA	313	161	51.44%
207	ME	407	158	38.82%
208	ID	619	294	47.50%
209	CA	814	465	57.13%
210	TX	528	278	52.65%
212/646/917	NY	673	352	52.30%
213	CA	587	273	46.51%
214/469/972	TX	1,693	801	47.31%
215/267	PA	1,192	550	46.14%
216	OH	316	162	51.27%
217	IL	357	200	56.02%
218	MN	409	174	42.54%
219	IN	333	151	45.35%
220/740	OH	593	262	44.18%
224/847	IL	856	265	30.96%
225	LA	263	123	46.77%
228	MS	170	78	45.88%
229	GA	243	69	28.40%
231	MI	450	184	40.89%
234/330	OH	601	236	39.27%
239	FL	232	69	29.74%
240/301	MD	980	397	40.51%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
248/947	MI	589	205	34.80%
251	AL	213	116	54.46%
252	NC	282	139	49.29%
253	WA	255	119	46.67%
254	TX	265	137	51.70%
256/938	AL	311	158	50.80%
260	IN	236	101	42.80%
262	WI	386	170	44.04%
269	MI	497	169	34.00%
270/364	KY	419	116	27.68%
272/570	PA	670	291	43.43%
276	VA	165	52	31.52%
281/346/713/	TX	2428	998	41.10%
302	DE	397	203	51.13%
303/720	CO	989	376	38.02%
304/681	WV	451	256	56.76%
305/786	FL	1125	521	46.31%
307	WY	256	114	44.53%
308	NE	1158	341	29.45%
309	IL	483	224	46.38%
310/424	CA	992	465	46.88%
312/872	IL	403	223	55.33%
313	MI	697	168	24.10%
314	MO	667	262	39.28%
315	NY	398	232	58.29%
316	KS	1326	542	40.87%
317	IN	488	212	43.44%
318	LA	265	131	49.43%
319	IA	209	94	44.98%
320	MN	430	139	32.33%
321	FL	165	78	47.27%
321/407	FL	632	297	46.99%
323	CA	869	363	41.77%
325	TX	110	50	45.45%
331/630	IL	431	154	35.73%
334	AL	271	138	50.92%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
336	NC	518	220	42.47%
337	LA	236	135	57.20%
339/781	MA	631	303	48.02%
347/718/917/	NY	2001	749	37.43%
347/718/929	NY	174	88	50.57%
351/978	MA	811	283	34.90%
352	FL	581	171	29.43%
360	WA	518	201	38.80%
361	TX	300	143	47.67%
380/614	OH	355	204	57.46%
385/801	UT	699	326	46.64%
386	FL	271	102	37.64%
401	RI	218	141	64.68%
402/531	NE	644	255	39.60%
404/470/678	GA	816	309	37.87%
405	OK	550	247	44.91%
406	MT	387	78	20.16%
408/669	CA	465	260	55.91%
409	TX	257	124	48.25%
410/443/667	MD	1228	542	44.14%
412/878	PA	464	205	44.18%
413	MA	273	140	51.28%
414	WI	513	165	32.16%
415/628	CA	766	398	51.96%
417	MO	595	278	46.72%
419/567	OH	473	186	39.32%
423	TN	410	148	36.10%
425	WA	290	127	43.79%
430/903	TX	468	166	35.47%
432	TX	230	89	38.70%
434	VA	241	136	56.43%
435	UT	254	93	36.61%
440	OH	439	219	49.89%
442/760	CA	767	461	60.10%
458/541	OR	705	297	42.13%
470/678/770	GA	1371	508	37.05%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
478	GA	229	91	39.74%
479	AR	228	95	41.67%
480	AZ	805	308	38.26%
484/610	PA	1201	399	33.22%
501	AR	304	141	46.38%
502	KY	462	257	55.63%
503/971	OR	684	324	47.37%
504	LA	245	99	40.41%
505	NM	753	209	27.76%
507	MN	554	159	28.70%
508/774	MA	1029	389	37.80%
509	WA	516	151	29.26%
510	CA	500	246	49.20%
512/737	TX	674	347	51.48%
513	OH	499	257	51.50%
515	IA	393	141	35.88%
516	NY	439	160	36.45%
517	MI	520	160	30.77%
518	NY	702	356	50.71%
520	AZ	570	241	42.28%
530	CA	512	223	43.55%
534/715	WI	251	128	51.00%
539/918	OK	534	224	41.95%
540	VA	553	255	46.11%
559	CA	975	567	58.15%
561	FL	313	151	48.24%
562	CA	533	258	48.41%
563	IA	297	169	56.90%
571/703	VA	935	363	38.82%
573	MO	602	228	37.87%
574	IN	145	64	44.14%
575	NM	424	121	28.54%
580	OK	200	105	52.50%
585	NY	389	225	57.84%
586	MI	828	455	54.95%
601/769	MS	392	174	44.39%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
602	AZ	431	114	26.45%
603	NH	499	179	35.87%
605	SD	394	144	36.55%
606	KY	287	70	24.39%
607	NY	198	112	56.57%
608	WI	337	139	41.25%
609	NJ	524	255	48.66%
612	MN	478	114	23.85%
615/629	TN	687	308	44.83%
616	MI	448	178	39.73%
617/857	MA	747	409	54.75%
618	IL	360	156	43.33%
619	CA	659	373	56.60%
620	KS	694	205	29.54%
623	AZ	462	108	23.38%
626	CA	483	305	63.15%
631	NY	653	207	31.70%
636	MO	349	175	50.14%
641	IA	264	52	19.70%
650	CA	418	243	58.13%
651	MN	349	83	23.78%
657/714	CA	1011	552	54.60%
660	MO	602	226	37.54%
661	CA	667	373	55.92%
662	MS	404	182	45.05%
682/817	TX	648	255	39.35%
701	ND	378	105	27.78%
702/725	NV	638	327	51.25%
704/980	NC	831	381	45.85%
706/762	GA	500	210	42.00%
707	CA	567	246	43.39%
708	IL	545	175	32.11%
712	IA	242	61	25.21%
716	NY	701	412	58.77%
717	PA	588	261	44.39%
719	CO	415	133	32.05%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
724/878	PA	706	292	41.36%
727	FL	437	205	46.91%
731	TN	176	116	65.91%
732/848	NJ	571	343	60.07%
734	MI	422	134	31.75%
747/818	CA	748	421	56.28%
754/954	FL	621	256	41.22%
757	VA	514	237	46.11%
763	MN	249	105	42.17%
765	IN	343	120	34.99%
772	FL	100	58	58.00%
773/872	IL	671	239	35.62%
775	NV	266	121	45.49%
779/815	IL	681	258	37.89%
785	KS	716	205	28.63%
787/939	PR	589	307	52.12%
802	VT	296	108	36.49%
803	SC	491	259	52.75%
804	VA	417	223	53.48%
805	CA	760	476	62.63%
806	TX	331	125	37.76%
808	HI	339	212	62.54%
810	MI	302	71	23.51%
812/930	IN	380	167	43.95%
813	FL	542	269	49.63%
814	PA	622	281	45.18%
816	MO	605	220	36.36%
828	NC	248	128	51.61%
830	TX	261	119	45.59%
831	CA	253	164	64.82%
843/854	SC	417	228	54.68%
845	NY	370	189	51.08%
850	FL	290	124	42.76%
856	NJ	493	233	47.26%
858	CA	244	161	65.98%
859	KY	275	115	41.82%



NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
860/959	CT	465	271	58.28%
862/973	NJ	589	294	49.92%
863	FL	294	151	51.36%
864	SC	317	203	64.04%
865	TN	343	142	41.40%
870	AR	224	146	65.18%
901	TN	343	147	42.86%
904	FL	337	182	54.01%
906	MI	40	28	70.00%
907	AK	134	81	60.45%
908	NJ	301	156	51.83%
909	CA	683	335	49.05%
910	NC	432	212	49.07%
912	GA	273	114	41.76%
913	KS	628	181	28.82%
914	NY	295	108	36.61%
915	TX	364	127	34.89%
916	CA	629	396	62.96%
919/984	NC	599	362	60.43%
920	WI	424	169	39.86%
925	CA	333	181	54.35%
928	AZ	354	152	42.94%
931	TN	261	137	52.49%
936	TX	322	150	46.58%
937	OH	311	181	58.20%
940	TX	154	83	53.90%
941	FL	288	138	47.92%
949	CA	382	237	62.04%
951	CA	574	256	44.60%
952	MN	452	64	14.16%
956	TX	573	298	52.01%
970	CO	746	195	26.14%
979	TX	278	105	37.77%
985	LA	205	85	41.46%
989	MI	867	292	33.68%
Totals		121,578	53,415	43.93%

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

Table 5-3 below shows that there were 9 NPAs/NPA complex areas where fewer than 25% of the blocks forecasted were assigned in 2015. This is down from the 13 NPAs/NPA complex areas where fewer than 25% of the blocks forecasted were assigned in 2014.

Table 5-3

NPAs/States with Forecasted versus Actual Blocks Assigned under 25%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
952	MN	452	64	14.16%
641	IA	264	52	19.70%
406	MT	387	78	20.16%
623	AZ	462	108	23.38%
810	MI	302	71	23.51%
651	MN	349	83	23.78%
612	MN	478	114	23.85%
313	MI	697	168	24.10%
606	KY	287	70	24.39%

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

Table 5-4 below shows that there were 75 NPAs/NPA complex areas where the ratio between blocks forecasted and blocks assigned was above 50% in 2015. This is a 29% decrease from 2014.

In 2015, there were no areas over 75%. In 2014 there were 11 areas that had a percent assigned over 75%.

Table 5-4

**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	40	28	70.00%
201/551	NJ	564	380	67.38%
858	CA	244	161	65.98%
731	TN	176	116	65.91%
870	AR	224	146	65.18%
831	CA	253	164	64.82%
401	RI	218	141	64.68%
864	SC	317	203	64.04%
626	CA	483	305	63.15%
916	CA	629	396	62.96%
202	DC	333	209	62.76%
805	CA	760	476	62.63%
808	HI	339	212	62.54%
949	CA	382	237	62.04%
907	AK	134	81	60.45%
919/984	NC	599	362	60.43%
442/760	CA	767	461	60.10%
732/848	NJ	571	343	60.07%
203/475	CT	613	367	59.87%
716	NY	701	412	58.77%
315	NY	398	232	58.29%
860/959	CT	465	271	58.28%
937	OH	311	181	58.20%
559	CA	975	567	58.15%
650	CA	418	243	58.13%
772	FL	100	58	58.00%
585	NY	389	225	57.84%
380/614	OH	355	204	57.46%
337	LA	236	135	57.20%
209	CA	814	465	57.13%
563	IA	297	169	56.90%
304/681	WV	451	256	56.76%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
619	CA	659	373	56.60%
607	NY	198	112	56.57%
434	VA	241	136	56.43%
747/818	CA	748	421	56.28%
217	IL	357	200	56.02%
661	CA	667	373	55.92%
408/669	CA	465	260	55.91%
502	KY	462	257	55.63%
312/872	IL	403	223	55.33%
586	MI	828	455	54.95%
617/857	MA	747	409	54.75%
843/854	SC	417	228	54.68%
657/714	CA	1011	552	54.60%
251	AL	213	116	54.46%
925	CA	333	181	54.35%
904	FL	337	182	54.01%
940	TX	154	83	53.90%
804	VA	417	223	53.48%
803	SC	491	259	52.75%
210	TX	528	278	52.65%
580	OK	200	105	52.50%
931	TN	261	137	52.49%
212/646/917	NY	673	352	52.30%
787/939	PR	589	307	52.12%
956	TX	573	298	52.01%
415/628	CA	766	398	51.96%
908	NJ	301	156	51.83%
254	TX	265	137	51.70%
828	NC	248	128	51.61%
513	OH	499	257	51.50%
512/737	TX	674	347	51.48%
206	WA	313	161	51.44%
863	FL	294	151	51.36%
413	MA	273	140	51.28%
216	OH	316	162	51.27%
702/725	NV	638	327	51.25%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percent Assigned
302	DE	397	203	51.13%
845	NY	370	189	51.08%
534/715	WI	251	128	51.00%
334	AL	271	138	50.92%
256/938	AL	311	158	50.80%
518	NY	702	356	50.71%
347/718/929	NY	174	88	50.57%
636	MO	349	175	50.14%

5.4. Analysis of Forecasted-versus-Actual-Blocks Assigned Percentage since 2011

For the five years since 2011, the 2015 forecasted-versus-actual-blocks-assigned percentage of 43.9% 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.

Table 5-5 below illustrates the ratio between forecasts and actual assigned blocks from 2011 through 2015, ranked from highest percentage to lowest.

Table 5-5

Summary of Forecasts and Actual Assigned Blocks from 2011 through 2015

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	2014	129,820	59,274	45.7%
3	2015	121,578	53,415	43.9%
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

6.1.1 Summary of PAS Performance

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 critical.

Section 3.3 of contract Attachment A, Thousands-Block Pooling Administrator *Technical Requirement*, 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 2015, we continued our tradition of exceeding the PAS performance metric of 99.9% scheduled uptime. PAS was available for use **99.98%** of scheduled uptime. Of the 8,760 hours that PAS could be available, PAS users experienced only four instances of *unscheduled* down time for a total of one hour and 25 minutes. The PAS has exceeded the performance metric for every year since 2002.

There was no scheduled PAS unavailability in 2015 other than the major overhaul of the PAS in January. Details about the PAS refresh and enhancements completed in January can be found in Section 2.3.2.1.



Table 6-1 summarizes PAS system performance in 2015.

Table 6-1
Summary of Actual PAS Performance

MONTH	NUMBER OF POSSIBLE AVAILABLE HOURS	NUMBER OF HOURS AVAILABLE	TOTAL UNAVAILABILITY	SCHEDULED (S) OR UNSCHEDULED (U)
January	744	701 hours 45 minutes	42 hours 15 minutes	S
February	672	672		
March	744	743 hours 38 minutes	22 minutes	U
April	720	720		
May	744	744	20 minutes	U
June	720	719 hours 40 minutes		
July	744	743 hours 35 minutes	25 minutes	U
August	744	744		
September	720	720		
October	744	743 hours 42 minutes	18 minutes	U
November	720	720		
December	744	744		

6.1.2 PAS Performance Metrics

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
2015 PAS PERFORMANCE METRICS

REQUIRED SERVICE	PERFORMANCE STANDARD	ACCEPTABLE QUALITY LEVEL	ACCOMPLISHMENT
PAS Availability (See PWS 3.3)	Pooling Administration System is available	99.9%	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 FOUR INSTANCES OF UNSCHEDULED DOWNTIME TOTALLING ONE HOUR AND 25 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 NO DOWNTIME RELATED TO SCHEDULED MAINTENANCE

6.1.3 PAS Maintenance

We had a total of nine maintenance updates. Although we requested and were approved for 15 hours of scheduled downtime outside of normal business hours for these activities, we did not use them, and PAS customers experienced no downtime during scheduled maintenance.

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

6.1.4 Pooling Trouble Tickets Opened and Closed

The PA opened 32 trouble tickets and closed 30. This represents a considerable increase over the total of six from 2014, but is not surprising in light of the complete PAS overhaul that was completed in January. After the implementation of the enhanced PAS in 2008 we had a similar number of trouble tickets (28) and the total continued to decline each year following. Only nine of the 32 trouble tickets were opened in the second half of the year. We expect the downward trend to continue into 2016. We responded to each issue as quickly as possible to ensure timely access to PAS for customer requests and found workarounds so that no customer was unable to complete their request. At no time was any user's information compromised.

We report trouble tickets details each month to the NOWG and in the "Monthly Pooling Metrics Report" posted on the website.

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 added a category of OTHER because the reason did not fall into any of the other categories.

Of the 32 trouble tickets opened by the PA in 2015, 31 were due to a PAS system issue and one was due to "Other". The overall average time that a trouble ticket was open until resolution was 45 days 9 hours 28 minutes.

Table 6-3 and Figure 6 show the total number of trouble tickets opened, by year, since 2011.

Table 6-3

Number of Pooling Trouble Tickets from 2011 through 2015

YEAR	NUMBER OF TROUBLE TICKETS
2011	4
2012	3
2013	2
2014	6
2015	32

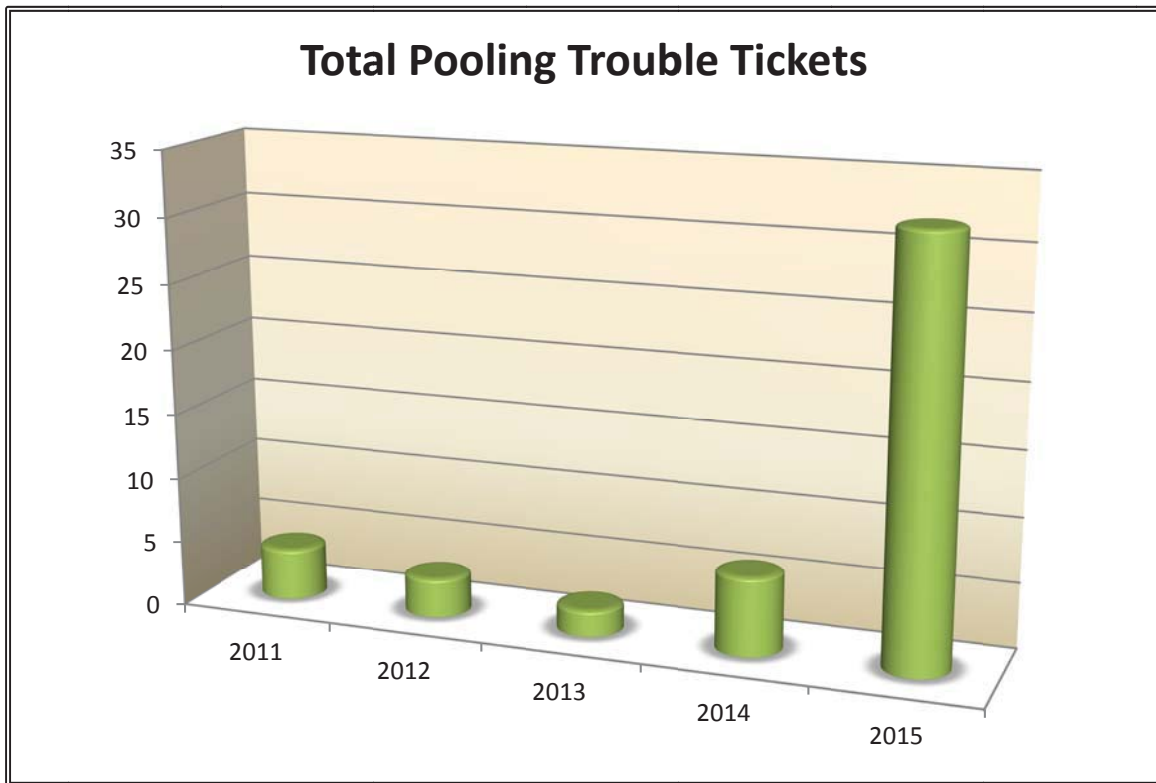


Figure 6: Total Trouble Tickets 2011 through 2015



6.2. Routing Number Administration System (RNAS) Performance in 2015

6.2.1 Summary of RNAS Performance

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. Because it provides essential reporting features that contain real-time data, reliability is essential. RNAS is subject to the same availability requirements as PAS.

We continued to exceed the RNAS performance metric of 99.9% scheduled uptime. RNAS was available for use **99.99%** of the year. Of the 8,760 possible hours that RNAS could be available, RNAS users experienced only one 30-minute instance of *unscheduled* down time. The RNAS has exceeded its performance metric every year since implementation in March 2012.

As outlined in Table 6-4, RNAS exceeded the performance metrics set forth in Attachment C of the contract:

Table 6-4

Summary of RNAS Performance

MONTH	NUMBER OF POSSIBLE AVAILABLE HOURS	NUMBER OF HOURS AVAILABLE	TOTAL UNAVAILABILITY	SCHEDULE D (S) OR UNSCHEDULED (U)
January	744	744		
February	672	672		
March	744	744		
April	720	720		
May	744	744		
June	720	720		
July	744	743 hours 30 minutes	30 minutes	U
August	744	744		
September	720	720		
October	744	744		
November	720	720		
December	744	744		

6.2.2 RNAS Performance Metrics

In 2015, as outlined in Table 6-5, RNAS met or exceeded the performance metrics as set forth in Section 3.3 of Attachment A of the contract for PA systems:

**Table 6-5
2015 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 99.99%
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 ONLY ONE INSTANCE OF UNSCHEDULED DOWNTIME RESULTING IN THE UNAVAILABILITY OF RNAS TOTALING 30 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 ZERO HOURS OF APPROVED DOWNTIME AS A RESULT OF SCHEDULED MAINTENANCE

6.2.3 RNAS Maintenance in 2015

All seven maintenance instances for RNAS were performed outside of normal working hours, and RNAS customers experienced no downtime.

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

6.2.4 P-ANI Administration Trouble Tickets

The RNA opened no trouble tickets for RNAS in 2015. Since the initial implementation of RNAS in 2012, only 2 trouble tickets have been opened, both in 2014.



Table 6-6 shows the total number of trouble tickets opened, by year, since 2012.

**Table 6-6
Number of RNAS Trouble Tickets from 2012 through 2015**

YEAR	NUMBER OF TROUBLE TICKETS
2012	0
2013	0
2014	2
2015	0

6.3. PA and RNA Systems Disaster Recovery Testing

The PA successfully completed technical disaster recovery testing for both PAS and RNAS on October 18 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: providing status reports at the North American Numbering Council (NANC) meetings, interaction with the Numbering Oversight Working Group (NOWG), participation in NANC subgroup meetings, 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 2015.

8.1 North American Numbering Council (NANC)

Neustar, as national PA, provided status reports in person at three meetings of the North American Numbering Council (NANC) in 2015, and sent in a status report for the March 2015 meeting that was cancelled due to weather. The PA reports consist of the status of thousands-block pooling administration and routing number administration as well as events affecting the performance of the PA and RNA.

The PA also participated in three NANC subgroups; the Future of Numbering (FoN) Working Group, the Internet Protocol Issue Management Group, and the Testing Landscape Team.

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 meetings in 2015.

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. The IP-IMG will monitor and track the IP (Internet Protocol) numbering related issues/contributions that are currently being worked by industry committees identified by the IP-IMG, and will track the progress of test bed activities, the goal being to examine and identify areas related to numbering that may need to be raised to the NANC. (Mission statement). The PA attended the IP IMG meetings in 2015.

8.1.3 Testing Landscape Team (TLT)

The Testbed Landscape Team (TLT) was formed in 2014. Transition initiatives were calling for test beds to validate solutions for migration to all IP. The group is to evaluate existing testbed activities and proposals to identify common requirements. Testbed use cases consist of “numbering”, “routing” and “provider to provider”. At the end of 2015 the group transitioned from a landscape team to a focus group, since a focus group is considered a longer-term framework for the testbeds work. This team keeps the ATIS Technical and Operations (TOPS) council apprised of its work. The PA started attending these meetings in 2015.

8.2 Industry Forums

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

- Working on issues that affect 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 2015:

- **Industry Numbering Committee (INC)** – the PA attended all six face-to-face meetings and five virtual meetings. The PA submitted four new issues and 18 new contributions. Two issues and 13 contributions submitted were pooling-related. Two issues and five contributions submitted were p-ANI-related.
- **Common Interest Group on Rating and Routing (CIGRR)** – the PA participated in the four CIGRR meetings and eight conference calls. The PA submitted one new issue in 2015, which remains active. (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). The BCRnoNXD is a monthly report and 3E report is as needed. 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.
- **Emergency Services Interconnection Forum (ESIF)** – the PA, as the Routing Number Administrator, participated in the ESIF meetings. Amy Putnam continued as the co-chair of the ESIF-ECDR (Emergency Call & Data Routing) sub-committee, and a member of the ESIF Advisory Group, until the ECDR sub-committee was dissolved in October 2015.

8.3 PA Interaction with the Numbering Oversight Working Group (NOWG)

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

- Reviewing PA Change Order proposals 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 as necessary during the year. The entire PA management team participates with the NOWG in the monthly conference calls and the annual performance review process, including the operational review.

Each month, the NOWG and PA met via conference call to discuss the PA's performance during the previous month. The 2015 meeting dates were: January 16, February 26, March 12, April 21, May 26, June 23, July 17, August 13, September 18, October 13, November 13, and December 15.

Prior to each monthly meeting, the PA updated an agenda and then reviewed the information with the NOWG during the meeting. The standing agenda items are:

- 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
- Rate centers with blocks with a pending status.
- Applications – number of applications processed monthly (running 12 month total)
- Number of Part 1s passed thru 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
- 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:

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

In all, the PA provided 48 reports to the NOWG for the monthly meetings in 2015. We also provided the NOWG with mid-year highlights that presented a summary of PA performance for the first six-months of the 2015 calendar year.

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 8-1, we had 105 customer focus items in 2015.

**Table 8-1
Number of Customer Focus Items by Month**

MONTH	NUMBER OF CUSTOMER FOCUS ITEMS
January	7
February	5
March	10
April	10
May	14
June	13
July	9
August	4
September	9
October	7
November	9
December	8
TOTAL	105

Also in 2015, the NOWG completed the annual review of 2014 PA and p-ANI Administrator performance and rated the performance as “Met”³ by using the following inputs:

- 2014 Performance Feedback Survey for PA and RNA;
- Monthly Reports;
- Annual Operational Review, and
- NOWG observations and monthly interactions with the PA

As a result of the annual operational review of 2014 performance, which was held March 31 – April 1 2015 in our Concord, CA office, the NOWG made four formal suggestions for continuous improvement of pooling administration that the PA took under consideration and provided responses about to the NOWG. The PA worked, and continues to work, cooperatively with the NOWG to make desired industry improvements while also meeting our contractual requirements.

The NOWG provides recommendations to the FCC on all PA change order proposals. The NOWG provided one recommendation on our change orders in 2015. For details on change orders, see Section 2.3.2

³ The NOWG changed their rating measurement in 2014 to be either Met or Not Met.



The PA and RNA also reviewed the proposed 2015 performance surveys for content and prepared them for website posting and distribution on January 4, 2016.

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 2015, Neustar, as national PA, received **no formal complaints**.

8.5 Tips

8.5.1 Pooling Tips of the Quarter

The PA has been offering *Tips* since 2004 and feedback from recipients continues to be positive. Topics for the *Tip* are generated from issues raised and suggestions received from regulators and service providers, INC action items, and internal intelligence, when processes need to be clarified. The *Tip* is sent via email to the PAS distribution list 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 8-2 lists all of the Pooling *Tip* topics that were covered by quarter in 2015.

Table 8-2
2015 Tips of the Quarter

Month	Topic
January	Effective Date Preference for New Block, Block Modification, and Block Disconnect Requests
April	Disconnecting LRN records in the BIRDS database on pooled code returns
July	To Begin Pooling in an Excluded Rate Center
October	Designated Point of Contact - Search for New Block Holder/New Code Holder

8.5.2 P-ANI Tips of the Quarter

Building on the success of the *Pooling Tips*, the RNA began sending *P-ANI Tips* in April of 2012. The *P-ANI Tip* is sent via email to the RNAS distribution list on the first business day of each quarter. 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. Archive files for all *Tips* can be found on our website.

Table 8-3 lists all of the *P-ANI Tip* topics that were covered by quarter.

Table 8-3
2015 Quarterly p-ANI Tips

Month	Topic
January	Returning p-ANIs
April	24X7 Emergency Company Contact Number & Selective Router CLLI
July	Supporting Documentation for New p-ANI Requests
October	p-ANI Forecast Report

Section 9

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

This section identifies the volume of reports in 2015 related to pooling and p-ANI aggregated by regulatory agency, NANC, NANPA, and service providers. The total in each section includes standard contract reports as well as non-standard (ad hoc) reports. These totals *do not* include reports that were obtained directly from the Pooling Administration website, the Pooling Administration System (PAS), the Routing Number Administration System (RNAS).

Table 9-1 shows the total number of reports produced during 2015 aggregated by regulatory agency, NANC, NANPA, and service providers. 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.

NANC: the pooling status reports for the four NANC meetings and the monthly report we provide.

NANPA: pooling status reports for NANPA industry meetings, *ad hoc* reports, and two NRUF-cycle reports.

SERVICE PROVIDER: rate center change reports, implementation meeting reports, monthly meeting reports to the NOWG, and miscellaneous *ad hoc* reports.

**Table 9-1
Total 2015 Reports**

	Total number of reports
FCC	110
STATES	342
NANC	16
NANPA	54
SERVICE PROVIDER	115
TOTAL	637

Section 10 Trends in Pooling Since 2011⁴

When Neustar began administering number pooling trials in 1998, nearly every NPA was experiencing acceleration of expected exhaust dates. Many required extraordinary jeopardy procedures⁵ to maintain enough resources until relief was implemented.

There remain only 2 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 2011 and 2015, with the exception of Section 10.1, which includes NXXs saved since pooling began.

10.1 NXXs Saved by Pooling

The PA calculates that 70,624 NXXs have been saved by pooling, which is the equivalent of almost 90 NPAs. (*See Section 10.1.1 below for further details*)

Table 10-1 illustrates by NPA/NPA complex⁶ the 70,624 NXXs that have been saved in all NPA areas, in 50 states and the District of Columbia and Puerto Rico.

⁴ Except Section 10.1 and 10.2.3 which is since pooling began.

⁵ NANPA declares “jeopardy” in area codes for which the supply of NXXs could exhaust before relief can be provided.

⁶ An NPA complex is the combination of all NPAs tied to any specific geographic rate center, including overlay NPAs.

**Table 10-1
NXXs Saved by Pooling**

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
201/551	New Jersey	323
202	District of Columbia	25
203/475	Connecticut	293
205	Alabama	247
206	Washington	53
207	Maine	605
208	Idaho	290
209	California	456
210	Texas	20
212/646/917	New York	34
213	California	57
214/469/972	Texas	464
215/267	Pennsylvania	437
216	Ohio	50
217	Illinois	378
218	Minnesota	296
219	Indiana	282
220/740	Ohio	735
224/847	Illinois	573
225	Louisiana	159
228	Mississippi	78
229	Georgia	116
231	Michigan	555
234/330	Ohio	616
239	Florida	128
240/301	Maryland	530
248/947	Michigan	353
251	Alabama	112

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
252	North Carolina	340
253	Washington	117
254	Texas	229
256/938	Alabama	305
260	Indiana	295
262	Wisconsin	327
269	Michigan	551
270/364	Kentucky	324
272/570	Pennsylvania	676
276	Virginia	264
281/346/713/832	Texas	474
302	Delaware	319
303/720	Colorado	91
304/681	West Virginia	722
305/786	Florida	103
307	Wyoming	141
308	Nebraska	103
309	Illinois	222
310/424	California	313
312/872	Illinois	20
313	Michigan	101
314	Missouri	74
315	New York	621
316	Kansas	82
317	Indiana	295
318	Louisiana	334
319	Iowa	129
320	Minnesota	254
321	Florida	58
321/407	Florida	190



NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
323	California	186
325	Texas	77
331/630	Illinois	327
334	Alabama	277
336	North Carolina	298
337	Louisiana	250
339/781	Massachusetts	510
347/718/ 917/929	New York	223
347/718/ 929	New York	42
351/978	Massachusetts	663
352	Florida	304
360	Washington	368
361	Texas	226
380/614	Ohio	170
385/801	Utah	160
386	Florida	173
401	Rhode Island	192
402/531	Nebraska	378
404/470/ 678	Georgia	30
405	Oklahoma	297
406	Montana	279
408/669	California	163
409	Texas	168
410/443/ 667	Maryland	837
412/878	Pennsylvania	278
413	Massachusetts	382
414	Wisconsin	45
415/628	California	202
417	Missouri	416
419/567	Ohio	762
423	Tennessee	290

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
425	Washington	133
430/903	Texas	490
432	Texas	90
434	Virginia	250
435	Utah	132
440	Ohio	386
442/760	California	700
458/541	Oregon	645
470/678/ 770	Georgia	409
478	Georgia	118
479	Arkansas	111
480	Arizona	13
484/610	Pennsylvania	843
501	Arkansas	192
502	Kentucky	213
503/971	Oregon	277
504	Louisiana	42
505	New Mexico	139
507	Minnesota	278
508/774	Massachusetts	984
509	Washington	408
510	California	200
512/737	Texas	283
513	Ohio	168
515	Iowa	140
516	New York	170
517	Michigan	419
518	New York	616
520	Arizona	104
530	California	559
534/715	Wisconsin	351
539/918	Oklahoma	295
540	Virginia	448
559	California	369

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
561	Florida	145
562	California	126
563	Iowa	87
571/703	Virginia	224
573	Missouri	739
574	Indiana	197
575	New Mexico	165
580	Oklahoma	279
585	New York	403
586	Michigan	174
601/769	Mississippi	377
602	Arizona	10
603	New Hampshire	623
605	South Dakota	89
606	Kentucky	194
607	New York	318
608	Wisconsin	267
609	New Jersey	503
612	Minnesota	20
615/629	Tennessee	275
616	Michigan	409
617/857	Massachusetts	295
618	Illinois	437
619	California	142
620	Kansas	372
623	Arizona	12
626	California	153
631	New York	641
636	Missouri	308
641	Iowa	146
650	California	205
651	Minnesota	90
657/714	California	225
660	Missouri	323

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
661	California	269
662	Mississippi	621
682/817	Texas	258
701	North Dakota	96
702/725	Nevada	57
704/980	North Carolina	432
706/762	Georgia	430
707	California	676
708	Illinois	419
712	Iowa	174
716	New York	443
717	Pennsylvania	575
719	Colorado	202
724/878	Pennsylvania	914
727	Florida	82
731	Tennessee	254
732/848	New Jersey	531
734	Michigan	455
747/818	California	259
754/954	Florida	93
757	Virginia	209
763	Minnesota	47
765	Indiana	611
772	Florida	136
773/872	Illinois	145
775	Nevada	159
779/815	Illinois	714
785	Kansas	337
787/939	Puerto Rico	154
802	Vermont	339
803	South Carolina	342
804	Virginia	345
805	California	420
806	Texas	125



NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
808	Hawaii	50
810	Michigan	475
812/930	Indiana	441
813	Florida	144
814	Pennsylvania	627
816	Missouri	298
828	North Carolina	323
830	Texas	301
831	California	181
843/854	South Carolina	256
845	New York	712
850	Florida	228
856	New Jersey	435
858	California	102
859	Kentucky	186
860/959	Connecticut	472
862/973	New Jersey	601
863	Florida	196
864	South Carolina	367
865	Tennessee	190
870	Arkansas	315
901	Tennessee	67
904	Florida	160
906	Michigan	161
907	Alaska	27
908	New Jersey	337

NPA/NPA Complex	State	Quantity of NXXs Saved by Pooling
909	California	324
910	North Carolina	395
912	Georgia	171
913	Kansas	116
914	New York	359
915	Texas	41
916	California	180
919/984	North Carolina	298
920	Wisconsin	435
925	California	246
928	Arizona	171
931	Tennessee	334
936	Texas	176
937	Ohio	534
940	Texas	150
941	Florida	151
949	California	102
951	California	315
952	Minnesota	25
956	Texas	172
970	Colorado	500
979	Texas	224
985	Louisiana	257
989	Michigan	713
Totals		70,624

10.2 Trends in Thousands-Block Number Pooling

The following sub-sections contain summaries of thousands-block number pooling statistics since 2011.

10.2.1 Pooling Charts

The following charts illustrate the trends in the numbering environment between 2011 and 2015. 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 2011 through 2015 At-A-Glance**

	2011 Statistics	2012 Statistics	2013 Statistics	2014 Statistics	2015 Statistics
NXXs Opened for LRNs	531	442	532	352	425
NXXs Opened for Dedicated Customers	68	75	57	79	103
NXXs Opened for Pool Replenishment	2,175	2,071	2,022	2,950	3,188
Blocks Assigned by PA During Year	43,547	47,074	47,326	59,440	53,416
Total Assigned Blocks in PAS at Year End	334,557	368,661	401,186	451,859	494,582
Applications Processed	132,429	130,407	137,375	139,181	145,828

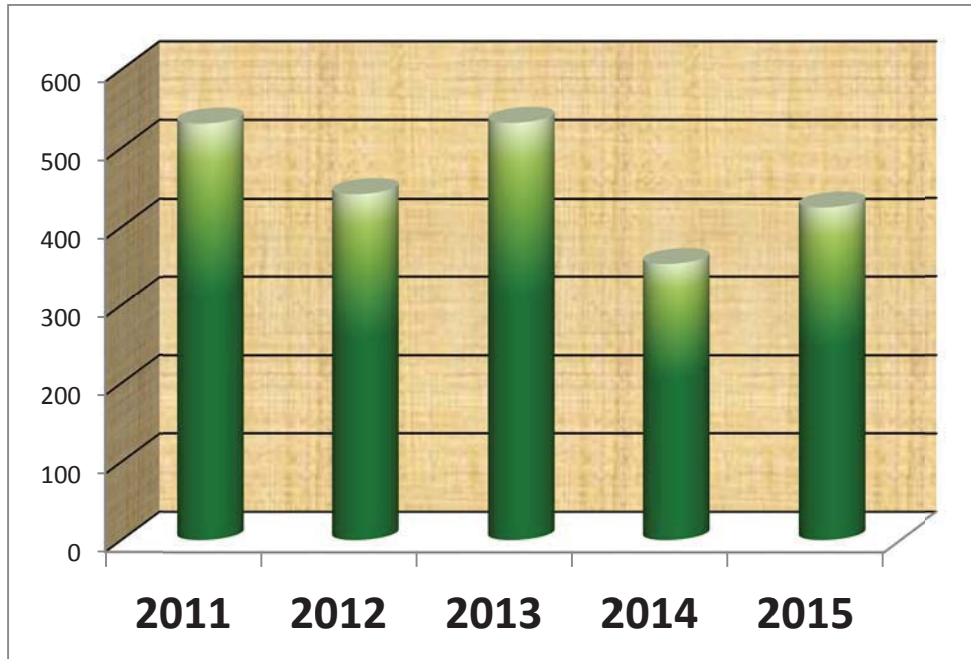


Figure 7: CO Codes Opened for LRNs from 2011 through 2015

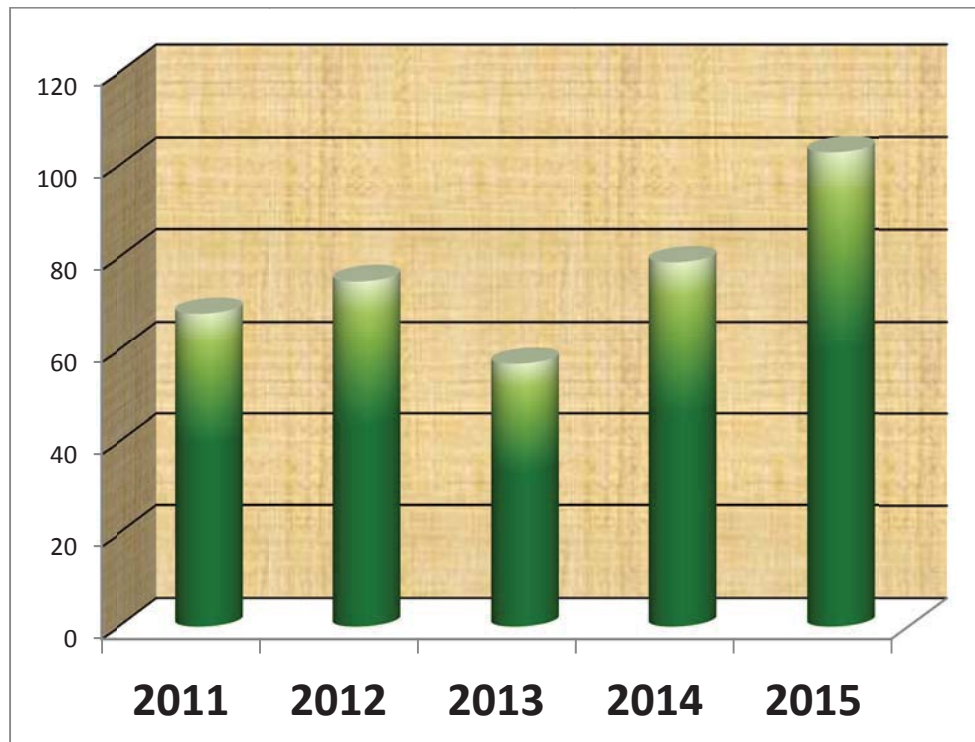


Figure 8: CO Codes Opened for Dedicated Customers from 2011 through 2015

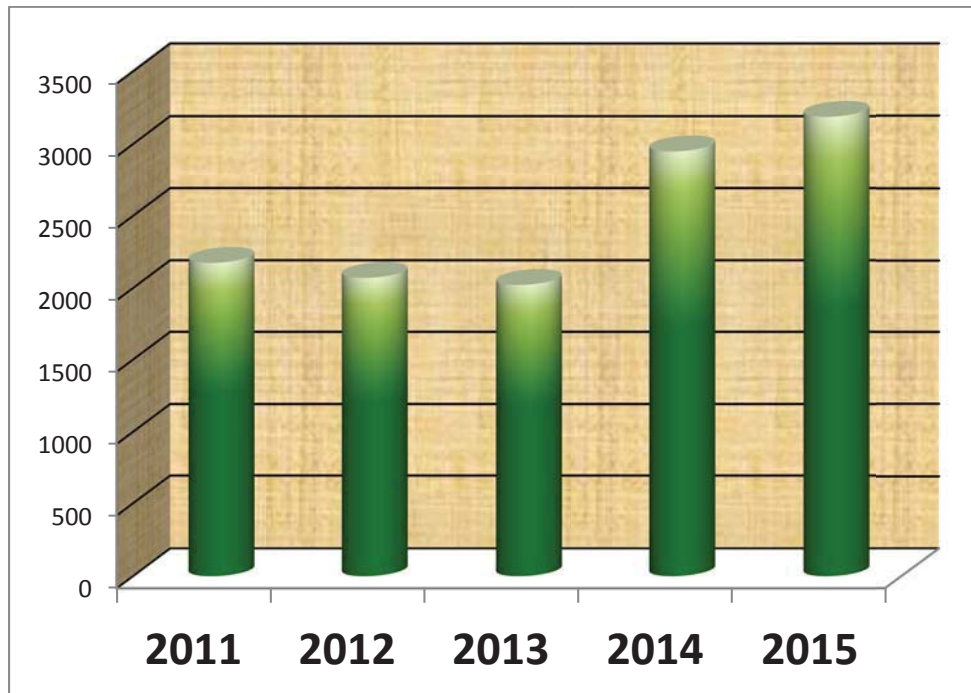


Figure 9: CO Codes Opened for Pool Replenishment from 2011 through 2015

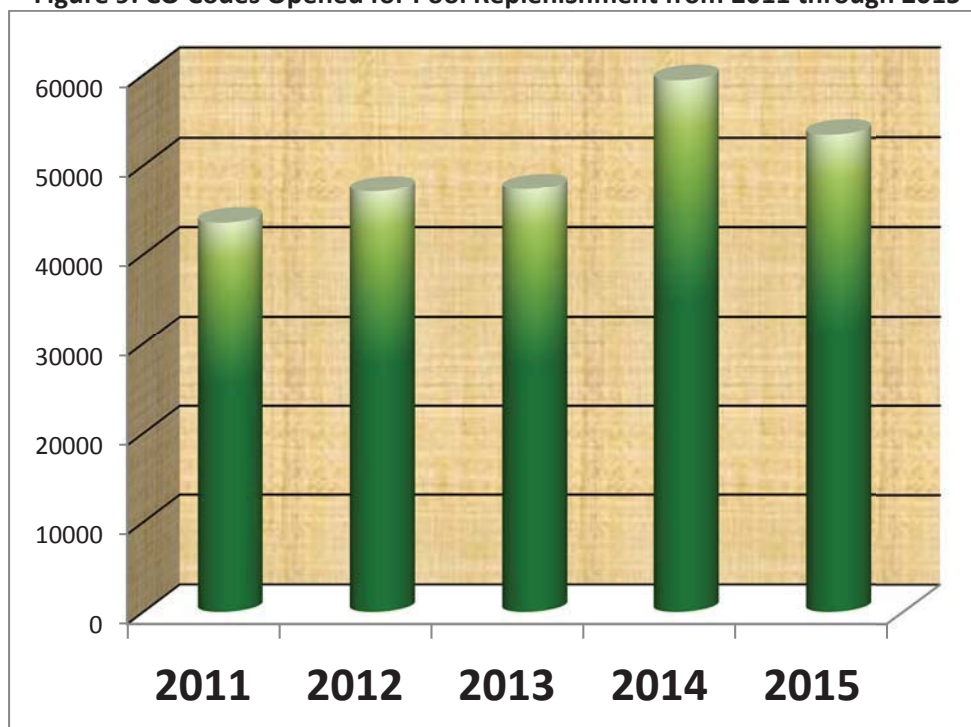


Figure 10: Blocks Assigned During Years 2011 through 2015

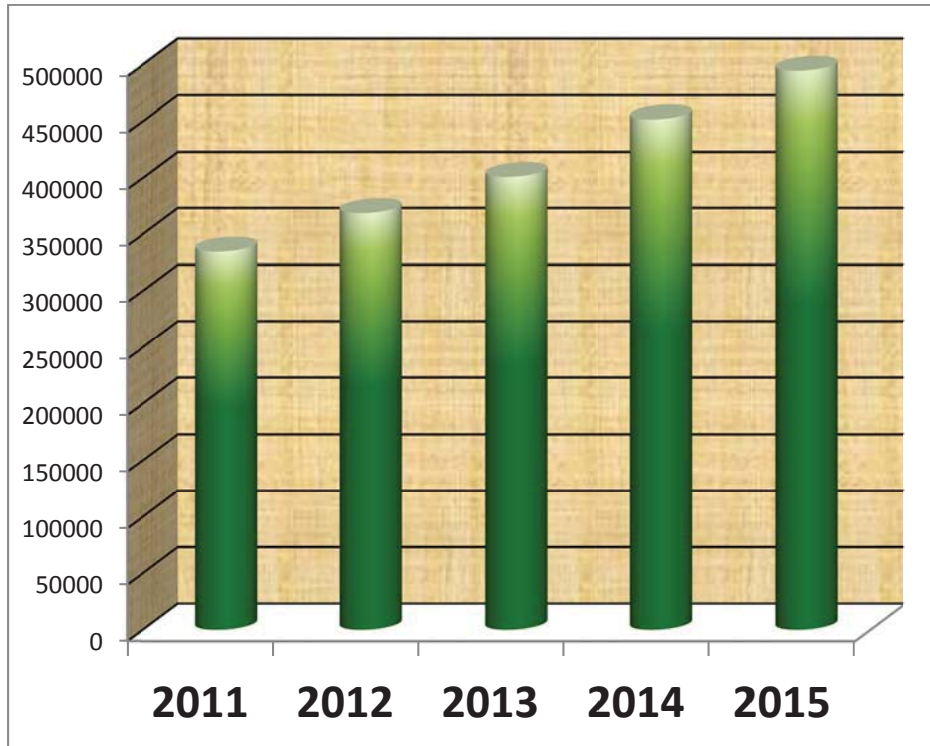


Figure 11: Assigned Blocks at End of Years 2011 through 2015

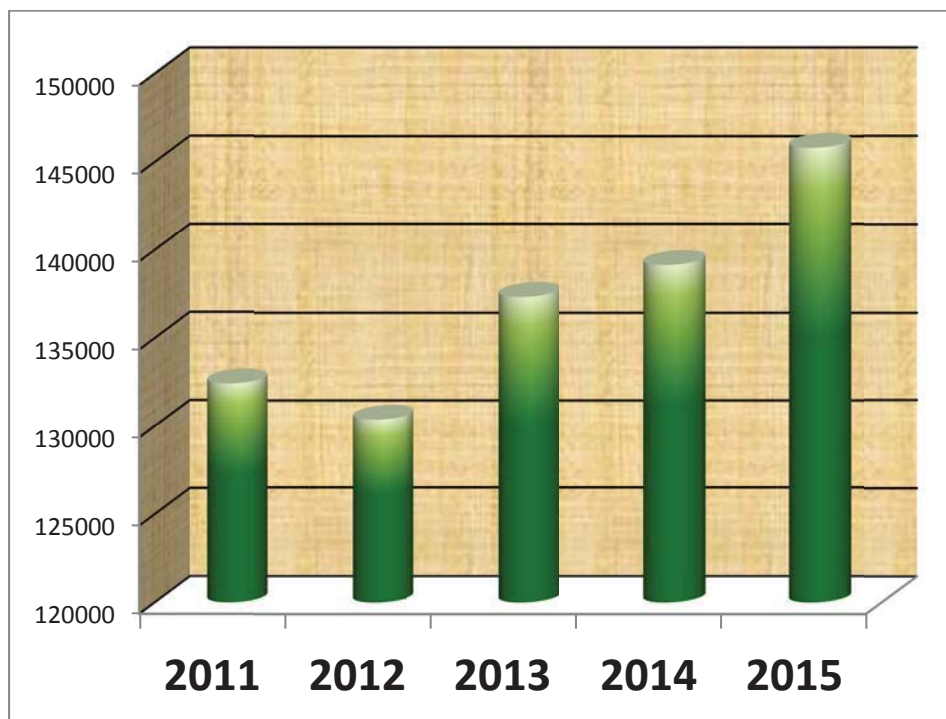


Figure 12: Applications (Part 3s) Processed From Years 2011 through 2015

10.2.2 Total Applications Processed (Part 3s) from 2011 through 2015

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 2011 through 2015.

**Table 10-5
Total Applications Processed (Part 3s) Since 2011**

	2011	2012	2013	2014	2015
Jan	7,725	8,220	15,136	8,069	7,518
Feb	11,572	9,357	9,602	8,725	15,628
Mar	13,250	9,958	10,357	9,422	10,763
Apr	10,960	8,266	11,823	17,601	13,295
May	12,422	11,904	12,863	8,977	17,565
Jun	10,061	10,369	25,142	8,145	24,285
Jul	10,512	8,021	8,016	10,493	13,310
Aug	14,633	10,990	9,817	15,232	8,068
Sep	12,600	15,081	8,374	12,113	9,977
Oct	9,057	15,124	10,499	15,849	8,524
Nov	11,296	15,491	7,975	13,954	7,604
Dec	8,341	7,626	7,771	10,601	9,291
TOTAL	132,429	130,407	137,375	139,181	145,828

10.2.3 Cumulative Thousands Blocks Assigned Since 2002

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

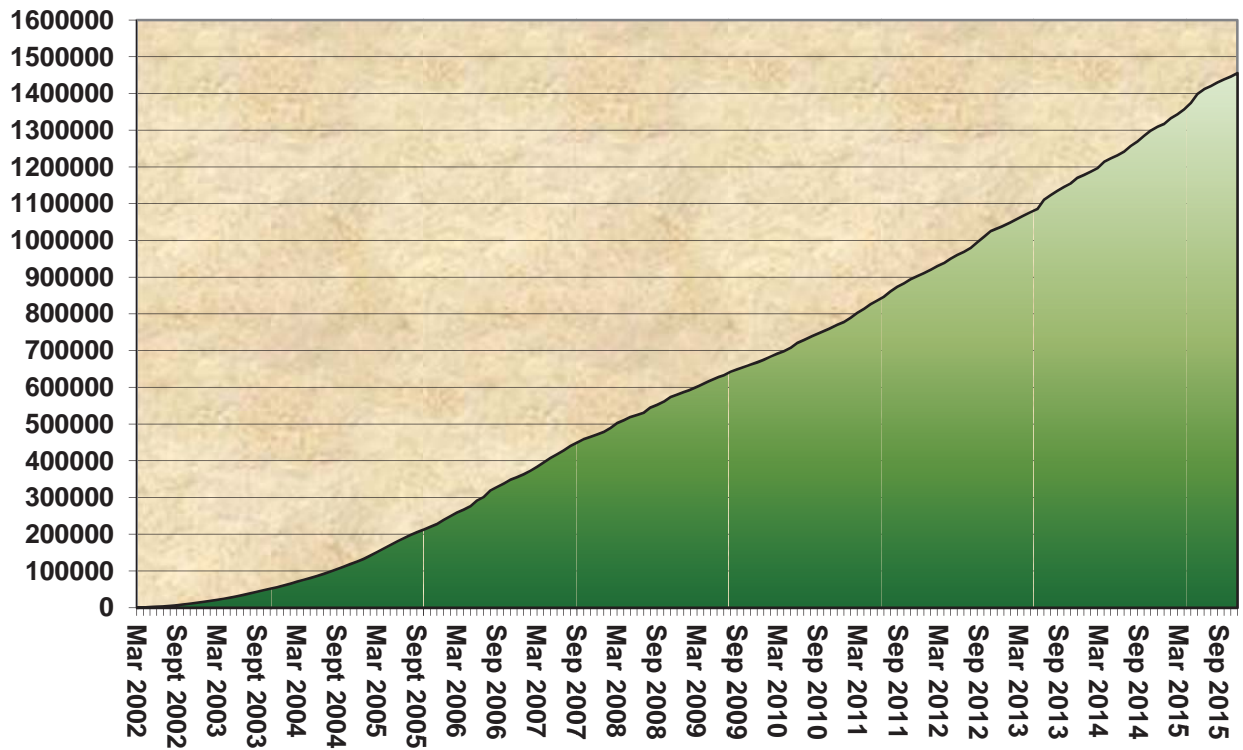


Figure 13: Cumulative Pooling Administration Applications (Part 3s) from March 2002 through December 2015

10.3 – Reclamation 2011 through 2015

The PA has been authorized to reclaim 238 blocks since 2011. Table 10-15 shows the total number of blocks reclaimed by state since 2011, ranked from highest to lowest.

**Table 10-15
Total Number of Blocks Reclaimed by State from 2011 through 2015**

State	2011	2012	2013	2014	2015	Total
CALIFORNIA		124	3	15	1	143
COLORADO			17			17
NEW JERSEY			15			15
VIRGINIA			11			11
WASHINGTON	2	2	4	1		9
PENNSYLVANIA			9			9
INDIANA	7					7
WISCONSIN		5				5
MASSACHUSETTS			3			3
MICHIGAN		1		1	1	3
TEXAS		3				3
FLORIDA			1		1	2
HAWAII		2				2
ILLINOIS			2			2
OREGON			1	1		2
DISTRICT OF COLUMBIA			1			1
MISSISSIPPI				1		1
NEW HAMPSHIRE	1					1
SOUTH CAROLINA				1		1
WEST VIRGINIA				1		1
TOTAL	10	137	67	21	3	238

Table 10-16 shows, by year since 2011, 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 ratio of new blocks to cumulative blocks remained the same in 2015 as in 2014. In addition, we initiated reclamation for only 3 blocks, the lowest number in the past five years.

Table 10-16
Summary of Reclamation from 2011 through 2015

Year	Number of Cumulative Blocks on the List	Number of New Blocks on the List ⁷	Percent New Blocks to Cumulative Blocks on the List	Number of Blocks for which Reclamation has been Initiated ⁸
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
2015	2,790	815	29%	3

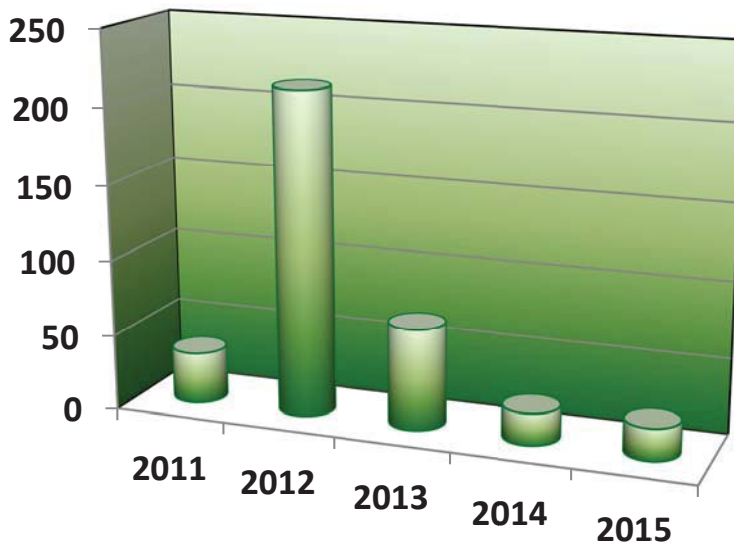


Figure 14: Blocks Reclaimed by Year from 2011 through 2015

10.4. Summary of Pooled Areas since 2011

The following sub-sections contain summary pooled area data since 2011.

10.4.1 Aggregated Pooled Areas – 2011 through 2015

⁷ We added new overdue Part 4s to the cumulative list in 2009.

⁸ 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.

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 distinct service providers participating in the pooled areas since 2011. In the past five years, the total number of rate centers in pooling has increased approximately 6.0%, from 15,329 to 16,248. The number of distinct service providers has increased approximately 12.8% from 951 at the end of 2011 to 1,073 at the end of 2015. 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 2011 through 2015

Year	Total Number of Distinct Pooling Service Providers	Pooled Areas
2011	951	15,329
2012	984	15,418
2013	1,020	15,819
2014	1,053	16,076
2015	1,073	16,248

10.4.2 Pooling versus Excluded Rate Centers – 2011 through 2015

The number of pooling rate centers continued to increase in 2015. This is primarily the result of carriers entering previously excluded rate centers. Of the 298 rate center designation changes we made in 2015, 67% were due to changes from excluded to optional status.

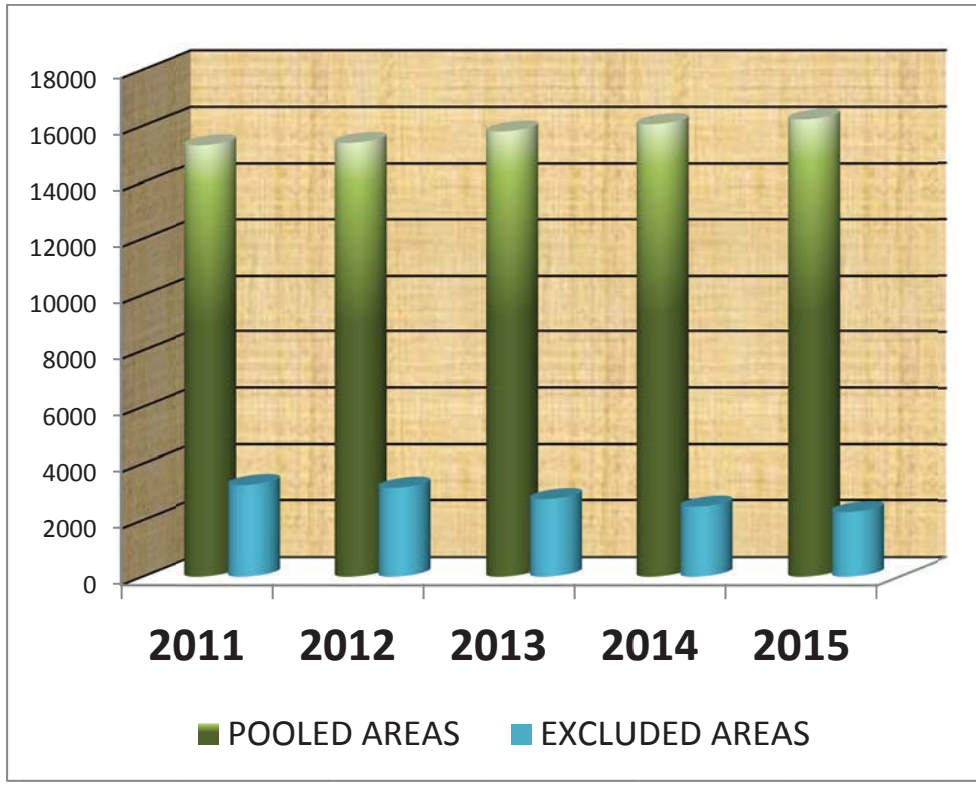


Figure 15: Pooling versus Excluded Rate Centers – 2011 through 2015

10.4.3 Total Number of Distinct Pooling Service Providers – 2011 through 2015

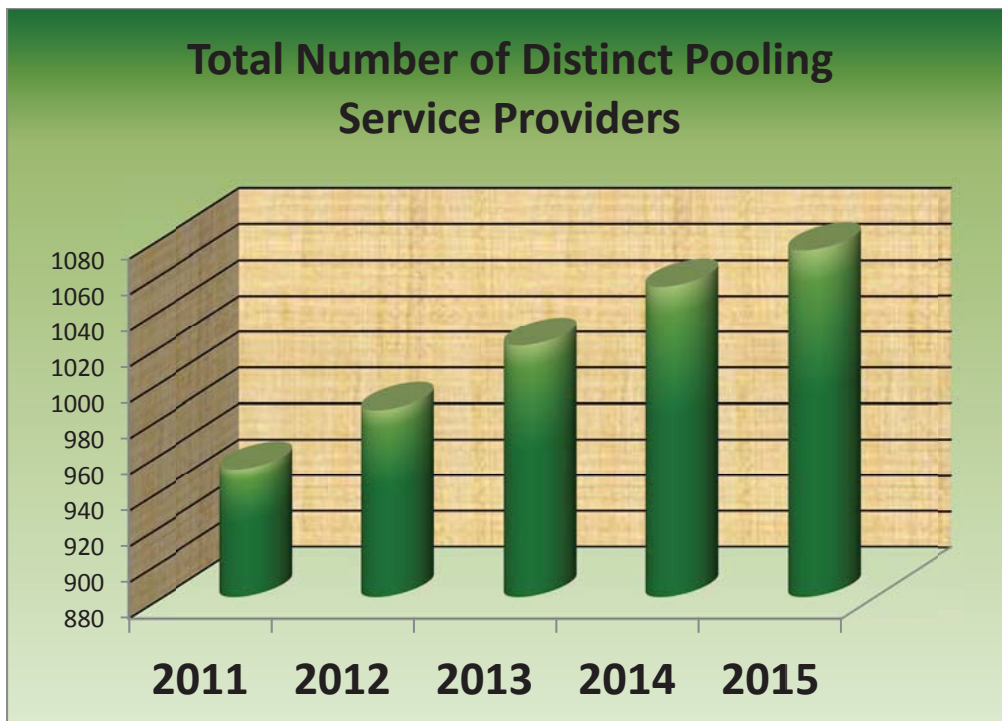


Figure 16: Total Number of Distinct Pooling Service Providers

Table 10-18 depicts the trends in rate center status between 2011 through 2015.

Table 10-18
Pooling Rate Center Facts Comparison by Year - 2011 through 2015

	2011	2012	2013	2014	2015
Total Number of Distinct Rate Centers	18,546	18,540	18,538	18,528	18,515
Total Number of Distinct Rate Centers Available for Pooling	15,329	15,418	15,819	16,075	16,248
Percentage of Distinct Rate Centers that are Available for Pooling	82.70%	83.20%	85.30%	86.76%	87.75%
Total Number of Mandatory Distinct Rate Centers	8,389	8,439	8,549	8,815	8,876
Percentage of Distinct Rate Centers that are Mandatory	45.20%	45.50%	46.10%	47.58%	47.93%
Total Number of Distinct Mandatory Single-Service Provider Rate Centers	1,261	1,205	1,181	1,163	1,088
Percentage of Distinct Rate Centers that are Mandatory Single-Service Provider	6.80%	6.50%	6.40%	6.28%	5.87%
Total Number of Distinct Optional Rate Centers	5,679	5,774	6,089	6,098	6,284
Percentage of Distinct Rate Centers that are Optional	36.60%	31.10%	32.80%	32.91%	33.94%
Total Number of Distinct Rate Centers Excluded from Pooling	3,217	3,122	2,719	2,452	2,267
Percentage of Distinct Rate Centers that are Excluded from Pooling	17.30%	16.80%	14.70%	13.23%	12.24%
Total Number of Rate Center Designations Changed (see Section 2.4.2 for detail)	892	170	703	753	298