PA

National Pooling and Routing Number Administrator

National Pooling and Routing Number Administrator Annual Report 2019

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Background

In October of 2018, following a competitive bidding process, the Federal Communications Commission (FCC) awarded Somos, Inc. (Somos), the contract to perform the National Pooling Administration (PA) and Routing Number Administration (RNA) services, effective January 1, 2019.

The PA is required by Section 5.6.1 of the Technical Requirements Document (TRD) to publish, within the first quarter of the year, an annual report covering the performance of the prior year. Somos therefore submits the following 2019 Annual Report.

Section 1- Description of the Pooling and P-ANI Administrator

1.1. History

Thousands-block number pooling was first implemented as a trial in the Illinois 847 Numbering Plan Area (NPA) 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 other pooling trials. Shortly thereafter, New York implemented a pooling trial in the 212 NPA. By the beginning of national pooling, in March 2002, the national Pooling Administrator (PA) was managing 22 state pooling trials in 83 NPAs.

There have been four (4) federal contracts to administer national pooling, all awarded after a competitive bidding process:

- Contract number CON01000016 was awarded on June 15, 2001 and expired on June 14, 2006. The FCC issued contract modifications between June 15, 2006 and July 12, 2007 to extend the PA's contract through August 14, 2007. During this contract the PA developed, tested and implemented the first Pooling Administration System (PAS) and website, www.nationalpooling.com. At the start of national pooling the PA transitioned more than 5,000 blocks from the state trials to the PAS and developed a national rollout schedule for implementation of pooling throughout the NANP. In addition to pooling administration, the FCC, by letter dated September 8, 2006, directed the PA to begin assigning Emergency Service Query Keys (ESQKs) under certain limited circumstances as the Interim Routing Number Administrator (IRNA).

- Contract number CON07000005 was awarded on July 31, 2007, became effective on August 15, 2007 and expired on August 14, 2012. The FCC issued contract modifications to extend the contract through July 14, 2013. This contract 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. As a result, the PA developed, tested and implemented the Routing Number Administration System (RNAS) for p-ANI administration and upgraded PAS.

- Contract number FCC13C0007 was awarded on July 12, 2013 and expired on July 14, 2017. The FCC issued contract modifications to extend the contract through December 31, 2018. During this contract the PA upgraded PAS and moved it and RNAS into the cloud utilizing Amazon Web Services (AWS).

- On October 5, 2018, the FCC awarded contract number 273FCC19C0002, a one-year bridge contract for national pooling and p-ANI administration services, to Somos, Inc. The PA transitioned the PAS, RNAS and personnel seamlessly to Somos, maintaining continuity of service. This contract expired on October 31, 2019. On November 1, 2019, the FCC extended the bridge contract for 6-months with two additional 3-month options.

1.2 Neutrality

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. Section 1.10, Neutrality Requirements, of the pooling contract requires that the PA be an independent, neutral third party. As such, the PA is responsible for the fair and efficient overall administration of pooled numbering resources.

1.3 Description of the National Pooling Administrator (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 North American Numbering Plan Administrator (NANPA), the Number Portability Administration Center (NPAC), service providers, industry forums, (e.g., Industry Numbering Committee (INC), 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. 273FCC19C0002.

1.4 Description of the Routing Number Administrator (RNA)

As the RNA, the PA is 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, and were added as part of the RNA responsibilities on September 24, 2012.

The RNA performs the day-to-day p-ANI assignment and administrative activities with a long-term focus, which includes maintaining a system to support all day-to-day and long-term p-ANI functions.

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, https://www.nationalpani.com under Documents.

Section 2 - 2019 Pooling and P-ANI Administrator Highlights and Significant Milestones

The following are the Pooling Administrator (PA) and Routing Number/P-ANI Administrator (RNA/P-ANI) highlights and significant milestones for 2019:

★ **Pooling Contract:**

- The transition of PA systems, services and personnel from Neustar to Somos was successfully completed on January 1.
- The PA met all performance metrics.
- The PA contract was extended.

★ **Pooling Administrator (PA) Highlights for 2019:**

- The PA staff processed:
  - 116,797 Part 3As.
    - 87,728 approvals.
    - 21,871 suspensions.
    - 1,401 withdrawals.
    - 5,797 block or code request denials.
      - 159 were Red Light Rule denials.
    - 100% of those applications were processed within 7 calendar days.
  - 59,924 requests for new resources (containing both multiple block and code requests).
    - Assigned 51,969 blocks.
    - Opened 3,380 NXX codes.
  - 22,178 change requests.
  - 13,354 disconnect requests.
  - 13,231 actual block disconnects.
- The PA reclaimed 7 blocks.
- The PA staff answered and responded to 100% of the 1,120 received calls within 1 business day.
- The Help Desk handled 511 calls.

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

- PAS was available for use 99.996% of the time, which meets the contract performance metric of a minimum of 99.9%.
- PAS had 21 minutes of unscheduled down time.

- We conducted maintenance on PAS eight times and used two hours 45 minutes of the FCC-approved down time in conjunction with the maintenance activities.
- We submitted and implemented two change order proposals.
- We opened one trouble ticket.

★ **Reporting:**

- We produced a total of 522 reports for the FCC, states, the North American Numbering Council (NANC), North American Numbering Plan Administrator (NANPA), service providers and others.
- We submitted all 69 required Contract Data Requirements List (CDRL) reports on time and posted them to the website.
- We submitted all 15 additional contract-required reports on time and posted them to the website.
- We produced all 79 by-request [ad hoc] reports within three business days.

★ **Industry Support:**

- We participated in 49 industry meetings for INC, CIGRR, ESIF, LNPAWG and NANC WGs either in-person or by conference call.
- We submitted 8 new issues and 12 new contributions at the Industry Numbering Committee (INC).
- We provided 26 pooling status reports to the NANPA for its meetings.
- We attended 13 NANPA meetings relating to NPA relief and jeopardy, providing an up-to-date pooling status for the affected NPAs.
- We made 293 changes to rate center information, of which 81% changed the pooling status designation from Excluded to Optional.
- The PA staff met with the Numbering Administration Oversight Working Group (NAOWG) Contract Oversight Subcommittee (COSC) ten times providing updates on various PA activities and providing responses to questions.
- We continued sending pooling Tips.
- We had no formal complaints.

★ **Training:**

- We facilitated eight state regulatory commission educational sessions on pooling issues.
- Educational videos were accessed or downloaded from the pooling website 128 times.

★ **Distinctive Projects:**

- We completed an update of MSA-designations.
- We continued Seeking Donations.
- We continued seeking resolution for Abandoned Codes/Blocks.
- We completed a New York Blockable Code project.

★ **Routing Number/P-ANI Administrator Highlights:**

- 9,307 applications processed (Part 3s issued)
  - 100% of those applications processed on time
- 4,476 new p-ANI range assignments made
- 22 modifications made to existing p-ANI ranges
- 4,784 p-ANI range returns processed
- 1 request to cancel p-ANI returns processed
- 0 requests denied
- 24 requests withdrawn
- 0 requests suspended

★ **Other Routing Number/P-ANI Activities:**

- Worked with carriers to resolve data discrepancies.
- Processed carriers' annual reports and semi-annual forecasts.
- Attended Emergency Services Interconnection Forum (ESIF) meetings.
- 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.
- Educational videos were accessed or downloaded from the P-ANI website 20 times.

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

- RNAS was available for use 100% of the time, which met the contract performance metric of a minimum of 99.9%.
- RNAS had no unscheduled down time.
- We conducted maintenance on RNAS one time with 1 hour 45 minutes of FCC-approved downtime.
- RNAS had no trouble tickets opened.

Following is a synopsis of our major accomplishments during the 2019 reporting period. Details for these activities are found throughout the report.

2.1 Pooling Administrator Contract

- Somos successfully completed the transition of PA systems, services and personnel from Neustar on January 1, 2019.

    - Somos, PA and NANPA staff conducted an overview on the transition, as well as an overview of NANPA and PA at the NARUC winter meeting on February 11.
    - Distributed a NANPA/PA/RNA Transition Survey in March:
        - Survey respondents comprised of users from NAS, PAS and RNAS.
        - Survey results were very positive. Details on the results can be found in Section 2.8.
    - Effective November 1, the PA contract was extended. The extension is for six months with two additional 3-month options.

- Required Performance Metrics

As illustrated in Table 2-1, the PA and RNA met all performance measurements for the PA and RNA functions as outlined in Section 6 of the Technical Requirements Document (TRD).

Table 2-1
Permormance Metrics

Required Service	Performance Standards	Acceptable Quality Levels	Actual 2019 Quality Level	Met Or Not Met Y or N
Process Applications (See Sections 2.20.4,2.22.4.6, 2.22.4.7)	PAS applications processed within 7 calendar days; RNAS applications processed within 5 business days	99%	100%	Y
Answer calls (See Section 2.22.4.3)	Calls answered within 1 business day	100%	100%	Y

Required Service	Performance Standards	Acceptable Quality Levels	Actual 2019 Quality Level	Met Or Not Met Y or N
Submission of Deliverables (See Sections 5.2, 5.3, 5.4, 5.5, 5.6, 5.6.1, 5.6.2.1, 5.6.2.2, 5.6.3.1, 5.7, 5.8, 5.9, 5.10)	Deliverables submitted no later than the due dates	100%	100%	Y
Submission of Deliverables (See Sections 5.6.4.1, 5.6.4.2, 5.6.4.3, 5.6.4.4, 5.6.5)	Deliverables submitted no later than the due dates	100%	100%	Y
PAS and RNAS Availability (See Sections 3.3 and 4.3)	Pooling Administration System is available; Routing Number Administration System is available	99.9%	PAS: 99.996% RNAS: 100%	Y
Maintenance (See Sections 3.3 and 4.3)	Unscheduled maintenance of the PAS is less than 9 hours in any 12-month period; Unscheduled maintenance of the RNAS is less than 9 hours in any 12 month period	100%	100%	Y
Maintenance (See Sections 3.3 and 4.3)	Scheduled maintenance of the PAS is less than 24 hours in any 12-month period; Scheduled maintenance of the RNAS is less than 24 hours in any 12-month period	100%	100%	Y

2.2 Pooling Administrator Services

This section describes PA activity in 2019, including information about applications processed, blocks assigned, and NXX codes opened. Productivity statistics for the past five years can be found herein in Section 10, Trends in Pooling Since 2015.

2.2.1 Pooling Administrator Productivity

In 2019, the PA continued its exceptional level of performance. Table 2-2 identifies areas of activity:

Table 2-2
PA Productivity at a Glance

ACTIVITIES	2019 TOTALS
Applications processed (Part 3As):	116,797
Applications not processed in 7 calendar days:	0
Blocks assigned:	51,969
Change requests to existing blocks or codes:	22,178
Disconnects processed (Part 3As):	13,354
Withdrawals:	1,401
Block or code requests denied:	5,797
Central office codes opened:	3,380
Red Light Rule denials:	159
Total blocks reclaimed:	7

Table 2-3 shows a breakdown of applications (Part 3As) by disposition type, including approvals, denials, suspensions, and withdrawals.

Table 2-3
Applications (Part 3As) Processed

Approvals	87,728
Denials	5,797
Suspensions	21,871
Withdrawals	1,401
TOTAL	116,797

Table 2-4 and Figure 1 contain the total number of applications processed by activity type.

Table 2-4
2019 Applications Processed by Type

	Approved	Denied	Suspended	Withdrawn	Total
Block Modifications	20,486	183	-	121	20,790
Block Disconnects	13,231	1,493	15,545	551	30,820
Block Cancel Disconnect	16	-	-	-	16
Individual Blocks	43,384	2,566	1	331	46,282
Block Reservations	65	22	-	9	96
Process/Cancel Block Reservations	21	4	-	-	25
Code Modifications	1,670	70	1,700	85	3,525
Code Disconnects	123	351	929	9	1,412
LRN Blocks	930	382	770	71	2,153
Dedicated Customer Blocks	480	32	49	8	569
Pool Replenishment Blocks	7,154	675	2,877	189	10,985
ISP Disconnects	63	18	-	-	81
ISP Modifications	22	-	-	9	31
ISP Blocks	83	1	-	18	102
TOTALS	**87,728**	**5,797**	**21,871**	**1,401**	**116,797**

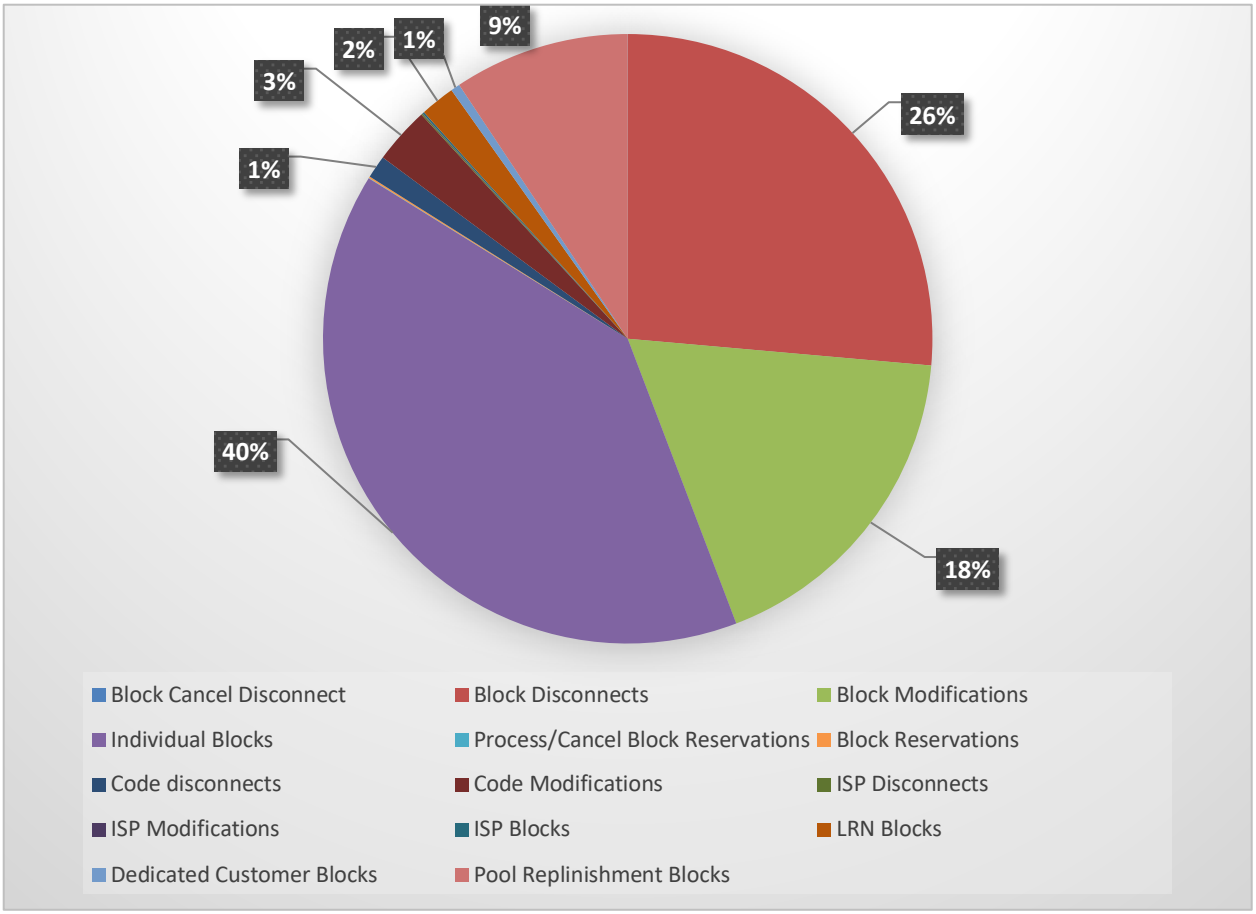

Figure 1: 2019 Pooling Applications by Type

The PA also issued 13,428 Part 5s for block disconnects, reclamations, and exchanges during 2019, of which 13,231 were actual block disconnects.

The PA processed 100% of the 116,797 applications (Part 3As) within seven calendar days, which exceeds the performance metric of 99%.

There were 647,827 assigned blocks in PAS at the end of 2019, an increase of 42,266 from 2019.

Figure 2 below depicts the monthly block assignments made by the PA during each month in 2019.

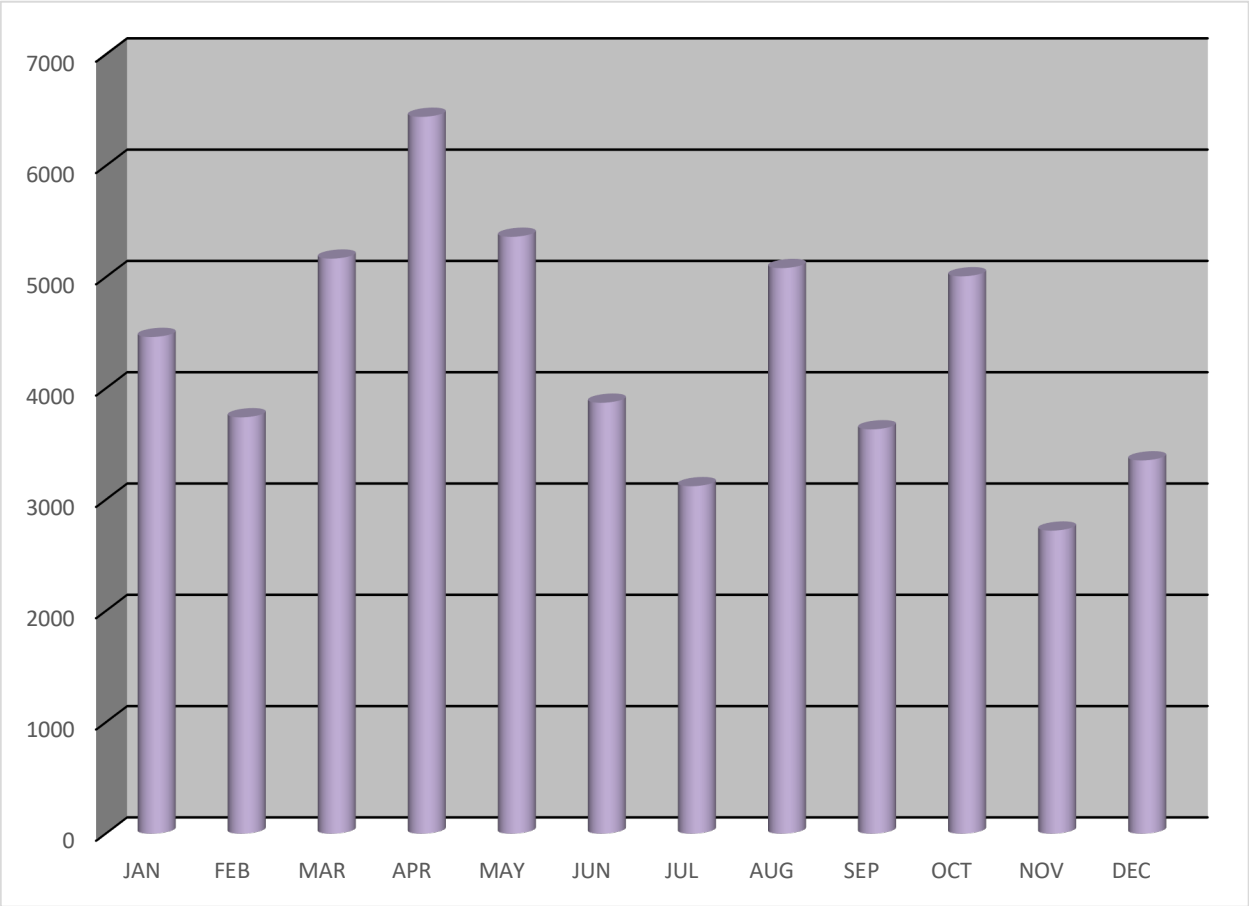

Figure 2: Blocks Assigned by the PA in Each Month in 2019

The total number of applications (Part 3As) processed is a measure of the actual processing work performed by the pooling administrators, because not every application result 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. Each of these actions requires work on the part of the pooling administrators and generates a Part 3A.

Figure 3 below provides a complete overview of all applications processed in PAS for 2019, including approvals, denials, withdrawals, and suspended applications.

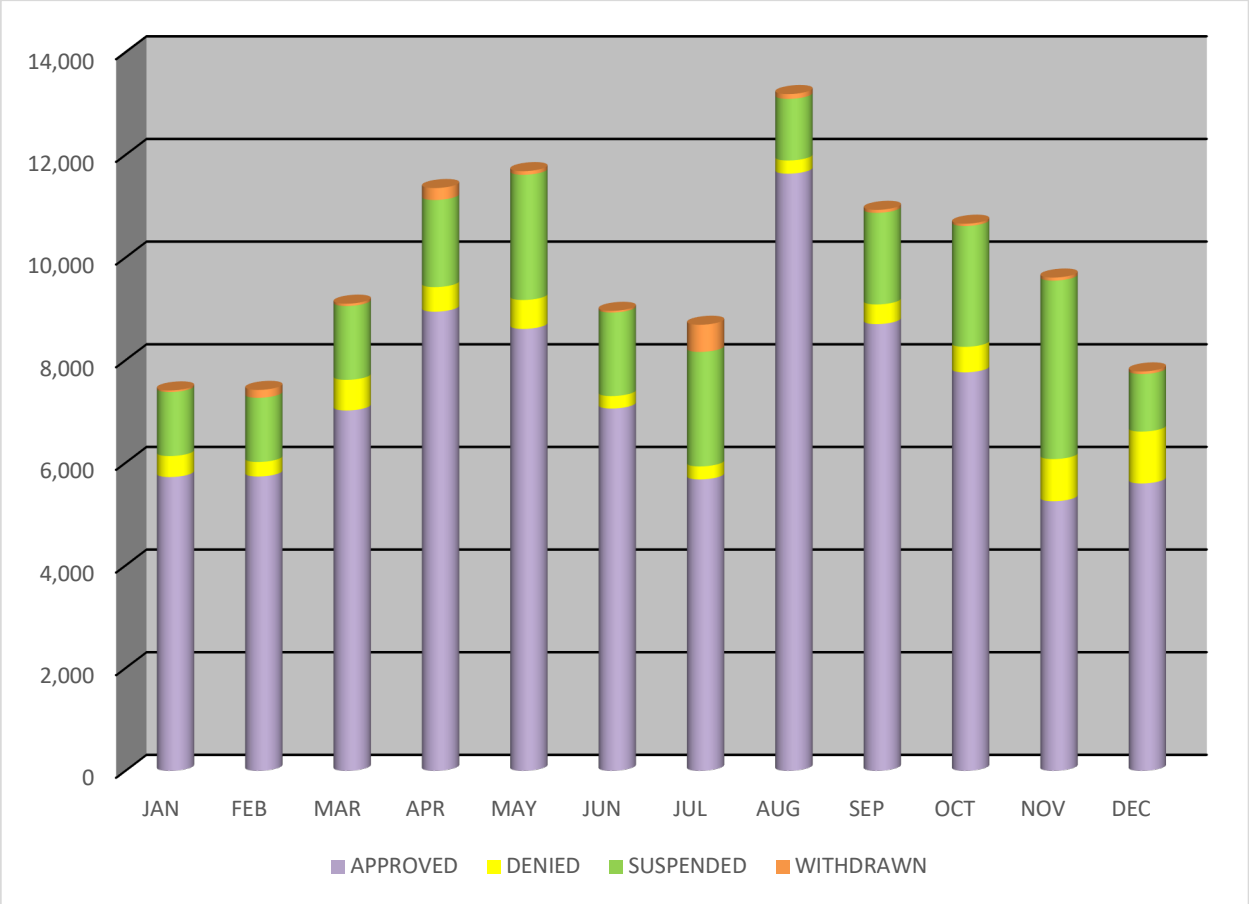

Figure 3: Overview of All 2019 Applications Processed by Status

Tables 2-5 and 2-6 list the ten states and Numbering Plan Areas (NPAs) for which the highest number of applications (Part 3As) occurred in 2019.

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

State	Total Part 3As
CA	13,541
TX	9,533
NY	8,161
FL	7,312
PA	6,264
GA	4,710
NJ	4,580
IL	4,218
MA	4,155
MD	3,303

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

NPA	State	Total Part 3As
618	IL	1,478
240	MD	1,286
470	GA	1,138
929	NY	957
781	MA	952
402	NE	945
484	PA	944
707	CA	938
205	AL	928
417	MO	903

Pool replenishment allows service providers to open a code to add blocks to a pool when a pooling rate center inventory will either be equal to or falls below the aggregated six-month service provider forecasts. We manage the process by determining when a rate center inventory is not adequate to meet forecasted

demand. PAS alerts a service provider about the need to replenish the pool and permits several options for the service provider. Because it is not authorized to obtain resources directly, the PA has no authority to actually replenish the inventory pools itself and therefore must rely on the service providers that can meet both the MTE (Months-to-Exhaust) and utilization requirements to maintain adequate inventories by opening an NXX code, keeping the blocks they need and then returning the remaining blocks from that NXX code to the pool.

Table 2-7 below provides an overview of rate center inventories and pool replenishment.

Table 2-7
2019 Pool Replenishment Overview

Average number of rate centers per month that had less than a six-month inventory	626
Percentage of total number of rate centers per month that had less than a six-month inventory	3.5%
Average number of rate centers per month that had no blocks available with forecast	164
Number of CO codes opened for pool replenishment	2,651

Table 2-8 shows the number of NXX codes opened by the PA in 2019 and for what purpose. Pool replenishment accounts for 79% of the NXXs opened.

Table 2-8
NXXs Opened by Purpose

PURPOSE	TOTAL	PERCENT OF TOTAL
LRN	682	20%
Dedicated Customer	47	1%
Pool Replenishment	2,651	79%
TOTAL	**3,380**	**100%**

Tables 2-9 and 2-10 show the ten states and NPAs which had the most pool replenishment activity in 2019.

Table 2-9
Ten States with the Most Pool Replenishment Activity

State	Codes Opened
CA	346
FI	249
TX	242
NY	169
GA	115
VA	78
NJ	75
MO	73
IL	67
PA	67

Table 2-10
Ten NPAs with the Most Pool Replenishment

NPA	State	Codes Opened
470	GA	49
657	CA	32
929	NY	32
205	AL	29
385	UT	27
305	FL	25
561	FL	25
402	NE	22
571	VA	22
346	TX	21

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

- Respond to questions and requests for assistance from service providers,
- Review documentation to assure eligibility for requested blocks and pooled codes,
- Interact with state commission staff about certification issues and answer questions about the pooling process,
- Assist service providers with questions relating to PAS,
- Educate new users on 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,
- 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.

2.2.2. Authorized Interconnected VoIP Support

On June 22, 2015, the Federal Communications Commission (FCC) released the VoIP Direct Access order establishing a process to authorize interconnected VoIP (iVoIP) providers to obtain telephone numbers directly from the Numbering Administrators. We have been providing additional support for iVoIP providers and state regulators since the order became effective and the FCC began accepting applications for authorization in February 2016.

Once an iVoIP provider's direct access authorization application is granted, the applicant can immediately submit the required 30-day notification to states from which it intends to request numbers. The first numbering resources were assigned to an iVoIP entity in May 2016.

By the end of 2019, a total of 69 applications had been submitted to the FCC for direct access authorization, with a total of 42 approved. Of those 19 new applications were submitted in 2019, and the FCC issued six authorization orders.

We continue to support and educate iVoIP providers on application processing requirements, proper supporting documentation, and the information needed in 30-day notification letters. We provide a "Getting Started for Interconnected VOIP Providers" quick sheet that provides guidance on the rules and industry guidelines related to iVoIP direct access to numbering resources and have a "New Service Provider Checklist" to assist with process questions.

We also work one-on-one with the iVoIP applicants to explain the rules and guidelines so the applications for numbering resources can be processed as quickly as possible. This often prevents the need to resubmit documentation or applications. We have spent a tremendous amount of time with individual iVoIP provider's personnel going over the process for registering in PAS, what documentation they need and how to submit applications.

In addition, we continue sending regular updates to the state commissions whenever new applications or filings are made and when initial requests to open codes are submitted in their states. The PA continues to respond to questions about the 30-day day notification process and works with the states and the FCC on whether the iVoIP entities must follow individual state regulations.

We also continue to maintain and update the "VoIP Provider 30-day Notification State Regulatory Contact Sheet" which is posted to our website. We developed the file with information obtained from state regulatory authorities about how to submit 30-day notifications, as well as contact information for each state. It is intended to save iVoIP providers time when submitting a 30-day notification to a state. In September, the PA sent a pooling Tip reminding iVoIP about the contact sheet and the information it provides.

In 2019, there were 4,947 applications (Part 3As) processed for iVoIP providers, approximately 4% of the total number of Parts 3As processed. Table 2-11 details the total number of applications processed for iVoIP providers in 2019:

Table 2-11
2019 iVoIP Applications (Part 3As) Processed

Approvals	2,809
Denials	827
Suspensions	1,213
Withdrawals	98
TOTAL	4,947

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 3A and entered on the BCD/BCR screen in BIRRDS." Each

thousands-block assignment has an associated "Part 3A 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 4A to the PA. If the PA does not receive the Part 4A during the first five months following the original effective date identified on the Part 3A, the PA sends a reminder notice to the block holder. The PA also sends a second reminder to the service provider (SP) on the day after the Part 4A was due.

If the Part 4A is not received within six months of the original Part 3A effective date, the Part 4A 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 4As for the thousands-blocks from the previous month to the thousands-block assignment has an associated "Part 3A 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 4A to the PA. If the PA does not receive the Part 4A during the first five months following the original effective date identified on the Part 3A, the PA sends a reminder notice to the block holder. The PA also sends a second reminder to the service provider (SP) on the day after the Part 4A was due.

If the Part 4A is not received within six months of the original Part 3A effective date, the Part 4A 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 4As for the thousands-blocks from the previous month to the appropriate state commission or FCC.[1] This includes Part 4As that are new to the list and those that were carried over from previous months until they are resolved. The PA website provides more detailed information about the reclamation process, as well as contact information for the participating state commissions and FCC.

The PA sent 312 monthly reports to regulatory staff to address a total of 2,652 blocks on the overdue Part 4/4A reports in 2019. Of those, 1,306 blocks were new.

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 2019, regulators authorized the PA

[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.

to initiate reclamation on 19 blocks. Of those, 7 thousands-blocks were actually reclaimed: three in Washington, two in Georgia, one in the District of Columbia and one in Virginia. Table 2-12 depicts all 2019 reclamation activity:

Table 2-12
Reclamation Activity

Month	Total Number of Blocks with Overdue Part 4As	Total Number of NEW blocks with Overdue Part 4As	Total Number of Blocks for which Reclamation was Initiated[2]	Total Number of Blocks Reclaimed
January	156	42	2	1
February	269	174	0	2
March	139	34	0	0
April	279	188	1	0
May	184	81	0	1
June	297	217	11	0
July	256	146	1	1
August	174	35	2	0
September	197	73	0	2
October	237	113	0	0
November	252	129	0	0
December	212	74	2	0
TOTAL	**2,652**	**1,306**	**19**	**7**

2.2.4 Pooling Administrator 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. In 2019, the CSR handled approximately 511 calls. For more details on CSR / Help Desk see Section 8.6.1.

[2] While a state may authorize the PA to initiate block reclamation, not all blocks in this category have been reclaimed. In some cases, the reclamation process is halted if it is determined that the blocks are actually in service.

2.3 Pooling Administration System (PAS)

2.3.1 PAS Performance

PAS continued to meet the contract requirement for availability with a minimum of 99.9% uptime and 21 minutes of unscheduled down time. We conducted builds and maintenance on PAS eight times and had a total of two hours 45 minutes of scheduled down time associated with these maintenance activities. We opened one PAS Trouble Ticket at the end of 2019. For details on PAS performance see Section 6.

2.3.2 PAS Change Orders

Changes and 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 PAS, we submit a change order proposal to the FCC to modify the contract. 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.[3] The NAOWG COSC reviews PA change order proposals and provides recommendations to the FCC.

The PA submitted and implemented two change orders in 2019. Further details about the PAS change orders can be found in Section 6.1.3.2.

2.3.3 PAS Training Videos

Our training videos were first made available on our website for PAS on September 29, 2010.

In 2019, there were 128 total views of the 14 PAS training videos. While we did not add any new videos in 2019, our customers continue viewing the existing videos. The most popular video was the "New to Pooling Quick Start" which accounted for 38% of the views.

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,

[3] FCC contract No. 273FCC19C0002, Section 2.5.4 of Attachment 1.

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 managed quarterly neutrality audits. In 2019, the DQIM attended 13 NANPA meetings, and provided 29 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).

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. For the definitions of rate center status designations, please see Section 3.

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. For details on related 2019 changes see Section 2.6.1.

Changes to rate center file information have been available in real-time through the website. In 2019, the PA made 293 rate center information changes. Of those, 184 were rate center status designation changes, of which 41% were from Excluded (X) to Optional (O).

Table 2-13 shows the type of rate center information change and how many were changed during each month in 2019.

Table 2-13
Summary of Rate Center File Changes

RATE CENTER CHANGES													
REASON	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
Changes in Status:													
M* to M		5		3	2	3	2	2		3		3	23
M* to M	1	9	6	2		3		6	3		1	9	40
X to O	23		6	4	2	2		5	5	8	12	9	76
X to M*		9											9
X to M*		16											16
O to M*		4											4
M to M		15											15
M to M*		1											1
New Rate Centers													0
Rate Centers with MSA updates		109											109
MSA Changes													0
TOTALS	**24**	**168**	**12**	**9**	**4**	**8**	**2**	**13**	**8**	**11**	**13**	**21**	**293**

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 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 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 individual service providers in these forecasts is treated as confidential by the PA. The PA then uses this data to fulfill two Contract Data Requirements List (CDRL) report requirements:

- the Semi-Annual Pooling Forecast referenced in Section 5.6.2.1, and

- the Rate Area Inventory Pool Status Report referenced in Section 5.6.2.2.

During 2019, 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 PA 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 15 and August 9.

Table 2-14 contains the PA NRUF/forecast results for both semi-annual reporting periods in 2019.

Table 2-14
NRUF/Forecast Results

Date	NPAs	Jurisdictions	Blocks Forecasted	Blocks Available	Codes Forecasted
February	320	52	40,173	133,738	3,017
August	322	52	24,978	128,914	1,774

2.5 Regulatory and Compliance

2.5.1 Regulatory Support

The PA supports state regulators throughout the year by providing education on pooling processes, website navigation and responding to hundreds of emails and telephone inquiries. Inquiries relate to such issues as application processing, state waiver rules, service provider authorization, iVoIP processes, and reclamation. We also continued to provide support for state regulators as they addressed number conservation and NPA relief planning issues by attending NANPA meetings relating to NPA relief and jeopardy procedures and supporting NANPA with NPA exhaust projections and state notifications.

In 2019, the PA facilitated four calls to update state regulators on NANPA, PA, P-ANI and federal activities related to numbering. These calls were held on April 4, June 27, October 1, and December 17. Topics included updates on NPA Relief Planning, NRUF, NANPA, Pooling and P-ANI administrator processes and activity, iVoIP provider processes, updates to PAS and RNAS, relevant INC issues, and FCC numbering activities.

The PA also conducted eight educational conference calls about pooling processes for state regulatory staff. Our goal in conducting training sessions for regulators is to make it easier for them to respond to numbering issues in their states. During the educational sessions, the PA reviewed various numbering procedures such as applications processing, reclamation, forecasting, and iVoIP requirements and activity, as well as information about reports available through the websites.

2.5.2 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 159 denials as a result of the Red Light Rule in 2019.

2.5.3 Reporting Compliance

The PA contract and TRD directs that certain Contract Data Requirements List (CDRL) and other reports be submitted each year. For details on all reports completed by the PA, see Section 9.

2.5.3.1 Contract Data Requirements List (CDRL) – Recurring Reports

The following CDRL reports are submitted annually, semi-annually, quarterly, or monthly. Table 2-15 contains the CDRL recurring reports that were submitted by the PA during the 2019 calendar year according to the established deadlines. In 2019, the PA submitted 148 CDRL reports, which are available on the PA website[4].

[4] The By Request (Ad Hoc) reports total is an aggregate of individual reports requested by and provided to customers, so they are therefore not posted the website.

Table 2-15
Recurring CDRL Reports Submitted in 2019

Report Name	Total Reports
Staffing Report	12
Thousands-Block Pooling Report	12
P-ANI Monthly Report	12
PAS and RNAS Performance Report	12
Ad Hoc Reports	12
Pooling Matrices Report	4
Forecasted Demand	2
Rate Area Inventory Pool Status	2
Annual	1
By Request (Ad Hoc)	79
TOTAL	148

2.5.3.2 Other TRD Required Reports

Table 2-16 lists the 15 other reports required by the contract that the PA completed in 2019.

Table 2-16
Other Required Reports Submitted in 2019

Report Name	Total Reports
Monthly Pooling Metrics	12
Inventory	3
TOTAL	15

2.6 Special Projects

2.6.1. Changes to Metropolitan Statistical Area (MSA) Rank and Name

The PA maintains a current list of rate centers that are in the top-100 Metropolitan Statistical Areas (MSAs) in which carriers are required to pool under FCC orders. If there are changes to MSA information, the federal Office of Management and Budget (OMB) releases a bulletin. The OMB usually releases any updates to the definitions and/or composition (i.e., counties or other political divisions) of MSAs once per year. The PA monitors the OMB website and when a bulletin is issued, investigates the impact on

the status designations of rate centers in the pools. 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 its political divisions have 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.

In addition, the PA monitors the federal Census Bureau website to determine when new population estimates are available. When the PA finds something new, they correlate the new MSA data with the new population estimates and make all of the appropriate updates to the ranking of the top-100 MSAs.

After the OMB published Bulletin OMB 18-04 entitled "Revised Definitions of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas, and Guidance on Uses of the Definitions of These Areas," the PA analyzed the data, made the appropriate revisions, and notified all registered PAS users on February 19. Following is a summary of the revisions:

1. Changed the names of 17 of the current top 100 MSAs

2. Changed the MSA association for 111 rate centers

3. Added six new MSAs to the top 100:

    - Deltona-Daytona Beach-Ormond Beach, FL Metropolitan Statistical Area
    - Hartford-East Hartford-Middletown, CT Metropolitan Statistical Area
    - Allentown-Bethlehem-Easton, PA-NJ Metropolitan Statistical Area
    - Augusta-Richmond County, GA-SC Metropolitan Statistical Area
    - El Paso, TX Metropolitan Statistical Area
    - Baton Rouge, LA Metropolitan Statistical Area

4. Changed some rate center designations:

- Updated 42 rate center designations as follows:
    - 3 were changed from Optional (O) to Single Service Provider Mandatory (M*).
    - 15 were changed from Optional (O) to Mandatory (M).
    - 14 were changed from State Mandatory (M) to Mandatory (M).
    - 1 was changed from State Mandatory (M) to Single Service Provider Mandatory (M*); and
    - 9 were changed from Excluded (X) to Single Service Provider Mandatory (M*)

2.6.2 Seeking Voluntary Disconnects

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 SP requests that the rate center designation be changed from "Excluded" to "Optional". In this circumstance, we seek voluntary block disconnects from existing SP(s) in that rate center so that the incoming SP can request blocks instead of opening a new NXX code. The process of requesting blocks involves verifying which SPs presently operate in the rate center, getting the contact information for them, and then sending each of them emails, which takes the PA a lot of extra time.

In 2019, the PA attempted to secure voluntary block disconnects for 47 rate centers being changed from Excluded to Optional. We were able to obtain disconnects (formerly donations) for 30 of those rate centers, thereby potentially saving the opening of 30 NXX codes.

At times a carrier will also contact us to request that we seek disconnects in a pooling rate center it is entering to prevent the opening of an NXX code when no blocks available because it is either a single-service provider rate center or it is already available for pooling. This is especially useful in low population areas where blocks added to the pool from opening an NXX code may never be utilized. In 2019, we were asked by the carriers to request voluntary block disconnects in 29 optional pooling rate centers that did not have any available blocks. We requested and received disconnects for 12 of the rate centers which saved 12 NXX codes from being opened.

2.6.3 Abandoned Codes/Blocks:

When we are made aware that a company has abandoned pooled codes and blocks, we contact other carriers with ports on that code or block to take them over or if no carrier volunteers, work with state regulators to obtain permission to reclaim the numbering resources as abandoned. This requires a lot of extra work by PA. 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 code holders so that customers are not put out of service.

The following is a summary of abandoned code/block activity for this period:

- Nine companies in 11 states abandoned pooled codes and/or blocks.
- We sent 29 emails seeking new code or block holders.
- 17 pooled codes were transferred to new code holders.
- 20 pooled blocks were transferred to new block holders.
- 88 blocks were disconnected and put back into the available pools.

2.6.4 New York Blockable Codes Project

Effective May 17, 2018, the New York Public Service Commission issued an Order in Case 17-C-0278, that directed service providers to remove the blocking service on those CO codes that have been excluded from the tariffs, and to ensure those central office codes are reflected in the LERG with the COC type of EOC (end office code) rather than the COC type of INP (Information Provider). The PA and NANPA worked extensively with affected code holders over the past year to complete the project which ultimately resulted in 86 blocks being made available in pools and 25 CO codes returned to NANPA.

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

2.7.1 P-ANI Administrator (RNA) Productivity:

The P-ANI Administrator (RNA) processes not only p-ANI applications but carriers' annual reports and forecasts. The forecasts are used to develop

the P-ANI Activity and Projected Exhaust Report found herein in Appendix 1. We processed annual report files for 81 unique NENA ID/OCN combinations and two forecast files. Table 2-17 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.

Table 2-17
Total Number of p-ANIs by Activity Type

	REQUESTED	ASSIGNED	RETURNED	MODIFIED
Jan	4,483	4,483	673	6
Feb	1,320	1,309	737	0
Mar	2,111	2,103	1,079	0
Apr	8,080	8,060	6,674	0
May	21,373	21,368	1,618	0
Jun	25,884	25,884	1,091	0
Jul	61,384	61,319	438	51
Aug	14,389	14,329	891	20
Sep	12,572	12,557	16,933	40
Oct	3,634	3,609	21,055	11
Nov	5,448	4,876	362	0
Dec	1,938	1,898	85	0
TOTAL	162,616	161,795	51,636	128

Table 2-18
Applications Processed by Request Type

	Approved	Denied	Suspended	Withdrawn	Total
Cancel p-ANI Return Request	1	0	0	0	1
P-ANI Modification Request	22	0	0	1	23
New p-ANI Request	4,476	0	0	23	4,499
P-ANI Return Request	4,784	0	0	0	4,784
TOTAL	**9,280**	**0**	**0**	**24**	**9,307**

The following table is a summary of p-ANI inventory as of December 31, 2019:

Table 2-19
P-ANI Inventory as of December 31, 2019

STATUS	TOTAL p-ANIs	211	511
Assigned	972,712	415,162	557,550
Aging	58	43	15
Available	5,504,435	2,817,572	2,686,863
Unavailable	22,795	17,223	5,572
TOTALS	**6,500,000**	**3,250,000**	**3,250,000**

2.7.3 Other P-ANI Administrator Activities

In addition to processing requests for p-ANI ranges, the RNA performed many other functions during 2019.

2.7.3.1 Annual Report

P-ANI Assignees are required to report to the RNA on all of their assigned p-ANI ranges via the P-ANI Annual Report (Appendix 2) on an annual basis. For 2019, there were 81 unique NENA ID and OCN combinations that filed an Annual Report. During this process, the RNA was able to identify p-ANI ranges that were never reported during the initial reports filing and show those p-ANI ranges as assigned. The RNA also worked with the carriers to identify p-ANI ranges that were not in use and could be returned to the available inventory as a result of this filing.

2.7.3.2 Duplicate Assignment Issues

In 2019, the RNA was notified of 154 p-ANI ranges that had been assigned by the RNA but appeared to already be in use by another carrier. The RNA worked with the affected carriers to determine if the ranges were in use or not. If the range was not being used, it was removed from the applicable routing databases by the old carrier so that the new carrier could use the range. If the range was in use, the RNA replaced the assignment with a new range, and updated the RNAS to reflect that the original range had been assigned. The RNA also advised the carrier that reported it as being available to update its records so that the range would be properly reflected in its next annual report. The original assignment would have occurred prior to our assumption of assignment responsibility.

2.7.3.3 Customer Support:

For all new p-ANI requests, a carrier 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 carrier fails to provide the correct documentation with its request for p-ANIs, the RNA sends a courtesy email. The RNA also assists carriers who are having difficulties locating the correct documentation to help alleviate any delays in obtaining these critical resources. In 2019, the RNA sent courtesy emails for 113 requests. In addition, the RNA provided documents for 36 requests.

2.7.3.4 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.
8. forecast reports for projected future p-ANI resource usage."

This report contains the required information for January 1 through December 31, 2019 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, 1-4, and 1-5 addresses national p-ANI utilization, p-ANI utilization by NPA, location and exhaust year.

The P-ANI Activity and Projected Exhaust Report can be found on the website www.nationalpani.com under REPORTS. We also 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 2-20 below contains the first five NPAs that are projected to exhaust 211/511/p-ANIs as of December 31, 2019.

Table 2-20
p-ANIs Top 5 NPAs as of December 31, 2019
Projected Exhaust of 211/511

NPA	State	Total p-ANIs	Forecasted P-ANIs	Exhaust Date
931	TN	4443	499	1Q2047
315	NY	7751	308	4Q2056
224	IL	9891	249	3Q2057
218	MN	3444	340	3Q2065
209	CA	5671	230	2Q2078

For a complete list of Projected Exhaust of 211/511 p-ANIs by NPA, Projected Exhaust of 211/511 p-ANIs by State, and Projected Exhaust of 211/511 p-ANIs by Year, see Appendix 1 at the end of this report.

2.7.4 Routing Number Administration System (RNAS)

The Routing Number Administration System (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, its reliability is essential.

RNAS continued to meet the contract requirement for availability with a minimum of 99.9% uptime and no unscheduled down time. We conducted maintenance on RNAS one time after business hours on August 15 using one hour 45 minutes of the FCC-approved 2 hours of scheduled downtime. The RNA opened no trouble tickets for RNAS in 2019. For more details on RNAS performance see Section 6.

2.7.5 Routing Number Administrator (RNA) Customer Support/Help Desk

The Routing Number Administrator (RNA) serves as the P-ANI Administrator Customer Support/Help Desk, and processes new user registrations and user profile updates, responds to p-ANI-related questions, as well as responding to questions regarding RNAS user accounts and passwords. In 2019, the p-ANI Administrator Customer Support/Help Desk processed 19 new user registration requests, of which 17 were approved and 2 were denied; 7 profile update requests, of which 6 were approved and 1 was denied, and handled approximately 67 phone calls. For further details on RNA Customer Support/Help Desk, see Section 8.6.2.

2.7.6 RNAS Training Videos

In 2016, the RNA developed nine training videos for service providers and service provider consultants about requesting new p-ANIs and managing existing p-ANI assignments. In all, there were 20 views of RNAS training videos in 2019. The most popular video is "FCC License Search," which accounted for 50% of the views.

2.8 PA and RNA Continued Focus on Outstanding Customer Satisfaction

The PA and RNA are constantly focused on customer satisfaction. We strive to respond affirmatively to our customers' questions and suggestions for improvement, while meeting or exceeding contract requirements. A strong indication of our firm commitment to customer satisfaction is that we not only had no formal complaints in 2019 but that the transition from Neustar to Somos was completed with no disruption of service. Others include:

- Processing 100% of the Pooling and p-ANI Applications (Part 3/3As) on time
- Posting Pooling and P-ANI Tips
- PAS and RNAS Exceeded Performance Metrics for Availability
- Exceeding Reporting Requirements for Responding to Requests for Ad Hoc Reports
- Providing education through one-on-one support or website videos
- Resolving p-ANI Range Discrepancies

The NANPA, PA and RNA distributed a survey about the transition from Neustar to Somos on March 25 to users of NAS, PAS and RNAS.

- 100% of respondents were able to access the systems after transition.
- 88% of respondents indicated they were "extremely satisfied" or "very satisfied" with the overall communications about the transition, including the frequency, timeliness and thoroughness of the communications.
- Feedback used to describe the transition included "Seamless", "Transparent", "Smooth", and "Didn't notice any changes other than email addresses".

In addition, in March, at the request of the NAOWG, we began reporting monthly on "Customer Focus Items" which include noteworthy specific ways in which the PA and RNA responded to more significant issues and requests from our customers during the year. The PA and RNA reported a total of 149 customer focus items in 2019. For more information, see Section 8.3.

Section 3 - Identification of Existing and Potential Pooling Areas

As of December 31, 2019, there are 16,672 distinct pooling rate centers (i.e., pooling areas), which constitute 90.2% of the 18,485-total number of distinct rate centers. While pooling is available in all states, the District of Columbia and Puerto Rico, all but 3 states[5] have mandatory pooling, either by FCC rule or delegated authority.

There are currently 1,813 rate centers in which no carrier is pooling and could therefore be considered potential pooling areas.

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

1. Mandatory (M) - This rate center is 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] North Dakota, South Dakota and Wyoming have no mandatory pooling rate centers.

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 and Potential Pooling Areas

Table 3-1 below identifies the 16,672 distinct pooling rate centers (i.e., pooling areas), and their status designations, by state, as of December 31, 2019. 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 all Rate Centers by Status Designation

State	Mandatory (M)	Mandatory State (M)	Optional	Mandatory Single SP(M*)	Mandatory State Single SP (M*)	Excluded	Total
AK		76			184		260
AL	58	79	131		7	24	299
AR	46		281	1		52	380
AZ	27		46	20		37	130
CA	439	83	179	15		23	739
CO	20	5	136	3		44	208
CT	74	15					89
DC	1						1
DE	8		22				30
FL	129	14	124			1	268
GA	77		241	3		38	359
HI	1		5				6
IA	75	63	451	26		196	811
ID	16	79		3	47		145
IL	236		639	16		93	984
IN	219	262	15	6	20	3	525
KS	74		356	19		125	574

State	Mandatory (M)	Mandatory State (M)	Optional	Mandatory Single SP(M*)	Mandatory State Single SP (M*)	Excluded	Total
KY	47	144	137		19	25	372
LA	63		204	3		7	277
MA	234	30	1			1	266
MD	112	53					165
ME	50	101	89			9	249
MI	226	108	286	3	5	6	634
MN	61		425	2		150	638
MO	138	439		20	124		721
MS	43	89	87	6	9	5	239
MT		153			107		260
NC	150	17	237	8		19	431
ND			126			173	299
NE	28	174	170	4	75		451
NH	32	92	25				149
NJ	187		21				208
NM	5		87	2		60	154
NV	23		48	2		23	96
NY	407	260	79		1		747
OH	379	163	162	4		31	739
OK	107	15	208	33		166	529
OR	36	103	76			40	255
PA	415	347	12		2		776
PR	48		35	1			84
RI	25						25
SC	108		121	4		7	240
SD			109			160	269
TN	122		190	5		23	340
TX	306	7	739	27		198	1,277
UT	32		51	11	1	37	132
VA	125	178	66				369
VT		101	40				141
WA	54	150	1	3	15		223
WI	128	314	121	10	29		602
WV	7	156	60			5	228
WY			60			32	92

State	Mandatory (M)	Mandatory State (M)	Optional	Mandatory Single SP(M*)	Mandatory State Single SP (M*)	Excluded	Total
Grand Total	5,198	3,870	6,699	260	645	1,813	18,485

3.2 Summarized Information about Existing and "Potential" Pooling Areas

Table 3-2 below is a breakdown of the total number and percentage of rate centers that are available for pooling, as well as by pooling status designation.

Table 3-2
Summarized Information about Existing and Potential Pooling Areas

Total Number of Distinct Rate Centers Available for Pooling	16,672
Percentage of Distinct Rate Centers Available for Pooling	90.2%
Total Number of Mandatory Distinct Rate Centers	9,068
Percentage of Distinct Rate Centers that are Mandatory	49.1%
Total Number of Distinct Mandatory Single-Service Provider Rate Centers	905
Percentage of Distinct Rate Centers that are Mandatory Single-Service Provider	4.9%
Total Number of Distinct Optional Rate Centers	6,699
Percentage of Distinct Rate Centers that are Optional	36.2%
Total Number of Distinct Rate Centers Excluded from Pooling[6]	1,813
Percentage of Distinct Rate Centers that are Excluded from Pooling	9.8%
Total Number of Distinct Rate Centers	18,485

[6] Considered potential pooling areas.

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 2019. There are 1,115 distinct service providers* participating in 16,672 distinct pooled rate centers in 239 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	55	22
202	51	1
203/475	36	32
205/659	51	67
206	49	5
207	58	240
208/986	60	145
209	45	56
210/726	44	1
212/332/646/917	68	1
213/323	53	15
214/469/972	75	43
215/267/445	60	36
216	41	4
217	43	232
218	50	137
219	36	45
220/740	49	187
223/717	56	107
224/847	43	41

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
225	39	34
228	34	11
229	33	80
231	41	94
234/330	48	116
239	34	11
240/301	66	63
248/947	42	20
251	44	35
252	37	89
253	38	10
254	44	105
256/938	48	91
260	34	76
262	34	60
269	46	76
270/364	59	170
272/570	59	180
276	45	78
279/916	49	16
281/346/713/832	66	45

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
302	37	30
303/720	53	13
304/681	50	223
305/786	59	5
307	34	60
308	34	170
309	44	148
310/424	48	16
312/872	46	1
313	44	6
314	35	7
315/680	53	149
316	33	14
317/463	45	36
318	38	117
319	44	103
320	51	140
321	35	5
321/407/689	53	17
325	36	61
331/630	42	25
334	45	82
336/743	60	85
337	37	70
339/781	36	40
341/510	45	13
347/718/917/929	58	11
347/718/929	41	2
351/978	39	58
352	37	48
360/564	61	75
361	42	68
380/614	44	16
385/801	37	20
386	38	33
401	32	25
402/531	67	281

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
404/470/678	55	1
405	44	83
406	52	260
408/669	51	11
409	42	48
410/443/667	65	102
412/878	48	23
413	34	62
414	33	4
415/628	56	14
417	51	155
419/567	52	175
423	51	71
425	37	14
430/903	58	169
432	29	44
434	35	66
435	35	75
440	42	62
442/760	57	83
458/541	49	153
470/678/770	59	41
478	42	40
479	31	64
480	35	1
484/610	56	90
501	34	61
502	40	35
503/971	57	62
504	37	5
505	41	33
507	48	185
508/774	38	85
509	59	119
512/737	56	35
513	41	25
515	50	73
516	49	11

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
517	54	77
518/838	67	135
520	39	27
530	56	117
534/715	80	253
539/918	53	142
540	55	117
559	43	57
561	50	7
562	45	9
563	41	85
571/703	54	19
573	48	216
574	40	56
575	33	61
580	41	138
585	44	77
586	37	11
601/769	47	101
602	33	1
603	46	149
605	41	109
606	40	100
607	48	105
608	67	159
609/640	50	39
612	46	1
615/629	46	49
616	44	36
617/857	51	20
618	42	212
619/858	48	19
620	60	200
623	29	1
626	44	10
631/934	47	53
636	35	46
641	43	175

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
650	43	15
651	47	12
657/714	48	13
660	42	224
661	52	32
662	47	122
682/817	54	24
701	48	126
702/725	44	16
704/980	49	55
706/762	69	105
707	50	75
708	38	31
712	60	179
716	54	79
719	46	57
724/878	50	162
727	42	5
731	40	64
732/848	50	36
734	49	33
747/818	42	16
754/954	48	5
757	33	34
763	51	10
765	54	138
772	40	8
773/872	44	10
775	39	57
779/815	56	191
785	54	201
787/939	15	84
802	34	141
803	57	79
804	42	55
805/820	57	40
806	36	113
808	21	6

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
810	36	47
812/930	62	171
813	52	8
814	54	178
816	50	73
828	41	73
830	46	82
831	42	24
843/854	48	90
845	65	96
850	44	63
856	51	32
859	45	42
860/959	36	57
862/973	68	41
863	45	22
864	47	64
865	41	33
870	41	203
901	39	14
904	41	19
906	24	93
907	20	260
908	52	38

NPA/NPA COMPLEX	Pooling OCNs	Pooled RCs
909	48	21
910	44	72
912	46	54
913	44	34
914	53	28
915	30	11
919/984	53	38
920	60	126
925	41	17
928	41	63
931	46	86
936	44	66
937	48	123
940	57	78
941	44	11
949	47	7
951	46	20
952	45	3
956	36	34
970	43	94
979	49	52
985	35	44
989	46	135

Section 5 – Forecast Results and a Review of Forecasts versus Actual Block Assignments

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.

HIGHLIGHTS OF 2019 FORECAST VS ASSIGNED DATA
There were forecasts in 239 NPA and NPA complexes;
11,235 distinct rate areas with forecasts;
114,472 forecasted blocks;
51,929 blocks assigned: and
45.36% of the blocks forecasted were assigned.

In 2019, 114,472 blocks were forecasted, and 51,929 blocks were assigned in 239 NPA and NPA complexes. This resulted in 45.36% of the forecasted blocks being assigned which is the highest percentage in the past five years.

Carriers forecasted a need for blocks in 11,235 of the 16,672 pooling rate centers, or in 67% of them. In 5,437 pooling rate centers, no blocks were forecasted during 2019. Table 5-1 below depicts the percentage of blocks forecasted versus actual block assignment by NPA or NPA Complex.

Table 5-1
Forecasted versus Actual Block Assignments by NPA/NPA Complex

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
201/551	NJ	668	253	37.87%
202	DC	411	202	49.15%
203/475	CT	679	231	34.02%
205/659	AL	885	538	60.79%
206	WA	517	200	38.68%
207	ME	498	284	57.03%
208/986	ID	449	260	57.91%
209	CA	480	255	53.13%
210/726	TX	275	140	50.91%
212/332/646/917	NY	1,065	405	38.03%
213/323	CA	626	295	47.12%
214/469/972	TX	1,337	663	49.59%
215/267/445	PA	1,250	375	30.00%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
216	OH	227	108	47.58%
217	IL	586	368	62.80%
218	MN	338	158	46.75%
219	IN	296	127	42.91%
220/740	OH	304	153	50.33%
223/717	PA	1,128	302	26.77%
224/847	IL	452	155	34.29%
225	LA	352	173	49.15%
228	MS	180	90	50.00%
229	GA	437	251	57.44%
231	MI	170	93	54.71%
234/330	OH	356	148	41.57%
239	FL	330	157	47.58%
240/301	MD	1,316	503	38.22%
248/947	MI	411	169	41.12%
251	AL	266	162	60.90%
252	NC	203	117	57.64%
253	WA	272	90	33.09%
254	TX	357	292	81.79%
256/938	AL	743	426	57.34%
260	IN	216	139	64.35%
262	WI	302	133	44.04%
269	MI	183	92	50.27%
270/364	KY	852	363	42.61%
272/570	PA	1,087	293	26.95%
276	VA	404	234	57.92%
279/916	CA	408	203	49.75%
281/346/713/832	TX	1,293	630	48.72%
302	DE	384	223	58.07%
303/720	CO	776	326	42.01%
304/681	WV	1,212	560	46.20%
305/786	FL	927	475	51.24%
307	WY	260	162	62.31%
308	NE	153	100	65.36%
309	IL	503	235	46.72%
310/424	CA	478	275	57.53%
312/872	IL	334	116	34.73%
313	MI	313	152	48.56%
314	MO	384	191	49.74%
315/680	NY	715	343	47.97%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
316	KS	175	111	63.43%
317/463	IN	455	221	48.57%
318	LA	629	260	41.34%
319	IA	228	108	47.37%
320	MN	207	131	63.29%
321	FL	222	105	47.30%
321/407/689	FL	1,150	601	52.26%
325	TX	381	169	44.36%
326/937	OH	202	104	51.49%
331/630	IL	298	117	39.26%
334	AL	347	207	59.65%
336/743	NC	535	276	51.59%
337	LA	213	114	53.52%
339/781	MA	383	171	44.65%
341/510	CA	538	241	44.80%
347/718/917/929	NY	2,646	565	21.35%
347/718/929	NY	373	57	15.28%
351/978	MA	357	150	42.02%
352	FL	379	204	53.83%
360/564	WA	433	168	38.80%
361	TX	282	134	47.52%
380/614	OH	374	147	39.30%
385/801	UT	873	449	51.43%
386	FL	342	214	62.57%
401	RI	156	63	40.38%
402/531	NE	669	397	59.34%
404/470/678	GA	707	303	42.86%
405	OK	436	142	32.57%
406	MT	448	310	69.20%
408/669	CA	473	218	46.09%
409	TX	239	136	56.90%
410/443/667	MD	1,630	807	49.51%
412/878	PA	583	209	35.85%
413	MA	235	133	56.60%
414	WI	202	90	44.55%
415/628	CA	411	186	45.26%
417	MO	1,339	470	35.10%
419/567	OH	367	194	52.86%
423	TN	477	262	54.93%
425	WA	399	140	35.09%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
430/903	TX	583	208	35.68%
432	TX	378	92	24.34%
434	VA	648	278	42.90%
435	UT	243	153	62.96%
440	OH	258	148	57.36%
442/760	CA	492	249	50.61%
458/541	OR	606	300	49.50%
470/678/770	GA	1,638	679	41.45%
478	GA	207	116	56.04%
479	AR	408	192	47.06%
480	AZ	586	216	36.86%
484/610	PA	1,099	384	34.94%
501	AR	383	135	35.25%
502	KY	466	299	64.16%
503/971	OR	672	258	38.39%
504	LA	394	124	31.47%
505	NM	295	165	55.93%
507	MN	360	230	63.89%
508/774	MA	559	289	51.70%
509	WA	472	191	40.47%
512/737	TX	532	291	54.70%
513	OH	244	97	39.75%
515	IA	351	163	46.44%
516	NY	838	280	33.41%
517	MI	309	88	28.48%
518/838	NY	1,254	231	18.42%
520	AZ	271	136	50.18%
530	CA	426	262	61.50%
534/715	WI	206	122	59.22%
539/918	OK	467	228	48.82%
540	VA	844	351	41.59%
559	CA	355	229	64.51%
561	FL	578	301	52.08%
562	CA	260	137	52.69%
563	IA	181	83	45.86%
571/703	VA	762	349	45.80%
573	MO	414	315	76.09%
574	IN	162	109	67.28%
575	NM	221	102	46.15%
580	OK	358	200	55.87%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
585	NY	427	195	45.67%
586	MI	122	48	39.34%
601/769	MS	246	141	57.32%
602	AZ	498	125	25.10%
603	NH	260	156	60.00%
605	SD	612	166	27.12%
606	KY	198	99	50.00%
607	NY	441	166	37.64%
608	WI	469	234	49.89%
609/640	NJ	628	350	55.73%
612	MN	294	117	39.80%
615/629	TN	507	276	54.44%
616	MI	289	121	41.87%
617/857	MA	549	199	36.25%
618	IL	411	281	68.37%
619/858	CA	599	288	48.08%
620	KS	366	330	90.16%
623	AZ	564	84	14.89%
626	CA	328	189	57.62%
631/934	NY	739	197	26.66%
636	MO	215	151	70.23%
641	IA	331	159	48.04%
650	CA	250	144	57.60%
651	MN	138	67	48.55%
657/714	CA	1,180	569	48.22%
660	MO	272	134	49.26%
661	CA	330	162	49.09%
662	MS	244	128	52.46%
682/817	TX	488	272	55.74%
701	ND	325	165	50.77%
702/725	NV	434	197	45.39%
704/980	NC	817	408	49.94%
706/762	GA	882	641	72.68%
707	CA	376	194	51.60%
708	IL	268	108	40.30%
712	IA	489	227	46.42%
716	NY	601	218	36.27%
719	CO	373	232	62.20%
724/878	PA	959	289	30.14%
727	FL	254	126	49.61%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
731	TN	192	111	57.81%
732/848	NJ	899	334	37.15%
734	MI	368	78	21.20%
747/818	CA	290	171	58.97%
754/954	FL	506	303	59.88%
757	VA	464	233	50.22%
763	MN	140	51	36.43%
765	IN	328	199	60.67%
772	FL	255	121	47.45%
773/872	IL	364	162	44.51%
775	NV	282	131	46.45%
779/815	IL	518	292	56.37%
785	KS	204	119	58.33%
787/939	PR	302	100	33.11%
802	VT	331	175	52.87%
803	SC	476	286	60.08%
804	VA	699	279	39.91%
805/820	CA	360	228	63.33%
806	TX	422	163	38.63%
808	HI	276	127	46.01%
810	MI	224	98	43.75%
812/930	IN	657	398	60.58%
813	FL	646	254	39.32%
814	PA	1,026	243	23.68%
816	MO	556	238	42.81%
828	NC	319	212	66.46%
830	TX	184	92	50.00%
831	CA	180	104	57.78%
843/854	SC	523	294	56.21%
845	NY	1,300	339	26.08%
850	FL	1,149	341	29.68%
856	NJ	424	235	55.42%
859	KY	247	111	44.94%
860/959	CT	523	272	52.01%
862/973	NJ	810	331	40.86%
863	FL	279	158	56.63%
864	SC	417	182	43.65%
865	TN	221	127	57.47%
870	AR	499	173	34.67%
901	TN	345	182	52.75%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
904	FL	494	274	55.47%
906	MI	71	39	54.93%
907	AK	98	54	55.10%
908	NJ	530	252	47.55%
909	CA	386	203	52.59%
910	NC	411	240	58.39%
912	GA	734	438	59.67%
913	KS	339	145	42.77%
914	NY	442	184	41.63%
915	TX	191	104	54.45%
919/984	NC	524	280	53.44%
920	WI	590	175	29.66%
925	CA	330	151	45.76%
928	AZ	320	137	42.81%
931	TN	260	162	62.31%
936	TX	204	95	46.57%
940	TX	417	186	44.60%
941	FL	291	141	48.45%
949	CA	442	243	54.98%
951	CA	332	149	44.88%
952	MN	260	54	20.77%
956	TX	312	186	59.62%
970	CO	248	153	61.69%
979	TX	225	87	38.67%
985	LA	131	66	50.38%
989	MI	291	79	27.15%
Grand Total		114,472	51,929	45.36%

Table 5-2 shows the blocks forecasted versus actual block assignments by percent assigned, from lowest to highest, in each NPA or NPA Complex. The Arizona 623 NPA had the lowest percentage of blocks assigned compared to total forecast, at 14.89%, while Kansas 620 NPA had the highest ratio at 90.16%.

Table 5-2
Forecasted versus Actual Block Assignments by Percent Assigned
Listed from Lowest to Highest

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
623	AZ	564	84	14.89%
347/718/929	NY	373	57	15.28%
518/838	NY	1,254	231	18.42%
952	MN	260	54	20.77%
734	MI	368	78	21.20%
347/718/917/929	NY	2,646	565	21.35%
814	PA	1,026	243	23.68%
432	TX	378	92	24.34%
602	AZ	498	125	25.10%
845	NY	1,300	339	26.08%
631/934	NY	739	197	26.66%
223/717	PA	1,128	302	26.77%
272/570	PA	1087	293	26.95%
605	SD	612	166	27.12%
989	MI	291	79	27.15%
517	MI	309	88	28.48%
920	WI	590	175	29.66%
850	FL	1,149	341	29.68%
215/267/445	PA	1,250	375	30.00%
724/878	PA	959	289	30.14%
504	LA	394	124	31.47%
405	OK	436	142	32.57%
253	WA	272	90	33.09%
787/939	PR	302	100	33.11%
516	NY	838	280	33.41%
203/475	CT	679	231	34.02%
224/847	IL	452	155	34.29%
870	AR	499	173	34.67%
312/872	IL	334	116	34.73%
484/610	PA	1,099	384	34.94%
425	WA	399	140	35.09%
417	MO	1,339	470	35.10%
501	AR	383	135	35.25%
430/903	TX	583	208	35.68%
412/878	PA	583	209	35.85%
617/857	MA	549	199	36.25%
716	NY	601	218	36.27%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
763	MN	140	51	36.43%
480	AZ	586	216	36.86%
732/848	NJ	899	334	37.15%
607	NY	441	166	37.64%
201/551	NJ	668	253	37.87%
212/332/646/917	NY	1,065	405	38.03%
240/301	MD	1,316	503	38.22%
503/971	OR	672	258	38.39%
806	TX	422	163	38.63%
979	TX	225	87	38.67%
206	WA	517	200	38.68%
360/564	WA	433	168	38.80%
331/630	IL	298	117	39.26%
380/614	OH	374	147	39.30%
813	FL	646	254	39.32%
586	MI	122	48	39.34%
513	OH	244	97	39.75%
612	MN	294	117	39.80%
804	VA	699	279	39.91%
708	IL	268	108	40.30%
401	RI	156	63	40.38%
509	WA	472	191	40.47%
862/973	NJ	810	331	40.86%
248/947	MI	411	169	41.12%
318	LA	629	260	41.34%
470/678/770	GA	1,638	679	41.45%
234/330	OH	356	148	41.57%
540	VA	844	351	41.59%
914	NY	442	184	41.63%
616	MI	289	121	41.87%
303/720	CO	776	326	42.01%
351/978	MA	357	150	42.02%
270/364	KY	852	363	42.61%
913	KS	339	145	42.77%
816	MO	556	238	42.81%
928	AZ	320	137	42.81%
404/470/678	GA	707	303	42.86%
434	VA	648	278	42.90%
219	IN	296	127	42.91%
864	SC	417	182	43.65%
810	MI	224	98	43.75%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
262	WI	302	133	44.04%
325	TX	381	169	44.36%
773/872	IL	364	162	44.51%
414	WI	202	90	44.55%
940	TX	417	186	44.60%
339/781	MA	383	171	44.65%
341/510	CA	538	241	44.80%
951	CA	332	149	44.88%
859	KY	247	111	44.94%
415/628	CA	411	186	45.26%
702/725	NV	434	197	45.39%
585	NY	427	195	45.67%
925	CA	330	151	45.76%
571/703	VA	762	349	45.80%
563	IA	181	83	45.86%
808	HI	276	127	46.01%
408/669	CA	473	218	46.09%
575	NM	221	102	46.15%
304/681	WV	1,212	560	46.20%
712	IA	489	227	46.42%
515	IA	351	163	46.44%
775	NV	282	131	46.45%
936	TX	204	95	46.57%
309	IL	503	235	46.72%
218	MN	338	158	46.75%
479	AR	408	192	47.06%
213/323	CA	626	295	47.12%
321	FL	222	105	47.30%
319	IA	228	108	47.37%
772	FL	255	121	47.45%
361	TX	282	134	47.52%
908	NJ	530	252	47.55%
239	FL	330	157	47.58%
216	OH	227	108	47.58%
315/680	NY	715	343	47.97%
641	IA	331	159	48.04%
619/858	CA	599	288	48.08%
657/714	CA	1,180	569	48.22%
941	FL	291	141	48.45%
651	MN	138	67	48.55%
313	MI	313	152	48.56%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
317/463	IN	455	221	48.57%
281/346/713/832	TX	1,293	630	48.72%
539/918	OK	467	228	48.82%
661	CA	330	162	49.09%
225	LA	352	173	49.15%
202	DC	411	202	49.15%
660	MO	272	134	49.26%
458/541	OR	606	300	49.50%
410/443/667	MD	1,630	807	49.51%
214/469/972	TX	1,337	663	49.59%
727	FL	254	126	49.61%
314	MO	384	191	49.74%
279/916	CA	408	203	49.75%
608	WI	469	234	49.89%
704/980	NC	817	408	49.94%
228	MS	180	90	50.00%
606	KY	198	99	50.00%
830	TX	184	92	50.00%
520	AZ	271	136	50.18%
757	VA	464	233	50.22%
269	MI	183	92	50.27%
220/740	OH	304	153	50.33%
985	LA	131	66	50.38%
442/760	CA	492	249	50.61%
701	ND	325	165	50.77%
210/726	TX	275	140	50.91%
305/786	FL	927	475	51.24%
385/801	UT	873	449	51.43%
326/937	OH	202	104	51.49%
336/743	NC	535	276	51.59%
707	CA	376	194	51.60%
508/774	MA	559	289	51.70%
860/959	CT	523	272	52.01%
561	FL	578	301	52.08%
321/407/689	FL	1,150	601	52.26%
662	MS	244	128	52.46%
909	CA	386	203	52.59%
562	CA	260	137	52.69%
901	TN	345	182	52.75%
419/567	OH	367	194	52.86%
802	VT	331	175	52.87%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
209	CA	480	255	53.13%
919/984	NC	524	280	53.44%
337	LA	213	114	53.52%
352	FL	379	204	53.83%
615/629	TN	507	276	54.44%
915	TX	191	104	54.45%
512/737	TX	532	291	54.70%
231	MI	170	93	54.71%
423	TN	477	262	54.93%
906	MI	71	39	54.93%
949	CA	442	243	54.98%
907	AK	98	54	55.10%
856	NJ	424	235	55.42%
904	FL	494	274	55.47%
609/640	NJ	628	350	55.73%
682/817	TX	488	272	55.74%
580	OK	358	200	55.87%
505	NM	295	165	55.93%
478	GA	207	116	56.04%
843/854	SC	523	294	56.21%
779/815	IL	518	292	56.37%
413	MA	235	133	56.60%
863	FL	279	158	56.63%
409	TX	239	136	56.90%
207	ME	498	284	57.03%
601/769	MS	246	141	57.32%
256/938	AL	743	426	57.34%
440	OH	258	148	57.36%
229	GA	437	251	57.44%
865	TN	221	127	57.47%
310/424	CA	478	275	57.53%
650	CA	250	144	57.60%
626	CA	328	189	57.62%
252	NC	203	117	57.64%
831	CA	180	104	57.78%
731	TN	192	111	57.81%
208/986	ID	449	260	57.91%
276	VA	404	234	57.92%
302	DE	384	223	58.07%
785	KS	204	119	58.33%
910	NC	411	240	58.39%

NPA/NPA Complex	State	Blocks Forecasted	Blocks Assigned	Percentage Assigned
747/818	CA	290	171	58.97%
534/715	WI	206	122	59.22%
402/531	NE	669	397	59.34%
956	TX	312	186	59.62%
334	AL	347	207	59.65%
912	GA	734	438	59.67%
754/954	FL	506	303	59.88%
603	NH	260	156	60.00%
803	SC	476	286	60.08%
812/930	IN	657	398	60.58%
765	IN	328	199	60.67%
205/659	AL	885	538	60.79%
251	AL	266	162	60.90%
530	CA	426	262	61.50%
970	CO	248	153	61.69%
719	CO	373	232	62.20%
307	WY	260	162	62.31%
931	TN	260	162	62.31%
386	FL	342	214	62.57%
217	IL	586	368	62.80%
435	UT	243	153	62.96%
320	MN	207	131	63.29%
805/820	CA	360	228	63.33%
316	KS	175	111	63.43%
507	MN	360	230	63.89%
502	KY	466	299	64.16%
260	IN	216	139	64.35%
559	CA	355	229	64.51%
308	NE	153	100	65.36%
828	NC	319	212	66.46%
574	IN	162	109	67.28%
618	IL	411	281	68.37%
406	MT	448	310	69.20%
636	MO	215	151	70.23%
706/762	GA	882	641	72.68%
573	MO	414	315	76.09%
254	TX	357	292	81.79%
620	KS	366	330	90.16%
Grand Total		114,472	51,929	45.36%

For the last five years, the highest percentage of forecasted to actual assigned at 45.4% was in 2019 and the lowest of 32.7% was in 2017. Table 5-3 below illustrates the ratio between forecasts and actual assigned blocks from 2015 through 2019, ranked from highest percentage to lowest.

Table 5-3
Summary of Forecasts and Actual Assigned Blocks from 2015

Rank from Highest to Lowest	Year	Total Forecasted Blocks	Total Blocks Assigned	Percentage of Assigned/ Forecasted Blocks
1	2019	114,472	51,929	45.4%
2	2015	121,578	53,415	43.9%
3	2016	134,021	55,720	41.6%
4	2018	116,958	46,588	39.8%
5	2017	121,477	39,728	32.7%

Section 6 – Pooling Administration (PA) and Routing Number Administration (RNA) System Performance

6.1. Pooling Administration System (PAS) Performance

6.1.1 Summary of PAS Performance

The Pooling Administration System (PAS) is the core 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 1, Thousands-Block Pooling Administrator (Including Routing Number Administrator) Technical Requirements Document (TRD), states that the PAS shall, at a minimum, adhere to the following availability and reliability requirements:

- Available 24 hours, seven (7) days a week
- Availability shall meet a minimum requirement of 99.9% of scheduled up-time
- Unscheduled maintenance downtime per calendar year interval shall be less than nine (9) hours
- The mean time to repair (MTTR) for all unscheduled downtime per any 12-month interval shall be less than one (1) hour during core business hours and four (4) hours for non-core business hours
- Scheduled maintenance downtime per 12-month interval shall be less than 24 hours.

In 2019, PAS met the performance metric of a minimum of 99.9% scheduled uptime. PAS was available for use 99.996% of scheduled uptime during the 12-month period. While PAS was unavailable during the year for two unscheduled outages on July 20 and 21 for a total of 21 minutes, both instances were not attributable to PAS, occurred after hours and no customers were affected. There was also one off-hours maintenance event on September 27 which triggered two hours and 45 minutes of FCC-approved, unavailability.

Table 6-1 summarizes PAS system performance in 2019.

Table 6-1
Summary of Actual 2019 PAS Performance

MONTH	NUMBER OF POSSIBLE AVAILABLE HOURS	NUMBER OF ACTUAL HOURS AVAILABLE	TOTAL UNAVAILABILITY	SCHEDULED (S) OR UNSCHEDULED (U)
January	744	744	0	N/A
February	672	672	0	N/A
March	744	744	0	N/A
April	720	720	0	N/A
May	744	744	0	N/A
June	720	720	0	N/A
July	744	743 hours 39 minutes	21 minutes	U
August	744	744	0	N/A
September	720	718 hours 15 minutes	2 hours 45 minutes	S
October	744	744	0	N/A
November	720	720	0	N/A
December	744	744	0	N/A

6.1.2 PAS Performance Metrics

In 2019, as outlined in Table 6-2, PAS met the required performance metrics set forth in Attachment 1 of the contract:

Table 6-2
PAS Performance Metrics

REQUIRED SERVICE	PERFORMANCE STANDARD	ACCEPTABLE QUALITY LEVEL	ACCOMPLISHMENT
PAS Availability (See PWS 3.3)	Pooling Administration System is available	99.9%	MET THE REQUIREMENT WITH A SCHEDULED AVAILABILITY LEVEL OF 99.996%
Maintenance (See PWS 3.3)	Unscheduled maintenance of the PAS is less than 9 hours in any 12-month period	100%	MET THE REQUIREMENT WITH TWO INSTANCES OF UNSCHEDULED PAS AVAILABILITY FOR A TOTAL OF 21 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 2 HOUR 45 MINUTES OF DOWNTIME RELATED TO APPROVED SCHEDULED MAINTENANCE

6.1.3 PAS Maintenance and Change Orders

6.1.3.1 PAS Maintenance

We had a total of eight (8) PAS maintenance updates and builds in 2019; on February 2, February 28, March 28, May 16, July 18, September 27, October 30, and December 6. While we used two hours 45 minutes for the database maintenance on September 27, PAS maintenance did not cause any unavailability for the other seven (7) events.

Per Section 3 of the PA Technical Requirements Document (TRD) addressing INC Issue 845 "Add language to the TBPAG Sections 4.3 and 6.2 stating the Quantity of Total Numbering Resources in Section C of the Appendix 3 Shall Match the

Total Numbering Resources Report," new functionality was added to PAS as part of the maintenance activity on March 28, to enable PAS to auto-populate the total numbering resources count and the list of blocks and codes that make up the total numbering resources count on the MTE form.
Per Section 3 of the PA TRD addressing INC Issue 843 "Modify COCAG Appendix C Processes for Soliciting New Code Holders," new functionality was added to PAS as part of the maintenance activity on May 16, to include three new email notifications for the PA to send when soliciting a new code holder, as well as text changes to existing email notifications, which includes a new table showing assigned and retained blocks, and the OCN and OCN name of each block holder.

6.1.3.2 PAS Change Orders

As noted in Section 2.5.4 of the TRD, changes and improvements to PAS may come from regulatory directives and/or industry-initiated modifications to guidelines. The PA submitted and implemented two PAS change order proposals in 2019. Table 6-3 provides details for the PAS change orders submitted, approved and implemented.

Table 6-3
2019 PAS Change Order Activity

Number	Date Submitted	Description	NOWG Recommendation	FCC Status	Implemented
8	1/31/19[7]	INC Issue 869-NPAC Help Desk information is incorrect on system generated TBPAG Part 1B form	Approved 2/22/19	Approved 3/22/19	5/16/19

[7] The PA initially submitted this change order in 2018 but due to the contract transition it was revised, resubmitted, and implemented in 2019.

Number	Date Submitted	Description	NOWG Recommendation	FCC Status	Implemented
A	2/1/19	INC Issue 839 – Combine the Central Office Code (NXX) Assignment Guidelines (COCAG) and the Thousands-Block (NXX-X) Administration Guidelines (TBPAG) into one document	Approved 4/28/19	Approve 6/28/19	10/30/19

6.1.4 PAS Trouble Tickets

We report trouble ticket details each month to the NAOWG COSC and in the "Monthly Pooling Metrics Report."

There are four reasons for opening a trouble ticket, as specified in Section 2.22.4.1 of the TRD, relating to issues with the system performance, website, contractor ISP and other. The PA opened one (1) PAS trouble ticket in 2019 due to a system performance issue. We responded to the issue quickly and found a workaround, however this issue did not impact the customer's ability to complete its task. At no time was any user's information compromised.

Table 6-4 shows the details and status of the PAS trouble ticket opened in 2019.

Table 6-4
2019 PAS Trouble Tickets

TROUBLE TICKET NUMBER	DATE OPENED	DATE CLOSED	ISSUE TYPE
1560	12/26/19	N/A	System Performance

Table 6-5 shows the total number of trouble tickets opened by year since 2015, and that 2019 had the fewest trouble tickets during this 5-year period.

Table 6-5
Number of PAS Trouble Tickets from 2015 through 2019

YEAR	NUMBER OF TROUBLE TICKETS
2015[8]	32
2016	8
2017	5
2018	6
2019	1

6.2. Routing Number Administration System (RNAS) Performance

6.2.1 Summary of RNAS Performance

As with PAS, the Routing Number Administration System (RNAS) is essential to the routing number (p-ANI) administration operation because RNAS stores all of the information relating to p-ANI administration to facilitate routing of e9-1-1 calls. Because it provides essential reporting features that contain real-time data, reliability is critical. RNAS is subject to the same availability requirements as PAS.

Section 4.3 of contract Attachment 1, Thousands-Block Pooling Administrator (Including Routing Number Administrator) Technical Requirements Document (TRD), states that the RNAS shall, at a minimum, adhere to the following availability and reliability requirements:

- Available 24 hours, seven (7) days a week
- Availability shall meet a minimum requirement of 99.9% of scheduled up-time
- Unscheduled maintenance downtime per calendar year interval shall be less than nine (9) hours
- The mean time to repair (MTTR) for all unscheduled downtime per any 12-month interval shall be less than one (1) hour during core business hours and four (4) hours for non-core business hours
- Scheduled maintenance downtime per 12-month interval shall be less than 24 hours.

[8] The PAS re-write was completed in 2015, and the new system was rolled out that year.

In 2019, we continued our practice of meeting the RNAS performance metric of a minimum of 99.9% scheduled uptime. RNAS was available for use 100% of scheduled time for the year. In 2019, RNAS users experienced no unscheduled down time but RNAS was unavailable for one hour 45 minutes on August 15 for FCC-approved, scheduled maintenance.

As outlined in Table 6-6, in 2019 RNAS met the performance metrics set forth in the TRD:

Table 6-6
Summary of Actual 2019 RNAS Performance

MONTH	NUMBER OF POSSIBLE AVAILABLE HOURS	NUMBER OF ACTUAL HOURS AVAILABLE	TOTAL UNAVAILABILITY	SCHEDULED (S) OR UNSCHEDULED (U)
January	744	744	0	N/A
February	672	672	0	N/A
March	744	744	0	N/A
April	720	720	0	N/A
May	744	744	0	N/A
June	720	720	0	N/A
July	744	744	0	N/A
August	744	742 hours 15 minutes	1 hour 45 minutes	S
September	720	720	0	N/A
October	744	744	0	N/A
November	720	720	0	N/A
December	744	744	0	N/A

6.2.2 RNAS Performance Metrics

In 2019, as outlined in Table 6-7, RNAS met the performance metrics as set forth in Section 4.3 of Attachment A of the contract for the RNA system:

Table 6-7
2019 RNAS Performance Metrics

REQUIRED SERVICE	PERFORMANCE STANDARD	ACCEPTABLE QUALITY LEVEL	ACCOMPLISHMENT
RNAS Availability (See PWS 4.3)	Routing Number Administration System is available	99.9%	MET THE REQUIREMENT WITH A SCHEDULED AVAILABILITY LEVEL OF 100%
Maintenance (See PWS 4.3)	Unscheduled maintenance of the RNAS is less than 9 hours in any 12-month period	100%	MET THE REQUIREMENT WITH NO UNSCHEDULED DOWNTIME RESULTING IN NO RNAS UNAVAILABILITY
Maintenance (See PWS 4.3)	Scheduled maintenance of the RNAS is less than 24 hours in any 12-month period	100%	MET THE REQUIREMENT BY USING 1 HOUR 45 MINUTES OF APPROVED DOWNTIME AS A RESULT OF SCHEDULED MAINTENANCE

6.2.3 RNAS Maintenance

6.2.3.1 RNAS Maintenance

There was one RNAS maintenance event in 2019, on August 15. We requested 2 hours of scheduled downtime for this maintenance and used 1 hour 45 minutes.

6.2.3.2 RNAS Change Orders

Changes and improvements to RNAS are generally driven by changes to FCC rules, industry guidelines, or specific service provider or regulatory requests. There were no RNAS Change Orders submitted or implemented in 2019.

6.2.4 RNAS Trouble Tickets

We report trouble ticket details each month to the NAOWG COSC and in the "Monthly Metrics Report." There are four reasons for opening a trouble ticket, as

specified in Section 2.22.4.1 of the TRD, relating to issues with the system performance, website, contractor ISP and other.

The RNA opened no new trouble tickets for RNAS in 2019, which is the first time this has occurred since 2016. Table 6-8 shows the total number of RNAS trouble tickets opened, by year, since 2015.

Table 6-8
Number of RNA Trouble Tickets from 2015 through 2019

YEAR	NUMBER OF TROUBLE TICKETS
2015	0
2016	0
2017	3
2018	1
2019	0

6.3. PA and RNA Systems Disaster Recovery Testing

Disaster recovery testing occurs throughout the year during routine system maintenance for PAS and RNAS to ensure system redundancy in an AWS cloud environment.

In addition, our Concord office also assesses evacuation procedures and the ability of personnel to access the system remotely throughout the year.

Section 7 – Status of Required Transferable Property

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

Section 8- Industry Issue Identification/Feedback

The PA supports the industry through several channels during the year: interaction with the Numbering Administration Oversight Working Group (NAOWG) Contract Oversight Subcommittee (COSC), providing status reports for the North American Numbering Council (NANC) meetings through the NAOWG COSC, participation in NANC subgroup meetings, and participation in industry forums. This section contains information on the industry forums the PA participated in, including the number of issues and contributions that the PA submitted and quarterly Tips.

8.1 North American Numbering Council (NANC)

The PA provided status reports to the FCC through the NAOWG COSC for the four meetings of the North American Numbering Council (NANC) in 2019; in March, June, September, and December. The PA reports consisted of a 12-month rolling status of thousands-block pooling administrator and routing number administrator activities.

8.2 Participation in Industry Forums

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

- Working on issues and 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 2019:

- Industry Numbering Committee (INC) – the PA participated in all 4 face-to-face meetings and 11 virtual meetings. The PA submitted 3 new issues and 5 new contributions in 2019 that were all pooling related.

- Common Interest Group on Rating and Routing (CIGRR) – the PA participated in the 4 CIGRR meetings. The PA continued to review the 3H (BCRnoNXD under 45 days) validation report monthly prior to the report being sent to the Administrative Operating Company Numbers (AOCNs). The PA also reviewed the 3E (BCRnoNXD over 45 days) report monthly. The PA also researched other data comparison

requests sent by iconectiv TRA when requested. The PA continued to address issues and concerns in the committee from participants.

- Local Number Portability Working Group (LNPA WG) - the PA participated in 8 LNPA Transition Oversight Subcommittee (TOSC) meetings and conference calls as a subject matter resource.

- Emergency Services Interconnection Forum (ESIF) – the PA, as the Routing Number Administrator, attended 4 ESIF meetings.

8.3 Pooling and Routing Number Administrator Interaction with the Numbering Administration Oversight Working Group (NAOWG) Contract Oversight Committee (COSC)

The Numbering Administration Oversight Working Group (NAOWG) Contract Oversight Subcommittee (COSC), reviews our annual performance. The NAOWG COSC's interactions with the PA throughout the year included:

- Reviewing PA Change Orders and providing a recommendation to the FCC for the disposition of the proposed change order and,
- Conducting meetings with the PA to review each month's performance.

The NAOWG COSC and the PA Director met 10 times via conference call to discuss the PA and RNA's monthly performance. The 2019 meeting dates were: February 20, March 21, April 25, May 23, June 6, July 25, August 29, November 1, November 14 and December 19.

Prior to each meeting, the PA provided the NAOWG COSC with a summary report of its performance for the previous month/s which included updates on trouble tickets, industry meeting activities and regulatory information. In all, the PA provided 12 monthly reports[9] to the NAOWG COSC.

Table 8-1 contains the description of the standing summary report agenda items.

[9] There were no meetings in September or October due to the re-chartering of the NANC, however we provided August and September summary reports to the NAOWG COSC at the November 1 meeting.

Table 8-1
NAOWG COSC Description of the Standing Monthly Summary Report Agenda Items

Title	Description
Summary Data	Measurable items that happened in the month that are based on the TRD and guideline requirements
Summary Block Report	The total number of rate centers with less than six months inventory based on service providers' forecasts; total number of rate centers with no blocks available where SPs have forecasted a need for blocks within 6 months; and the total number of rate centers with blocks available from codes that have been assigned, but have not yet been opened in the PSTN or NPAC (and are therefore classified as pending)
RCs< 6 Mo Inventory	The list of all rate centers that have fewer blocks available than are forecasted to be needed in the next 6 months.
RCs zero Inventory with Forecast	The list of all rate centers that have no blocks available to be assigned, but service providers have forecasted a need for blocks
RCs with Pending Blocks	Blocks that are currently available in the pool where the code holder has not confirmed to the PA it has activated the code in the PSTN, loaded it in the NPAC, and completed all other code holder responsibilities
Trouble Tickets	All new, closed, and pending trouble tickets for the current year and their status
Regulatory Update	Information about state commissions and personnel that might be of importance to the oversight group
INC Update	INC issues that have gone into either initial or final closure and anything of importance to note from INC
Customer Focus Items	Items that require research, assistance, or education beyond our normal daily interactions with customers

Effective with the March report, the PA resumed reporting on Customer Focus Items. Activities reported as "customer focus" are noteworthy specific ways in which the PA and RNA responded to more significant issues and requests from our customers during the year. This list includes only items that required extra time and effort on the part of the PA and RNA and does not include all of the day-to-day questions and requests that the pooling staff members field as part of their daily workload. The PA and RNA reported a total of 149 customer focus items in 2019 of which 115 were pooling-related and 34 were P-ANI-related.

The NAOWG COSC also provides recommendations to the FCC on all PAS and RNAS change order proposals. In 2019, the NAOWG COSC provided two recommendations on PAS change orders. For details on the affected PAS change orders, see section 6.1.3.2.

8.4 Pooling and Routing Number Administrator Formal Complaints

Pursuant to Section 2.9.4 of the TRD, 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 2019, the PA received no formal complaints.

8.5 Pooling and Routing Number Administrator Quarterly Tips

8.5.1 Pooling Tips

The PA has been offering pooling Tips since 2004 and feedback from recipients continues to be positive. Topics for the Tip are generated from suggestions received from regulators and service providers, INC action items, and internal observations that procedures regarding processes could benefit from additional clarification. The Tip is sent via email to the PAS distribution list during each quarter.[10] The Pooling Tip provides helpful information regarding the PAS and thousands-block pooling process, as well as serving as a useful reference for all PAS users. If additional issues arise during a quarter that justify notice, the PA may send a supplemental Tip. The PA sent three (3) supplemental Tips in 2019. Archive files for Pooling Tip from previous years can be found on our website.

Table 8-2 lists all of the 2019 pooling Tip topics:

[10] Because there were two *Supplemental Tips* in September, there was no fourth quarter pooling Tip in 2019.

Table 8-2
Pooling Tips

Month	Topic
January	Reminder of Code Holder Responsibilities
January – Supplemental	Commonly Found Mistakes with Part 4 Submissions
May	Keeping PAS Up to Date for the Switch Information on Pooled CO Codes
August	Voluntary Code Transfer Process for Establishing an LRN
September – Supplemental 1	Change to Mass Modify Process
September – Supplemental 2	30-Day Notice Procedures and Regulatory Contact Spreadsheet

8.5.2 P-ANI Tips

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 at the beginning 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 P-ANI Tips can be found on our website.

Table 8-3 lists all of the P-ANI Tip topics that were covered by quarter in 2019.

Table 8-3
2019 P-ANI Tips

Month	Topic
January	p-ANI Forecast Report
April	Returning p-ANIs
July	RNAS Passwords
October	New p-ANI Requests

8.6 Pooling and Routing Number Administrator Customer Support / Help Desk

The Pooling Customer Support Representative (CSR or Help Desk) and Routing Number Administrator respond to both internal and external questions and

requests for technical support and attempts to promptly confirm the cause of a problem. Some examples are:

- Creating, deleting, and maintaining user accounts and passwords,
- Answering a variety of inquiries from customers, including questions regarding use of forms and the PAS, and assists users with locating documentation, and
- Working with carriers to troubleshoot problems and assist in resolving technical problems.

8.6.1 Pooling Administrator Customer Support / Help Desk Calls

In 2019, the CSR handled approximately 511 calls from customers. Table 8-4 shows the numbers of calls to the pooling Help Desk by year since 2015.

Table 8-4
Number of Pooling Customer Support/Help Desk Calls from 2015 through 2019

Year	Number of Help Desk Calls
2015	914
2016	875
2017	698
2018	674
2019	511

8.6.2 Routing Number Administrator (RNA) Customer Support /Help Desk Calls

In 2019, the Routing Number Administrator (RNA)/P-ANI Customer Support/Help Desk handled 67 phone calls and processed 19 new user registration requests, of which 17 were approved and 2 were denied; 7 profile updates, of which 6 were approved and 1 was denied.

Table 8-5 shows the numbers of calls to the Routing Number Administrator (RNA)/P-ANI Customer Support/Help Desk for the past five years.

Table 8-5
Number of P-ANI Customer Support/Help Desk Calls from 2015 through 2019

Year	Number of Help Desk Calls
2015	81
2016	72
2017	69
2018	65
2019	67

Section 9 - Volume of Reports Produced in 2018 Aggregated by Regulatory Agency, NANC, NANPA, Service Providers, and Metrics

9.1 Total Reports

This section identifies the volume of reports in 2019 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 Administrator's website, the Pooling Administration System (PAS), or the Routing Number Administration System (RNAS). We produced 522 reports in 2019, which is an average of about 43 reports per month.

Table 9-1 shows the total number of reports produced during 2019 aggregated by regulatory agency, NANC, NANPA, service providers and monthly metrics. The total number of reports 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.
- NANPA: pooling status reports for NANPA industry meetings, ad hoc reports, and two NRUF-cycle reports.
- SERVICE PROVIDERS: rate center change reports, implementation meeting reports, monthly meeting reports to the NAOWG, and miscellaneous ad hoc reports.
- MONTHLY METRICS: required by Section 2.22.4 of the TRD. This report includes information about trouble tickets, change orders, communications, and forecasting data on a per-state basis and summaries of application processing on a monthly basis by the PA and RNA. This report is posted to the website only.

Table 9-1
Total 2019 Reports

Report Type	Total number of reports
FCC	77
STATES	325
NANC	4
NANPA	37
SERVICE PROVIDER	67
MONTHLY METRICS	12
TOTAL	**522**

9.2 Reports Compliance

All report requirements were met in 2019. This section describes the reports that are required in the TRD. Some reports are CDRL reports and others are required by the TRD. Table 9-2 shows the report name, contract reference, required interval, dates the reports were submitted, the total number of each required report submitted for the year, and whether the requirement was met.

Table 9-2
Required Reports Compliance

Report Name	Section Reference	Required Interval	Dates Submitted	Total	Met Requirements
Staffing Report	CDRL 5.6.4.4 per Section 2.3	1st working day of the month	12/28, 2/1, 3/1, 4/1, 5/1, 6/1, 7/1, 8/1, 9/3, 10/1, 11/1, 12/2	12	Y
Thousands – Block Pooling Report	CDRL 5.6.4.1 per Section 2.21.1.1	Monthly	1/14, 2/12, 3/12, 4/11, 5/10, 6/11, 7/12, 8/13,	12	Y

Report Name	Section Reference	Required Interval	Dates Submitted	Total	Met Requirements
			9/5, 10/1, 11/7, 12/9		
p-ANI Monthly Report	Section 5.6.4.2 and 2.21.1.2	Monthly	1/14, 2/12, 3/12, 4/11, 5/10, 6/11, 7/12, 8/13, 9/5, 10/1, 11/7, 12/9	12	Y
Systems (PAS and RNAS) Performance Report	CDRL 5.6.4.3 per Section 2.21.1.1 and 2.21.1.2	Monthly	1/14, 2/12, 3/12, 4/11, 5/10, 6/11, 7/12, 8/13, 9/5, 10/1, 11/7, 12/9	12	Y
Ad Hoc Reports	CDRL 5.6.5 per Section 2.21.4	Monthly	1/14, 2/12, 3/12, 4/11, 5/10, 6/11, 7/12, 8/13, 9/5, 10/1, 11/7, 12/9	12	Y
Pooling Matrices Report	CDRL 5.6.3.1 Per Section 2.21.3	Quarterly	1/14, 4/11, 7/12, 10/11	4	Y
Forecasted Demand (Pooling)	CDRL 5.6.2.1 Per Section 2.17.1.1	Semi-Annual	2/12, 8/13	2	Y
Rate Area Inventory Pool Status (Pooling and RNA)	CDRL 5.6.2.2 and Section 2.16.1.5.	Semi-Annual	2/12,8/13	2	Y
Annual	CDRL 5.6.1 Per Section 2.21.2	Annual	4/5	1	Y
By Request (Ad Hoc)	CDRL 5.6.5	Within three	January (3 reports)	79	Y

Report Name	Section Reference	Required Interval	Dates Submitted	Total	Met Requirements
	Per Section 2.21.4	business days	February (4 reports) March (4 reports) April (18 reports) May (7 reports) June (7 reports) July (7 reports) August (5 reports) September (6 reports) October (7 reports) November (4 reports) December (7 reports)		
Monthly Pooling Metrics	Section 2.22.4	Monthly	1/14, 2/12, 3/12, 4/11, 5/10, 6/11, 7/12, 8/13, 9/5, 10/1, 11/7, 12/9	12	Y
Inventory	Per Section 3.21	Quarterly	1/22, 5/1, 8/12	3	Y
TOTAL Reports				**84**	
TOTAL (with ad hoc)				**163**	

Section 10 - Trends in Pooling Since 2015

This section contains pooling statistics that illustrate the impacts and activity trends in the pooling environment between 2015 and 2019, except for Section 10.1, which includes CO Codes (NXXs) saved since pooling began. There are only 2 NPAs in a jeopardy status, IL 217 and 618, compared to 73 in 1999, and 17 in 2010.

10.1 CO Codes (NXXs) Saved by Pooling

The PA calculates that 86,803 NXXs have been saved by pooling, which is the equivalent of 90 NPAs.

Table 10-1 illustrates by NPA/NPA complex[11] the NXXs that have been saved in all NPA areas, in 50 states and the District of Columbia and Puerto Rico.

Table 10-1
NXXs Saved by Pooling by NPA/NPA Complex

State	NPA/NPA Complex	Quantity of NXXs saved by pooling	State	NPA/NPA Complex	Quantity of NXXs saved by pooling
New Jersey	201/551	361	Ohio	220/740	969
District of Columbia	202	27	Pennsylvania	223/717	679
			Illinois	224/847	603
Connecticut	203/475	318	Louisiana	225	213
Alabama	205/659	346	Mississippi	228	107
Washington	206	60	Georgia	229	202
Maine	207	758	Michigan	231	567
Idaho	208/986	355	Ohio	234/330	693
California	209	450	Florida	239	122
Texas	210/726	26	Maryland	240/301	643
New York	212/332/646/917	37	Michigan	248/947	324
California	213/323	237	Alabama	251	134
Texas	214/469/972	477	North Carolina	252	441
Pennsylvania	215/267/445	471	Washington	253	114
Ohio	216	57	Texas	254	329
Illinois	217	604	Alabama	256/938	433
Minnesota	218	348	Indiana	260	345
Indiana	219	316	Wisconsin	262	377

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

State	NPA/NPA Complex	Quantity of NXXs saved by pooling	State	NPA/NPA Complex	Quantity of NXXs saved by pooling
Michigan	269	536	Oklahoma	405	392
Kentucky	270/364	499	Montana	406	380
Pennsylvania	272/570	1034	California	408/669	170
Virginia	276	361	Texas	409	185
California	279/916	186	Maryland	410/443/667	963
Texas	281/346/713/832	523	Pennsylvania	412/878	316
Delaware	302	352	Massachusetts	413	403
Colorado	303/720	89	Wisconsin	414	52
West Virginia	304/681	1,105	California	415/628	221
Florida	305/786	127	Missouri	417	578
Wyoming	307	205	Ohio	419/567	967
Nebraska	308	181	Tennessee	423	373
Illinois	309	451	Washington	425	130
California	310/424	298	Texas	430/903	617
Illinois	312/872	25	Texas	432	128
Michigan	313	106	Virginia	434	357
Missouri	314	92	Utah	435	162
New York	315/680	666	Ohio	440	421
Kansas	316	124	California	442/760	761
Indiana	317/463	314	Oregon	458/541	761
Louisiana	318	431	Georgia	470/678/770	455
Iowa	319	296	Georgia	478	152
Minnesota	320	311	Arkansas	479	214
Florida	321	69	Arizona	480	18
Florida	321/407/689	230	Pennsylvania	484/610	951
Texas	325	179	Arkansas	501	257
Illinois	331/630	363	Kentucky	502	285
Alabama	334	358	Oregon	503/971	331
North Carolina	336/743	361	Louisiana	504	55
Louisiana	337	342	New Mexico	505	115
Massachusetts	339/781	523	Minnesota	507	405
California	341/510	218	Massachusetts	508/774	1,036
New York	347/718/917/929	230	Washington	509	431
New York	347/718/929	39	Texas	512/737	320
Massachusetts	351/978	708	Ohio	513	204
Florida	352	339	Iowa	515	292
Washington	360/564	370	New York	516	166
Texas	361	327	Michigan	517	437
Ohio	380/614	185	New York	518/838	864
Utah	385/801	178	Arizona	520	104
Florida	386	222	California	530	684
Rhode Island	401	251	Wisconsin	534/715	579
Nebraska	402/531	589	Oklahoma	539/918	536
Georgia	404/470/678	30	Virginia	540	636

State	NPA/NPA Complex	Quantity of NXXs saved by pooling	State	NPA/NPA Complex	Quantity of NXXs saved by pooling
California	559	388	Illinois	708	438
Florida	561	155	Iowa	712	344
California	562	126	New York	716	547
Iowa	563	246	Colorado	719	224
Virginia	571/703	241	Pennsylvania	724/878	1,077
Missouri	573	987	Florida	727	84
Indiana	574	246	Tennessee	731	376
New Mexico	575	249	New Jersey	732/848	596
Oklahoma	580	500	Michigan	734	440
New York	585	545	California	747/818	254
Michigan	586	166	Florida	754/954	111
Mississippi	601/769	552	Virginia	757	308
Arizona	602	15	Minnesota	763	53
New Hampshire	603	680	Indiana	765	727
			Florida	772	145
South Dakota	605	190	Illinois	773/872	164
Kentucky	606	309	Nevada	775	214
New York	607	443	Illinois	779/815	924
Wisconsin	608	398	Kansas	785	429
New Jersey	609/640	581	Puerto Rico	787/939	184
Minnesota	612	26	Vermont	802	593
Tennessee	615/629	335	South Carolina	803	412
Michigan	616	379	Virginia	804	448
Massachusetts	617/857	307	California	805/820	466
Illinois	618	683	Texas	806	227
California	619/858	239	Hawaii	808	58
Kansas	620	643	Michigan	810	457
Arizona	623	15	Indiana	812/930	719
California	626	143	Florida	813	159
New York	631/934	655	Pennsylvania	814	792
Missouri	636	378	Missouri	816	394
Iowa	641	499	North Carolina	828	387
California	650	226	Texas	830	406
Minnesota	651	92	California	831	233
California	657/714	229	South Carolina	843/854	390
Missouri	660	412	New York	845	830
California	661	290	Florida	850	285
Mississippi	662	779	New Jersey	856	444
Texas	682/817	242	Kentucky	859	238
North Dakota	701	132	Connecticut	860/959	523
Nevada	702/725	64	New Jersey	862/973	632
North Carolina	704/980	465	Florida	863	229
Georgia	706/762	581	South Carolina	864	407
California	707	730	Tennessee	865	258

State	NPA/NPA Complex	Quantity of NXXs saved by pooling	State	NPA/NPA Complex	Quantity of NXXs saved by pooling
Arkansas	870	501	Arizona	928	208
Tennessee	901	95	Tennessee	931	425
Florida	904	185	Texas	936	235
Michigan	906	311	Ohio	937	642
Alaska	907	34	Texas	940	205
New Jersey	908	405	Florida	941	169
California	909	334	California	949	120
North Carolina	910	482	California	951	321
Georgia	912	252	Minnesota	952	29
Kansas	913	136	Texas	956	221
New York	914	355	Colorado	970	493
Texas	915	51	Texas	979	241
North Carolina	919/984	340	Louisiana	985	349
Wisconsin	920	627	Michigan	989	751
California	925	269			

10.2 Trends in Thousands-Block Number Pooling

The following sub-sections contain summaries of thousands-block number pooling statistics since 2015.

10.2.1 Pooling Activity Charts

The following charts illustrate the trends in pooling activity between 2015 and 2019. Table 10-2 shows CO Codes 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 3As). Figures 4 through 9 are graphic representations of each individual category.

Table 10-2
Pooling Activity from 2015 through 2019 At-A-Glance

	2015 Statistics	2016 Statistics	2017 Statistics	2018 Statistics	2019 Statistics
CO Codes Opened for LRNs	425	382	436	481	682
CO Codes Opened for Dedicated Customers	103	169	91	54	47
CO Codes Opened for Pool Replenishment	3,188	2,827	2,165	2,262	2,651
Blocks Assigned by PA During Year	53,416	55,723	39,728	36,602	51,969
Total Assigned Blocks in PAS at Year End	494,582	540,560	568,959	605,561	647,827
Applications Processed	145,828	123,629	134,389	115,319	116,797

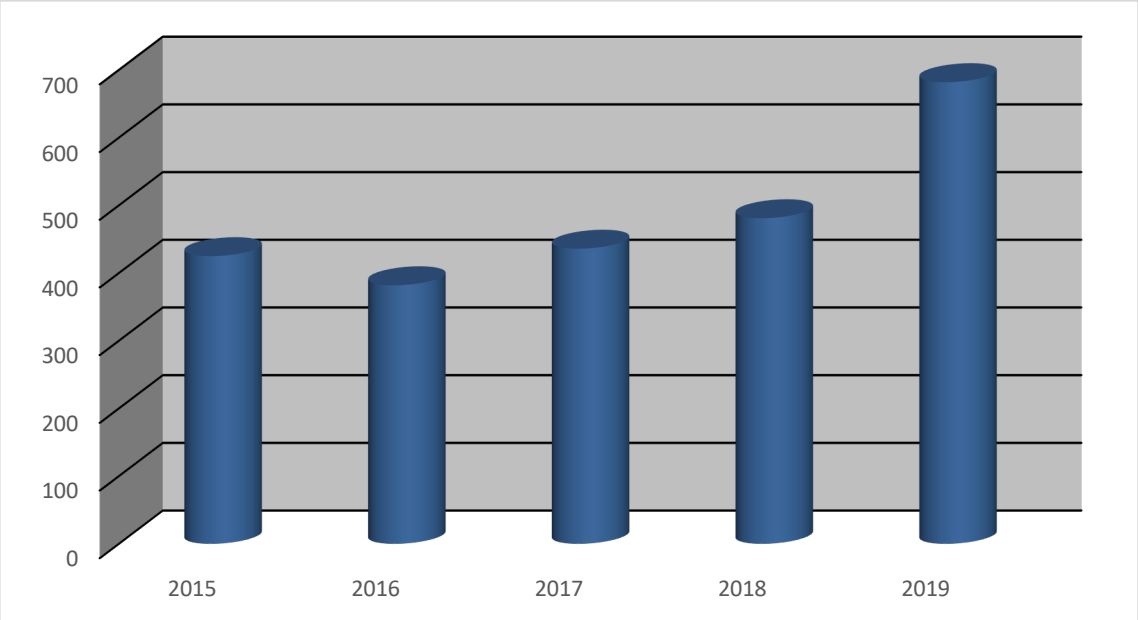

Figure 4: CO Codes Opened for LRNs from 2015 through 2019

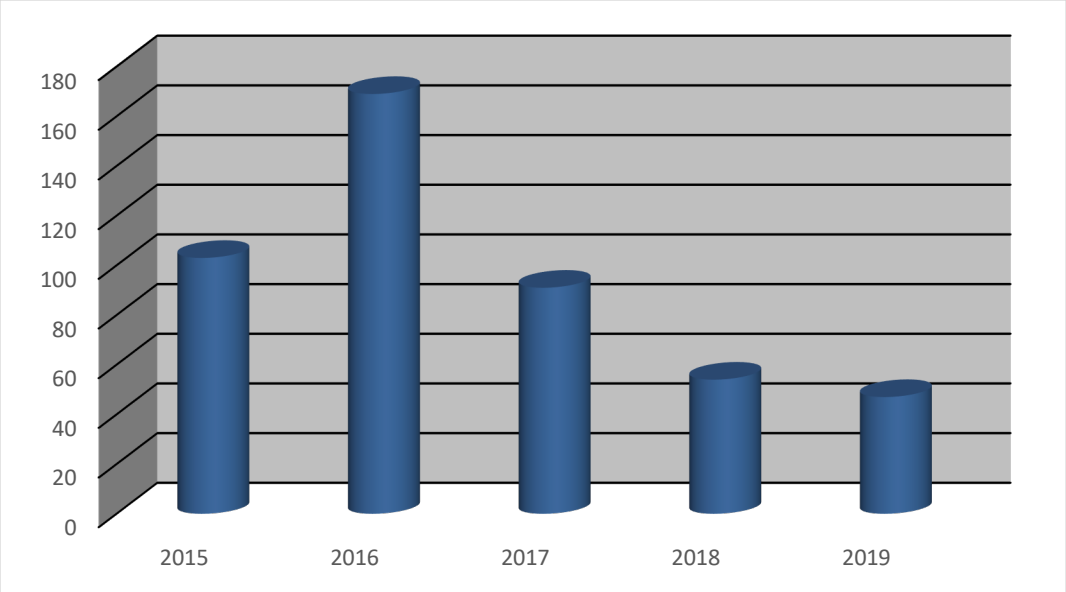

Figure 5: CO Codes Opened for Dedicated Customers from 2015 through 2019

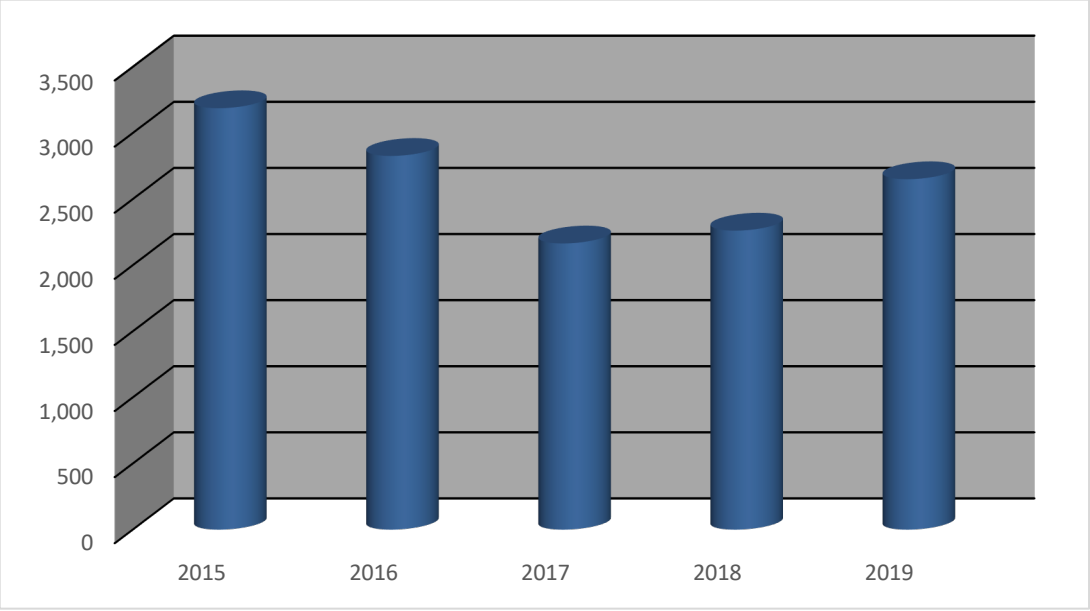

Figure 6: CO Codes Opened for Pool Replenishment from 2015 through 2019

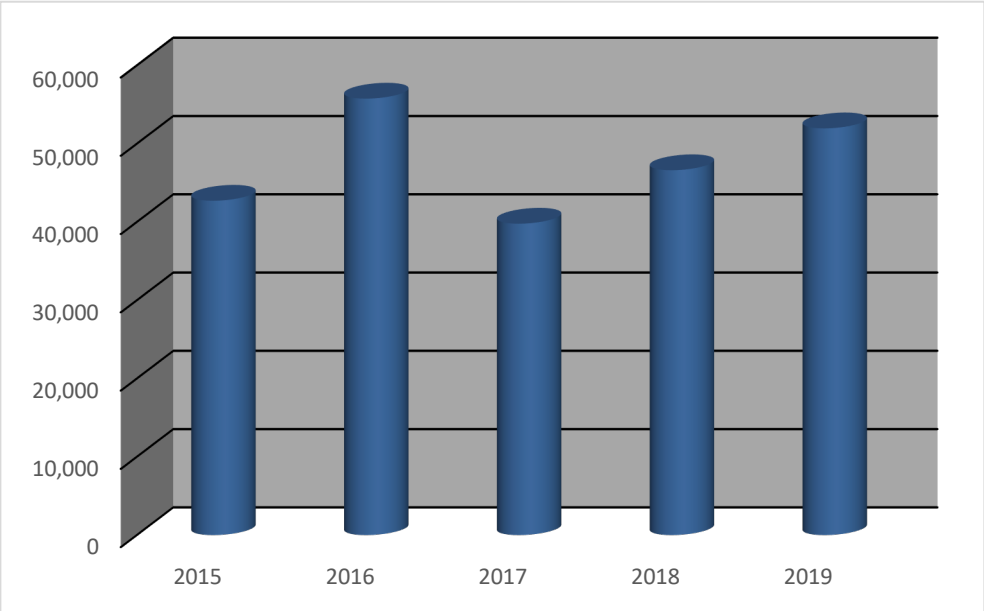

Figure 7: Blocks Assigned During Years 2015 through 2019

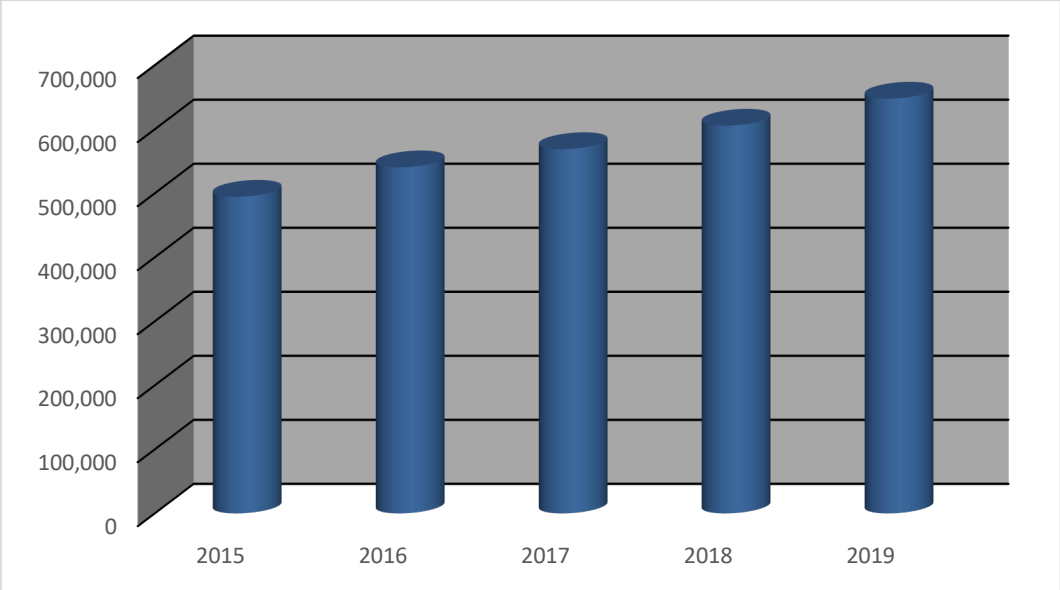

Figure 8: Assigned Blocks at End of Year 2015 through 2019

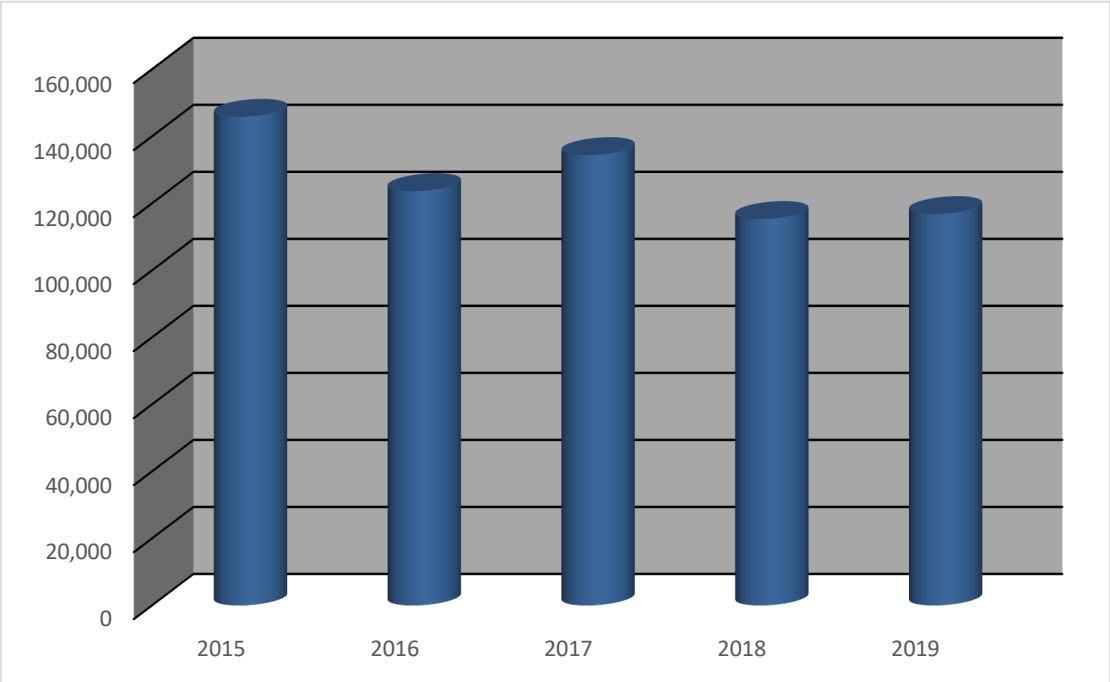

Figure 9: Applications (Part 3As) Processed from Years 2015 through 2019

10.2.2 Total Applications Processed (Part 3As) from 2015 through 2019

The total number of applications (Part 3As) 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 3A. Table 10-3 contains the total numbers of Part 3As processed by month from 2015 through 2019.

Table 10-3
Total Applications (Part 3As) Processed By Month Since 2015

	2015	2016	2017	2018	2019
Jan	7,518	6,922	11,063	13,652	7,412
Feb	15,628	12,323	15,301	5,317	7,422
Mar	10.763	15,097	17,491	9,334	9,102
Apr	13,295	9,371	12,298	11,348	11,355
May	17,565	9,614	12,187	11,214	11,684
Jun	24,285	10,767	10,004	11,611	8,962
Jul	13,310	8,067	8,547	6,899	8,691
Aug	8,068	11,361	7,667	7,979	13,186

	2015	2016	2017	2018	2019
Sep	9,977	9,197	7,262	8,146	10,930
Oct	8,524	10,156	7,110	15,080	10,660
Nov	7,604	8,851	10,782	7,790	9,611
Dec	9,291	11,903	14,677	6,949	7,782
TOTAL	**145,828**	**123,629**	**134,389**	**115,319**	**116,797**

10.2.3 Cumulative Thousands Blocks Assigned Since 2002

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

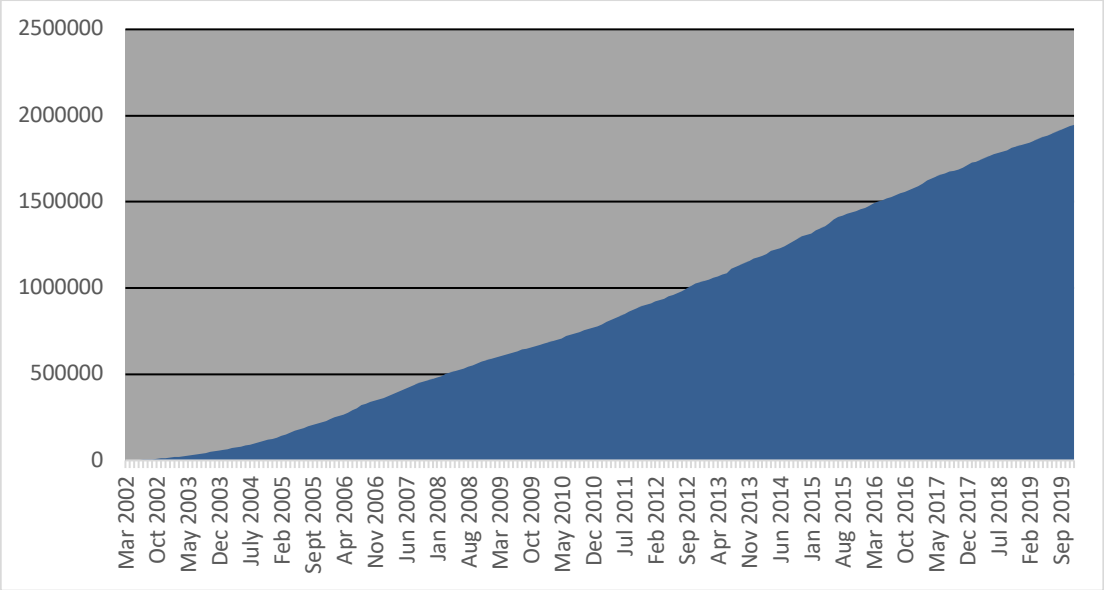

Figure 10: Cumulative Pooling Administration Applications (Part 3As) from March 2002 through December 2019

10.3 – Reclamation 2015 through 2019

The PA has reclaimed 29 blocks since 2015. Table 10-4 shows the total number of blocks reclaimed by state since 2015, ranked from highest to lowest.

Table 10-4
Total Number of Blocks Reclaimed by State from 2015 through 2019

State	2015	2016	2017	2018	2019	Total
GEORGIA			6	2	2	10
WASHINGTON			2	1	3	6
MICHIGAN	1	2				3

State	2015	2016	2017	2018	2019	Total
VIRGINIA		1			1	2
ALABAMA			1			1
CALIFORNIA	1					1
COLORADO			1			1
DISTRICT OF COLUMBIA					1	1
FLORIDA	1					1
MISSISSIPPI			1			1
OREGON			1			1
VERMONT		1				1
TOTAL	3	4	12	3	7	29

Table 10-5 shows, by year since 2015, the cumulative number of blocks on the reclamation lists each month, the total number of those blocks that were new each month, and the number of blocks for which reclamation has been initiated, and the number of blocks actually reclaimed. In 2019, we saw the highest number of new blocks on the reclamation list in this five-year period, were authorized to initiate reclamation for 19 blocks but reclaimed only 7. For more detailed information on the reclamation process, see Section 2.2.4.

Table 10-5
Summary of Reclamation from 2015 through 2019

Year	Number of Cumulative Blocks on the List	Number of New Blocks on the List	Number of Blocks for which Reclamation was Initiated[12]	Number of Blocks Reclaimed	Percentage of Actual Reclamation to Initiated Reclamation
2015	2,790	815	11	3	27%
2016	2,840	1,081	44	4	9%
2017	3,703	1,117	32	12	38%
2018	2,403	1,061	115	3	3%
2019	2,652	1,306	19	7	37%

[12] While a state may authorize the PA to initiate block reclamation, not all blocks in this category have been reclaimed. In some cases, the reclamation process is halted if it is determined that the blocks are actually in service.

10.4 Summary of Pooled Areas since 2015

Pooling trends depicted in Table 10-18 below for rate center statuses between 2015 through 2019 show that:

- Each year the numbers of rate centers available for pooling increases, as do the number of Mandatory and Optional rate centers.
- Each year the percentage of Single-Service Provider and Excluded rate centers decreases.

Table 10-6
Pooling Rate Center Facts Comparison by Year - 2015 through 2019

	2015	2016	2017	2018	2019
Total Number of Distinct Rate Centers	18,515	18,507	18,490	18,485	18,485
Total Number of Distinct Rate Centers Available for Pooling	16,248	16,331	16,447	16,592	16,672
Percentage of Distinct Rate Centers that are Available for Pooling	87.75%	88.24%	88.95%	89.8%	90.2%
Total Number of Mandatory Distinct Rate Centers	8,876	8,898	8,983	9,006	9,068
Percentage of Distinct Rate Centers that are Mandatory	47.93%	48.08%	48.58%	48.7%	49.1%
Total Number of Distinct Mandatory Single-Service Provider Rate Centers	1,088	1,064	969	941	905
Percentage of Distinct Rate Centers that are Mandatory Single-Service Provider	5.87%	5.75%	5.24%	5.0%	4.9%
Total Number of Distinct Optional Rate Centers	6,284	6,369	6,495	6,645	6,699
Percentage of Distinct Rate Centers that are Optional	33.94%	34.41%	35.12%	35.9%	36.2%

	2015	2016	2017	2018	2019
Total Number of Distinct Rate Centers Excluded from Pooling	2,267	2,176	2,043	1,893	1,813
Percentage of Distinct Rate Centers that are Excluded from Pooling	12.24%	11.76%	11.04%	10.2%	9.8%
Total Number of Rate Center Designations Changed (see Section 2.4.2 for detail)	298	174	283	204	293

Appendix 1
2019 p-ANI ACTIVITY & PROJECTED EXHAUST REPORT

The tables found herein contain the p-ANI Activity and Projected Exhaust Report projected exhaust information detail based on data as of December 31, 2019 as follows and referenced in Section 2.7.3.4:

- **Table A1-1:** Projected Exhaust of 211/511 p-ANIs by NPA
- **Table A1-2:** Projected Exhaust of 211/511 p-ANIs by State
- **Table A1-3:** Projected Exhaust of 211/511 p-ANIs by Year

NOTE: "N/A" for exhaust date and quarter indicates there is no forecasted demand so no exhaust date can be calculated.

Table A1-1
Projected Exhaust of 211/511 p-ANIs by NPA

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
201	NJ	9,023	80	2153	1
202	DC	652	48	2419	1
203	CT	7,427	12	3064	4
205	AL	5,937	84	2183	2
206	WA	1,097	10	3906	2
207	ME	8,065	10	3210	3
208	ID	5,354	64	2245	4
209	CA	5,671	230	2078	2
210	TX	7,354	182	2085	2
212	NY	5,135	54	2291	2
213	CA	3,094	130	2146	1
214	TX	7,443	104	2137	3
215	PA	1,947	54	2350	2
216	OH	1,195	160	2134	3
217	IL	5,699	170	2100	1
218	MN	3,444	340	2065	3
219	IN	4,349	130	2136	2
220	OH	50	0	N/A	N/A
223	PA	50	0	N/A	N/A
224	IL	9,891	249	2057	3
225	LA	1,937	64	2298	1

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
228	MS	2,076	54	2348	4
229	GA	3,555	54	2321	3
231	MI	4,251	200	2095	3
234	OH	305	0	N/A	N/A
239	FL	1,422	54	2360	1
240	MD	575	48	2421	3
248	MI	6,246	0	N/A	N/A
251	AL	1,945	54	2350	2
252	NC	4,124	140	2129	2
253	WA	1,308	0	N/A	N/A
254	TX	8,246	180	2081	2
256	AL	3,890	64	2268	3
260	IN	2,141	54	2347	3
262	WI	317	0	N/A	N/A
267	PA	50	0	N/A	N/A
269	MI	1,967	48	2392	3
270	KY	4,792	65	2250	4
272	PA	145	0	N/A	N/A
276	VA	2,097	54	2348	3
279	CA	50	0	N/A	N/A
281	TX	10,329	82	2134	4
301	MD	1,787	54	2353	2
302	DE	2,070	54	2348	1
303	CO	4,185	64	2263	1
304	WV	10,527	64	2164	1
305	FL	2,260	54	2345	3
307	WY	3,572	54	2320	1
308	NE	2,183	100	2194	1
309	IL	4,673	54	2300	4
310	CA	3,148	70	2257	3
312	IL	5,002	80	2203	2
313	MI	712	0	N/A	N/A
314	MO	11,256	108	2097	4
315	NY	7,751	308	2056	4
316	KS	5,617	84	2187	1
317	IN	4,224	110	2159	2
318	LA	4,280	54	2307	1
319	IA	2,002	0	N/A	N/A
320	MN	1,681	104	2192	1

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
321	FL	1,927	54	2351	3
323	CA	4,127	54	2310	4
325	TX	8,202	160	2090	3
330	OH	7,234	70	2198	2
331	IL	75	0	N/A	N/A
332	NY	50	0	N/A	N/A
334	AL	6,013	70	2216	4
336	NC	3,094	60	2298	4
337	LA	2,623	60	2306	3
339	MA	360	0	N/A	N/A
340	VI	390	0	N/A	N/A
341	CA	50	0	N/A	N/A
346	TX	50	0	N/A	N/A
347	NY	50	0	N/A	N/A
351	MA	370	0	N/A	N/A
352	FL	2,618	60	2306	3
360	WA	2,479	60	2308	1
361	TX	7,344	104	2138	3
364	KY	110	0	N/A	N/A
380	OH	50	0	N/A	N/A
385	UT	50	0	N/A	N/A
386	FL	1,684	100	2199	1
401	RI	1,135	48	2409	1
402	NE	7,200	154	2099	1
404	GA	2,622	54	2338	4
405	OK	14,091	64	2108	2
406	MT	4,683	54	2300	3
407	FL	2,117	54	2347	1
408	CA	2,752	70	2262	2
409	TX	3,522	96	2188	3
410	MD	4,663	54	2300	1
412	PA	1,169	54	2365	3
413	MA	4,137	70	2243	3
414	WI	6,552	70	2208	1
415	CA	1,926	54	2351	3
417	MO	4,907	54	2296	3
419	OH	6,171	130	2122	2
423	TN	4,997	104	2160	2
424	CA	50	0	N/A	N/A

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
425	WA	757	54	2372	2
430	TX	1,202	54	2364	1
432	TX	3,452	96	2188	2
434	VA	3,365	54	2324	1
435	UT	2,309	54	2344	3
440	OH	2,448	54	2341	1
442	CA	90	0	N/A	N/A
443	MD	100	0	N/A	N/A
445	PA	50	0	N/A	N/A
458	OR	50	0	N/A	N/A
463	IN	50	0	N/A	N/A
469	TX	3,490	134	2139	1
470	GA	188	0	N/A	N/A
475	CT	1,206	0	N/A	N/A
478	GA	2,159	54	2346	2
479	AR	4,045	39	2425	1
480	AZ	516	0	N/A	N/A
484	PA	100	54	2385	3
501	AR	8,290	105	2128	3
502	KY	2,167	54	2346	1
503	OR	2,998	54	2331	4
504	LA	1,663	54	2356	3
505	NM	3,428	59	2297	4
507	MN	2,781	120	2159	2
508	MA	8,214	160	2090	3
509	WA	2,649	54	2337	2
510	CA	2,612	64	2288	3
512	TX	10,693	102	2107	1
513	OH	4,190	54	2309	4
515	IA	6,961	90	2161	4
516	NY	1,357	154	2137	1
517	MI	519	54	2377	4
518	NY	5,962	130	2124	4
520	AZ	2,580	59	2311	2
530	CA	8,317	130	2106	4
531	NE	50	0	N/A	N/A
534	WI	50	0	N/A	N/A
539	OK	50	0	N/A	N/A
540	VA	6,389	54	2268	1

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
541	OR	5,580	84	2188	3
551	NJ	100	0	N/A	N/A
559	CA	4,582	54	2302	3
561	FL	2,891	70	2260	2
562	CA	3,154	54	2328	4
563	IA	1,562	0	N/A	N/A
564	WA	50	0	N/A	N/A
567	OH	299	0	N/A	N/A
570	PA	5,838	54	2278	2
571	VA	50	0	N/A	N/A
573	MO	3,572	84	2212	3
574	IN	2,091	54	2348	3
575	NM	1,893	54	2351	2
580	OK	1,249	54	2363	1
585	NY	2,044	54	2349	3
586	MI	150	0	N/A	N/A
601	MS	5,071	54	2292	2
602	AZ	1,790	89	2221	3
603	NH	1,375	69	2286	4
605	SD	2,609	54	2338	1
606	KY	3,483	54	2322	4
607	NY	2,884	90	2206	1
608	WI	3,716	110	2164	1
609	NJ	9,706	90	2130	2
610	PA	3,303	54	2325	1
612	MN	3,468	104	2175	4
614	OH	1,851	84	2232	1
615	TN	4,509	164	2110	2
616	MI	4,683	130	2134	4
617	MA	1,265	54	2363	4
618	IL	11,016	130	2085	1
619	CA	3,071	54	2330	3
620	KS	3,235	54	2326	2
623	AZ	136	0	N/A	N/A
626	CA	3,233	64	2278	4
628	CA	60	0	N/A	N/A
629	TN	50	0	N/A	N/A
630	IL	4,850	110	2154	3
631	NY	1,818	54	2353	3

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
636	MO	2,432	54	2341	2
640	NJ	50	0	N/A	N/A
641	IA	2,682	0	N/A	N/A
646	NY	60	0	N/A	N/A
650	CA	3,056	64	2281	4
651	MN	453	64	2321	2
657	CA	60	0	N/A	N/A
659	AL	50	0	N/A	N/A
660	MO	2,648	54	2337	2
661	CA	2,317	54	2343	2
662	MS	11,309	54	2177	4
667	MD	85	0	N/A	N/A
669	CA	50	0	N/A	N/A
678	GA	6,350	54	2269	4
680	NY	50	0	N/A	N/A
681	WV	195	0	N/A	N/A
682	TX	7,807	154	2095	1
689	FL	50	0	N/A	N/A
701	ND	1,998	64	2297	2
702	NV	952	54	2369	3
703	VA	1,556	54	2358	3
704	NC	2,334	54	2343	1
706	GA	5,863	106	2149	2
707	CA	6,602	54	2264	1
708	IL	8,836	130	2102	4
712	IA	2,119	0	N/A	N/A
713	TX	2,631	0	N/A	N/A
714	CA	4,459	64	2259	4
715	WI	4,705	54	2299	1
716	NY	2,234	84	2228	3
717	PA	2,091	54	2348	3
718	NY	3,701	0	N/A	N/A
719	CO	4,078	54	2311	4
720	CO	664	0	N/A	N/A
724	PA	3,028	54	2330	2
725	NV	50	0	N/A	N/A
726	TX	50	0	N/A	N/A
727	FL	978	54	2368	2
731	TN	2,596	69	2268	1

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
732	NJ	8,452	64	2196	2
734	MI	7,543	84	2164	2
737	TX	50	0	N/A	N/A
740	OH	7,118	130	2115	1
743	NC	50	0	N/A	N/A
747	CA	60	0	N/A	N/A
754	FL	123	0	N/A	N/A
757	VA	3,125	64	2280	3
760	CA	6,255	110	2141	4
762	GA	50	0	N/A	N/A
763	MN	786	54	2372	4
765	IN	8,055	72	2182	4
769	MS	1,107	0	N/A	N/A
770	GA	2,154	54	2346	2
772	FL	708	54	2373	2
773	IL	50	0	N/A	N/A
774	MA	745	0	N/A	N/A
775	NV	1,830	64	2300	4
779	IL	140	0	N/A	N/A
781	MA	2,690	70	2263	2
785	KS	7,690	55	2240	4
786	FL	202	54	2383	3
787	PR	357	0	N/A	N/A
801	UT	1,921	54	2351	4
802	VT	1,721	54	2354	3
803	SC	4,029	54	2312	4
804	VA	4,641	64	2256	4
805	CA	4,595	42	2383	4
806	TX	9,450	108	2114	3
808	HI	1,559	54	2358	3
810	MI	475	54	2378	3
812	IN	6,022	64	2234	2
813	FL	1,283	54	2363	3
814	PA	4,003	54	2312	1
815	IL	4,153	70	2242	2
816	MO	6,361	104	2147	1
817	TX	6,001	100	2156	4
818	CA	1,145	54	2365	1
820	CA	50	0	N/A	N/A

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
828	NC	3,582	54	2320	1
830	TX	3,837	54	2315	2
831	CA	2,527	90	2210	1
832	TX	6,172	66	2226	3
838	NY	50	0	N/A	N/A
843	SC	3,829	54	2315	2
845	NY	3,367	54	2324	1
847	IL	5,949	90	2172	1
848	NJ	55	0	N/A	N/A
850	FL	2,864	54	2333	2
854	SC	50	0	N/A	N/A
856	NJ	4,906	54	2296	3
857	MA	50	0	N/A	N/A
858	CA	3,588	90	2198	2
859	KY	4,579	65	2253	1
860	CT	11,331	0	N/A	N/A
862	NJ	330	0	N/A	N/A
863	FL	1,429	54	2360	4
864	SC	3,613	54	2319	2
865	TN	1,668	54	2355	2
870	AR	7,220	54	2253	3
872	IL	50	0	N/A	N/A
878	PA	50	0	N/A	N/A
901	TN	2,872	54	2333	1
903	TX	10,980	114	2095	1
904	FL	1,916	60	2317	2
906	MI	1,987	60	2316	1
907	AK	2,117	60	2314	1
908	NJ	6,950	81	2177	1
909	CA	4,089	70	2243	2
910	NC	3,661	60	2288	2
912	GA	3,413	60	2292	2
913	KS	3,262	48	2365	3
914	NY	2,190	60	2313	4
915	TX	955	60	2333	2
916	CA	3,534	60	2290	2
917	NY	50	0	N/A	N/A
918	OK	8,047	60	2215	1
919	NC	2,866	36	2492	4

NPA	STATE	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
920	WI	4,146	120	2148	1
925	CA	2,872	70	2261	3
928	AZ	2,377	65	2287	1
929	NY	50	0	N/A	N/A
930	IN	50	0	N/A	N/A
931	TN	4,443	499	2047	1
934	NY	50	0	N/A	N/A
936	TX	294	0	N/A	N/A
937	OH	4,355	54	2306	3
938	AL	50	0	N/A	N/A
939	PR	50	0	N/A	N/A
940	TX	4,987	90	2183	4
941	FL	987	54	2368	1
947	MI	1,634	54	2356	1
949	CA	1,488	54	2359	4
951	CA	3,131	54	2328	2
952	MN	355	64	2323	4
954	FL	2,481	54	2340	2
956	TX	7,137	70	2200	4
959	CT	50	0	N/A	N/A
970	CO	4,015	54	2312	1
971	OR	50	0	N/A	N/A
972	TX	4,480	70	2238	3
973	NJ	11,314	105	2099	3
978	MA	3,919	70	2246	3
979	TX	3,241	90	2202	1
980	NC	380	0	N/A	N/A
984	NC	60	0	N/A	N/A
985	LA	2,434	60	2309	4
986	ID	50	0	N/A	N/A
989	MI	3,636	60	2289	3

Table A1-2
Projected Exhaust of 211/511 p-ANIs by State

STATE	NPA	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
AK	907	2,117	60	2314	1
AL	205	5,937	84	2183	2

STATE	NPA	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
AL	251	1,945	54	2350	2
AL	256	3,890	64	2268	3
AL	334	6,013	70	2216	4
AL	659	50	0	N/A	N/A
AL	938	50	0	N/A	N/A
AR	479	4,045	39	2425	1
AR	501	8,290	105	2128	3
AR	870	7,220	54	2253	3
AZ	480	516	0	N/A	N/A
AZ	520	2,580	59	2311	2
AZ	602	1,790	89	2221	3
AZ	623	136	0	N/A	N/A
AZ	928	2,377	65	2287	1
CA	209	5,671	230	2078	2
CA	213	3,094	130	2146	1
CA	279	50	0	N/A	N/A
CA	310	3,148	70	2257	3
CA	323	4,127	54	2310	4
CA	341	50	0	N/A	N/A
CA	408	2,752	70	2262	2
CA	415	1,926	54	2351	3
CA	424	50	0	N/A	N/A
CA	442	90	0	N/A	N/A
CA	510	2,612	64	2288	3
CA	530	8,317	130	2106	4
CA	559	4,582	54	2302	3
CA	562	3,154	54	2328	4
CA	619	3,071	54	2330	3
CA	626	3,233	64	2278	4
CA	628	60	0	N/A	N/A
CA	650	3,056	64	2281	4
CA	657	60	0	N/A	N/A
CA	661	2,317	54	2343	2
CA	669	50	0	N/A	N/A
CA	707	6,602	54	2264	1
CA	714	4,459	64	2259	4
CA	747	60	0	N/A	N/A
CA	760	6,255	110	2141	4
CA	805	4,595	42	2383	4

STATE	NPA	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
CA	818	1,145	54	2365	1
CA	820	50	0	N/A	N/A
CA	831	2,527	90	2210	1
CA	858	3,588	90	2198	2
CA	909	4,089	70	2243	2
CA	916	3,534	60	2290	2
CA	925	2,872	70	2261	3
CA	949	1,488	54	2359	4
CA	951	3,131	54	2328	2
CO	303	4,185	64	2263	1
CO	719	4,078	54	2311	4
CO	720	664	0	N/A	N/A
CO	970	4,015	54	2312	1
CT	203	7,427	12	3064	4
CT	475	1,206	0	N/A	N/A
CT	860	11,331	0	N/A	N/A
CT	959	50	0	N/A	N/A
DC	202	652	48	2419	1
DE	302	2,070	54	2348	1
FL	239	1,422	54	2360	1
FL	305	2,260	54	2345	3
FL	321	1,927	54	2351	3
FL	352	2,618	60	2306	3
FL	386	1,684	100	2199	1
FL	407	2,117	54	2347	1
FL	561	2,891	70	2260	2
FL	689	50	0	N/A	N/A
FL	727	978	54	2368	2
FL	754	123	0	N/A	N/A
FL	772	708	54	2373	2
FL	786	202	54	2383	3
FL	813	1,283	54	2363	3
FL	850	2,864	54	2333	2
FL	863	1,429	54	2360	4
FL	904	1,916	60	2317	2
FL	941	987	54	2368	1
FL	954	2,481	54	2340	2
GA	229	3,555	54	2321	3
GA	404	2,622	54	2338	4

STATE	NPA	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
GA	470	188	0	N/A	N/A
GA	478	2,159	54	2346	2
GA	678	6,350	54	2269	4
GA	706	5,863	106	2149	2
GA	762	50	0	N/A	N/A
GA	770	2,154	54	2346	2
GA	912	3,413	60	2292	2
HI	808	1,559	54	2358	3
IA	319	2,002	0	N/A	N/A
IA	515	6,961	90	2161	4
IA	563	1,562	0	N/A	N/A
IA	641	2,682	0	N/A	N/A
IA	712	2,119	0	N/A	N/A
ID	208	5,354	64	2245	4
ID	986	50	0	N/A	N/A
IL	217	5,699	170	2100	1
IL	224	9,891	249	2057	3
IL	309	4,673	54	2300	4
IL	312	5,002	80	2203	2
IL	331	75	0	N/A	N/A
IL	618	11,016	130	2085	1
IL	630	4,850	110	2154	3
IL	708	8,836	130	2102	4
IL	773	50	0	N/A	N/A
IL	779	140	0	N/A	N/A
IL	815	4,153	70	2242	2
IL	847	5,949	90	2172	1
IL	872	50	0	N/A	N/A
IN	219	4,349	130	2136	2
IN	260	2,141	54	2347	3
IN	317	4,224	110	2159	2
IN	463	50	0	N/A	N/A
IN	574	2,091	54	2348	3
IN	765	8,055	72	2182	4
IN	812	6,022	64	2234	2
IN	930	50	0	N/A	N/A
KS	316	5,617	84	2187	1
KS	620	3,235	54	2326	2
KS	785	7,690	55	2240	4

STATE	NPA	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
KS	913	3,262	48	2365	3
KY	270	4,792	65	2250	4
KY	364	110	0	N/A	N/A
KY	502	2,167	54	2346	1
KY	606	3,483	54	2322	4
KY	859	4,579	65	2253	1
LA	225	1,937	64	2298	1
LA	318	4,280	54	2307	1
LA	337	2,623	60	2306	3
LA	504	1,663	54	2356	3
LA	985	2,434	60	2309	4
MA	339	360	0	N/A	N/A
MA	351	370	0	N/A	N/A
MA	413	4,137	70	2243	3
MA	508	8,214	160	2090	3
MA	617	1,265	54	2363	4
MA	774	745	0	N/A	N/A
MA	781	2,690	70	2263	2
MA	857	50	0	N/A	N/A
MA	978	3,919	70	2246	3
MD	240	575	48	2421	3
MD	301	1,787	54	2353	2
MD	410	4,663	54	2300	1
MD	443	100	0	N/A	N/A
MD	667	85	0	N/A	N/A
ME	207	8,065	10	3210	3
MI	231	4,251	200	2095	3
MI	248	6,246	0	N/A	N/A
MI	269	1,967	48	2392	3
MI	313	712	0	N/A	N/A
MI	517	519	54	2377	4
MI	586	150	0	N/A	N/A
MI	616	4,683	130	2134	4
MI	734	7,543	84	2164	2
MI	810	475	54	2378	3
MI	906	1,987	60	2316	1
MI	947	1,634	54	2356	1
MI	989	3,636	60	2289	3
MN	218	3,444	340	2065	3

STATE	NPA	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
MN	320	1,681	104	2192	1
MN	507	2,781	120	2159	2
MN	612	3,468	104	2175	4
MN	651	453	64	2321	2
MN	763	786	54	2372	4
MN	952	355	64	2323	4
MO	314	11,256	108	2097	4
MO	417	4,907	54	2296	3
MO	573	3,572	84	2212	3
MO	636	2,432	54	2341	2
MO	660	2,648	54	2337	2
MO	816	6,361	104	2147	1
MS	228	2,076	54	2348	4
MS	601	5,071	54	2292	2
MS	662	11,309	54	2177	4
MS	769	1,107	0	N/A	N/A
MT	406	4,683	54	2300	3
NC	252	4,124	140	2129	2
NC	336	3,094	60	2298	4
NC	704	2,334	54	2343	1
NC	743	50	0	N/A	N/A
NC	828	3,582	54	2320	1
NC	910	3,661	60	2288	2
NC	919	2,866	36	2492	4
NC	980	380	0	N/A	N/A
NC	984	60	0	N/A	N/A
ND	701	1,998	64	2297	2
NE	308	2,183	100	2194	1
NE	402	7,200	154	2099	1
NE	531	50	0	N/A	N/A
NH	603	1,375	69	2286	4
NJ	201	9,023	80	2153	1
NJ	551	100	0	N/A	N/A
NJ	609	9,706	90	2130	2
NJ	640	50	0	N/A	N/A
NJ	732	8,452	64	2196	2
NJ	848	55	0	N/A	N/A
NJ	856	4,906	54	2296	3
NJ	862	330	0	N/A	N/A

STATE	NPA	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
NJ	908	6,950	81	2177	1
NJ	973	11,314	105	2099	3
NM	505	3,428	59	2297	4
NM	575	1,893	54	2351	2
NV	702	952	54	2369	3
NV	725	50	0	N/A	N/A
NV	775	1,830	64	2300	4
NY	212	5,135	54	2291	2
NY	315	7,751	308	2056	4
NY	332	50	0	N/A	N/A
NY	347	50	0	N/A	N/A
NY	516	1,357	154	2137	1
NY	518	5,962	130	2124	4
NY	585	2,044	54	2349	3
NY	607	2,884	90	2206	1
NY	631	1,818	54	2353	3
NY	646	60	0	N/A	N/A
NY	680	50	0	N/A	N/A
NY	716	2,234	84	2228	3
NY	718	3,701	0	N/A	N/A
NY	838	50	0	N/A	N/A
NY	845	3,367	54	2324	1
NY	914	2,190	60	2313	4
NY	917	50	0	N/A	N/A
NY	929	50	0	N/A	N/A
NY	934	50	0	N/A	N/A
OH	216	1,195	160	2134	3
OH	220	50	0	N/A	N/A
OH	234	305	0	N/A	N/A
OH	330	7,234	70	2198	2
OH	380	50	0	N/A	N/A
OH	419	6,171	130	2122	2
OH	440	2,448	54	2341	1
OH	513	4,190	54	2309	4
OH	567	299	0	N/A	N/A
OH	614	1,851	84	2232	1
OH	740	7,118	130	2115	1
OH	937	4,355	54	2306	3
OK	405	14,091	64	2108	2

STATE	NPA	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
OK	539	50	0	N/A	N/A
OK	580	1,249	54	2363	1
OK	918	8,047	60	2215	1
OR	458	50	0	N/A	N/A
OR	503	2,998	54	2331	4
OR	541	5,580	84	2188	3
OR	971	50	0	N/A	N/A
PA	215	1,947	54	2350	2
PA	223	50	0	N/A	N/A
PA	267	50	0	N/A	N/A
PA	272	145	0	N/A	N/A
PA	412	1,169	54	2365	3
PA	445	50	0	N/A	N/A
PA	484	100	54	2385	3
PA	570	5,838	54	2278	2
PA	610	3,303	54	2325	1
PA	717	2,091	54	2348	3
PA	724	3,028	54	2330	2
PA	814	4,003	54	2312	1
PA	878	50	0	N/A	N/A
PR	787	357	0	N/A	N/A
PR	939	50	0	N/A	N/A
RI	401	1,135	48	2409	1
SC	803	4,029	54	2312	4
SC	843	3,829	54	2315	2
SC	854	50	0	N/A	N/A
SC	864	3,613	54	2319	2
SD	605	2,609	54	2338	1
TN	423	4,997	104	2160	2
TN	615	4,509	164	2110	2
TN	629	50	0	N/A	N/A
TN	731	2,596	69	2268	1
TN	865	1,668	54	2355	2
TN	901	2,872	54	2333	1
TN	931	4,443	499	2047	1
TX	210	7,354	182	2085	2
TX	214	7,443	104	2137	3
TX	254	8,246	180	2081	2
TX	281	10,329	82	2134	4

STATE	NPA	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
TX	325	8,202	160	2090	3
TX	346	50	0	N/A	N/A
TX	361	7,344	104	2138	3
TX	409	3,522	96	2188	3
TX	430	1,202	54	2364	1
TX	432	3,452	96	2188	2
TX	469	3,490	134	2139	1
TX	512	10,693	102	2107	1
TX	682	7,807	154	2095	1
TX	713	2,631	0	N/A	N/A
TX	726	50	0	N/A	N/A
TX	737	50	0	N/A	N/A
TX	806	9,450	108	2114	3
TX	817	6,001	100	2156	4
TX	830	3,837	54	2315	2
TX	832	6,172	66	2226	3
TX	903	10,980	114	2095	1
TX	915	955	60	2333	2
TX	936	294	0	N/A	N/A
TX	940	4,987	90	2183	4
TX	956	7,137	70	2200	4
TX	972	4,480	70	2238	3
TX	979	3,241	90	2202	1
UT	385	50	0	N/A	N/A
UT	435	2,309	54	2344	3
UT	801	1,921	54	2351	4
VA	276	2,097	54	2348	3
VA	434	3,365	54	2324	1
VA	540	6,389	54	2268	1
VA	571	50	0	N/A	N/A
VA	703	1,556	54	2358	3
VA	757	3,125	64	2280	3
VA	804	4,641	64	2256	4
VI	340	390	0	N/A	N/A
VT	802	1,721	54	2354	3
WA	206	1,097	10	3906	2
WA	253	1,308	0	N/A	N/A
WA	360	2,479	60	2308	1
WA	425	757	54	2372	2

STATE	NPA	Total p-ANIs	Forecasted p-ANIs	Exhaust Year	Exhaust Qtr
WA	509	2,649	54	2337	2
WA	564	50	0	N/A	N/A
WI	262	317	0	N/A	N/A
WI	414	6,552	70	2208	1
WI	534	50	0	N/A	N/A
WI	608	3,716	110	2164	1
WI	715	4,705	54	2299	1
WI	920	4,146	120	2148	1
WV	304	10,527	64	2164	1
WV	681	195	0	N/A	N/A
WY	307	3,572	54	2320	1

Table A1-3
Projected Exhaust of 211/511 p-ANIs by Year

Exhaust Year	Exhaust Qtr	NPA	STATE	Total p-ANIs	Forecasted p-ANIs
2047	1	931	TN	4,443	499
2056	4	315	NY	7,751	308
2057	3	224	IL	9,891	249
2065	3	218	MN	3,444	340
2078	2	209	CA	5,671	230
2081	2	254	TX	8,246	180
2085	1	618	IL	11,016	130
2085	2	210	TX	7,354	182
2090	3	508	MA	8,214	160
2090	3	325	TX	8,202	160
2095	1	682	TX	7,807	154
2095	1	903	TX	10,980	114
2095	3	231	MI	4,251	200
2097	4	314	MO	11,256	108
2099	1	402	NE	7,200	154
2099	3	973	NJ	11,314	105
2100	1	217	IL	5,699	170
2102	4	708	IL	8,836	130
2106	4	530	CA	8,317	130
2107	1	512	TX	10,693	102
2108	2	405	OK	14,091	64
2110	2	615	TN	4,509	164

Exhaust Year	Exhaust Qtr	NPA	STATE	Total p-ANIs	Forecasted p-ANIs
2114	3	806	TX	9,450	108
2115	1	740	OH	7,118	130
2122	2	419	OH	6,171	130
2124	4	518	NY	5,962	130
2128	3	501	AR	8,290	105
2129	2	252	NC	4,124	140
2130	2	609	NJ	9,706	90
2134	3	216	OH	1,195	160
2134	4	616	MI	4,683	130
2134	4	281	TX	10,329	82
2136	2	219	IN	4,349	130
2137	1	516	NY	1,357	154
2137	3	214	TX	7,443	104
2138	3	361	TX	7,344	104
2139	1	469	TX	3,490	134
2141	4	760	CA	6,255	110
2146	1	213	CA	3,094	130
2147	1	816	MO	6,361	104
2148	1	920	WI	4,146	120
2149	2	706	GA	5,863	106
2153	1	201	NJ	9,023	80
2154	3	630	IL	4,850	110
2156	4	817	TX	6,001	100
2159	2	317	IN	4,224	110
2159	2	507	MN	2,781	120
2160	2	423	TN	4,997	104
2161	4	515	IA	6,961	90
2164	1	608	WI	3,716	110
2164	1	304	WV	10,527	64
2164	2	734	MI	7,543	84
2172	1	847	IL	5,949	90
2175	4	612	MN	3,468	104
2177	1	908	NJ	6,950	81
2177	4	662	MS	11,309	54
2182	4	765	IN	8,055	72
2183	2	205	AL	5,937	84
2183	4	940	TX	4,987	90
2187	1	316	KS	5,617	84
2188	2	432	TX	3,452	96

Exhaust Year	Exhaust Qtr	NPA	STATE	Total p-ANIs	Forecasted p-ANIs
2188	3	541	OR	5,580	84
2188	3	409	TX	3,522	96
2192	1	320	MN	1,681	104
2194	1	308	NE	2,183	100
2196	2	732	NJ	8,452	64
2198	2	858	CA	3,588	90
2198	2	330	OH	7,234	70
2199	1	386	FL	1,684	100
2200	4	956	TX	7,137	70
2202	1	979	TX	3,241	90
2203	2	312	IL	5,002	80
2206	1	607	NY	2,884	90
2208	1	414	WI	6,552	70
2210	1	831	CA	2,527	90
2212	3	573	MO	3,572	84
2215	1	918	OK	8,047	60
2216	4	334	AL	6,013	70
2221	3	602	AZ	1,790	89
2226	3	832	TX	6,172	66
2228	3	716	NY	2,234	84
2232	1	614	OH	1,851	84
2234	2	812	IN	6,022	64
2238	3	972	TX	4,480	70
2240	4	785	KS	7,690	55
2242	2	815	IL	4,153	70
2243	2	909	CA	4,089	70
2243	3	413	MA	4,137	70
2245	4	208	ID	5,354	64
2246	3	978	MA	3,919	70
2250	4	270	KY	4,792	65
2253	1	859	KY	4,579	65
2253	3	870	AR	7,220	54
2256	4	804	VA	4,641	64
2257	3	310	CA	3,148	70
2259	4	714	CA	4,459	64
2260	2	561	FL	2,891	70
2261	3	925	CA	2,872	70
2262	2	408	CA	2,752	70
2263	1	303	CO	4,185	64

Exhaust Year	Exhaust Qtr	NPA	STATE	Total p-ANIs	Forecasted p-ANIs
2263	2	781	MA	2,690	70
2264	1	707	CA	6,602	54
2268	1	731	TN	2,596	69
2268	1	540	VA	6,389	54
2268	3	256	AL	3,890	64
2269	4	678	GA	6,350	54
2278	2	570	PA	5,838	54
2278	4	626	CA	3,233	64
2280	3	757	VA	3,125	64
2281	4	650	CA	3,056	64
2286	4	603	NH	1,375	69
2287	1	928	AZ	2,377	65
2288	2	910	NC	3,661	60
2288	3	510	CA	2,612	64
2289	3	989	MI	3,636	60
2290	2	916	CA	3,534	60
2291	2	212	NY	5,135	54
2292	2	912	GA	3,413	60
2292	2	601	MS	5,071	54
2296	3	417	MO	4,907	54
2296	3	856	NJ	4,906	54
2297	2	701	ND	1,998	64
2297	4	505	NM	3,428	59
2298	1	225	LA	1,937	64
2298	4	336	NC	3,094	60
2299	1	715	WI	4,705	54
2300	1	410	MD	4,663	54
2300	3	406	MT	4,683	54
2300	4	309	IL	4,673	54
2300	4	775	NV	1,830	64
2302	3	559	CA	4,582	54
2306	3	352	FL	2,618	60
2306	3	337	LA	2,623	60
2306	3	937	OH	4,355	54
2307	1	318	LA	4,280	54
2308	1	360	WA	2,479	60
2309	4	985	LA	2,434	60
2309	4	513	OH	4,190	54
2310	4	323	CA	4,127	54

Exhaust Year	Exhaust Qtr	NPA	STATE	Total p-ANIs	Forecasted p-ANIs
2311	2	520	AZ	2,580	59
2311	4	719	CO	4,078	54
2312	1	970	CO	4,015	54
2312	1	814	PA	4,003	54
2312	4	803	SC	4,029	54
2313	4	914	NY	2,190	60
2314	1	907	AK	2,117	60
2315	2	843	SC	3,829	54
2315	2	830	TX	3,837	54
2316	1	906	MI	1,987	60
2317	2	904	FL	1,916	60
2319	2	864	SC	3,613	54
2320	1	828	NC	3,582	54
2320	1	307	WY	3,572	54
2321	2	651	MN	453	64
2321	3	229	GA	3,555	54
2322	4	606	KY	3,483	54
2323	4	952	MN	355	64
2324	1	845	NY	3,367	54
2324	1	434	VA	3,365	54
2325	1	610	PA	3,303	54
2326	2	620	KS	3,235	54
2328	2	951	CA	3,131	54
2328	4	562	CA	3,154	54
2330	2	724	PA	3,028	54
2330	3	619	CA	3,071	54
2331	4	503	OR	2,998	54
2333	1	901	TN	2,872	54
2333	2	850	FL	2,864	54
2333	2	915	TX	955	60
2337	2	660	MO	2,648	54
2337	2	509	WA	2,649	54
2338	1	605	SD	2,609	54
2338	4	404	GA	2,622	54
2340	2	954	FL	2,481	54
2341	1	440	OH	2,448	54
2341	2	636	MO	2,432	54
2343	1	704	NC	2,334	54
2343	2	661	CA	2,317	54

Exhaust Year	Exhaust Qtr	NPA	STATE	Total p-ANIs	Forecasted p-ANIs
2344	3	435	UT	2,309	54
2345	3	305	FL	2,260	54
2346	1	502	KY	2,167	54
2346	2	478	GA	2,159	54
2346	2	770	GA	2,154	54
2347	1	407	FL	2,117	54
2347	3	260	IN	2,141	54
2348	1	302	DE	2,070	54
2348	3	574	IN	2,091	54
2348	3	717	PA	2,091	54
2348	3	276	VA	2,097	54
2348	4	228	MS	2,076	54
2349	3	585	NY	2,044	54
2350	2	251	AL	1,945	54
2350	2	215	PA	1,947	54
2351	2	575	NM	1,893	54
2351	3	415	CA	1,926	54
2351	3	321	FL	1,927	54
2351	4	801	UT	1,921	54
2353	2	301	MD	1,787	54
2353	3	631	NY	1,818	54
2354	3	802	VT	1,721	54
2355	2	865	TN	1,668	54
2356	1	947	MI	1,634	54
2356	3	504	LA	1,663	54
2358	3	808	HI	1,559	54
2358	3	703	VA	1,556	54
2359	4	949	CA	1,488	54
2360	1	239	FL	1,422	54
2360	4	863	FL	1,429	54
2363	1	580	OK	1,249	54
2363	3	813	FL	1,283	54
2363	4	617	MA	1,265	54
2364	1	430	TX	1,202	54
2365	1	818	CA	1,145	54
2365	3	913	KS	3,262	48
2365	3	412	PA	1,169	54
2368	1	941	FL	987	54
2368	2	727	FL	978	54

Exhaust Year	Exhaust Qtr	NPA	STATE	Total p-ANIs	Forecasted p-ANIs
2369	3	702	NV	952	54
2372	2	425	WA	757	54
2372	4	763	MN	786	54
2373	2	772	FL	708	54
2377	4	517	MI	519	54
2378	3	810	MI	475	54
2383	3	786	FL	202	54
2383	4	805	CA	4,595	42
2385	3	484	PA	100	54
2392	3	269	MI	1,967	48
2409	1	401	RI	1,135	48
2419	1	202	DC	652	48
2421	3	240	MD	575	48
2425	1	479	AR	4,045	39
2492	4	919	NC	2,866	36
3064	4	203	CT	7,427	12
3210	3	207	ME	8,065	10
3906	2	206	WA	1,097	10
N/A	N/A	659	AL	50	0
N/A	N/A	938	AL	50	0
N/A	N/A	480	AZ	516	0
N/A	N/A	623	AZ	136	0
N/A	N/A	279	CA	50	0
N/A	N/A	341	CA	50	0
N/A	N/A	424	CA	50	0
N/A	N/A	442	CA	90	0
N/A	N/A	628	CA	60	0
N/A	N/A	657	CA	60	0
N/A	N/A	669	CA	50	0
N/A	N/A	747	CA	60	0
N/A	N/A	820	CA	50	0
N/A	N/A	720	CO	664	0
N/A	N/A	475	CT	1,206	0
N/A	N/A	860	CT	11,331	0
N/A	N/A	959	CT	50	0
N/A	N/A	689	FL	50	0
N/A	N/A	754	FL	123	0
N/A	N/A	470	GA	188	0
N/A	N/A	762	GA	50	0

Exhaust Year	Exhaust Qtr	NPA	STATE	Total p-ANIs	Forecasted p-ANIs
N/A	N/A	319	IA	2,002	0
N/A	N/A	563	IA	1,562	0
N/A	N/A	641	IA	2,682	0
N/A	N/A	712	IA	2,119	0
N/A	N/A	986	ID	50	0
N/A	N/A	331	IL	75	0
N/A	N/A	773	IL	50	0
N/A	N/A	779	IL	140	0
N/A	N/A	872	IL	50	0
N/A	N/A	463	IN	50	0
N/A	N/A	930	IN	50	0
N/A	N/A	364	KY	110	0
N/A	N/A	339	MA	360	0
N/A	N/A	351	MA	370	0
N/A	N/A	774	MA	745	0
N/A	N/A	857	MA	50	0
N/A	N/A	443	MD	100	0
N/A	N/A	667	MD	85	0
N/A	N/A	248	MI	6,246	0
N/A	N/A	313	MI	712	0
N/A	N/A	586	MI	150	0
N/A	N/A	769	MS	1,107	0
N/A	N/A	743	NC	50	0
N/A	N/A	980	NC	380	0
N/A	N/A	984	NC	60	0
N/A	N/A	531	NE	50	0
N/A	N/A	551	NJ	100	0
N/A	N/A	640	NJ	50	0
N/A	N/A	848	NJ	55	0
N/A	N/A	862	NJ	330	0
N/A	N/A	725	NV	50	0
N/A	N/A	332	NY	50	0
N/A	N/A	347	NY	50	0
N/A	N/A	646	NY	60	0
N/A	N/A	680	NY	50	0
N/A	N/A	718	NY	3,701	0
N/A	N/A	838	NY	50	0
N/A	N/A	917	NY	50	0
N/A	N/A	929	NY	50	0

Exhaust Year	Exhaust Qtr	NPA	STATE	Total p-ANIs	Forecasted p-ANIs
N/A	N/A	934	NY	50	0
N/A	N/A	220	OH	50	0
N/A	N/A	234	OH	305	0
N/A	N/A	380	OH	50	0
N/A	N/A	567	OH	299	0
N/A	N/A	539	OK	50	0
N/A	N/A	458	OR	50	0
N/A	N/A	971	OR	50	0
N/A	N/A	223	PA	50	0
N/A	N/A	267	PA	50	0
N/A	N/A	272	PA	145	0
N/A	N/A	445	PA	50	0
N/A	N/A	878	PA	50	0
N/A	N/A	787	PR	357	0
N/A	N/A	939	PR	50	0
N/A	N/A	854	SC	50	0
N/A	N/A	629	TN	50	0
N/A	N/A	346	TX	50	0
N/A	N/A	713	TX	2,631	0
N/A	N/A	726	TX	50	0
N/A	N/A	737	TX	50	0
N/A	N/A	936	TX	294	0
N/A	N/A	385	UT	50	0
N/A	N/A	571	VA	50	0
N/A	N/A	340	VI	390	0
N/A	N/A	253	WA	1,308	0
N/A	N/A	564	WA	50	0
N/A	N/A	262	WI	317	0
N/A	N/A	534	WI	50	0
N/A	N/A	681	WV	195	0