North American Numbering Plan Administrator (NANPA)

2020 Annual Report

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1 NORTH AMERICAN NUMBERING PLAN

1.1 NANP History

The North American Numbering Plan (NANP) was developed by AT&T in 1947 to simplify and facilitate direct dialing of long-distance calls. NANP telephone numbers are ten-digit numbers consisting of a three-digit Numbering Plan Area (NPA) code, commonly called an area code, followed by a seven-digit local number.

The NANP is an integrated numbering plan serving 20 North American countries that share its resources. Regulatory authorities in each participating country have plenary authority over numbering resources, but all participating countries, implicitly or explicitly, share numbering resources cooperatively. This approach has been successful for more than 70 years.

1.2 North American Numbering Plan Administration

AT&T administered shared numbering resources such as area codes until divestiture of the Bell System in 1984, when these functions were transferred to Bellcore under the Plan of Reorganization. On October 9, 1997, the FCC, acting on a recommendation of the North American Numbering Council (NANC), named Lockheed Martin to serve as administrator of the NANP. Two years later, in December 1999, NANPA was transitioned from Lockheed Martin to Neustar. In 2003, the FCC selected Neustar through a competitive bid to serve as NANPA and it continued serving in that role for the next 15 years. In 2018, the NANPA function was competitively bid by the FCC and Somos was chosen to act as the NANPA for a one-year term. On November 1, 2019, the FCC extended Somos' term for an additional year.

On December 1, 2020, through a competitive bidding process, the FCC awarded to SomosGov, Inc. a contract (No. 273FCC21C0003) which combined the NANPA, Pooling Administration (PA), and Routing Number Administration (RNA) into a single organization. That contract also includes the newly created Reassigned Numbers Database (RND) organization. This contract is for a base period of five-years with three additional one-year options.

Regulatory authorities in various NANP countries have named national administrators to oversee the numbering resources assigned by NANPA for use within their countries. The NANPA is the national administrator for the United States (U.S.) and its territories (Puerto Rico, American Samoa, Guam, Commonwealth of Northern Mariana Islands, US Virgin Islands). The Canadian Numbering Administrator (CNA) is responsible for administration of telephone numbers and other telecommunications codes in Canada. In other participating countries, regulatory authorities either serve as the national administrator or delegate the responsibility to the dominant carrier. NANPA, in its overall coordinating role, consults with and provides assistance to those regulatory authorities and national administrators to ensure that numbering resources are used in the best interest of all participants in the NANP.

NANPA is not a policy-making entity. In reaching assignment decisions, NANPA follows regulatory directives and industry-developed guidelines. The NANC provides continuous oversight of NANPA and evaluates NANPA's performance each year.

NANPA has three core responsibilities: administration of NANP resources, coordination of area code relief planning and collection of utilization and forecast data from service providers.

1.3 NANPA Neutrality

In accordance with FCC regulations, the NANPA is a non-governmental entity that is impartial and not aligned with any particular telecommunications industry segment. Accordingly, while conducting its operations, the NANPA may not be an affiliate of any telecommunications service provider(s) as defined in the Telecommunications Act of 1996. "Affiliate" is a person who controls, is controlled by, or is under the direct or indirect common control with another person. Further, the NANPA and any affiliate thereof, may not issue a majority of its debt to, nor may it derive a majority of its revenues from, any telecommunications service provider. "Majority" shall mean greater than 50 percent, and "debt" shall mean stocks, bonds, securities, notes, loans, or any other instrument of indebtedness.

2 NANP ADMINISTRATION SYSTEM (NAS)

The NANP Administration System (NAS) provides an automated system for processing number resource applications, collecting resource utilization and forecast data and issuing notifications to the industry on numbering matters. Introduced in 2004, NAS is the primary tool used by federal and state regulators, service providers, service provider consultants and the NANPA in the assignment and administration of the various NANP resources.

NAS was available for use **100%** of scheduled uptime during 2020, which meets the NAS performance metric of a minimum of 99.9% scheduled uptime. There were no instances of unscheduled NAS downtime in 2020.

At the end of 2020, there were 1,099 registered NAS users: 1,037 were service provider or service provider consultant users, 54 were federal and state regulatory users, and 22 were registered as "Other" users.

There were several system changes in 2020, including the implementation of Change Orders B and C:

- Change Order B was approved by the FCC on January 22, 2020 and implemented on March 13, 2020. This Change Order resulted from the resolution of INC Issue 878, Request the INC to permit the assignment of 5XX-N11 codes, excluding the assignment of 5XX-911 in the Non-Geographic 5XX-NXX Code Assignment Guidelines. The changes allow for assignment of the 32 designated/reserved non-geographic 5XX NPAs (i.e., 5XX-N11 codes), with the exclusion of 5XX-911. The changes to NAS include the removal of the restriction from assignment of future non-geographic 5XX-N11 (excluding 5XX-911) and the following non-geographic N11-NXXs for existing 5XX codes (500, 521, 522, 523, 524, 533, 544, 566, 577, 588).
- Change Order C was submitted on August 25, 2020 to address INC Issue 879, Revisit Assignment of 800-855 line numbers and the 800-855 Assignment Guidelines. The Change Order was approved by the FCC on September 16, 2020, and was implemented on October 29, 2020, removing the 800-855 line resource functionality from NAS.

NAS maintenance was performed five times, on April 16, June 19, August 7, September 17 and October 29.

Three NAS trouble tickets were opened in 2020:

 On July 28, the NANPA help desk received three calls from users that were unable to login to NAS after 3:30 pm ET but after a few minutes users were able to login. Access had been degraded due to multiple users simultaneously downloading multiple files. The trouble

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- ticket was closed after the August 7 maintenance event corrected the issue.
- On September 14, a user was unable to send NRUF form 502, via email to the nruf@nanpa.com Outlook mailbox. The trouble ticket was closed on September 28, after the user's email address was restored.
- During the week of November 9, due to a third-party DNS issue, NANPA experienced sporadic issues with outgoing and incoming emails while the DNS updates propagated globally. We notified users of this issue via NNS to verify the status of a request through NAS in case there was a delay in receiving Part 3 email responses. A follow up NNS was sent on November 13, noting the email issue was resolved.

2.1 NAS Central Office Code Administration

NAS mechanizes central office (CO) code administration by processing the following code requests: Part 1 (Central Office Code Assignment Request form), Months-to-Exhaust (MTE) Worksheet (required when requesting growth CO codes in a rate center) and Part 4/Part 4-PA (Confirmation of Code In-Service forms). NAS issues a Part 3 (Central Office Code Administrator's Response/Confirmation form) to provide a disposition on the Part 1 request and Part 5 forms used to confirm NANPA's receipt of a Part 4. NAS allows users to complete and submit these forms on-line. NAS also processes and stores these forms.

Once NAS validates an application's content and accepts it for processing, the applicant receives confirmation via a tracking number, indicating that the code request was successfully submitted. NAS will also permit code applicants to search for previously-submitted forms and supports an interface with the Pooling Administration System (PAS). This interface permits the service provider to submit the information needed to apply for a central office code (i.e., Part 1) in a pooling rate center into PAS. In addition, users may submit changes to the information associated with a pooled CO code or return a pooled code. PAS forwards the Part 1 form data to NANPA via the NAS/PAS interface. This process includes the submission of the appropriate MTE form required with any central office code growth request. Once received by NAS, the Part 1 request appears in the work item list of the NANPA Code Administrator. When the Code Administrator processes the central office code application, NAS emails the Part 3 Administrator's Response/Confirmation to the applicant and the Pooling Administrator (PA) and sends it via the NAS/PAS interface to PAS. The Part 4 and Part-4A (submitted by the Pooling Administrator) are also sent via the interface.

2.2 5XX NPA Resource Administration

Similar to CO code administration, NAS also mechanizes the process for applying for 5XX-NXX codes using the following forms: Part A (5XX-NXX Code Assignment Request/Return Notification/Information Change form) and Part C (Confirmation of 5XX-NXX Code In-Service form). When the Resource Administrator processes the 5XX-NXX application, NAS generates a Part B (5XX-NXX Code Assignment Confirmation form) to provide a disposition on the Part A request. All submitted forms are stored in NAS.

NAS auto-populates specific fields within 5XX-NXX applications with information contained in the user's profile and provides drop-down menus for certain data required on the forms such as type of request and applicant's OCN. System checks ensure that all required fields are populated, and certain information supplied is validated prior to submission. Once NAS accepts the application for processing, the applicant receives confirmation via a tracking number, indicating that the request was successfully submitted. NAS will also permit applicants to search for previously- submitted forms. Finally, NAS provides real-time reports on the assignment status of this numbering

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resource. These reports are accessible through the 'Reports' section of the NANPA website.

2.3 Applying On-line for Other Numbering Resources

NAS allows on-line application submissions not only for CO codes, but also for other NANP resources such as Carrier Identification Codes (CICs). In addition, NAS provides real-time reports on the assignment status of these numbering resources. These reports are accessible through the 'Reports' section of the NANPA website.

2.4 NANP Notification System

The NANP Notification System (NNS) provides a vehicle for NANPA to distribute notifications when significant events occur. Notifications fall under two categories: Geographic and Non-Geographic. Geographic notifications are those issued for documents that have been generated for specific states and/or NPAs. Non- Geographic notifications are those that relate to the entire NANP and are not related to a specific state or NPA.

Geographic notifications available to the public include:

	New processes and changes in central office code administration that affect specific states and/or NPAs;
	NPAs moving into or out of jeopardy status or other changes to the jeopardy status of an NPA;
	Regulatory announcements of changes that affect NANP processing; and
	Data related to the status of resources associated with state conservation activities.
n-ge	eographic notifications available to the public include:
	Changes in Industry Numbering Committee (INC) administration guidelines;
	Updates on the NRUF Form 502 and associated job aids, as well as
	procedural changes (such as the introduction of new data fields);
	Changes to NANPA processes that will affect customers;
	NANPA Planning Letters;
	International activities impacting the NANP and NANP Administration;
	New and/or revised NPA and NANP exhaust projections;
	Reminders relating to semi-annual CIC reporting requirement;
	Scheduled system maintenance and system availability issues; and
	Client education, new forms and tools.
	n-ge

In addition to distributing notices, NAS has the capability to include attachments to the notices, allowing NANPA to transmit certain documentation directly to users. NAS also permits users to search for specific notices based upon a particular time period. Notifications concerning NPA relief planning activity remain limited to only the service providers and appropriate regulatory agencies.

NANPA distributed 183 notifications in 2020. The chart below illustrates the quantity of notifications distributed by category. All notifications are retained in NAS.

Notification Category	Number of Notifications
NPA Relief Planning	100 ¹
Other Non-Geographic	23
NRUF	14
Planning Letters	24
Code Administration	3
INC Guidelines	10
Jeopardy	9
Other Geographic	0
TOTAL	183

2.5 NAS NRUF

NRUF reporting is a semi-annual process whereby service providers submit utilization and forecast information to NANPA for use in the development of NPA and NANP exhaust projections. NANPA collects and stores this information and provides it to the FCC and state commissions. Service providers also submit utilization and forecast information for resources assigned from the non-geographic 5XX NPA and 900 NPAs. This data is provided to the FCC. Service providers are required to report by February 1 and August 1 of each year and may submit updates and corrections to their submissions at any time during the current reporting cycle.

NAS permits service providers to submit their utilization and forecast data via email (i.e., Excel spreadsheet), Electronic File Transfer (EFT) using secure FTP, compact disc (CD) or on-line. With the on-line method, service providers log into NAS and enter the data requested in the various worksheets contained in the NRUF Form 502. In addition since many service providers have the need to submit NRUF data between reporting cycles (e.g., update forecast information), NAS permits service providers to update or modify previously-submitted utilization and forecast data for the current reporting cycle. This on-line capability is available for geographic and the 5XX and 900 non-geographic NPAs.

2.6 NAS Reports

NAS provides a number of real-time reports concerning NANP resource assignment and availability, including NPAs, central office codes, CICs, 5XX-NXXs and 900-NXXs. These reports are available on the NANPA website.

In addition to resource availability, NAS permits both service providers and regulators access to numerous NRUF queries and reports. Information provided in these queries is driven by the user's NAS profile. For example, service providers' access is limited to their own information, while state regulators have access to all utilization and forecast data for the area codes in their respective states.

2.7 NAS User Registration

All users of NAS are required to register in the system. The registration process allows a user to select from a variety of resource subscriptions depending on the user's needs.

¹ Includes notifications about the transition to 10-digit dialing for use of the 988 abbreviated code for the National Suicide Prevention Lifeline 2020 NANPA Annual Report

There are different types of NAS users, including service providers, service provider consultants, federal and state regulators and other individuals or entities with a valid interest in number administration matters.

For each user type, specific NAS capabilities are available. These capabilities include the ability to:

- submit requests for central office codes from geographic area codes,
- · access and utilize NRUF capabilities,
- register for various geographic and non-geographic notifications,
- submit applications for other NANP resources such as CICs, 5XX-NXXs, and 900-NXXs, and
- submit in service confirmation forms.

All registration requests are reviewed and validated prior to approval. Once NANPA approves the registration request, the user is issued a password. The password, randomly generated by the system, contains numbers, letters and other characters. Once registered in NAS, the user is able to update and modify their profile.

NAS has been engineered with numerous security features. NAS has specified time intervals within which a user must log into the system after their profile has been approved or system access is denied. Users are required to update their NAS passwords every 180 days. When a user contacts NANPA to re-enable their profile, the user will receive a new password that must be reset by the user within 14 calendar days of when the profile was re-enabled. If an existing NAS user fails to reset the password, the NAS profile will be suspended. NAS will continue to send NNS notices to the user whose profile is suspended, but no other NAS-generated work item-related emails will be sent to the user, nor will the user have access to NAS. The user will receive weekly reminders to contact NANPA to reset the NAS password. If the user fails to contact NANPA within 90 days of the date the NAS account is suspended, the profile will automatically be disabled, and the user will cease to receive NNS notices.

3 CODE ADMINISTRATION

Code administration responsibilities include receiving and processing applications for assignment, making and recording assignments, reclaiming resources that are not placed into service, updating information associated with assigned resources and keeping the industry informed as the supply of available resources approaches exhaust. The scope of code administration includes these numbering resources:

Numbering Plan Area (NPA) codes (area codes);
Central office (NXX) codes;
5XX-NXX codes;
900-NXX codes;
N11 codes;
Carrier identification codes (CICs);
ANI II digits (Automatic Number Identification Information Integers); and
Vertical service codes.

Subsequent sections of this report discuss each of these resources in greater detail. Contact information for all of the resources can be located at https://nationalnanpa.com/contact_us/index.html

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3.1 Resource report—Numbering Plan Areas (NPAs)

Numbering Plan Areas (NPAs), also known as "area codes," are the first three digits of the tendigit telephone number. NPAs are in NXX format, where N is any digit from 2 through 9 and X is any digit from 0 through 9. Attachment 1 provides an inventory of all NPAs.

Most NPAs designate specific geographic areas; for example, NPA 701 serves the entire state of North Dakota while the NPA 804 covers just a portion of Virginia. NPAs used in this manner are called geographic NPA codes. As of December 31, 2020, 391 geographic NPA codes were in service. Of these, 329 serve the U.S. and its territories, 41 serve Canada, and the remaining 21 serve Bermuda and the Caribbean countries participating in the North American Numbering Plan. Attachments 2 and 3 are tables of geographic NPA codes currently in use, sorted by location and numerically.

Other NPAs designate special services such as toll-free calling rather than geographic areas. These NPAs are non-geographic codes. Attachment 4 lists the non-geographic NPAs currently in service.

Introduction of a new geographic NPA follows a specific plan and schedule approved by regulatory authorities. The plan is summarized in one or more *Planning Letters* on the NANPA website. Once an NPA is assigned for a geographic area, an implementation period follows. The most visible implementation activities include preparing the network to accept the new NPA, introducing any required changes to the dialing plan and informing the public about how the new NPA is to be used. The new NPA is said to be "in service" when it becomes generally dialable.

3.1.1 2020 NPA Activities

Three new NPAs went into service in 2020, as shown in the table below:

Table 1a: NPAs Introduced in 2020

NPA	IN-SERVICE	LOCATION	OVERLAY?	PARENT	PLANNING	NPA OVERLAY
	DATE			NPA	LETTER	COMPLEX
					NUMBER	
326	3/8/20	Ohio	Yes	937	517	326/937
839	5/26/20	South Carolina	Yes	803	520	803/839
525	7/13/20	Non- Geographic	Yes	500	542	500/588/577/566/ 544/533/522/521/ 523/524/525

Ten NPAs were assigned this past year as shown in the Table1b below:

Table 1b: NPAs Assigned in 2020

NPA	ASSIGNMENT DATE	LOCATION	OVERLAY?	PARENT NPA	PLANNING LETTER NUMBER	NPA OVERLAY COMPLEX
572	1/8/20	Oklahoma	Yes	405	535	405/572
948	2/5/20	Virginia	Yes	757	546 536	757/948
945	2/28/20	Texas	Yes	214	537	214/469/972/945
525	4/13/20	Non- Geographic	Yes	500	542 538	500/521/522/533/544 566/577/588/523/524/525
582	4/30/20	Pennsylvania	Yes	814	543 540	814/582
656	5/4/20	Florida	Yes	813	552 541	813/656
826	6/17/20	Virginia	Yes	540	545	540/826
771	9/22/20	District of Columbia	Yes	202	547	202/771
943	10/23/20	Georgia	Yes	404	555	404/770/678/440/943
742	10/29/20	Canada	Yes	905	550	289/365/905/742

At year end, 26 previously-assigned NPAs remained to be introduced, as shown in Table 2. The "status" column provides the key to understanding the table. A status of "Pending" indicates that the industry or regulatory authority has yet to determine an in-service date for the new NPA. Typically, this means that the new NPA will not be introduced until additional numbers are needed. A status of "Suspended" indicates that the regulatory authority has placed the plan for introducing the new code on hold and that the plan may be canceled, revised, or implemented in the future. "Scheduled" means a specific in-service date has been identified for the new NPA.

Table 2: NPAs planned but not yet introduced (as of December 31, 2020)

LOCATION	COUNTRY	PLANNED IN- SERVICE DATE	EXISTING NPA/s	STATUS	PLANNING LETTER NUMBER/S
Maryland	US		301/240	Pending	
Wisconsin	US		920	Pending	442 417 385
Ohio	US		513	Suspended	316 286 264
Arkansas	US		870	Suspended	437 400
Quebec	Canada		450	Suspended	533 526
New Brunswick	Canada	4/23/22	506	Scheduled	539 522
Illinois	US	3/27/21	217	Scheduled	532
Florida	US	6/22/21	850	Scheduled	551 534
Illinois	US		708	Pending	195
Saskatchewan	Canada	10/02/21	639	Scheduled	530

Missouri	US		314	Suspended	303 279 261
Oklahoma	US	5/24/21	405	Scheduled	535
Pennsylvania	US	5/01/21	814	Scheduled	543, 540
Florida	US	2/22/22	813	Scheduled	552 541
Michigan	US		313	Suspended	227 209
Illinois	US		618	Pending	
District of Columbia	US	11/09/21	202	Scheduled	547
Virginia	US	6/14/22	540	Scheduled	544
California	US	2/23/21	909	Scheduled	529
Newfoundland	Canada	5/20/22	709	Scheduled	521 514 503
Georgia	US	8/15/22	404/470/678/770	Scheduled	555
Texas	US	1/15/21	214/469/972	Scheduled	537
Virginia	US	5/09/22	757	Scheduled	546 536
Missouri	US		816	Suspended	304 280 262

3.1.2 Overlays

In an overlay, two or more NPAs serve all or part of the same geographic area. The term "overlay complex" describes the list of NPAs included in the overlay. All of the overlays in service today are full-service overlays; that is, numbers in the overlay NPA(s) are not restricted to any specific service or services.

Two NPA overlays were implemented in 2020. Listed in Table 3 are the overlay complexes in service as of December 31, 2020.

Table 3: NPA Overlays

LOCATION	OVERLAY_COMPLEX
AL	205/659
AL	256/938
ALBERTA	403/587/780
ALBERTA	403/587/780/825
BRITISH COLUMBIA	236/250/604/778/672
CA	213/323
CA	310/424
CA	408/669
CA	415/628
CA	442/760
CA	510/341
CA	619/858
CA	657/714
CA	747/818
CA	805/820
CA	916/279
CO	303/720
СТ	203/475
CT	860/959

LOCATION	OVERLAY_COMPLEX
DOMINICAN REPUBLIC	809/829/849
FL	305/786
FL	321/407/689
FL	754/954
FL	954/754
GA	404/470/678/770
GA	706/762
ID	208/986
IL	224/847
IL	312/773/872
IL	331/630
IL	773/872
IL	779/815
IL	815/779
IN	317/463
IN	812/930
JAMAICA	876/658
KY	270/364
MA	339/781
MA	351/978
MA	508/774
MA	617/857
MANITOBA	204/431
MD	240/301
MD	410/443/667
MI	248/947
MS	601/769
NC	336/743
NC	704/980
NC	919/984
NE	402/531
NJ	201/551
NJ	609/640
NJ	732/848
NJ	862/973
NOVA SCOTIA - PRINCE EDWARD ISLAND	782/902
NV	702/725
NY	212/332/646/917
NY	315/680
NY	347/718/917/929
NY	518/838
NY	631/934
OH	220/740
OH	220/140

LOCATION	OVERLAY_COMPLEX
ОН	234/330
OH	380/614
OH	419/567
ОН	614/380
ОН	740/220
ОН	937/326*
OK	539/918
ONTARIO	226/519/548
ONTARIO	249/705
ONTARIO	289/365/905
ONTARIO	343/613
ONTARIO	416/437/647
OR	458/541
OR	503/971
PA	215/267/445
PA	272/570
PA	412/724/878
PA	484/610
PA	717/223
PUERTO RICO	787/939
QUEBEC	418/581/367
QUEBEC	438/514
QUEBEC	450/579
QUEBEC	819/873
SASKATCHEWAN	306/639
SC	803/839*
SC	843/854
TN	615/629
TX	210/726
TX	214/469/972
TX	281/346/713/832
TX	430/903
TX	512/737
TX	682/817
UT	385/801
VA	571/703
WA	360/564
WI	534/715
WV	304/681

*New in 2020

3.1.3 Dialing plans

Each NPA has a basic dialing plan, which indicates the dialing pattern to be used for various types of calls originating in that NPA. In the U.S., dialing plans vary from state to state and from NPA to NPA.

Key variables in determining a dialing pattern are:

- whether or not the call originates and terminates within the same NPA,
- whether the call is a local or toll call and 3) whether the call requires special handling (e.g., credit card, third-party billing, or operator assistance).

Dialing patterns in the U.S. have been largely standardized. Local calls originating and terminating within the same NPA are usually dialed on a seven-digit basis, omitting the area code, except in overlay areas where the NPA must be dialed. Toll calls originating in one NPA and terminating in another are usually dialed with a prefix "1" followed by the ten-digit number. Special handling calls are always dialed with a prefix "0" followed by the ten-digit number.

Most of the variations in basic dialing plans involve toll calls originating and terminating within the same NPA (home-NPA toll calls) and local calls originating in one NPA and terminating in another NPA (foreign-NPA local calls). In states where the prefix "1" is considered to be a toll indicator, home NPA toll calls are usually dialed as "1" followed by the ten-digit number, and foreign NPA local calls are dialed using the ten-digit number without a prefix. In states where the prefix "1" is used to indicate that a ten-digit number will follow, home-NPA toll calls are dialed using just the seven-digit number and foreign-NPA local calls are dialed as "1" followed by the ten-digit number.

Dialing patterns within an NPA also may vary according to service provider capabilities. In addition, in many areas where NPA boundaries split local calling areas, state regulatory commissions and service provider tariffs allow seven-digit dialing across NPA boundaries, including across state lines.

Basic dialing plans for U.S. NPAs are listed in Attachment 5.

3.2 Resource report—Central office codes

Central office (CO) codes, also known as prefixes, exchanges, or NXX codes, are digits 4 through 6 of the ten-digit telephone number. The following discussion addresses CO codes within geographic area codes.

NANPA administers all geographic CO codes in the U.S. and its territories. The Canadian Numbering Administrator performs this function in Canada. In the remaining NANP countries, regulatory authorities play an active role in central office code administration. Contact information for regulatory and administrative personnel can be found in Attachment 10.

Service providers obtain numbers for their customers by applying for and receiving CO code assignments. Each CO code contains 10,000 numbers for use in the area the code serves. Service providers operating in pooling rate centers apply through the Pooling Administrator for CO codes in order to:

- 1) request the assignment of a CO code for Location Routing Number (LRN) purposes,
- 2) request a CO code to replenish the inventory pool, or
- 3) request a CO code to meet a service provider's need for 10,000 consecutive telephone numbers for a single customer.

NANPA tracks 174,087 assigned central office codes in the U.S. and its territories.

The FCC, in its Number Resource Optimization (NRO) order series, established detailed criteria

for the assignment of initial and growth central office codes in the U.S. and its territories. The process of applying for a CO code assignment based on FCC rules and regulations is specified in guidelines developed by the industry. The latest version of the guidelines, entitled Thousands-Block (NPA-NXX- X) & Central Office Code (NPA-NXX) Administration Guidelines (TBCOCAG), ATISO30019, can be found at the Alliance for Telecommunications Industry Solutions (ATIS) website at http://www.atis.org/01 committ forums/INC/documents/.

3.2.1 Central Office Code Activity

Central office (CO) code monthly application and assignment activities during 2020 are shown in Table 4.

The rows in the table should be interpreted as follows:

- Assignments—Applications that resulted in the assignment of a new central office code.
- Changes—Applications that resulted in a change to the information associated with an existing code assignment, for example, a change to the OCN or switch.
- Denials—Applications not meeting the criteria for assignment as prescribed by the FCC and embodied in the central office code assignment guidelines.
- Cancellations—Applications canceled or withdrawn by the applicant. These applications are not counted in the total quantity of applications processed.
- Canceled Returns—Applications requesting the return of an assigned code that were canceled after NANPA issued the Part 3 approving the return.
- Returns—Applications requesting the return of an assigned code.
- Reservations—Applications requesting and receiving a code reservation.
- Total Processed—Total quantity of applications processed by NANPA.
- Pooling Pass-Thru—Applications processed by NANPA that came through the Pooling Administrator.
- Abandoned Codes—Quantity of codes that NANPA followed the Thousands-Block Central Office Code Assignment Guidelines (TBCOCAG) procedures for code holder exit.

Table 4: 2020 Monthly CO Code Activity

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Assignments	198	298	273	230	387	408	598	449	679	499	350	526	4,895
Changes	538	245	272	169	202	485	1,059	832	892	580	1,340	739	7,353
Denials	330	74	56	36	75	51	178	81	120	73	81	72	1,227
Cancellations (Note 1)	0	0	4	5	8	1	1	0	0	0	0	0	19
Canceled Returns (Note 1)	0	0	0	0	0	0	0	0	0	0	0	0	0
Returns	10	23	20	14	15	26	44	12	18	19	27	10	238
Reservations	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Processed	1,636	641	621	440	740	800	1,879	1,374	1,709	1,171	1,798	1,870	14,679
Pooling Pass- Thru	983	594	449	391	629	711	1,189	862	1,137	844	800	1,018	9,607
Abandoned Codes	0	0	0	43	1	19	31	0	0	8	23	0	125

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Note 1 – Applications that are canceled are not included in the total quantity of applications processed.

NANPA processed 14,679 requests in 2020 compared to 7,869 requests in 2019 for CO code assignments, returns or changes to existing assignments. This represents a 87% increase. It is also substantially higher than the total of 9,567 requests processed in 2018, and 11,491 in 2017. A total of 4,895 CO code assignments were made in 2020 as compared to 3,433 in 2019, 2,846 in 2018, and 2,713 in 2017.

The majority of assignment were for pool replenishment. Following are the assignment totals by type:

- 4,152 for pool replenishment,
- 691 for LRNs,
- 44 for dedicated customers,
- 8 for non-pooled assignments.

Out of the 14,679 applications processed, 10,526 CO Code Applications were passed through to NAS from the Pooling Administration System (PAS), as compared to 6,150 in 2019. A total of 7,353 change requests were processed in 2020. These includes transfers to other service providers, switch changes, tandem changes, OCN changes due to mergers/acquisitions, and effective date changes. This compares to 3,523 changes processed in 2019.

A total of 238 return requests were approved in 2020 as compared to 305 in 2019. In addition, a total of 1,235 CO codes were treated as abandoned in 2020, as compared to 87 in 2019. A total of 247 applications were cancelled/withdrawn, as compared to 48 withdrawals in 2019.

As part of its code administration responsibilities under the Debt Collection Improvement Act of 1996 (Red Light Rule), NANPA is required to withhold the assignment of numbering resources to an entity identified by the FCC as delinquent in their payments to the Commission. In 2020, NANPA denied 46 CO code assignment requests in compliance with this requirement.

3.2.2 Central Office Code Activity (Year-over-Year)

NANPA also tracks year-over-year assignment data to identify any trends in CO code assignment rates. Table 5 shows the total quantity of CO codes assigned in 2020 compared with assignments over the last ten years. Also included is the net demand for the year, reflecting the impact of codes returned during the year.

Table 5: Year-over-Year CO Code Assignments

Year	Annual Gross CO Code Demand	Annual Net CO Code Demand	Quantity of Returned Codes
2011	2,889	2,273	616
2012	2,637	2,065	572
2013	2,712	2,428	284
2014	3,414	3,155	259
2015	3,728	3,495	233
2016	3,405	3,184	221
2017	2,713	2,502	211

Year	Annual Gross CO Code Demand	Annual Net CO Code Demand	Quantity of Returned Codes
2018	2,846	2,567	279
2019	3,433	3,128	305
2020	4,895	4,657	238

3.2.3 Central Office Code Administration Quality Measurements

The three Central Office (CO) Code Administration primary measurements are:

Application processing

NANPA is required to process CO code applications within seven calendar days of the date of receipt. In 2020, NANPA processed all applications within seven calendar days.

Codes assigned without a code conflict or reject

A 'Code Conflict' occurs when a code assigned by NANPA cannot be placed into service due to a dialing conflict. A 'Code Reject' is an assignment error in which NANPA did not assign the available code which was requested. In 2020, there was one 'Code Reject' in March due to assignment of an incorrect code in Brevard County FL.

Telephone calls

Code Administrators are required to respond to telephone calls by no later than the end of the next business day. In 2020, NANPA Code Administrators responded to 100% of telephone calls by no later than the next business day.

3.2.4 2020 Activities

Below is a summary of central office code administration activities in 2020.

- Abandoned CO Codes NANPA identified 125 codes to be treated as abandoned. During the
 year, NANPA coordinated the recovery/transfer of these codes with state regulators and the
 FCC.
- Code Conservation efforts NANPA continuously worked with various state regulators and service providers to recover CO codes previously protected or no longer in use. NAS was appropriately updated to ensure it accurately reflected available resources in all rate centers. A total of 80 CO codes were changed to available status across numerous area codes. NANPA continued the practice of assisting service providers and state regulators in the transfer of a CO code from one service provider to another service provider needing to open a code for a Location Routing Number (LRN). NANPA coordinated with regulators, the Pooling Administrator and service providers in an attempt to transfer 30 CO codes, where possible, to avoid opening new CO codes for LRN purposes.
- Managing Jeopardies When the supply of codes in a particular NPA is at risk of exhausting before a new area code or other relief measure can be introduced, NANPA declares "jeopardy" in that NPA. When jeopardy is declared, code allocations are initially set at 3 codes per month. The industry, with the assistance of NANPA Code Administration and NPA Relief Planning, develops local industry jeopardy procedure options at a meeting convened by NANPA. Once determined, local jeopardy procedures are posted on the NANPA website (www.nanpa.com). NANPA declared two jeopardies in 2020, for the California 209 NPA and District of Columbia 202 NPA. At the end of 2020, there were four NPAs in jeopardy (California 209, District of Columbia 202, as well as Illinois 217 and 618 NPAs).

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Mass Modification Process

Service providers may submit a mass modification spreadsheet containing modifications (e.g., change in switch ID, intra-company OCN, tandem homing CLLI) to central office code records when such changes impact 50 or more codes. In 2020, NANPA processed 2,893 record changes via the mass modification process.

Reclamation

Each CO code assignment has an associated "effective date" when the code will be placed in service. The assignment guidelines require that the code be placed in service no later than six-months after the original effective date. The assignee confirms that the code is in service by submitting a Part 4. NANPA responds with the "Administrator's Response – Receipt of the Part 4." If a Part 4 has not been received by NANPA during the first five months following the original effective date, NANPA will send a reminder notice to the code assignee. In 2020, 4,160 Part 4s were processed by NANPA. In order to process the Part 4 to show the code is in service, NANPA must complete the work item in NAS as well as update the in-service indicator on the ACD screen in iconectiv®'s BIRRDS (Business Integrated Rating and Routing Database System).

NANPA tracks CO code assignment effective dates and, if the Part 4 is not received within the six-month period following the effective date, the code is considered to be delinquent and NANPA notifies the appropriate regulatory authority. The FCC NRO orders delegated authority to the states to determine whether or not delinquent codes should be reclaimed. The FCC makes reclamation decisions for those states that decided not to participate in the process. The NANPA website provides detailed information about the reclamation process, including contact information for each participating state and the FCC.

To measure reclamation effectiveness, NANPA monitors the percentage of delinquent codes on which it begins the reclamation process, along with the number of codes recovered each month. The recovery of a code must be directed by the appropriate regulatory authority. NANPA also monitors the reclamation lists provided to the states/FCC to ensure there are no errors or discrepancies. NANPA initiated reclamation for 119 CO Codes in 2020. Table 6 reflects the reclamation activity in 2020.

Table 6: 2020 CO Code Reclamation Quality Results

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Percentage of applicable codes on which reclamation was started	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of codes for which a Part 4 was not rec'd 180 days after original effective date (Note 1)	9	5	4	5	18	7	21	9	10	12	13	6
Number of codes on which reclamation started late	0	0	0	0	0	0	0	0	0	0	0	0
Codes recovered (Note 2)	0	0	0	0	0	0	0	0	0	0	0	0
Number of reclamation discrepancies reported by state commission(s) regarding monthly reclamation list	0	0	0	0	0	0	0	0	0	0	0	0

Note 1: Quantity of codes for which NANPA did not receive a Part 4 in-service confirmation within 180 days after the original effective date.

Note 2: Quantity of codes recovered through the reclamation process (the state regulator or FCC directed NANPA to reclaim the code).

3.3 Resource report—5XX-NXX codes

5XX-NXX codes are used for applications which are non-geographic in nature, are not assigned to rate centers and may or may not traverse the Public Switched Telephone Network (PSTN) but do require an E.164 addressing scheme. The use of this NANP numbering resource is to communicate with both fixed and mobile devices, some of which may be unattended. This resource may also be used for applications enabling machines, which would include but not be limited to wireless devices and appliances, with the ability to share information with back-office control and database systems and the people that use them. Service is limited only by terminal and network capabilities and restrictions imposed by the service provider.

NANPA assigns 5XX-NXX codes in accordance with the Non-Geographic 5XX-NXX Code Assignment Guidelines, ATIS 0300052, which may be downloaded from the ATIS website (http://www.atis.org/01_committ_forums/INC/documents/). It should be noted that the 5XX resource is not portable.

There were eleven 5XX NPAs in-service at the end of 2020: NPAs 500, 521, 533, 544, 566, 577, 588, 522, 523, 524 and 525. In April 2020, NANPA published Planning Letter 538 (Assignment of NPA 525 for Non-Geographic Services). In July 2020, NANPA initiated NXX assignments from the 525 NPA and published Planning Letter 542.

During 2020, NANPA assigned 1,186 new 5XX-NXX codes. This compares with 994 5XX-NXX codes assigned in 2019 and 940 5XX-NXX codes assigned in 2018.

At the end of 2020, a total of 8,705 5XX-NXX codes were assigned, 68 5XX-NXX codes were returned in 2020 and 73 5XX-NXX codes remained available for assignment.

There are 22 5XX-NXX codes that are not available for assignment (5XX-555 and 5XX-911). Based on NRUF forecast data and assignment information, it is projected that multiple 5XX-NXXs will be needed over the next several years.

Consequently, the following 5XX NPAs have been reserved: 526, 527, 528,529, 532, 538, 542, 543, 545, 547, 549, 552, 553, 554, 556, 569, 578, 589, 550, 535, 546 and 558.

NANPA continues to provide information concerning assignments, updates and reclamations for inclusion in iconectiv's Local Exchange Routing Guide (LERG™).

3.4 Resource report—900-NXX codes

900 numbers are used for premium services, with the cost of each 900 call billed to the calling party. NANPA assigns these numbers according to industry-developed assignment guidelines that may be found on the ATIS website at http://www.atis.org/01_committ_forums/INC/documents/. The guidelines are entitled 9YY NXX Code Assignment Guidelines, ATIS-0300060.

There was one 900-NXX code assigned in 2020, no codes returned, and 49 900-NXX codes that were unavailable for assignment as of December 31, 2020. These include eight 900-N11 codes and 41 900-NXX codes reserved for Canadian use.

At the end of 2020, a total of 53 900-NXX assignments were in effect. The number of 900-NXX codes available for assignment was 698. With the quantity of available 900-NXX codes, exhaust of the 900 NPA is not an issue at this time.

NANPA continues to provide information about assignments, updates and reclamations for inclusion in the LERG Routing Guide.

3.5 Resource report—555 line numbers

555 numbers were made available starting in 1994 for the purpose of reaching a wide variety of information services. Although nearly 8,000 555 line numbers were assigned, these numbers were not placed into service. In May 2016, the Industry Numbering Committee (INC) determined that the purpose for which this resource was intended had been accommodated by other information/communication technologies. The future of a 555 resource will be determined if a need for the resource is identified and agreed to by INC.

As a result, INC created the 555 NXX Line Number Reference Document, ATIS- 0300115 and agreed to sunset the 555 NXX Assignment Guidelines, ATIS-0300048. The FCC approved this decision in September 2016.

All 555 line numbers have been returned to the inventory of NANPA resources.	The
following 555 line numbers remain in use:	

- ☐ 555-1212 Directory Assistance National use
- ☐ 555-4334 Assigned National use

The fictitious, non-working numbers, 555-0100 through 555-0199, remain reserved for entertainment/advertising.

3.6 Resource report—Carrier Identification Codes

Carrier Identification Codes (CICs) are four-digit codes used to route and bill telephone traffic. An entity acquires a CIC assignment by purchasing Feature Group B (FG B) or Feature Group D (FG D) access from an access service provider. NANPA also assigns FG D CICs to "switchless resellers" without the requirement to purchase FG D trunk access before applying for a CIC. Finally, billing and collection clearinghouses ("BC clearinghouses") are allowed to obtain FG D and "matching" FG B CICs without the requirement to purchase access. A "BC clearinghouse" is only allowed to apply for a CIC under circumstances when the use of an ABEC (Alternate Billing Entity Code) is not permitted as an identifier and/or when the use of an ABEC has been determined as technically non-feasible.

In the U.S., all applicants apply to NANPA directly through NAS for CIC assignments. If the applicant is a long distance carrier, the access provider must separately provide NANPA with a copy of the Access Service Request (ASR) to verify that FG D trunk access has been ordered. If the CIC applicant is a Local Exchange Carrier (LEC), incumbent LEC (ILEC) or competitive LEC (CLEC), a copy of the authorization from a state regulatory commission granting the applicant authority must be provided separately to NANPA in support of their CIC application. If the applicant is a switchless reseller, it must separately provide NANPA with documentation that validates "switchless reseller" status. State regulatory commission certification is required unless the state does not issue switchless reseller certification. If the state does not issue such certification, a written statement

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by an officer of the applicant company will be accepted to verify "switchless reseller" status. In Canada, companies apply for CICs to the Canadian Numbering Administrator (CNA), who verifies that Canadian regulatory requirements have been met. The CNA then submits the application to NANPA via NAS on behalf of the applicant.

Industry-consensus guidelines for the administration of CICs may be found on the ATIS website at http://www.atis.org/01 committ forums/INC/documents/. The guidelines are entitled Carrier Identification Code (CIC) Assignment Guidelines, ATIS 0300050. The assignment guidelines require all CIC assignees to submit Entity semi-annual CIC reports. In addition, access providers providing FG B and/or FG D access service, particularly access providers with more than 30 CICs programmed in their switches, are required to submit access provider semi-annual CIC access/usage reports to NANPA for analysis.

Information contained in these reports serves as the basis for NANPA's CIC reclamation efforts. If no access provider reports access/usage for a given CIC, NANPA initiates reclamation procedures. All CIC assignees, including switchless resellers and "BC clearinghouses", are required to submit semi-annual Entity Access/Usage reports to NANPA. These reports demonstrate whether access or usage has been established as well as document that assigned CICs are being used in accordance with the CIC Assignment Guidelines.

3.6.1 Data Integrity

Maintaining accurate assignment records and entity contact information is an ongoing challenge for NANPA due to abandoned CICs and the high volume of mergers, acquisitions, asset purchases and bankruptcies that occur in the telecommunications industry. Obtaining documentation on and verification of these activities is often difficult, but crucial to the integrity of information contained in the CIC assignment databases. NANPA continues to send notifications in an effort to work with the industry to maintain the accuracy of the CIC assignment information.

3.6.2 FG D CIC activity

During 2020, NANPA assigned three new FG D CICs. NANPA investigated and reclaimed CIC resources that were "abandoned" (assigned to a company no longer in business and/or not in service), resulting in the return/reclamation of 49 FG D CICs. 223 codes from the entire FG D CIC resource are not available for assignment. These include CICs 9000-9199, which are available to all carriers for intranetwork use only. Also included are CICs 0000 and 5000, used exclusively for testing, 0911 and twenty CICs in the formats X411 and 411X, which have been marked unassignable at the direction of the FCC.

At the end of 2020, 1,769 FG D CICs were assigned in total, leaving 8,008 FG D CICs available for assignment. The potential exhaust of the FG D CIC resource is not a concern based on the current rate of assignment and the current FCC limit of two FG D CICs per "entity."

At the end of 2020, NANPA identified 40 FG D CICs as "abandoned" (CICs assigned to companies no longer in business, or CICs assigned to companies that have sold assets to other entities, or companies that have been acquired by other entities through mergers/acquisitions). These CICs are now listed in NANPA's records with no valid contact information. The assignee of these CICs and/or the companies that have acquired the CIC assignee company(ies) have failed to adhere to the CIC Assignment Guidelines by providing NANPA with legal documentation of the activities described in this paragraph. NANPA has been unable to reclaim these "abandoned" CICs since activity (FG D access and/or usage) appeared on access providers' 2020 semi-annual CIC

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reports.

Table 7: 2020 Monthly FG D CIC assignments, denials and reclamations

Month	Assigned	Reclaimed / returned	Applications denied	Applications withdrawn
January	0	0	4	0
February	0	3	0	0
March	0	12	1	0
April	0	1	0	0
May	0	4	0	1
June	0	7	0	0
July	1	4	0	0
August	0	15	0	0
September	1	1	1	0
October	0	5	1	0
November	0	0	0	0
December	1	1	0	1
TOTAL	3	53	7	2

3.6.3 FG B CIC activity

In 2020, no FG B CICs were assigned and 17 FG B CICs were returned or reclaimed. At the end of 2020, 204 FG B CICs were assigned in total. The potential exhaust of the FG B CIC resource is not a concern based on the current rate of assignment.

As of the end of 2020, NANPA had identified 8 FG B CICs as "abandoned" (CICs assigned to companies no longer in business, or CICs assigned to companies that have sold assets to other entities, or companies that have been acquired by other entities through mergers/acquisitions). These CICs are now listed in NANPA's records with no valid contact information. The assignee of these CICs and/or the companies that have acquired the CIC assignee company(ies) have failed to adhere to the CIC Assignment Guidelines by providing NANPA with legal documentation of the activities described in this paragraph. NANPA has been unable to reclaim these "abandoned" CICs since activity (FG B usage and/or access) appeared on access providers' 2020 semi-annual CIC reports.

Table 8: 2020 Monthly FG B CIC assignments, denials and reclamation

Month	Assigned	Reclaimed /returned	Applications denied	Applications withdrawn
January	0	0	0	0
February	0	1	0	0
March	0	0	0	0
April	0	1	0	0
May	0	1	0	0
June	0	8	0	0
July	0	0	0	0
August	0	3	0	0

Month	Assigned	Reclaimed /returned	Applications denied	Applications withdrawn
September	0	0	0	0
October	0	2	0	0
November	0	1	0	0
December	0	0	0	0
TOTAL	0	17	0	0

3.7 Resource report—N11 codes

N11 codes, listed with their descriptions in Table 10, are the only valid three-digit telephone numbers in the NANP.

The FCC administers N11 codes in the U.S., pursuant to the Telecommunications Act of 1996. The Canadian Radio-television and Telecommunications Commission (CRTC) administers N11 codes in Canada. It should be noted that 411 and 611, although long used for the purposes indicated in the table, have not been formally assigned by the FCC in the U.S. at this time.

Table 9: N11 Code Assignments

N11 Code	Description
211	Community information and referral services
311	Non-emergency police and other governmental services (U.S.)
411	Local directory assistance
511	Traffic and transportation information (U.S.); Provision of Weather and Traveler
	Information Services (Canada)
611	Repair service
711	Telecommunications Relay Service (TRS)
811	Access to One Call Services to Protect Pipeline and Utilities from
	Excavation Damage (U.S.); Non-Urgent Health Teletriage Services (Canada)
911	Emergency

3.8 Resource report—456-NXX codes

NXX codes from the 456 NPA were made available in 1993 (IL-93/08-002) and used to identify carrier-specific services. This was accomplished by providing carrier identification within the dialed digits of the E.164 number. More specifically, the prefix following 456 (456-NXX) identified the carrier. Use of these numbers enabled the proper routing of inbound international calls destined for these services into and between North American Numbering Plan area countries.

In 2017, INC determined there was no longer a need for the 456 NPA, agreed to sunset the International Inbound NPA (INT/NPA/NXX) Assignment Guidelines, ATIS-0300049, and age the 456 NPA for five years before the NPA is returned to the general purpose NPA code pool.

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3.9 Resource report—Automatic Number Identification "II" digits

Automatic Number Identification (ANI) Information Integers ("II") digits are digit pairs sent with the originating telephone number. The digit pair identifies the type of originating station; e.g., plain old telephone service (POTS) or hotel/motel.

NANPA assigns these numbers in accordance with industry-developed guidelines that may be found on the ATIS website at http://www.atis.org/01_committ_forums/INC/documents/. The guidelines are entitled Automatic Number Identification (ANI) Information Digits Codes, ATIS-0300064. Requests for the assignment of ANI II digits are referred to the INC for consideration. If the INC approves the request, NANPA makes the assignment. A list of ANI II assignments may be found on the NANPA website, www.nanpa.com.

No ANI II digit assignments were made in 2020. A list of ANI II digit assignments can be found on the NANPA website at

https://www.nationalnanpa.com/number resource info/ani ii assignments.html.

3.10 Resource report—Vertical Service Codes

Vertical Service Codes (VSCs) are customer-dialed codes in the *XX or *2XX dialing format for touch-tone and the 11XX or 112XX dialing format for rotary phones. They are used to provide customer access to features and services (e.g., call forwarding, automatic callback, etc.) provided by network service providers such as local exchange carriers, interexchange carriers or commercial mobile radio service (CMRS) providers. NANPA assigns VSCs in accordance with industry- developed guidelines that may be found on the ATIS website at http://www.atis.org/01 committ forums/INC/documents/. The guidelines are entitled Vertical Service Code Assignment Guidelines, ATIS-0300058.

No VSC assignments were made in 2020. There was a total of sixty-one VSCs assigned at the end of 2020.

A list of assigned VSCs is available on the NANPA website at https://www.nationalnanpa.com/number resource info/vertical service.html .

3.11 NANPA Help Desk

In 2020, the NANPA Help Desk responded to nearly 1,900 emails sent to the NANPA Help Desk and responded to 727 telephone calls. All emails and phone calls were either answered immediately or within one business day.

4 NPA RELIEF PLANNING OVERVIEW

NPA relief planning precedes the introduction of new geographic area codes. The relief planning process is described in detail in the NPA Code Relief Planning and Notification Guidelines, ATIS-0300061, which can be found on the ATIS website at http://www.atis.org/01 committ forums/INC/documents/.

NANPA plays a significant role in NPA relief planning. At least 36 months prior to the anticipated exhaust of an NPA in the U.S. or its territories, NANPA's relief planners prepare and distribute an Initial Planning Document (IPD) for consideration by the affected codeholders that outlines several alternative relief plans. NANPA then facilitates an

industry meeting to consider the options presented in the IPD and any others that may be proposed. NANPA next prepares a petition explaining the options considered and describes the recommended relief option(s) if the industry has reached consensus to do so. NANPA submits the petition on behalf of the industry to the state regulatory commission for approval.

Once a petition is filed, the respective state commission reviews the proposed plan and often conducts public hearings to invite public comment. When this occurs, the relief planner actively participates and may be called upon to testify about various aspects of the proposed relief plan. Some states use the internet to gather public comment in lieu of public meetings in an attempt to solicit greater feedback. After the state commission has approved an NPA Relief plan, which may not be one of the options considered by the industry, NANPA requests assignment of the relief NPA to implement the plan, and then convenes and facilitates the first industry implementation meeting. Using decisions made at the initial implementation meeting, the relief planner then prepares and publishes a Planning Letter (PL) on the NANPA website. The PL announces the method of relief selected, the identity of the new NPA, the schedule for relief, the new dialing plan, the test number(s) for the new area code, a rate center map, service providers that are code and/or block holders and, in the case of a split, a list of the prefixes moving to the new NPA, and those remaining in the NPA that is receiving relief.

Where NPA relief is required for an existing overlay complex, the process is slightly different. The IPD, relief planning meeting and industry consensus to recommend an overlay is not required. NANPA drafts a "direct petition" relief plan requesting approval of the overlay and recommends an implementation schedule, including a time frame for network preparation and customer education, with the new NPA effective at the end of the implementation schedule. There is no need for a permissive dialing period since local 10-digit dialing is already in place. The draft petition is reviewed and approved by the industry prior to submitting to the state commission.

NANPA's relief planners interface with Central Office Code and Pooling Administrators. Relief planners schedule and facilitate jeopardy conference calls and are involved in decisions about the timing of relief activities involving central office codes.

In 2020, NANPA:

- Initiated six new area code relief planning projects (CA 209, CA 707, CO 303/720, DC 202, GA 404/470/678/770 and NC 910)
- Filed four NPA relief petitions/applications with the appropriate state public regulatory commission (CO 303/720, DC 202, GA 404/470/678/770 and NC 910)
- Facilitated nine initial NPA implementation meetings (DC 202/771, FL 813/656 and 850/448, GA 404/470/678/770/943, OK 405/572, PA 814/582, TX 214/469/972/945, and VA 757/948 and 540/826) and, conducted four industry trigger, reset implementation timeframes, joint response and jeopardy review meetings for DC 202, CA 209, CO 303/720 and VA 757/948

In addition, NPA Relief Planners:

- Facilitated a total of 18 industry meetings, conducted entirely by web meeting
- Shadowed 85 industry NPA relief subcommittee meetings, providing status updates as needed
- Issued 81 notifications using the NNS, which included reminder notices of relief planning meetings that were distributed a few days prior to the meeting
- Issued nine jeopardy notifications via NNS
- Created and published 12 planning letters describing the details of ongoing geographic area code relief projects, as well as another four Planning Letters on behalf of the Canadian Numbering Administrator

Throughout the year, NANPA assisted numerous states concerning number administration and NPA relief planning, which included providing witness testimony, providing presentations for area code relief customer workshops and providing special reports per request from the state regulatory authorities.

4.1 Relief planning quality measurements

Industry guidelines prescribe time limitations for the completion of many NPA relief planning activities. To quantify the timeliness of its relief planning work, NANPA has established objectives for the completion of many additional activities.

Table 10: Relief Planning Performance Measurements

Performance Measurement	Instances in 2020	Total Completed On-time	% On-time Completion
Initiated NPA relief planning within 36 months of NPA exhaust.	3	3	100%
Distributed initial industry meeting notice within 8 weeks, 3 weeks or 2 months of relief meeting date.	10	10	100%
Distributed IPD within 4 weeks of relief meeting date.	1	1	100%
Distributed meeting minutes within 2 weeks or date set at the meeting.	15	15	100%
Held minutes review by date set at the meeting.	1	1	100%
Filed relief-related petitions by date set at the meeting.	4	4	100%
Requested relief NPA assignment within 1 week of regulatory approval.	7	7	100%
Issued press release within 2 weeks after relief NPA code assignment.	0	N/A	N/A
Held implementation meeting within 45 days after relief NPA code assignment.	9	9	100%
Held jeopardy meeting within 30 calendar days after jeopardy declaration.	2	2	100%
Posted planning letter or notice of industry meeting on website within 3 weeks after implementation meeting.	8	8	100%
Posted planning letter on website within 10 business days after regulatory change.	4 ²	4	100%
Distributed IPD 4 weeks after date jeopardy was declared, if relief planning was not been initiated.	0	N/A	N/A
Held industry relief planning meeting 8 weeks after date jeopardy was declared, if relief planning was not been initiated.	0	N/A	N/A
TOTALS	64	64	100%

² Two were due to state regulatory orders, one was due to changing implementation dates and one was due to a dialing issue in the Planning Letter so the Planning Letter was amended.

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In 2020, Relief Planners published four amended Planning Letters (PLs):

- On July 14, NANPA published PL-543 to update the dialing plan for the Pennsylvania 582 NPA to overlay the 814 NPA. This superceded PL-540.
- On August 20, NANPA published PL-546 to revise the implementation dates for the Virginia 948 NPA to overlay the 757 NPA. This superceded PL-536.
- On December 4, NANPA published PL-551 for Florida 448 NPA to overlay 850 NPA that extended the permissive dialing period and revised implementation and network testing intervals. This superceded PL-534.
- On December 4, NANPA published PL-552 for Florida 656 NPA to overlay the 813 NPA that extended the permissive dialing period and revised implementation and network testing intervals, This superseded PL-541

Relief planners are also measured on the promptness of their responses to voicemail and email messages. NANPA relief planners responded to 100% of customer voicemails and email messages by no later than the end of the next business day.

4.2 Relief planning process

NANPA's relief planners use the following practices to ensure an efficient and effective relief planning process:

For relief projects involving an existing area code overlay, a single NPA with only one rate center, a single NPA area and NANPA determined that only an overlay alternative will meet the guidelines, or the NPA is scheduled to transition to 10-digit dialing or has already transitioned to 10-digit dialing, NANPA skips the pre-planning IPD and NPA relief planning meeting and moves directly to the development of a draft petition recommending an overlay. This draft petition is reviewed and approved by the industry prior to NANPA filing it with the appropriate regulatory authority.

In 2020, all meetings were conducted via an on-line meeting platform, allowing participants to view relevant documentation and where appropriate, make real-time updates.

NANPA has created various tools to be used during the industry meetings. These tools include:

A "Pros & Cons" table for NPA relief planning meetings, allowing the participants to view this table via the online meeting capability and select those pros and cons applicable to the relief alternative being discussed.
A "Customer Education and Technical Milestones" table allowing participants to choose the milestones which will be followed during the implementation of the new area code.
Dialing plans and implementation schedules that permit the industry to reach a near instant decision on what information to include in the relief petition.
Excerpts from the NPA Code Relief Planning & Notification Guidelines, ATIS-0300061, to assist the industry in understanding the INC criteria for relief alternatives and in making their decisions during NPA relief meetings.
A Meeting aid with excerpts containing the latest changes from the NPA Code Relief Planning and Notification Guidelines.
An on-line meeting link in the PDF document posted in NAS NNS, in addition to including this information in the email notice.
An implementation meeting agenda template to ensure the industry addresses all relevant activities associated with the introduction of a new NPA.

At the beginning of each meeting, the NANPA relief planner explains the manner in which the consensus process will be applied in a uniform, impartial manner in the event participants choose to leave the call unannounced.

To expedite the meeting process, participants are notified in pre-meeting announcements that they are responsible for downloading and reviewing the documents to be discussed during the meeting. NANPA does not distribute documents while conference calls are in progress.

NANPA shadows industry NPA relief implementation subcommittee meetings to stay informed on the progress of the implementation as well as to gather and share knowledge gained via these activities in other similar relief efforts.

NANPA publishes daily reports on the status of NPA relief projects. In addition, during the NPA relief planning process, a state regulator or the industry may specify further action that NANPA is required to undertake based on a related event or trigger point expected to occur sometime in the future. NANPA provides a report that lists these events and associated activities on its website.

4.2.1 Streamlined Petition

In 2020, NANPA proactively developed a streamlined petition process for states where an overlay is already in place and for single NPAs which are transitioning or have transitioned to 10-digit dialing. NANPA's objective was to make the NPA relief planning process easier for states and industry when an overlay with 10-digit dialing has already been implemented in the NPA complex area and no other relief options are available.

NANPA has had two NPA areas, the Georgia 404/470/678/770 NPA complex, and the North Carolina 910 NPA, that qualified for the streamlined petition. As the first streamlined petition, NANPA discussed the proposed streamlined petition and accompanying process with the Georgia Public Service Commission (Georgia Commission) staff prior to presenting the draft to the industry at the planning meeting on August 6. The petition explains that because there are already four NPAs in this area, the only relief option is a new overlay NPA. In addition it outlines implementation targets and customer education options. The petition concludes with a request for the commission to approve it without the need for public meetings and hearings if there is no objection to the petition. NANPA filed the petition on behalf of the industry on August 28. Georgia Commission staff sent an email to all service providers on September 17, advising them that staff had reviewed the petition and placed it on the next Georgia Commission meeting agenda for approval. The Georgia Commission approved the petition on October 6, and the industry met to set implementation dates on December 2, after which NANPA assigned the new 943 NPA. The planned in-service date of the new 943 NPA is August 15, 2022.

Following similar discussions with the North Carolina Utilities Commission staff, NANPA presented a similar streamlined petition for the 910 NPA because it is one of the NPAs that will be transitioning to ten-digit local dialing in 2021 due to the implementation of 988 as an abbreviated code for the National Suicide Prevention Lifeline. NANPA filed the streamlined petition on December 23.

This streamlined option will continue to be viable in the future as a result of the transition to ten-digit dialing for the National Suicide Prevention Lifeline three-digit short code, 988. NANPA brought an issue to the Industry Numbering Committee (INC) to change NPA Code Relief Planning & Notification Guidelines, Section 5.6.2, to state that where NPA relief is required for a single NPA area and NANPA has determined that only an overlay alternative will meet the guidelines, or the NPA is scheduled to transition to ten-digit dialing or has already transitioned to tendigit dialing, then the Initial Planning Document (IPD), relief planning meeting, and industry consensus to recommend an overlay is not required because introduction of ten-digit local dialing is generally the principal hurdle for implementing an overlay.

4.2.2 Implementation of 10-digit dialing for the three-digit 988 abbreviated code for the National Suicide Prevention Lifeline:

On July 16, 2020, the FCC adopted Report and Order (FCC 20-100), requiring NANPA to develop, based on input

from covered providers, an implementation schedule, for multiple NPAs to transition to 10-digit dialing related to the designation of 988 as the 3-digit abbreviated dialing code to access the National Suicide Prevention Lifeline. NANPA worked with the FCC prior to the release of the order, providing information about the assignment of the 988 as an NXX throughout the country. In the area codes where the 988 is a working prefix and local calls are currently dialed with seven-digits, local calls will have to be dialed using all 10-digits of the phone number. This applies to all calls within the area codes that are currently dialed with 7-digits in the affected 82 area codes in 36 states.

STATE	AREA CODES AFFECTED
Alaska	907
Alabama	251
Arkansas	501
Arizona	480, 520, 928
California	209, 530, 562, 626, 650, 707, 925, 949, 951
Colorado	719, 970
Delaware	302
Florida	321 (Brevard County only), 352, 561, 941
Georgia	478, 912
Guam	671
Hawaii	808
Illinois	309, 618, 708
Indiana	219, 574
lowa	319, 515
Kansas	620, 785
Kentucky	859
Louisiana	337, 504
Michigan	616, 810, 906, 989
Minnesota	218, 952
Mississippi	662
Missouri	314, 417, 660, 816
Montana	406
Nevada	775
New Hampshire	603
New Jersey	856, 908
New Mexico	505, 575
New York	516, 607, 716, 845, 914
North Carolina	910
Ohio	440, 513
South Dakota	605
Tennessee	731, 865
Texas	254, 361, 409, 806, 830, 915, 940
Vermont	802
Virginia	276, 804
Washington	509
Wisconsin	262, 414, 608, 920

Once the order was released, NANPA immediately notified state regulators and worked on producing the 33 implementation milestones to be completed by providers, FCC, NANPA, 911 Providers and Directory Publishers up to the final deadline of July 15, 2022.

Per the milestone schedule, NANPA developed special letters and contact lists for Directory Publishers, Burglar and Fire Alarm Associations, Payphone Providers, Telecom Associations, 911 State/County Coordinators & PSAPs, Highway Call Box agencies, Tribal agencies, Elevator regulatory agencies, TTY providers, and senior organizations. In December, NANPA sent out more than 400 emails to these groups³ and completed Milestones 1, 2, and 3 on time. NANPA also developed a *Frequently Asked Questions* (FAQs) document for the website and state regulators.

During 2020, NANPA facilitated virtual meetings in August, October and November which were each attended by approximately 150 industry members and regulators.

On December 7,2020, NANPA announced it had created a dedicated webpage for "Transition to 10-Digit Dialing" for 988 that can be accessed at https://www.nationalnanpa.com/transition to 10 digit dialing for 988/index.html.

Following are highlights of activities completed in compliance with that Order:

Industry Meetings:

- 1. <u>August 14, 2020</u> Held initial industry meeting to comply with mandate to work with covered providers to develop implementation schedule within 30 days of Release of FCC 20-100.
- 2. October 1, 2020 Meeting held to review dialing plans and sample customer notices from August 14, 2020 meeting.
- 3. November 20, 2020 Held meeting to review Sample Special Letters and milestones expected to be confirmed to NANPA. NANPA also created new web page accessed from homepage, devoted to "Transition to 10-Digit Dialing for 988", which includes background, FAQs, sample customer letters, sample "special letters", tracking of milestones.

• NAS Notifications:

- 1. <u>July 28, 2020</u> Sent two NANP Notifications with a draft implementation schedule and milestones for discussion at August 14, 2020 industry meeting. Forwarded NANPA Notification to affected states.
- 2. <u>July 30, 2020</u> Sent two NANP Notifications regarding accessing 988 documentation in NAS & alternative recommendations to Service Providers operating in the multiple NPAs required to transition to 10-digit dialing for 988. Forwarded NANP notification to the affected states.
- 3. <u>August 5, 2020</u> Sent two notifications with industry recommendation related to the August 14, 2020 industry meeting, including the excel spreadsheet of proposed timing and milestones. Forwarded the notifications to the affected states.
- 4. <u>August 12, 2020</u> Sent a reminder notice of August 14, 2020 meeting and forwarded the notice to the affected states.
- 5. <u>August 17, 2020</u> Published the Draft Minutes of the August 14, 2020 Meeting for transition to 10-digit dialing for the FCC Designation of 988 as 3-digit access to National Suicide Prevention Hotline and sent a NANP Notification as well as forwarded the notification to the affected states.
- 6. <u>August 18, 2020</u> Sent a NANP Notification as well as forwarded the notification to the affected states about the publishing of Planning Letter 544.
- 7. <u>August 25, 2020</u> Final Meeting Minutes from August 14, 2020 meeting published to NANP Notification System (NNS). Sent a NANP Notification as well as forwarded the notification to the affected states.

³ Some emails included hundreds of recipients. 2020 NANPA Annual Report

- 8. <u>September 18, 2020</u> –Sent a notice on October 1, 2020 meeting and forwarded the notice to the affected states.
- 9. <u>September 29, 2020</u> –Sent a reminder notice on October 1, 2020 meeting and forwarded the notice to the affected states.
- 10. October 12, 2020 Sent a NANP Notification that the Draft Minutes of the October 1, 2020 meeting for transition to 10-digit dialing for the FCC Designation of 988 as 3-digit access to National Suicide Prevention Hotline were published as well as forwarded the notification to the affected states.
- 11. October 19, 2020 Sent a NANP Notification about the final Minutes of October 1, 2020 meeting published as well as forwarding the notification to the affected states.
- 12. October 23, 2020 Sent a NANP Notification about the finalization of INC Issue 895 and change to Section 5.6.2 of the NPA Code Relief Planning & Notification Guidelines to state that where NPA relief is required for a single NPA area and NANPA has determined that only an overlay alternative will meet the guidelines, or the NPA is scheduled to transition to 10-digit dialing or has already transitioned to 10-digit dialing, then the Initial Planning Document, relief planning meeting, and industry consensus to recommend an overlay is not required. Forwarded the info to the affected states.
- 13. November 4, 2020 Sent a NANP notification for the November 20, 2020 meeting to review progress on Milestone 3, Special Letters to be sent and identification of milestones to be confirmed to NANPA via 988@somos.com and forwarded the notification to the affected states.
- 14. <u>November 16, 2020</u> Sent reminder NANP notification for November 20, 2020 meeting to review progress on Milestone 3, Special Letters to be sent and identification of milestones to be confirmed to NANPA via 988@somos.com and forwarded the notification to the affected states.
- 15. <u>November 30, 2020</u> Published the Draft Minutes of the November 20, 2020 meeting for transition to 10-digit dialing for the FCC Designation of 988 as 3-digit access to National Suicide Prevention Hotline and sent a NANP Notification as well as forwarded the notification to the affected states.
- 16. <u>December 7, 2020</u> Sent a NANP notification announcing the web page for the "Transition to 10-Digit Dialing" for 988 that can be accessed at https://www.nationalnanpa.com/transition_to_10_digit_dialing_for_988/index.html forwarded the notification to the affected states.
- 17. <u>December 11, 2020</u> Published the Final Minutes of the November 20, 2020 meeting for transition to 10-digit dialing for the FCC Designation of 988 as 3-digit access to National Suicide Prevention Hotline and sent a NANP Notification as well as forwarded the notification to the affected states.
- 18. <u>December 30, 2020</u> Sent a NANP notification for the January 7, 2021 meeting to review the status/completion of Milestones 3 & 4, review status of 701-988 return (North Dakota), review milestones for which NANPA expects written confirmation of completion and review upcoming milestones and forwarded the notification to the affected states.

Website Publications:

1. August 18, 2020 – Published Planning Letter 544 to https://www.nationalnanpa.com/pdf/PL 544.pdf.

• Regulatory:

- 1. July 17, 2020 Sent notification to all state regulators about the FCC order.
- 2. <u>July 22, 2020</u> Sent notification to the affected states with details of NPAs affected.
- 3. <u>August 24, 2020</u> Responded to first inquiry from North Dakota Commission regarding elimination of the 701 NPA from the 10-digit-dialing requirement. Commission staff began taking steps to get the 988 NXX code returned.
- 4. November 19, 2020 Sent individual information sheets and Frequently Asked Questions (FAQ) including maps of affected area codes for use in answering questions from consumers regarding the transition to 10-digit local dialing for the implementation of the abbreviated dialing code 988 for the National Suicide Prevention Lifeline to each of the affected states [except North Dakota in anticipation]

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- of the return of the 988 NXX].
- 5. <u>December 14, 2020</u> The Virginia Corporation Commission issued a press release about the transition to 10-digit-dialing in the 804 and 276 area codes.

• NANPA Milestones – all completed ahead or on schedule:

- 1. <u>August 14, 2020</u> Completed Milestone 1. NANPA hosted meeting with all carriers operating in the 82 NPAs to develop an implementation schedule within 30 days of Release of FCC 20-100.
- 2. October 1, 2020: Completed Milestone 2. Developed and supplied template for first customer notification about the permissive dialing "effective date" so customers can start practicing dialing 10 digits and reprogramming CPE.
- October 1, 2020 Completed Milestone 17. Developed and supplied a template for second customer
 notification about the upcoming mandatory 10-digit dialing "effective date" to remind customers to
 continue practicing dialing 10 digits and to complete reprogramming CPE by the mandatory 10-digit
 dialing effective date. Message must remind customers of what they need to do to prep for mandatory
 10DD.
- 4. December 2, 2020 December 24, 2020 Completed Milestone 3. NANPA drafted and sent over 400 special letters tailored to industry-type and state, as well as for national organizations, including 911 providers and PSAPs, directory publishers, TTY Providers, senior organizations, payphone providers, highway call box agencies, burglar and fire alarm companies and associations, telecom associations, elevator agencies and associations, and tribal agencies in all of the affected area codes [except North Dakota 701 in anticipation of the return of the 988 NXX code].

• Other:

- 1. October 23, 2020: NANPA successfully brought an issue to INC, Issue 895, to change Section 5.6.2 of the NPA Code Relief Planning & Notification Guidelines to state that where NPA relief is required for a single NPA area and NANPA has determined that only an overlay alternative will meet the guidelines, or the NPA is scheduled to transition to 10-digit dialing or has already transitioned to 10-digit dialing, then the Initial Planning Document, relief planning meeting, and industry consensus to recommend an overlay is not required.
- 2. December 17, 2020 Timeline for the return of North Dakota 988 NXX code finalized.
- 3. December 18, 2020 Responded to a request for a Spanish version of the customer notice.

5 NUMBERING RESOURCE UTILIZATION/FORECAST

NANPA is responsible for the collection and reporting of utilization and forecast data, known as Numbering Resource Utilization/Forecast (NRUF) Reporting. Service providers are required to report utilization and forecast data twice a year to NANPA. Utilization data includes the quantity of assigned, intermediate, aging, administrative and reserved numbers. Forecast data typically is comprised of a five-year forecast of the quantity of thousands-blocks and/or codes by rate center. The FCC also requires access to disaggregated NRUF data by state regulatory commissions for heightened reporting enforcement, including the responsibility to withhold numbering resources from service providers that fail to file utilization and forecast reports.

NANPA collects, sorts and stores NRUF data submitted by service providers. Data may be submitted via NAS, email (i.e., ExcelTM workbook), Electronic File Transfer (EFT), compact disc or paper. In 2020, NANPA processed 11,840 NRUF submissions (See Table 12) and provided a confirmation of receipt, to include any identified errors, within seven calendar days. In addition to processing submissions, NRUF administration also responded to 969 telephone calls and email inquiries.

Along with collecting this information, NANPA makes available to states on-line access to service-provider specific and aggregated utilization and forecast data. In addition, state reports containing NRUF information are offered to

those states that desire a snapshot of utilization and forecast data for the area codes within their respective states. This data is provided via email or USB and contains several queries that assist in the analysis of the data. NANPA also provided 49 reports to the states, covering both NRUF submission cycles in 2020.

In 2020, NANPA sent industry notifications to assist service providers in accurately filing their NRUF including notifications on the need to maintain current NAS profile information, approaching NRUF filing due dates, and the treatment of aging numbers in areas hit by natural disasters. NANPA updated NRUF information on the NANPA website to ensure that user guides and other documentation were up-to-date. NANPA also worked closely with federal and state regulatory contacts on the completeness and accuracy of service provider NRUF filings.

5.1 Volume of NRUF Submissions and Associated Items

Following is a table that illustrates the volume of NRUF submissions as well as other items tracked by NANPA that are associated with the NRUF process.

Table 11: Summary of the volume of NRUF submissions and associated items for 2020

MEASUREMENTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Form 502 Email Submissions	2,292	560	144	67	44	47	2,429	413	188	131	40	49	6,404
Form 502 FTP Submissions	724	20	0	0	0	0	679	19	0	2	0	0	1,444
Form 502 Web Submissions	1,064	241	209	130	126	119	1,004	273	176	228	121	171	3,862
Total Form 502 Submissions	4,080	821	353	197	170	166	4,112	705	364	361	161	220	11,710
Error Notifications Sent	334	117	38	10	8	18	341	89	56	27	6	14	1,058
Missing Utilization Notifications Sent	0	222	0	0	0	0	0	235	1	0	0	0	458
Anomalous Notifications Sent	0	3	263	17	0	0	0	0	234	43	0	0	560
Confirmation Notifications Sent	2,668	462	106	57	36	29	2,763	343	131	106	34	35	6,770
Phone Calls/ Emails Received	211	98	94	46	20	24	182	69	121	65	19	20	969
State Reports Created	0	0	23	2	1	1	0	1	20	0	0	1	49
Job Aids Created/Revised	0	0	0	0	2	0	0	0	0	0	2	0	4

5.2 2020 NRUF Exhaust Forecasts

One of the primary uses for NRUF data is to support forecasting for the projected exhaust for each geographic NPA as well as the exhaust date for the 5XX NPA and the entire NANP.

The methodology used to produce the 2020 NPA exhaust projections was the same as the methodology NANPA used in the past several years to project area code exhaust. This methodology had previously been reviewed with the NANC and the FCC. In reporting the NPA exhaust

projections, NANPA provides five previously-projected NPA exhaust time frames in order to view the changes that have occurred over time.

NANPA projects NPA and NANP exhaust on a semi-annual basis. Exhaust projections are available at the end of April and October. Throughout the year NANPA monitors central office code assignment rates in all area codes and adjusts the projected NPA exhaust date when necessary. This is known as a "Delta NRUF." NANPA issued revised "Delta NRUF" exhaust dates twice in 2020: in March and December.

Detailed projections can be found in Attachments 6, 7 and 8 to this annual report.

5.2.1 March 2020 Delta NRUF:

Locality	NPA	Revised Exhaust Date	Oct19 Exhaust Date	Change in Quarters +/-	Reason
District of Columbia (3/12/20)	202	3Q2022	2Q2023	-3	Increase in code assignments
Pennsylvania (3/12/20)	484/6 10	2Q2024	1Q2023	+5	Decrease in code assignments
Virginia (3/12/20)	757	2Q2023	1Q2022	+5	Decrease in code assignments
North Carolina (3/12/20)	910	1Q2024	1Q2023	+4	Decrease in code assignments

5.2.2 December 2020 Delta NRUF:

Locality	NPA	Revised Exhaust Date	Oct20 Exhaust Date	Change in Quarters +/-	Reason
California (12/15/20)	209	4Q2022	4Q2023	-4	Increase in code assignments

6 OTHER NANPA SERVICES

NANPA is required to offer specific services as enterprise services. Enterprise services are additional services that may be provided for a specific fee by NANPA.

6.1 AOCN enterprise service

Upon request, NANPA will enter data for a service provider's assigned central office codes and thousands-blocks into the database used by the industry to configure the network for the proper routing and rating of calls. NANPA is permitted to charge a fee and a contract between the service provider and NANPA is required.

Although NANPA is required to provide the AOCN service, service providers are not required to select NANPA. The service provider may select another company to enter this information or may elect to enter the data themselves.

Providers of this data entry service are identified by numbers, called Administrative Operating Company Numbers (AOCNs). Over time, the company providing the data input service has come to be called the service provider's "AOCN."

6.2 Entry of Paper Submissions of Resource Applications

NANPA will enter paper submissions (faxed, scanned or mailed copies) of resource applications into NAS on behalf of the applicant. This includes the application form as well as the in-service confirmation forms (e.g., for central office code administration, the Part 1 and Part 4 forms). In 2020, NANPA processed no paper resource applications.

6.3 Entry of Paper NRUF Submissions

NANPA will enter paper submissions (faxed, scanned or mailed copies) of the NRUF Form 502 into NAS on behalf of the service provider. Normally, respondents submit data through email, FTP or on-line via NAS. For a fee, NANPA will accept and input data submitted by mail, scan or by fax. In 2020, no service provider used this service.

6.4 NANPA Testimony in State Regulatory Hearings

NANPA will prepare, file and present oral and written testimony at no charge. Should the state require a NANPA witness(es) to attend the hearing in person, NANPA will require the state to reimburse it for associated expenses (e.g., travel, lodging, meals, local transportation, etc.) for the witness(es) and legal counsel. If the state requires local counsel to represent NANPA at state regulatory hearings, these costs will be passed along to the state. In 2020, NANPA provided testimony on one occasion (VA 540 NPA). In addition, NANPA attended two public meetings for the Florida 813 NPA relief project and presented at a virtual community hearing for the District of Columbia 202 NPA relief project.

6.5 Customized Reports

NANPA offers customized reports for publicly-available NPA, central office code and other resource assignment data. Specifically, NANPA can provide publicly-available data in different formats for a reasonable fee based on its costs. NANPA negotiates a price with each requestor. Pricing for this service is based upon report development time and effort, frequency, delivery mechanism and other variables. In 2020, NANPA created no customized reports.

6.6 INC Participation

NANPA was an active participant and contributor to the INC in 2020, introducing six issues and submitting five contributions. A list of NANPA-championed issues is shown in Table 15. NANPA also continued to provide the INC with semi-annual updates on NANP resources in addition to written communications concerning the approval for certain reclamations.

Table 12: INC Issues Introduced in 2020

Issue Number	Description
846	Revisit Assignment of 800-855 line numbers and the 800-855 Assignment Guidelines was accepted at INC167 - moved to IC during INC170/July 2020 INC meeting and will result in NANPA Change Order
886	Updates to CIC Assignment Guidelines, Sections 2.2, Section 2.2.3 and CIC Application Form Page 32 was accepted at INC168 Final Closure 10/23/2020
888	Add language to the TBCOCAG to address Company Code Reclamation and to direct NANPA/PA to share Reclamation information for Abandoned Numbering Resources (Final Closure 8/21/20)
892	Add language to Sections 11.2.11.1 and 11.3.10.1 of the TBCOCAG that was inadvertently removed during the combining of the TBPAG and COCAG.

Issue Number	Description
895	NPA Relief associated with NPAs transitioning to 10-digit dialing – updated NPA Relief Planning and Notification Guidelines on 10/23/20
896	Update Section 5.4.3 to include the customer letter requirement for dedicated customer requests of the TBCOCAG to align with the existing process and the text in 5.3.3 (Final Closure 1/8/21)

6.7 NANPA website

The NANPA website, www.nanpa.com, is the primary public source for numbering information. It provides a complete description of the different services offered by NANPA. These services include resource administration, area code relief planning, NRUF data collection and analysis and enterprise services. All of the various numbering resources administered by NANPA, including a description of their use and links to their associated administration guidelines, can be easily accessed via the website. Area code maps, planning letters, FCC numbering orders and other NANPA publications are readily available. Contact information for NANPA staff members is posted on the website. The NANPA website is also the gateway into NAS.

Popular on the website are the numerous downloadable reports on the various resources NANPA administers. Many of the reports are available real-time, providing the most up-to-date source on resource availability.

Some of the frequently-accessed reports include the following:

	The Central Office Code Availability and Utilization reports provide up-to-date lists of all central office codes generally available or unavailable for assignment by geographic area
	code. The data is also available by NPA in a downloadable format (text and Excel TM).
	The Central Office Code Assignment Activity records provide the quantity of central
	office codes assigned and returned for each geographic area code on a monthly basis.
	The Part 3 Disconnect report provides a daily listing of central office codes with a
_	pending disconnect date.
	The Central Office Code Activity Status report provides the total number of new
	applications processed by NANPA by month for each state, including assignments,
	denials and return requests.
	The 5XX-NXX Availability, Aging and Utilized Reports provide real-time lists of all 5XX-NXX
	codes available or unavailable for assignment by non-geographic area code. The data is
	also available by NPA in a downloadable format (text and Excel™).
	Downloadable reports containing assignment information for CICs and 900 resources.
	Geographic Area Codes sorted by number and location.
	Planned area codes not yet in service report as well as area codes introduced over the last
	ten years.
	U.S. NPA dialing plans and area codes requiring ten-digit dialing.
	Search for Area Code listings query and a City/Town/NPA search.
	An NPA database (CSV file) containing information about all NPAs.
	The NPA Relief Activity Status report provides information on all active and pending
	NPA relief projects in the United States.
	The NPA Relief Planning Trigger report identifies specific actions to be initiated
	based on a related event or trigger point expected to occur sometime in the
	future.

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The NPAs Exhausting in the Next 36 Months report identifies the geographic area codes
projected to exhaust within the next three years and provides a current status of the relief
planning and/or implementation process.

Throughout the website, there are various documents available to assist the user. As an example, for NRUF reporting, the following documentation is available: NRUF Form 502, Geographic and Non-Geographic Job Aids, Rate Center Abbreviations, NRUF Preparation Checklist and list of common errors when completing the Form 502. Similar types of documents are available for CO Code Administration and Area Code Relief Planning. NAS User Guides, which provide detailed instructions on the use of the system, are continuously updated and posted on the website. Attachment 9 provides a listing of where important numbering information is available on the internet.

The home page of the website offers links to recent information or activity, under the "What's New" section. Also included is a section called "NANPA Fast Track," containing links to the most visited pages on the website. Included under the "NANPA Fast Track" section is a capability that allows the user to search for information about a specific NPA. Information that can be found includes if and/or when the area code was assigned, the location of the NPA, the in-service date where applicable, the NPA that it relieved, the time zone associated with the area code, the NPA dialing plan and other valuable data.

Enhancements and updates made to the website in 2020 include:

Updated the <i>State Safety Valve Process Quick Sheet</i> that identifies the states that participate in the safety valve process.
Updated the NRUF Geographic and Non Geographic Job Aids and the NRUF Common Error and Fixes. Located under NRUF/Submission Methods and Resources
Updated the Homepage "What's New Section" on a monthly basis with recent events (e.g. NPA forecasts, new Planning Letters, monthlystatistics)
Added a section dedicated to the transition to ten-digit local dialing in 82 NPAs in 36 states for the three-digit abbreviated code, 988, for the National Suicide Prevention Lifeline. Located here are implementation milestones, Planning Letter 556, sample customer letters, and Frequently Asked Questions (FAQS).

6.8 Support for NANP countries other than the U.S.

The NANP is unique among the world's telecommunications numbering plans in that it serves 20 independent countries. These countries include the United States and its territories, Canada, Bermuda, Anguilla, Antigua and Barbuda, the Bahamas, Barbados, the British Virgin Islands, the Cayman Islands, Dominica, the Dominican Republic, Grenada, Jamaica, Montserrat, Sint Maarten, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, and Turks and Caicos.

One of NANPA's roles is to coordinate the assignment of numbering resources that must be shared equitably by all of the participating countries. Area codes are, of course, the primary shared resource, but there are others. For example, entities in the U.S., Canada, Anguilla, St. Maarten and Bermuda use CICs. U.S. and Canadian entities offer 900 services and thus share the

supply of 9YY-NXX codes. NANPA may interface with other countries' national numbering administrators during the resource request and assignment process. Normally, the national administrator receives the requests, ensures that their country's regulatory requirements are met, and forwards the requests to NANPA. NANPA verifies that industry requirements are met and assigns the resources if appropriate to do so.

6.9 Support to the FCC, state commissions and the NANC

In order to ensure the proper and efficient administration of NANP resources, NANPA communicates regularly with the FCC, state regulatory authorities and the NANC in support of their needs for numbering information.

Ongoing communications between NANPA and the FCC are necessary to ensure proper administration and management of NANP resources. NANPA provides numerous reports and other documentation to the FCC as required by its contract. These reports consist of monthly readouts on CO code assignments, assignment of other NANP resources such as CICs and 5XX-NXX codes, area code relief planning projects, NAS performance and NANPA staffing. NANPA provides the FCC with service provider-specific utilization and forecast data submitted by carriers via the NRUF reporting process and reviews with the FCC issues concerning authorized access to numbering resources. As necessary, NANPA met with the FCC to discuss numbering in general and other activities impacting number resource use and optimization. NANPA also provided the results of the semi-annual NPA, 5XX Exhaust and NANP exhaust analysis and notified the FCC of the potential exhaust of the specific NPA resources.

NANPA continued to support state regulatory authorities by providing them with the number utilization data collected via semi-annual NRUF reporting and assisted state regulators in following up with the appropriate service providers with regard to this data. This included providing real-time access to NRUF data via NAS, with various reports and queries available to search and analyze the data, as well as providing ongoing assistance with using the NRUF reporting capabilities available to them in the system. Throughout the year, NANPA worked with state regulatory authorities concerning the reclamation of assigned resources. Activity included coordinating with the states to identify abandoned central office codes as well as transferring assigned codes to avoid opening new codes for LRN purposes.

NANPA continued to supply state regulators with central office code Part 1 and Part 3 reports, which provided a listing on a daily, weekly or monthly basis of all Part 1s and Part 3s processed by NANPA for their respective area codes. These reports include the Pooling Administration System tracking number, the Parent Company Name and Parent Company Operating Company Number associated with the application and the application type (e.g., LRN request, pool replenishment, dedicated customer).

NANPA interfaced with state regulators to address specific issues or concerns associated with individual service provider requests for resources. For example, as a specific NPA exhaust approached, NANPA ensured the state regulators were kept informed of the latest exhaust projections and provided updated information concerning NPA relief alternatives, to include refreshing the projected lives of proposed relief alternatives. NANPA representatives and state commissions regularly discuss specific activity and issues associated with active, pending or planned NPA relief projects. NANPA met with state commission staffs to review the status of NPA

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relief planning within their respective states and discuss number administration issues.

NANPA continued to participate in quarterly meetings with the state commission staffs, providing updates on its activities and soliciting input on any numbering- related matters. This opportunity was used to review internal processes and ensure a complete understanding of the responsibilities of NANPA, service providers and the state regulators.

NANPA provided reports to the NANC that highlighted central office code assignment activity, NPA relief planning efforts, status reports on other NANP resources administered by NANPA as well as NAS performance.

NANPA participated in meetings with the Numbering Administration Oversight Working Group (NAOWG) providing reports on performance measurements, NAS updates and trouble tickets, and a review of relevant numbering activities.

Finally, NANPA continued to work with both the FCC and NANC working groups to manage the NANC-Chair web page, which is used for posting NANC and subtending working group documentation.

Attachment 1 – Area Code Inventory

NPA codes are in NXX format, where N is any digit 2-9 and X is any digit 0-9, yielding 8*10*10 = 800 combinations. Of these, 121 are not assignable or have been set aside by the Industry Numbering Committee (INC) for special purposes. These 121 unassignable codes are listed in the table below:

TYPE	DESCRIPTION	TOTAL
N11 (8)	Abbreviated dialing	8
N9X (80)	Reserved for use during expansion of the NANP	80
37X and 96X (20)	Reserved by the INC for future use where contiguous blocks of codes are required	20
555 and 950 (2)	Not used as NPA codes to avoid possible confusion	2
880-887 and 889 (9)	Set aside for next series of toll-free codes.	9
456	Not available for assignment until 2022.	1
988	Set aside for National Suicide Prevenion Lifeline three-digit abbreviated code	1

Subtracting 121 from 800 leaves 679 assignable NPA codes. Of these, 440 have been assigned. Of the 440 assigned, 416 are in service and 26 are awaiting implementation. Of the 416 NPA codes in service, 394 are geographic and 22 are non-geographic.

Of the 679 assignable NPA codes, 237 are currently unassigned. Of these codes, 41 are easily recognizable codes (ERCs) currently allocated for non-geographic use, and 196 are general-purpose codes. Of these 196, 156 are reserved, ¹ leaving 40 available, unreserved, general-purpose codes.

Of the 40 unassigned ERCs, 5 are reserved, 2 leaving 35 available.

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¹These codes have been designated for the relief of NPAs that are forecasted to exhaust in the next ten years. Also included are 22 NPAs reserved for future 5XX-NXX expansion (526, 527, 528, 529, 532, 538, 542, 543, 545, 547, 549, 552, 553, 554, 556, 569, 578, 589, 550, 535, 546, and 558) as well as NPA codes reserved for use in Canada at the request of the CRTC.

²These five codes are reserved for Canada (633, 644, 655, 677 and 688). Canada has also reserved 699, which is counted as an expansion code.

Future geographic NPA codes are listed below.

		1	1	ı
221	363	528	648	821
230	369	529	652	823
232	381	532	653	824
235	382	535	654	827
237	383	536	663	834
238	384	537	665	835
241	387	538	668	836
243	389	542	673	837
245	420	543	674	841
247	421	545	675	842
257	426	546	676	846
258	427	547	683	851
259	429	549	685	852
261	436	550	686	853
263	439	552	687	861
265	446	553	723	871
271	449	554	728	874
273	451	556	729	875
275	452	558	735	921
278	453	560	736	923
280	454	565	738	924
282	457	568	739	926
285	459	569	741	927
286	460	576	742	932
287	461	578	745	935
324	462	583	746	942
328	465	584	748	946
329	467	589	749	953
335	468	621	750	957
338	471	624	751	958
342	472	625	752	974
348	476	627	753	976
349	481	632	756	981
350	482	634	759	982
353	483	635	761	983
356	483	635	761	987
357	486	638	768	
358	487	642	776	
359 362	489 527	643 645	783 789	

Attachment 2 – Geographic NPAs Sorted by Location

COUNTRY	LOCATION	NPA
ANGUILLA	ANGUILLA	264
ANTIGUA/BARBUDA	ANTIGUA/BARBUDA	268
BAHAMAS	BAHAMAS	242
BARBADOS	BARBADOS	246
BERMUDA	BERMUDA	441
BRITISH VIRGIN ISLANDS	BRITISH VIRGIN ISLANDS	284
CANADA	ALBERTA	403
CANADA	ALBERTA	587
CANADA	ALBERTA	780
CANADA	ALBERTA	825
CANADA	BRITISH COLUMBIA	236
CANADA	BRITISH COLUMBIA	250
CANADA	BRITISH COLUMBIA	604
CANADA	BRITISH COLUMBIA	672
CANADA	BRITISH COLUMBIA	778
CANADA	MANITOBA	204
CANADA	MANITOBA	431
CANADA	NEW BRUNSWICK	506
CANADA	NEWFOUNDLAND AND LABRADOR	709
CANADA	NOVA SCOTIA - PRINCE EDWARD ISLAND	782
CANADA	NOVA SCOTIA - PRINCE EDWARD ISLAND	902
CANADA	ONTARIO	226
CANADA	ONTARIO	249
CANADA	ONTARIO	289
CANADA	ONTARIO	343
CANADA	ONTARIO	365
CANADA	ONTARIO	416
CANADA	ONTARIO	437
CANADA	ONTARIO	519
CANADA	ONTARIO	548
CANADA	ONTARIO	613
CANADA	ONTARIO	647
CANADA	ONTARIO	705
CANADA	ONTARIO	807
CANADA	ONTARIO	905
CANADA	QUEBEC	367
CANADA	QUEBEC	418

COUNTRY	LOCATION	NPA
CANADA	QUEBEC	438
CANADA	QUEBEC	450
CANADA	QUEBEC	514
CANADA	QUEBEC	579
CANADA	QUEBEC	581
CANADA	QUEBEC	819
CANADA	QUEBEC	873
CANADA	SASKATCHEWAN	306
CANADA	SASKATCHEWAN	639
CANADA	YUKON-NW TERR NUNAVUT	867
CAYMAN ISLANDS	CAYMAN ISLANDS	345
COMMONWEALTH OF THE NORTH	COMMONWEALTH OF THE NORTH MARIANA	670
MARIANA ISLANDS DOMINICA	ISLANDS DOMINICA	767
DOMINICAN REPUBLIC	DOMINICA DOMINICAN REPUBLIC	809
DOMINICAN REPUBLIC	DOMINICAN REPUBLIC	
DOMINICAN REPUBLIC		829
	DOMINICAN REPUBLIC	849
GRENADA	GRENADA	473
JAMAICA	JAMAICA	658
JAMAICA	JAMAICA	876
MONTSERRAT	MONTSERRAT	664
SINT MAARTEN	SINT MAARTEN	721
ST. KITTS & NEVIS	ST. KITTS & NEVIS	869
ST. LUCIA	ST. LUCIA	758
ST. VINCENT & GRENADINES	ST. VINCENT & GRENADINES	784
TRINIDAD & TOBAGO	TRINIDAD & TOBAGO	868
TURKS & CAICOS ISLANDS	TURKS & CAICOS ISLANDS	649
US	AK	907
US	AL	205
US	AL	251
US	AL	256
US	AL	334
US	AL	659
US	AL	938
US	AR	479
US	AR	501
US	AR	870
US	AS	684
US	AZ	480
US	AZ	520
US	AZ	602
US	AZ	623
US	AZ	928
US	CA	209

COUNTRY	LOCATION	NPA
US	CA	213
US	CA	279
US	CA	310
US	CA	323
US	CA	341
US	CA	408
US	CA	415
US	CA	424
US	CA	442
US	CA	510
US	CA	530
US	CA	559
US	CA	562
US	CA	619
US	CA	626
US	CA	628
US	CA	650
US	CA	657
US	CA	661
US	CA	669
US	CA	707
US	CA	714
US	CA	747
US	CA	760
US	CA	805
US	CA	818
US	CA	820
US	CA	831
US	CA	858
US	CA	909
US	CA	916
US	CA	925
US	CA	949
US	CA	951
US	СО	303
US	СО	719
US	СО	720
US	СО	970
US	СТ	203
US	СТ	475
US	СТ	860
US	СТ	959
US	DC	202

COUNTRY	LOCATION	NPA
US	DE	302
US	FL	239
US	FL	305
US	FL	321
US	FL	352
US	FL	386
US	FL	407
US	FL	561
US	FL	689
US	FL	727
US	FL	754
US	FL	772
US	FL	786
US	FL	813
US	FL	850
US	FL	863
US	FL	904
US	FL	941
US	FL	954
US	GA	229
US	GA	404
US	GA	470
US	GA	478
US	GA	678
US	GA	706
US	GA	762
US	GA	770
US	GA	912
US	GU	671
US	HI	808
US	IA	319
US	IA	515
US	IA	563
US	IA	641
US	IA	712
US	ID	208
US	ID	986
US	IL	217
US	IL	224
US	IL	309
US	IL	312
US	IL	331
US	IL	618

COUNTRY	LOCATION	NPA
US	IL	630
US	IL	708
US	IL	773
US	IL	779
US	IL	815
US	IL	847
US	IL	872
US	IN	219
US	IN	260
US	IN	317
US	IN	463
US	IN	574
US	IN	765
US	IN	812
US	IN	930
US	KS	316
US	KS	620
US	KS	785
US	KS	913
US	KY	270
US	KY	364
US	KY	502
US	KY	606
US	KY	859
US	LA	225
US	LA	318
US	LA	337
US	LA	504
US	LA	985
US	MA	339
US	MA	351
US	MA	413
US	MA	508
US	MA	617
US	MA	774
US	MA	781
US	MA	857
US	MA	978
US	MD	240
US	MD	301
US	MD	410
US	MD	443
US	MD	667

COUNTRY	LOCATION	NPA
US	ME	207
US	MI	231
US	MI	248
US	MI	269
US	MI	313
US	MI	517
US	MI	586
US	MI	616
US	MI	734
US	MI	810
US	MI	906
US	MI	947
US	MI	989
US	MN	218
US	MN	320
US	MN	507
US	MN	612
US	MN	651
US	MN	763
US	MN	952
US	MO	314
US	MO	417
US	MO	573
US	MO	636
US	MO	660
US	MO	816
US	MS	228
US	MS	601
US	MS	662
US	MS	769
US	MT	406
US	NC	252
US	NC	336
US	NC	704
US	NC	743
US	NC	828
US	NC	910
US	NC	919
US	NC	980
US	NC	984
US	ND	701
US	NE	308
US	NE	402

COUNTRY	LOCATION	NPA
US	NE	531
US	NH	603
US	NJ	201
US	NJ	551
US	NJ	609
US	NJ	640
US	NJ	732
US	NJ	848
US	NJ	856
US	NJ	862
US	NJ	908
US	NJ	973
US	NM	505
US	NM	575
US	NV	702
US	NV	725
US	NV	775
US	NY	212
US	NY	315
US	NY	332
US	NY	347
US	NY	516
US	NY	518
US	NY	585
US	NY	607
US	NY	631
US	NY	646
US	NY	680
US	NY	716
US	NY	718
US	NY	838
US	NY	845
US	NY	914
US	NY	917
US	NY	929
US	NY	934
US	ОН	216
US	ОН	220
US	ОН	234
US	ОН	326
US	ОН	330
US	ОН	380
US	ОН	419

COUNTRY	LOCATION	NPA
US	ОН	440
US	ОН	513
US	ОН	567
US	ОН	614
US	ОН	740
US	ОН	937
US	ОК	405
US	ОК	539
US	OK	580
US	OK	918
US	OR	458
US	OR	503
US	OR	541
US	OR	971
US	PA	215
US	PA	223
US	PA	267
US	PA	272
US	PA	412
US	PA	445
US	PA	484
US	PA	570
US	PA	610
US	PA	717
US	PA	724
US	PA	814
US	PA	878
US	PUERTO RICO	787
US	PUERTO RICO	939
US	RI	401
US	SC	803
US	SC	839
US	SC	843
US	SC	854
US	SC	864
US	SD	605
US	TN	423
US	TN	615
US	TN	629
US	TN	731
US	TN	865
US	TN	901
US	TN	931

COUNTRY	LOCATION	NPA
US	TX	210
US	TX	214
US	TX	254
US	TX	281
US	TX	325
US	TX	346
US	TX	361
US	TX	409
US	TX	430
US	TX	432
US	TX	469
US	TX	512
US	TX	682
US	TX	713
US	TX	726
US	TX	737
US	TX	806
US	TX	817
US	TX	830
US	TX	832
US	TX	903
US	TX	915
US	TX	936
US	TX	940
US	TX	945
US	TX	956
US	TX	972
US	TX	979
US	UT	385
US	UT	435
US	UT	801
US	VA	276
US	VA	434
US	VA	540
US	VA	571
US	VA	703
US	VA	757
US	VA	804
US	VT	802
US	WA	206
US	WA	253
US	WA	360
US	WA	425

COUNTRY	LOCATION	NPA
US	WA	509
US	WA	564
US	WI	262
US	WI	414
US	WI	534
US	WI	608
US	WI	715
US	WI	920
US	WV	304
US	WV	681
US	WY	307
US VIRGIN ISLANDS	US VIRGIN ISLANDS	340

Note: All geographic NPAs were in service as of December 31, 2020.

Attachment 3 – Geographic NPAs Sorted Numerically

NPA	COUNTRY	LOCATION
201	US	NJ
202	US	DC
203	US	СТ
204	CANADA	MANITOBA
205	US	AL
206	US	WA
207	US	ME
208	US	ID
209	US	CA
210	US	TX
212	US	NY
213	US	CA
214	US	TX
215	US	PA
216	US	ОН
217	US	IL
218	US	MN
219	US	IN
220	US	ОН
223	US	PA
224	US	IL
225	US	LA
226	CANADA	ONTARIO
228	US	MS
229	US	GA
231	US	MI
234	US	ОН
236	CANADA	BRITISH COLUMBIA
239	US	FL
240	US	MD
242	BAHAMAS	BAHAMAS
246	BARBADOS	BARBADOS
248	US	MI
249	CANADA	ONTARIO
250	CANADA	BRITISH COLUMBIA
251	US	AL
252	US	NC
253	US	WA

NPA	COUNTRY	LOCATION
254	US	TX
256	US	AL
260	US	IN
262	US	WI
264	ANGUILLA	ANGUILLA
267	US	PA
268	ANTIGUA/BARBUDA	ANTIGUA/BARBUDA
269	US	MI
270	US	KY
272	US	PA
276	US	VA
279	US	CA
281	US	TX
284	BRITISH VIRGIN ISLANDS	BRITISH VIRGIN ISLANDS
289	CANADA	ONTARIO
301	US	MD
302	US	DE
303	US	СО
304	US	WV
305	US	FL
306	CANADA	SASKATCHEWAN
307	US	WY
308	US	NE
309	US	IL
310	US	CA
312	US	IL
313	US	MI
314	US	MO
315	US	NY
316	US	KS
317	US	IN
318	US	LA
319	US	IA
320	US	MN
321	US	FL
323	US	CA
325	US	TX
326	US	ОН
330	US	ОН
331	US	IL
332	US	NY
334	US	AL
336	US	NC

NPA	COUNTRY	LOCATION
337	US	LA
339	US	MA
340	US VIRGIN ISLANDS	US VIRGIN ISLANDS
341	US	CA
343	CANADA	ONTARIO
345	CAYMAN ISLANDS	CAYMAN ISLANDS
346	US	TX
347	US	NY
351	US	MA
352	US	FL
360	US	WA
361	US	TX
364	US	KY
365	CANADA	ONTARIO
367	CANADA	QUEBEC
380	US	ОН
385	US	UT
386	US	FL
401	US	RI
402	US	NE
403	CANADA	ALBERTA
404	US	GA
405	US	OK
406	US	MT
407	US	FL
408	US	CA
409	US	TX
410	US	MD
412	US	PA
413	US	MA
414	US	WI
415	US	CA
416	CANADA	ONTARIO
417	US	MO
418	CANADA	QUEBEC
419	US	ОН
423	US	TN
424	US	CA
425	US	WA
430	US	TX
431	CANADA	MANITOBA
432	US	TX
434	US	VA

NPA	COUNTRY	LOCATION
435	US	UT
437	CANADA	ONTARIO
438	CANADA	QUEBEC
440	US	ОН
441	BERMUDA	BERMUDA
442	US	CA
443	US	MD
445	US	PA
450	CANADA	QUEBEC
458	US	OR
463	US	IN
469	US	TX
470	US	GA
473	GRENADA	GRENADA
475	US	СТ
478	US	GA
479	US	AR
480	US	AZ
484	US	PA
501	US	AR
502	US	KY
503	US	OR
504	US	LA
505	US	NM
506	CANADA	NEW BRUNSWICK
507	US	MN
508	US	MA
509	US	WA
510	US	CA
512	US	TX
513	US	ОН
514	CANADA	QUEBEC
515	US	IA
516	US	NY
517	US	MI
518	US	NY
519	CANADA	ONTARIO
520	US	AZ
530	US	CA
531	US	NE
534	US	WI
539	US	OK
540	US	VA

NPA	COUNTRY	LOCATION
541	US	OR
548	CANADA	ONTARIO
551	US	NJ
559	US	CA
561	US	FL
562	US	CA
563	US	IA
564	US	WA
567	US	ОН
570	US	PA
571	US	VA
573	US	MO
574	US	IN
575	US	NM
579	CANADA	QUEBEC
580	US	ОК
581	CANADA	QUEBEC
585	US	NY
586	US	MI
587	CANADA	ALBERTA
601	US	MS
602	US	AZ
603	US	NH
604	CANADA	BRITISH COLUMBIA
605	US	SD
606	US	KY
607	US	NY
608	US	WI
609	US	NJ
610	US	PA
612	US	MN
613	CANADA	ONTARIO
614	US	ОН
615	US	TN
616	US	MI
617	US	MA
618	US	IL
619	US	CA
620	US	KS
623	US	AZ
626	US	CA
628	US	CA
629	US	TN

NPA	COUNTRY	LOCATION
630	US	IL
631	US	NY
636	US	MO
639	CANADA	SASKATCHEWAN
640	US	NJ
641	US	IA
646	US	NY
647	CANADA	ONTARIO
649	TURKS & CAICOS ISLANDS	TURKS & CAICOS ISLANDS
650	US	CA
651	US	MN
657	US	CA
658	JAMAICA	JAMAICA
659	US	AL
660	US	MO
661	US	CA
662	US	MS
664	MONTSERRAT	MONTSERRAT
667	US	MD
669	US	CA
670	COMMONWEALTH OF THE NORTH	COMMONWEALTH OF THE NORTH
	MARIANA ISLANDS	MARIANA ISLANDS
671	US	GU
672	CANADA	BRITISH COLUMBIA
678	US	GA
680	US	NY
681	US	WV
682	US	TX
684	US	AS
689	US	FL
701	US	ND
702	US	NV
703	US	VA
704	US	NC
705	CANADA	ONTARIO
706	US	GA
707	US	CA
708	US	IL
709	CANADA	NEWFOUNDLAND AND LABRADOR
712	US	IA
713	US	TX
714	US	CA
715	US	WI
716	US	NY

NPA	COUNTRY	LOCATION
717	US	PA
718	US	NY
719	US	CO
720	US	CO
721	SINT MAARTEN	SINT MAARTEN
724	US	PA
725	US	NV
726	US	TX
727	US	FL
731	US	TN
732	US	NJ
734	US	MI
737	US	TX
740	US	ОН
743	US	NC
747	US	CA
754	US	FL
757	US	VA
758	ST. LUCIA	ST. LUCIA
760	US	CA
762	US	GA
763	US	MN
765	US	IN
767	DOMINICA	DOMINICA
769	US	MS
770	US	GA
772	US	FL
773	US	IL
774	US	MA
775	US	NV
778	CANADA	BRITISH COLUMBIA
779	US	IL
780	CANADA	ALBERTA
781	US	MA
782	CANADA	NOVA SCOTIA - PRINCE EDWARD ISLAND
784	ST. VINCENT & GRENADINES	ST. VINCENT & GRENADINES
785	US	KS
786	US	FL
787	US	PUERTO RICO
801	US	UT
802	US	VT
803	US	SC
804	US	VA

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NPA	COUNTRY	LOCATION
805	US	CA
806	US	TX
807	CANADA	ONTARIO
808	US	HI
809	DOMINICAN REPUBLIC	DOMINICAN REPUBLIC
810	US	MI
812	US	IN
813	US	FL
814	US	PA
815	US	IL
816	US	MO
817	US	TX
818	US	CA
819	CANADA	QUEBEC
820	US	CA
825	CANADA	ALBERTA
828	US	NC
829	DOMINICAN REPUBLIC	DOMINICAN REPUBLIC
830	US	TX
831	US	CA
832	US	TX
838	US	NY
839	US	SC
843	US	SC
845	US	NY
847	US	IL
848	US	NJ
849	DOMINICAN REPUBLIC	DOMINICAN REPUBLIC
850	US	FL
854	US	SC
856	US	NJ
857	US	MA
858	US	CA
859	US	KY
860	US	СТ
862	US	NJ
863	US	FL
864	US	SC
865	US	TN
867	CANADA	YUKON-NW TERR NUNAVUT
868	TRINIDAD & TOBAGO	TRINIDAD & TOBAGO
869	ST. KITTS & NEVIS	ST. KITTS & NEVIS
870	US	AR

NPA	COUNTRY	LOCATION
872	US	IL
873	CANADA	QUEBEC
876	JAMAICA	JAMAICA
878	US	PA
901	US	TN
902	CANADA	NOVA SCOTIA - PRINCE EDWARD ISLAND
903	US	TX
904	US	FL
905	CANADA	ONTARIO
906	US	MI
907	US	AK
908	US	NJ
909	US	CA
910	US	NC
912	US	GA
913	US	KS
914	US	NY
915	US	TX
916	US	CA
917	US	NY
918	US	ОК
919	US	NC
920	US	WI
925	US	CA
928	US	AZ
929	US	NY
930	US	IN
931	US	TN
934	US	NY
936	US	TX
937	US	ОН
938	US	AL
939	US	PUERTO RICO
940	US	TX
941	US	FL
945	US	TX
947	US	MI
949	US	CA
951	US	CA
952	US	MN
954	US	FL
956	US	TX
959	US	СТ

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NPA	COUNTRY	LOCATION
970	US	CO
971	US	OR
972	US	TX
973	US	NJ
978	US	MA
979	US	TX
980	US	NC
984	US	NC
985	US	LA
986	US	ID
989	US	MI

Note: All geographic NPAs were in service as of December 31, 2020.

Attachment 4 - Non-Geographic NPAs in Service

The table below lists the non-geographic NPAs in service as of December 31, 2020, along with the service for which each is used.

NPA	Service					
500	Non-Geographic Services					
521	Non-Geographic Services					
522	Non-Geographic Services					
523	Non-Geographic Services					
524	Non-Geographic Services					
525	Non-Geographic Services					
533	Non-Geographic Services					
544	Non-Geographic Services					
566	Non-Geographic Services					
577	Non-Geographic Services					
588	Non-Geographic Services					
600	Canadian Non-Geographic Tariffed Services					
622	Canadian Non-Geographic Services					
700	Interexchange Carrier Services					
710	US Government					
800	Toll-Free					
833	Toll-Free					
844	Toll-Free					
855	Toll-Free					
866	Toll-Free					
877	Toll-Free					
888	Toll-Free					
900	Premium Services					

NPA codes 500, 521, 533, 544, 566, 577, 588, 522, 523, 524, and 525 (known as 5XX-NXX codes) are used for applications which are non-geographic in nature, are not assigned to rate centers and may or may not traverse the Public Switched Telephone Network, but do require an E.164 addressing scheme. The use of this NANP numbering resource is to communicate with both fixed and mobile devices, some of which may be unattended. This resource may be used for applications enabling machines, which would include but not be limited to wireless devices and appliances, with the ability to share information with back-office control and database systems and with the people that use them. Service is limited only by terminal and network capabilities and restrictions imposed by the service provider.

NPA codes 526, 527, 528, 529, 532, 538, 542, 543, 545, 547, 549, 552, 553, 554, 556, 569, 578, 589, 550, 535, 546, and 558 have been reserved for future use. NPA code 600 is used within Canada and assigned to Canadian telecommunications service providers in the provisioning of non-geographic, tariffed services.

NPA code 622 is used for applications in Canada which are non-geographic in nature, are not assigned to rate centers and may or may not traverse the Public Switched Telephone Network (PSTN), but do require an E.164 addressing scheme. The use of this NANP numbering resource is to communicate with both fixed and mobile devices, some of which may be unattended. This resource may also be used for applications enabling machines, which would include but not be

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limited to wireless devices and appliances, with the ability to share information with back-office control and data base systems and the people that use them. Service is limited only by terminal and network capabilities and restrictions imposed by the service provider. NPA codes 633, 644, 655, 677 and 688 have been designated for this use.

NPA code 700 was assigned in 1983 for use by all interexchange carriers. Each carrier has the use of all 7.92 million numbers in the 700 NPA. When a call is made to a 700 number, the local exchange carrier passes the call to the caller's interexchange carrier, selected either through presubscription or override. Note that 700 numbers, unlike other NANP numbers, may terminate in different ways, depending on how the interexchange carrier has allocated the numbers. NPA code 710 was assigned in 1983 to the U.S. Government for emergency services. The 710 NPA is treated as non-geographic with per-call compensation provided by the U.S. Government.

NPA codes 800, 833, 844, 855, 866, 877, and 888 are used as toll-free codes. NPA code 822 has been assigned for future use as a toll-free code and will be introduced when needed.

NPA 900 codes are used for premium services, with the cost of each 900 call billed to the calling party.

Attachment 5 – NPA Dialing Plans

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
AK	907	7D	1+10D	1+10D	1+10D
AL	334	7D	1+10D	10D	1+10D
AL	205	10D	1+10D	10D	1+10D
AL	659	10D	1+10D	10D	1+10D
AL	938	10D	1+10D	10D	1+10D
AL	251	7D	1+10D	10D	1+10D
AL	256	10D	1+10D	10D	1+10D
ALBERTA	403	10D	1+10D	10D	1+10D
ALBERTA	780	10D	1+10D	10D	1+10D
ALBERTA	825	10D	1+10D	10D	1+10D
ALBERTA	587	10D	1+10D	10D	1+10D
ANGUILLA	264	7D	1+10D	NA	1+10D
ANTIGUA/BARBUDA	268	7D	1+10D	NA	1+10D
AR	501	7D	1+10D	10D	1+10D
AR	479	7D	1+10D	10D	1+10D
AR	870	7D	1+10D	10D	1+10D
AS	684	7D	NA	NA	1+10D
AZ	520	7D	1+10D	10D	1+10D
AZ	480	7D	1+10D	10D	1+10D
AZ	928	7D	1+10D	10D	1+10D
AZ	602	7D	1+10D	10D	1+10D
AZ	623	7D	1+10D	10D	1+10D
BAHAMAS	242	7D	1+10D	NA	1+10D
BARBADOS	246	7D	1+10D	NA	1+10D
BERMUDA	441	7D	1+10D	NA	1+10D
BRITISH COLUMBIA	236	10D	1+10D	10D	1+10D
BRITISH COLUMBIA	604	10D	1+10D	10D	1+10D
BRITISH COLUMBIA	250	10D	1+10D	10D	1+10D
BRITISH COLUMBIA	672	10D	1+10D	10D	1+10D
BRITISH COLUMBIA	778	10D	1+10D	10D	1+10D
BRITISH VIRGIN ISLANDS	284	7D	1+10D	NA	1+10D
CA	619	1+10D	1+10D	1+10D	1+10D
CA	562	7D	7D	1+10D	1+10D
CA	628	1+10D	1+10D	1+10D	1+10D

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
CA	650	7D	7D	1+10D	1+10D
CA	657	1+10D	1+10D	1+10D	1+10D
CA	661	7D	7D	1+10D	1+10D
CA	408	1+10D	1+10D	1+10D	1+10D
CA	415	1+10D	1+10D	1+10D	1+10D
CA	424	1+10D	1+10D	1+10D	1+10D
CA	442	1+10D	1+10D	1+10D	1+10D
CA	626	7D	7D	1+10D	1+10D
CA	559	7D	7D	1+10D	1+10D
CA	530	7D	7D	1+10D	1+10D
CA	510	1+10D	1+10D	1+10D	1+10D
CA	341	1+10D	1+10D	1+10D	1+10D
CA	323	1+10D	1+10D	1+10D	1+10D
CA	310	1+10D	1+10D	1+10D	1+10D
CA	279	1+10D	1+10D	1+10D	1+10D
CA	951	7D	7D	1+10D	1+10D
CA	949	7D	7D	1+10D	1+10D
CA	209	7D	7D	1+10D	1+10D
CA	213	1+10D	1+10D	1+10D	1+10D
CA	669	1+10D	1+10D	1+10D	1+10D
CA	707	7D	7D	1+10D	1+10D
CA	714	1+10D	1+10D	1+10D	1+10D
CA	747	1+10D	1+10D	1+10D	1+10D
CA	760	1+10D	1+10D	1+10D	1+10D
CA	805	1+10D	1+10D	1+10D	1+10D
CA	818	1+10D	1+10D	1+10D	1+10D
CA	820	1+10D	1+10D	1+10D	1+10D
CA	831	7D	7D	1+10D	1+10D
CA	858	1+10D	1+10D	1+10D	1+10D
CA	909	1+10D	1+10D	1+10D	1+10D
CA	916	1+10D	1+10D	1+10D	1+10D
CA	925	7D	7D	1+10D	1+10D
CAYMAN ISLANDS	345	7D	1+10D	NA	1+10D
CNMI	670	7D	1+10D	NA	1+10D
CO	719	7D	1+10D	10D	1+10D
CO	303	10D	1+10D	10D	1+10D
CO	970	7D	1+10D	10D	1+10D
CO	720	10D	1+10D	10D	1+10D
СТ	203	10D	1+10D	10D	1+10D
СТ	475	10D	1+10D	10D	1+10D

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
CT	959	10D	1+10D	10D	1+10D
CT	860	10D	1+10D	10D	1+10D
DC	202	7D	NA	10D	1+10D
DE	302	7D	1+10D	10D	1+10D
DOMINICA	767	7D	1+10D	NA	1+10D
DOMINICAN REPUBLIC	849	10D	1+10D	10D	1+10D
DOMINICAN REPUBLIC	829	10D	1+10D	10D	1+10D
DOMINICAN REPUBLIC	809	10D	1+10D	10D	1+10D
FL	407	10D	1+10D	10D	1+10D
FL	561	7D	1+10D	10D	1+10D
FL	689	10D	1+10D	10D	1+10D
FL	727	7D	1+10D	10D	1+10D
FL	754	10D	1+10D	10D	1+10D
FL	772	7D	1+10D	10D	1+10D
FL	786	10D	1+10D	10D	1+10D
FL	813	7D	1+10D	10D	1+10D
FL	850	7D	1+10D	7D	1+10D
FL	863	7D	1+10D	10D	1+10D
FL	904	7D	1+10D	10D	1+10D
FL	941	7D	1+10D	10D	1+10D
FL	954	10D	1+10D	10D	1+10D
FL	305	10D	1+10D	10D	1+10D
FL	321	7D	1+10D	10D	1+10D
FL	352	7D	1+10D	10D	1+10D
FL	386	7D	1+10D	10D	1+10D
FL	239	7D	1+10D	10D	1+10D
GA	404	10D	1+10D	10D	1+10D
GA	229	7D	1+10D	10D	1+10D
GA	762	10D	1+10D	10D	1+10D
GA	470	10D	1+10D	10D	1+10D
GA	678	10D	1+10D	10D	1+10D
GA	706	10D	1+10D	10D	1+10D
GA	478	7D	1+10D	10D	1+10D
GA	770	10D	1+10D	10D	1+10D
GA	912	7D	1+10D	10D	1+10D
GRENADA	473	7D	1+10D	NA	1+10D
GU	671	7D	1+10D	NA	1+10D
HI	808	7D	1+10D	NA	1+10D
IA	712	7D	1+10D	10D	1+10D

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
IA	515	7D	1+10D	10D	1+10D
IA	641	7D	1+10D	10D	1+10D
IA	563	7D	1+10D	10D	1+10D
IA	319	7D	1+10D	10D	1+10D
ID	986	10D	1+10D	10D	1+10D
ID	208	10D	1+10D	10D	1+10D
IL	708	7D	1+10D	1+10D	1+10D
IL	224	1+10D	1+10D	1+10D	1+10D
IL	217	7D	1+10D	7D	1+10D
IL	618	7D	1+10D	1+10D	1+10D
IL	630	1+10D	1+10D	1+10D	1+10D
IL	331	1+10D	1+10D	1+10D	1+10D
IL	312	1+10D	1+10D	1+10D	1+10D
IL	309	7D	1+10D	1+10D	1+10D
IL	872	1+10D	1+10D	1+10D	1+10D
IL	847	1+10D	1+10D	1+10D	1+10D
IL	815	1+10D	1+10D	1+10D	1+10D
IL	779	1+10D	1+10D	1+10D	1+10D
IL	773	1+10D	1+10D	1+10D	1+10D
IN	930	10D	1+10D	10D	1+10D
IN	219	7D	1+10D	10D	1+10D
IN	317	10D	1+10D	10D	1+10D
IN	463	10D	1+10D	10D	1+10D
IN	812	10D	1+10D	10D	1+10D
IN	574	7D	1+10D	10D	1+10D
IN	260	7D	1+10D	10D	1+10D
IN	765	7D	1+10D	10D	1+10D
JAMAICA	876	7D	1+10D	NA	1+10D
JAMAICA	658	10D	1+10D	10D	1+10D
KS	913	7D	1+10D	10D	1+10D
KS	316	7D	1+10D	10D	1+10D
KS	785	7D	1+10D	10D	1+10D
KS	620	7D	1+10D	10D	1+10D
KY	502	7D	1+10D	7D	1+10D
KY	859	7D	1+10D	10D	1+10D
KY	364	10D	1+10D	10D	1+10D
KY	270	10D	1+10D	10D	1+10D
KY	606	7D	1+10D	10D	1+10D
LA	225	7D	1+10D	10D	1+10D
LA	985	7D	1+10D	10D	1+10D
LA	504	7D	1+10D	10D	1+10D

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
LA	337	7D	1+10D	10D	1+10D
LA	318	7D	1+10D	10D	1+10D
MA	774	10D	1+10D	10D	1+10D
MA	617	10D	1+10D	10D	1+10D
MA	351	10D	1+10D	10D	1+10D
MA	508	10D	1+10D	10D	1+10D
MA	857	10D	1+10D	10D	1+10D
MA	978	10D	1+10D	10D	1+10D
MA	413	7D	1+10D	10D	1+10D
MA	339	10D	1+10D	10D	1+10D
MA	781	10D	1+10D	10D	1+10D
MANITOBA	431	10D	1+10D	10D	1+10D
MANITOBA	204	10D	1+10D	10D	1+10D
MD	240	10D	1+10D	10D	1+10D
MD	410	10D	1+10D	10D	1+10D
MD	301	10D	1+10D	10D	1+10D
MD	443	10D	1+10D	10D	1+10D
MD	667	10D	1+10D	10D	1+10D
ME	207	7D	7D	1+10D	1+10D
MI	734	7D	1+10D	10D	1+10D
MI	248	10D	1+10D	10D	1+10D
MI	231	7D	1+10D	10D	1+10D
MI	586	7D	1+10D	10D	1+10D
MI	616	7D	1+10D	10D	1+10D
MI	517	7D	1+10D	10D	1+10D
MI	313	7D	1+10D	10D	1+10D
MI	269	7D	1+10D	10D	1+10D
MI	989	7D	1+10D	10D	1+10D
MI	947	10D	1+10D	10D	1+10D
MI	906	7D	1+10D	10D	1+10D
MI	810	7D	1+10D	10D	1+10D
MN	952	7D	1+10D	10D	1+10D
MN	320	7D	1+10D	7D	1+10D
MN	218	7D	1+10D	7D	1+10D
MN	651	7D	1+10D	10D	1+10D
MN	763	7D	1+10D	10D	1+10D
MN	612	7D	1+10D	10D	1+10D
MN	507	7D	1+10D	7D	1+10D
MO	314	7D	1+10D	10D	1+10D
MO	573	7D	1+10D	10D	1+10D
MO	660	7D	1+10D	10D	1+10D

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
MO	816	7D	1+10D	10D	1+10D
MO	636	7D	1+10D	10D	1+10D
MO	417	7D	1+10D	10D	1+10D
MONTSERRAT	664	7D	1+10D	NA	1+10D
MS	601	10D	1+10D	10D	1+10D
MS	662	7D	1+10D	10D	1+10D
MS	228	7D	1+10D	10D	1+10D
MS	769	10D	1+10D	10D	1+10D
MT	406	7D	1+10D	7D	1+10D
NC	980	10D	1+10D	10D	1+10D
NC	910	7D	1+10D	10D	1+10D
NC	252	7D	1+10D	10D	1+10D
NC	828	7D	1+10D	10D	1+10D
NC	336	10D	1+10D	10D	1+10D
NC	919	10D	1+10D	10D	1+10D
NC	743	10D	1+10D	10D	1+10D
NC	984	10D	1+10D	10D	1+10D
NC	704	10D	1+10D	10D	1+10D
ND	701	7D	1+10D	7D	1+10D
NE	308	7D	1+10D	7D	1+10D
NE	531	10D	1+10D	10D	1+10D
NE	402	10D	1+10D	10D	1+10D
NEW BRUNSWICK	506	7D	1+10D	NA	1+10D
NEWFOUNDLAND AND LABRADOR	709	7D	1+10D	NA	1+10D
NH	603	7D	7D	1+10D	1+10D
NJ	848	10D	10D	1+10D	1+10D
NJ	862	10D	10D	1+10D	1+10D
NJ	908	7D	7D	1+10D	1+10D
NJ	732	10D	10D	1+10D	1+10D
NJ	973	10D	10D	1+10D	1+10D
NJ	201	10D	10D	1+10D	1+10D
NJ	640	10D	10D	1+10D	1+10D
NJ	609	10D	10D	1+10D	1+10D
NJ	856	7D	7D	1+10D	1+10D
NJ	551	10D	10D	1+10D	1+10D
NM	575	7D	1+10D	10D	1+10D
NM	505	7D	1+10D	10D	1+10D

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
NOVA SCOTIA - PRINCE EDWARD ISLAND	782	10D	1+10D	NA	1+10D
NOVA SCOTIA - PRINCE EDWARD ISLAND	902	10D	1+10D	NA	1+10D
NV	702	10D	1+10D	1+10D	1+10D
NV	775	7D	1+10D	1+10D	1+10D
NV	725	10D	1+10D	10D	1+10D
NY	718	1+10D	1+10D	1+10D	1+10D
NY	716	7D	7D	1+10D	1+10D
NY	934	10D	10D	1+10D	1+10D
NY	315	10D	10D	1+10D	1+10D
NY	332	1+10D	1+10D	1+10D	1+10D
NY	680	10D	10D	1+10D	1+10D
NY	347	1+10D	1+10D	1+10D	1+10D
NY	212	1+10D	1+10D	1+10D	1+10D
NY	585	7D	7D	1+10D	1+10D
NY	646	1+10D	1+10D	1+10D	1+10D
NY	516	7D	7D	1+10D	1+10D
NY	518	10D	10D	1+10D	1+10D
NY	631	10D	10D	1+10D	1+10D
NY	607	7D	7D	1+10D	1+10D
NY	845	7D	7D	1+10D	1+10D
NY	929	1+10D	1+10D	1+10D	1+10D
NY	838	10D	10D	1+10D	1+10D
NY	914	7D	7D	1+10D	1+10D
NY	917	1+10D	1+10D	1+10D	1+10D
ОН	614	10D	1+10D	10D	1+10D
ОН	567	10D	1+10D	10D	1+10D
ОН	513	7D	1+10D	10D	1+10D
ОН	380	10D	1+10D	10D	1+10D
OH	330	10D	1+10D	10D	1+10D
ОН	326	10D	1+10D	10D	1+10D
ОН	937	10D	1+10D	10D	1+10D
ОН	740	10D	1+10D	10D	1+10D
ОН	234	10D	1+10D	10D	1+10D
ОН	220	10D	1+10D	10D	1+10D
ОН	216	7D	1+10D	10D	1+10D
ОН	440	7D	1+10D	10D	1+10D
ОН	419	10D	1+10D	10D	1+10D

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
OK	918	10D	1+10D	10D	1+10D
OK	405	7D	1+10D	7D	1+10D
OK	580	7D	1+10D	7D	1+10D
OK	539	10D	1+10D	10D	1+10D
ONTARIO	548	10D	1+10D	10D	1+10D
ONTARIO	289	10D	1+10D	10D	1+10D
ONTARIO	226	10D	1+10D	10D	1+10D
ONTARIO	365	10D	1+10D	10D	1+10D
ONTARIO	343	10D	1+10D	10D	1+10D
ONTARIO	905	10D	1+10D	10D	1+10D
ONTARIO	807	7D	1+10D	NA	1+10D
ONTARIO	613	10D	1+10D	10D	1+10D
ONTARIO	249	10D	1+10D	10D	1+10D
ONTARIO	705	7D	1+10D	10D	1+10D
ONTARIO	647	10D	1+10D	10D	1+10D
ONTARIO	416	10D	1+10D	10D	1+10D
ONTARIO	519	10D	1+10D	10D	1+10D
ONTARIO	437	10D	1+10D	10D	1+10D
OR	971	10D	1+10D	10D	1+10D
OR	503	10D	1+10D	10D	1+10D
OR	541	10D	1+10D	10D	1+10D
OR	458	10D	1+10D	10D	1+10D
PA	610	10D	10D	NA	1+10D
PA	570	10D	10D	1+10D	1+10D
PA	445	10D	10D	1+10D	1+10D
PA	215	10D	10D	NA	1+10D
PA	223	10D	10D	1+10D	1+10D
PA	717	10D	10D	1+10D	1+10D
PA	724	10D	10D	(see note)	(see note)
PA	412	10D	10D	(see note)	(see note)
PA	484	10D	10D	NA	1+10D
PA	814	7D	7D	1+10D	1+10D
PA	878	10D	10D	(see note)	(see note)
PA	267	10D	10D	NA	1+10D
PA	272	10D	10D	1+10D	1+10D
PUERTO RICO	939	10D	1+10D	10D	1+10D
PUERTO RICO	787	10D	1+10D	10D	1+10D
QUEBEC	418	10D	1+10D	10D	1+10D
QUEBEC	438	10D	1+10D	10D	1+10D
QUEBEC	450	10D	1+10D	1+10D	1+10D
QUEBEC	819	10D	1+10D	1+10D	1+10D

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
QUEBEC	581	10D	1+10D	10D	1+10D
QUEBEC	367	10D	1+10D	10D	1+10D
QUEBEC	514	10D	1+10D	10D	1+10D
QUEBEC	579	10D	10D	10D	10D
QUEBEC	873	10D	1+10D	1+10D	1+10D
RI	401	7D	7D	1+10D	1+10D
SASKATCHEWAN	306	7D	1+10D	10D	1+10D
SASKATCHEWAN	639	10D	1+10D	10D	1+10D
SC	843	10D	1+10D	10D	1+10D
SC	803	10D	1+10D	10D	1+10D
SC	864	7D	1+10D	10D	1+10D
SC	854	10D	1+10D	10D	1+10D
SC	839	10D	1+10D	10D	1+10D
SD	605	7D	1+10D	7D	1+10D
SINT MAARTEN	721	7D	NA	NA	1+10D
ST. KITTS & NEVIS	869	7D	1+10D	NA	1+10D
ST. LUCIA	758	7D	1+10D	NA	1+10D
ST. VINCENT & GRENADINES	784	7D	1+10D	NA	1+10D
TN	423	7D	1+10D	10D	1+10D
TN	931	7D	1+10D	7D	1+10D
TN	615	10D	1+10D	10D	1+10D
TN	901	7D	1+10D	10D	1+10D
TN	731	7D	1+10D	10D	1+10D
TN	629	10D	1+10D	10D	1+10D
TN	865	7D	1+10D	10D	1+10D
TRINIDAD & TOBAGO	868	7D	1+10D	NA	1+10D
TURKS & CAICOS ISLANDS	649	7D	1+10D	NA	1+10D
TX	726	10D	1+10D	10D	1+10D
TX	737	10D	1+10D	10D	1+10D
TX	806	7D	1+10D	10D	1+10D
TX	817	10D	1+10D	10D	1+10D
TX	512	10D	1+10D	10D	1+10D
TX	832	10D	1+10D	10D	1+10D
TX	903	10D	1+10D	10D	1+10D
TX	915	7D	1+10D	10D	1+10D
TX	940	7D	1+10D	10D	1+10D
TX	945	10D	1+10D	10D	1+10D

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
TX	956	7D	1+10D	10D	1+10D
TX	972	10D	1+10D	10D	1+10D
TX	979	7D	1+10D	10D	1+10D
TX	936	7D	1+10D	10D	1+10D
TX	281	10D	1+10D	10D	1+10D
TX	325	7D	1+10D	10D	1+10D
TX	346	10D	1+10D	10D	1+10D
TX	361	7D	1+10D	10D	1+10D
TX	713	10D	1+10D	10D	1+10D
TX	682	10D	1+10D	10D	1+10D
TX	254	7D	1+10D	10D	1+10D
TX	214	10D	1+10D	10D	1+10D
TX	210	10D	1+10D	10D	1+10D
TX	469	10D	1+10D	10D	1+10D
TX	432	7D	1+10D	10D	1+10D
TX	430	10D	1+10D	10D	1+10D
TX	409	7D	1+10D	10D	1+10D
TX	830	7D	1+10D	10D	1+10D
USVI	340	7D	1+10D	NA	1+10D
UT	385	10D	1+10D	10D	1+10D
UT	435	7D	1+10D	7D	1+10D
UT	801	10D	1+10D	10D	1+10D
VA	434	7D	1+10D	10D	1+10D
VA	703	10D	1+10D	10D	1+10D
VA	757	7D	1+10D	10D	1+10D
VA	571	10D	1+10D	10D	1+10D
VA	804	7D	1+10D	10D	1+10D
VA	276	7D	1+10D	10D	1+10D
VA	540	7D	1+10D	10D	1+10D
VT	802	7D	1+10D	1+10D	1+10D
WA	360	10D	1+10D	10D	1+10D
WA	206	10D	1+10D	10D	1+10D
WA	425	10D	1+10D	10D	1+10D
WA	564	10D	1+10D	10D	1+10D
WA	253	10D	1+10D	10D	1+10D
WA	509	7D	1+10D	10D	1+10D
WI	262	7D	1+10D	1+10D	1+10D
WI	920	7D	1+10D	1+10D	1+10D
WI	715	10D	1+10D	10D	1+10D
WI	608	7D	1+10D	1+10D	1+10D
WI	414	7D	1+10D	1+10D	1+10D

Location	NPA	Standard HNPA LOCAL	Standard HNPA TOLL	Standard FNPA LOCAL	Standard FNPA TOLL
WI	534	10D	1+10D	10D	1+10D
WV	681	10D	1+10D	10D	1+10D
WV	304	10D	1+10D	10D	1+10D
WY	307	7D	1+10D	7D	1+10D
YUKON-NW TERR NUNAVUT	867	7D	1+10D	NA	1+10D

The dialing plan associated with all geographic area codes in service in the NANP can be found on the NANPA website (www.nanpa.com) under Reports, NPA.

Notes:

- 1. Other dialing plans may apply at the discretion of the local service provider.
- 2. Intentionally left blank
- 3. Home NPA local calls are 7D in Brevard County.
- 4. See Planning Letter 291 for local dialing into the 954-754 NPAs.
- 5. All Extended Calling Service (ECS) calls directed to a presubscribed carrier will be dialed as 1+10D (PL 311).
- 6. Some cross-boundary 7D local dialing exists.
- 7. Calls between the 551 and 201 NPAs may be dialed as 10D.
- 8. Calls between the 732 and 848 NPAs may be dialed as 10D.
- 9. Calls between the 973 and 862 NPAs can be dialed as 10D.
- 10. Carriers must provide permissive 1+10D dialing for Foreign NPA Local Calls in areas where they provide optional Extended Area Service (EAS).
- 11. All calls within and between the 215, 267, 445,484, and 610 NPAs can be dialed as 10D or 1+10D. Calls to other NPAs must be dialed as 1+10D.
- 12. All calls within and between NPAs 412, 724, and 878 can be dialed as 10D or 1+10D. Calls to other NPAs must be dialed as 1+10D.
- 13. Note that some local calls may require dialing 10D or 1+10D depending on area and service provider.

Attachment 6 – October 2020 NPA Exhaust Projections

NANPA projects NPA exhaust on a semi-annual basis. These projections were produced in April and October 2020. The table below shows the current quarter/year in which each NPA is projected to exhaust, based on analysis performed in October 2020 and any subsequent changes made through December 31, 2020. The table also provides forecasted NPA exhaust information from previous exhaust projections developed by NANPA. The current forecast is based on NRUF data as it existed on October 1, 2020 for the US and January 1, 2020 for Canada, except where noted. The change between the current and previous forecasts is given in quarters. A positive number indicates that the exhaust date has moved out to a later date. A negative number indicates that the exhaust is now projected to occur sooner than previously expected.

NPA exhaust forecasts sorted by area code:

LOCATION	NPA	2020	0.2 FCST	2020	0.1 FCST	Change	Notes
		Year	Quarter	Year	Quarter	2020.1 to 2020.2	Comments
District of Columbia	202	2021	4Q	2022	3Q	-3Q	b
Connecticut	203/475						k
Canada	204/431			2025	1Q	N/C	С
Alabama	205/659	2041	4Q	2044	3Q	-11Q	b
Washington	206	2025	4Q	2027	2Q	-6Q	b
Maine	207	2024	4Q	2025	1Q	-1Q	b
Idaho	208/986						k
California	209	2023	4Q	2027	2Q	-14Q	b, i
Texas	210/726						k
New York	212/646/332	2048	3Q	2049	4Q	-5Q	b
California	213/323	2027	2Q	2029	4Q	-10Q	b
Texas	214/469/972	2021	1Q	2021	2Q	-1Q	b
Pennsylvania	215/267/445						k
Ohio	216	2043	2Q	2047	4Q	-18Q	b
Illinois	217	2021	2Q	2021	1Q	1Q	а
Minnesota	218	2046	1Q			-26Q	b
Indiana	219						k
Ohio	220/740						k
Pennsylvania	223/717	2046	2Q			-40Q	b
Illinois	224/847	2042	1Q	2046	4Q	-19Q	b
Louisiana	225						k
Canada	226/519/548				2028	N/C	С
Mississippi	228						k
Georgia	229	2047	3Q	2049	1Q	-6Q	b
Michigan	231			2049	1Q		k
Ohio	234/330	2048	1Q			-58Q	b
Canada	236/250/604/672/778			2026	4Q	N/C	С
Florida	239	2048	4Q			-6Q	b
Maryland	240/301	2026	3Q	2025	3Q	4Q	а

LOCATION	NPA	2020	0.2 FCST	2020	0.1 FCST	Change	Notes
,		Year	Quarter	Year	Quarter	2020.1 to 2020.2	Comments
	<u>.</u>	_		1			
Michigan	248/947					,	k
Canada	249/705			2026	2Q	N/C	C
Alabama	251						k
North Carolina	252	2041	2Q	2048	3Q	-29Q	b
Washington	253						k
Texas	254	2032	3Q	2032	3Q	N/C	
Alabama	256/938						k
Indiana	260						k
Wisconsin	262	2041	2Q			-42Q	b
Michigan	269						k
Kentucky	270/364						k
Pennsylvania	272/570						k
Virginia	276						k
California	279/916						k
Texas	281/346/713/ 832	2030	3Q	2029	2Q	5Q	а
Canada	289/365/905			2023	1Q	N/C	С
Delaware	302	2040	3Q	2039	1Q	6Q	а
Colorado	303/720	2023	2Q	2023	2Q	N/C	
West Virginia	304/681	2034	4Q	2033	1Q	7Q	а
Florida	305/786	2024	3Q	2023	3Q	4Q	а
Canada	306/639	2024	30	2022	1Q	N/C	С
Wyoming	307			2022	10	14/ C	k
Nebraska	308						k
Illinois	309	2024	2Q	2027	2Q	-15Q	b
California	310/424	2046	2Q	2048	3Q	-9Q	b
Illinois	312/773/872	2040	20	2040	30	34	k
Michigan	313	2028	4Q	2028	4Q	N/C	K
Missouri	314	2023	2Q	2023	3Q	-1Q	b
New York	315/680	2023	20	2023	30	-10	k
Kansas	316						k
Indiana	317/463						k
Louisiana	317,403	2030	1Q	2027	3Q	10Q	а
lowa	319	2030	10	2027	30	100	k
Minnesota	320						k
Florida	321/407/689						k
Florida	321/407/689 321A						
Texas	321A 325						g, k k
Ohio	326/937						k,f
Illinois							
	331/630 334	2020	20	2022	10	100	k
Alabama		2029	2Q	2033	4Q	-18Q	b
North Carolina Louisiana	336/743 337	2048	4Q			-14Q	k
		2048	40			-14Q	b
Massachusetts	339/781						k
Virgin Islands	340						k
California	341/510			2025	2.0	11/0	k
Canada	343/613			2025	2Q	N/C	С

LOCATION	NPA	2020	0.2 FCST	2020	0.1 FCST	Change	Notes
		Year	Quarter	Year	Quarter	2020.1 to 2020.2	Comments
New York	347/718/929	2030	1Q	2030	1Q	N/C	
Massachusetts	351/978				-	,	k
Florida	352	2033	3Q	2033	3Q	N/C	
Washington	360/564					7 -	k
Texas	361						k
Ohio	380/614						k
Utah	385/801	2038	2Q	2036	4Q	6Q	а
Florida	386					·	k
Rhode Island	401						k
Nebraska	402/531	2049	4Q			-13Q	b
Canada	403/587/780/ 825			2022	4Q	N/C	С
Georgia	404/470/678/ 770	2023	1Q	2023	2Q	-1Q	b
Oklahoma	405	2022	2Q	2021	4Q	2Q	а
Montana	406	2028	3Q	2027	3Q	4Q	а
California	408/669		,		•		k
Texas	409						k
Maryland	410/443/667	2041	4Q	2040	3Q	5Q	а
Pennsylvania	412/724/878	2049	3Q			-44Q	b
Massachusetts	413	2049	2Q			-43Q	b
Wisconsin	414						k
California	415/628						k
Canada	416/437/647			2025	1Q	N/C	С
Missouri	417	2028	1Q	2028	3Q	-2Q	b
Canada	418/581/367			2033	1Q	N/C	С
Ohio	419/567	2049	3Q			-143Q	b
Tennessee	423	2027	4Q	2028	1Q	-1Q	b
Washington	425	2045	2Q	2042	3Q	11Q	а
Texas	430/903						k
Texas	432						k
Virginia	434	2048	3Q			-22Q	b
Utah	435			2049	4Q		k
Canada	438/514			2026	1Q	N/C	С
Ohio	440	2029	2Q	2032	1Q	-11Q	b
California	442/760	2047	4Q			-80Q	b
Canada	450/579			2024	4Q	N/C	С
Oregon	458/541					-	k
Georgia	478						k
Arkansas	479	2041	4Q	2046	1Q	-17Q	b
Arizona	480	2024	1Q	2024	3Q	-2Q	b
Pennsylvania	484/610	2024	2Q	2024	2Q	N/C	
Arkansas	501	2036	3Q	2043	1Q	-26Q	b
Kentucky	502	2042	4Q	2043	1Q	-1Q	b
Oregon	503/971	2046	3Q	2048	2Q	-7Q	b
Louisiana	504			2049	3Q	-	k
New Mexico	505	2037	2Q	2042	2Q	-20Q	b
Canada	506		,	2024	1Q	N/C	С
Minnesota	507	2028	4Q	2029	2Q	-2Q	b

	LOCATION	NPA	2020	0.2 FCST	2020	0.1 FCST	Change	Notes
Washington 509 2026 2Q 2026 2Q N/C Texas 512/737 2046 1Q 2046 3Q -2Q b Ohio 513 2024 2Q 2026 1Q -7Q b Iowa 515 2035 4Q 2034 4Q 4Q a New York 516 2024 1Q 2024 2Q -1Q b Michigan 517 2048 2Q 2046 1Q 9Q a New York 518/838 8 8 K K Arizona 520 2042 1Q 2045 3Q -14Q b California 530 2031 1Q 2041 1Q 2031 1Q N/C N/C N/C Wisconsin K A A A A A A A A A A A A A A A A A A <th></th> <th></th> <th>Year</th> <th>Quarter</th> <th>Year</th> <th>Quarter</th> <th></th> <th>Comments</th>			Year	Quarter	Year	Quarter		Comments
Washington 509 2026 2Q 2026 2Q N/C Texas 512/737 2046 1Q 2046 3Q -2Q b Ohio 513 2024 2Q 2026 1Q -7Q b Iowa 515 2035 4Q 2034 4Q 4Q a New York 516 2024 1Q 2024 2Q -1Q b Michigan 517 2048 2Q 2046 1Q 9Q a New York 518/838 8 8 K K Arizona 520 2042 1Q 2045 3Q -14Q b California 530 2031 1Q 2045 3Q -14Q b Wirginia 540 2021 2Q 2021 4Q -2Q b California 561 2025 2Q 2022 4Q -15Q b California			r	_	-	г	r	
Texas 512/737 2046 1Q 2046 3Q -2Q b Ohio 513 2024 2Q 2026 1Q -7Q b Iowa 515 2035 4Q 2034 4Q 4Q a New York 516 2024 1Q 2024 2Q -1Q b Michigan 517 2048 2Q 2046 1Q 9Q a New York 518/838		· · · · · · · · · · · · · · · · · · ·						b
Ohio 513 2024 2Q 2026 1Q -7Q b Iowa 515 2035 4Q 2034 4Q 4Q a New York 516 2024 1Q 2024 2Q -1Q b Michigan 517 2048 2Q 2046 1Q 9Q a New York 518/838 K K K Arizona 520 2042 1Q 2045 3Q -14Q b California 530 2031 1Q 2031 1Q N/C N/C N/C Wisconsin 534/715 K K Oklahoma 539/918 K K Wirginia 540 2022 2Q 2022 4Q -2Q b California 559 2039 1Q 2042 4Q -15Q b L Florida 561 2025 2Q 2026 2Q -4Q b California 562 2044 2Q								
Iowa								
New York 516 2024 1Q 2024 2Q -1Q b Michigan 517 2048 2Q 2046 1Q 9Q a New York 518/838 k k k Arizona 520 2042 1Q 2045 3Q -14Q b California 530 2031 1Q 2031 1Q N/C Wisconsin 534/715 k k N/C k Oklahoma 539/918 k k N N/C N/C k N	Ohio							b
Michigan 517 2048 2Q 2046 1Q 9Q a New York 518/838 k k k Arizona 520 2042 1Q 2045 3Q -14Q b California 530 2031 1Q 2031 1Q N/C Wisconsin 534/715 k k k Oklahoma 539/918 k k k Virginia 540 2022 2Q 2022 4Q -2Q b California 559 2039 1Q 2042 4Q -15Q b Florida 561 2025 2Q 2026 2Q -4Q b California 562 2044 2Q 2048 3Q -17Q b Iowa 563 2048 3Q 2046 1Q 10Q a Virginia 571/703 2033 2Q 2035 2Q -8Q	lowa	515	2035	4Q	2034	4Q	4Q	а
New York			2024	1Q	2024	2Q	-1Q	b
Arizona 520 2042 1Q 2045 3Q -14Q b California 530 2031 1Q 2031 1Q N/C Wisconsin 534/715 K k K Oklahoma 539/918 k k K Virginia 540 2022 2Q 2022 4Q -2Q b California 559 2039 1Q 2042 4Q -15Q b Florida 561 2025 2Q 2026 2Q -4Q b California 562 2044 2Q 2048 3Q -17Q b Iowa 563 2048 3Q 2046 1Q 10Q a Virginia 571/703 2033 2Q 2035 2Q -8Q b Missouri 573 2029 1Q 2028 3Q 2Q a New Mexico 575 K k </td <td>Michigan</td> <td>517</td> <td>2048</td> <td>2Q</td> <td>2046</td> <td>1Q</td> <td>9Q</td> <td>a</td>	Michigan	517	2048	2Q	2046	1Q	9Q	a
California 530 2031 1Q 2031 1Q N/C Wisconsin 534/715 K k k Oklahoma 539/918 k k k Virginia 540 2022 2Q 2022 4Q -2Q b California 559 2039 1Q 2042 4Q -15Q b Florida 561 2025 2Q 2026 2Q -4Q b California 562 2044 2Q 2048 3Q -17Q b Iowa 563 2048 3Q 2046 1Q 10Q a Virginia 571/703 2033 2Q 2035 2Q -8Q b Missouri 573 2029 1Q 2028 3Q 2Q a Indiana 574 K k K K Oklahoma 580 2032 2Q 2033 1Q	New York	518/838						k
Wisconsin 534/715 k Oklahoma 539/918 k Virginia 540 2022 2Q 2022 4Q -2Q b California 559 2039 1Q 2042 4Q -15Q b Florida 561 2025 2Q 2026 2Q -4Q b California 562 2044 2Q 2048 3Q -17Q b Iowa 563 2048 3Q 2046 1Q 10Q a Virginia 571/703 2033 2Q 2035 2Q -8Q b Missouri 573 2029 1Q 2028 3Q 2Q a Indiana 574 k k k New Mexico 575 k k k Oklahoma 580 2032 2Q 2033 1Q -3Q b New York 585 2034 2Q </td <td>Arizona</td> <td>520</td> <td>2042</td> <td>1Q</td> <td>2045</td> <td>3Q</td> <td>-14Q</td> <td>b</td>	Arizona	520	2042	1Q	2045	3Q	-14Q	b
Oklahoma 539/918 k Virginia 540 2022 2Q 2022 4Q -2Q b California 559 2039 1Q 2042 4Q -15Q b Florida 561 2025 2Q 2026 2Q -4Q b California 562 2044 2Q 2048 3Q -17Q b lowa 563 2048 3Q 2046 1Q 10Q a Virginia 571/703 2033 2Q 2035 2Q -8Q b Missouri 573 2029 1Q 2028 3Q 2Q a Indiana 574 K k k New Mexico 575 K k k Oklahoma 580 2032 2Q 2033 1Q -3Q b New York 585 2034 2Q 2040 4Q -26Q b	California	530	2031	1Q	2031	1Q	N/C	
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California 559 2039 1Q 2042 4Q -15Q b Florida 561 2025 2Q 2026 2Q -4Q b California 562 2044 2Q 2048 3Q -17Q b Iowa 563 2048 3Q 2046 1Q 10Q a Virginia 571/703 2033 2Q 2035 2Q -8Q b Missouri 573 2029 1Q 2028 3Q 2Q a Indiana 574 K k k K K Oklahoma 580 2032 2Q 2033 1Q -3Q b New York 585 2034 2Q 2040 4Q -26Q b Michigan 586 K k K K	Oklahoma	539/918						k
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Oklahoma 580 2032 2Q 2033 1Q -3Q b New York 585 2034 2Q 2040 4Q -26Q b Michigan 586 k k k Mississippi 601/769 k k								
New York 585 2034 2Q 2040 4Q -26Q b Michigan 586 k k Mississippi 601/769 k k			2022	20	2022	10	20	
Michigan 586 k Mississippi 601/769 k						-	-	
Mississippi 601/769 k			2054	20	2040	40	-20Q	
	_							
Arizona 602 2027 3Q 2028 4Q -5Q b			2027	20	2020	4.0		
		_					<u> </u>	
New 603 2029 4Q 2032 3Q -11Q b		603	2029	4Q	2032	3Q	-11Q	b
Hampshire Co. T.	-	505	2027	4.0	2222	4.0	4.0	
South Dakota 605 2027 4Q 2028 4Q -4Q b			2027	4Q	2028	4Q	-4Q	
Kentucky 606 k								
New York 607 k								
Wisconsin 608 2025 2Q 2026 3Q -5Q b			2025	2Q	2026	3Q	-5Q	
New Jersey 609/640 k	•							k
Minnesota 612 2040 1Q 2039 2Q 3Q a			2040	1Q	2039	2Q	3Q	
Tennessee 615/629 k		· · · · · · · · · · · · · · · · · · ·						k
Michigan 616 2047 4Q 2047 3Q 1Q a			2047	4Q	2047	3Q	1Q	а
Massachusetts 617/857 k								k
Illinois 618 2026 2Q 2036 1Q -39Q b								
California 619/858 2041 4Q 2045 4Q -16Q b								
Kansas 620 2037 2Q 2038 4Q -6Q b	Kansas		2037	2Q	2038	4Q	-6Q	b
Arizona 623 k	Arizona	623						k
California 626 2031 3Q 2034 2Q -11Q b	California	626	2031	3Q	2034	2Q	-11Q	b
New York 631/934 k	New York	631/934						k
Missouri 636 k	Missouri	636						k
lowa 641 2042 1Q 2042 1Q N/C	Iowa	641	2042	1Q	2042	1Q	N/C	
California 650 2032 1Q 2032 2Q -1Q b	California	650	2032	1Q	2032	2Q	-1Q	b
Minnesota 651 k	Minnesota	651						k

LOCATION	NPA	2020	0.2 FCST	2020	0.1 FCST	Change	Notes
·		Year	Quarter	Year	Quarter	2020.1 to 2020.2	Comments
California	657/714	2032	2Q	2036	1Q	-15Q	b
Missouri	660	2032	20	2030	10	150	k
California	661	2039	2Q	2044	4Q	-22Q	b
Mississippi	662	2039	2Q 2Q	2044	2Q	20Q	а
CNMI	670	2043	20	2040	20	200	k
Guam	671						k
Texas	682/817	2045	4Q	2046	4Q	-4Q	b
American	684	2043	40	2040	40	-40	k
Samoa	004						K
North Dakota	701	2028	3Q	2030	1Q	-6Q	b
Nevada	702/725	2020	30	2030	10	-00	k
North Carolina	704/980	2045	3Q	2047	2Q	-7Q	b
Georgia	704/360	2043	30	2047	20	-/4	k
California	707	2023	4Q	2024	4Q	-4Q	b
Illinois	708	2023	2Q	2023	2Q	N/C	
Canada	709	2023	20	2024	1Q	N/C	С
lowa	712	2032	1Q	2031	2Q	3Q	а
New York	716	2032	1Q 1Q	2032	2Q 2Q	-9Q	b
Colorado	719	2039	1Q 1Q	2032	3Q	2Q	а
Florida	727	2042	4Q	2044	2Q	-6Q	b
Tennessee	731	2042	40	2044	20	-00	k
New Jersey	732/848	2050	3Q			-25Q	b
Michigan	732/848	2035	2Q	2036	3Q	-5Q	b
California	747/818	2033	20	2030	30	-30	k
Florida	754/954						k
Virginia	7547954	2022	3Q	2023	2Q	-3Q	b
Minnesota	763	2022	30	2023	20	-30	k
Indiana	765	2041	2Q	2047	2Q	-24Q	b
Florida	772	2041	20	2047	ZQ	-24Q	k
Nevada	775	2045	1Q	2045	3Q	-2Q	b
Illinois	779/815			2045	30	-60Q	
Canada		2049	1Q	2033	4Q	N/C	b
Kansas	782/902 785	2035	40	2033	2Q		С
Puerto Rico		2035	4Q	2034		6Q	a
	787/939	2020	20		2Q	150	k
Vermont South Carolina	802 803/839	2039	2Q	2043 2021	1Q 10	-15Q	b f
	<u> </u>	2025	40		1Q	20	
Virginia	804	2025	4Q	2026	3Q	-3Q	b
California	805/820	2026	20	2025	20	40	k
Texas	806	2026	3Q	2025	3Q	4Q	a
Canada	807	2040	20	2010	2.0		С
Hawaii	808	2042	2Q	2040	2Q	8Q	a
Michigan	810						k
Indiana	812/930			0.00			k
Florida	813	2022	4Q	2023	1Q	-1Q	b
Pennsylvania	814	2023	1Q	2022	3Q	2Q	а
Missouri	816	2025	4Q	2025	3Q	1Q	а
Canada	819/873			2025	3Q	N/C	С

LOCATION	NPA	2020	0.2 FCST	2020	0.1 FCST	Change	Notes
,		Year	Quarter	Year	Quarter	2020.1 to 2020.2	Comments
North Carolina	828	2038	1Q	2040	4Q	-11Q	b
Texas	830						k
California	831						k
South Carolina	843/854						k
New York	845	2025	1Q	2026	4Q	-1Q	b
Florida	850	2021	3Q	2021	3Q	N/C	
New Jersey	856	2042	2Q	2046	1Q	-15Q	b
Kentucky	859				-	,	k
Connecticut	860/959						k
New Jersey	862/973						k
Florida	863						k
South Carolina	864	2026	4Q	2029	2Q	-10Q	b
Tennessee	865						k
Canada	867					N/C	С
Arkansas	870	2024	2Q	2023	4Q	2Q	а
Tennessee	901	2042	4Q	2043	4Q	-4Q	b
Florida	904	2025	4Q	2029	2Q	-14Q	b
Michigan	906				-	,	k
Alaska	907			2048	3Q		k
New Jersey	908	2038	2Q	2038	4Q	-2Q	b
California	909	2022	3Q	2022	4Q	-1Q	b
North Carolina	910	2023	2Q	2024	1Q	-3Q	b,i
Georgia	912	2042	1Q	2042	4Q	-3Q	b
Kansas	913	2047	1Q	2045	4Q	5Q	а
New York	914	2037	2Q	2039	3Q	-9Q	b
Texas	915						k
New York	917						е
North Carolina	919/984						k
Wisconsin	920	2028	3Q	2027	2Q	5Q	а
California	925	2049	2Q	2048	3Q	3Q	а
Arizona	928	2039	2Q			-73Q	b
Tennessee	931						k
Texas	936						k
Texas	940	2048	1Q	2044	4Q	13Q	а
Florida	941						k
California	949	2030	1Q	2033	3Q	-14Q	b
California	951	2035	4Q	2037	3Q	-7Q	b
Minnesota	952						k
Texas	956	2032	2Q	2032	4Q	-2Q	b
Colorado	970	2029	2Q	2027	4Q	6Q	а
Texas	979		•		-		k
Louisiana	985						k
Michigan	989	2036	2Q	2035	4Q	2Q	а

Notes:

- a. Reduced historical and projected demand.
- b. Increased historical and projected demand.
- c. Forecast based upon information provided by the Canadian Numbering Authority (CNA). The CNA provides one projection per year (April). Change is from last forecast provided.
- d. Canadian NPA. With an exhaust date beyond 2038, there is generally no exhaust date provided.
- e. NPA is at exhaust. No codes available except for returns.
- f. New NPA added.
- g. Area Code 321A includes only Brevard County Florida; 321/407 includes the Counties around Orlando in Central Florida.
- i. Reflects Delta NRUF forecast.
- k. NPA Exhaust is beyond 30 years or the NPA exhaust moves to less than 30 years.

Attachment 7 - October 2020 NANP Exhaust Analysis

Introduction

NANPA projects the exhaust of the NANP based upon the utilization and forecast data submitted by service providers via the NRUF process. The following assumptions were used in this exhaust analysis.

October 2020 NANP Exhaust Projection Assumptions

The following is a list of assumptions used in the development of the October 2020 NANP exhaust projection prepared by NANPA.

- The NANP exhaust study uses as its basis the CO code demand, which includes service
 provider and Pooling Administrator forecasts, historical CO code assignments and
 other NPA-specific information, calculated for each respective NPA. The monthly CO
 code demand as calculated in the NPA exhaust analysis using statistical analyses
 similar to the analysis NANPA uses to forecast the exhaust of NPAs, i.e., SP forecasts
 and historical CO code assignment data.
- For NPAs in rationing, NANPA compared the actual CO code demand over the past year(s) with the rationed amount. In addition, NANPA compared the forecasted CO code demand provided by service providers and/or the Pooling Administrator to the rationed amount. Based upon this analysis, NANPA identified an average annual CO code demand rate for the NPA.
- 3. A new NPA will be required when the number of assigned and unavailable CO codes reaches 800.
- 4. It is assumed that each new NPA will require the same number of unassignable codes as the current NPA. It appears that most of the unassignable codes in the existing NPAs are duplicated in the new NPA. There may be times, however, when additional codes in the new NPA are marked unassignable.
- 5. No assumptions were made with regard to the relief method implemented (*i.e.*, NPA split vs. overlay). However, it was assumed that the selected relief method did not require the duplication or protection of central office codes other than those identified in number 4 above.
- 6. The CO code demand for an exhausting NPA will be continued after NPA relief. By doing so, the demand for both the existing and new NPAs will be taken into account for the geographic area covered by the original NPA.

- 7. The total quantity of available NPA codes will be 672 NPAs. This figure is derived as follows: 800 NPAs less NPAs reserved for NANP expansion (80), N11 codes (8), 555 and 950 NPAs (2), toll-free NPAs (9)¹ and non-geographic NPAs (29)².
- 8. To account for the variability of demand, a sensitivity analysis was performed to the CO code demand (i.e., demand will be increased and decreased by increments of 10%) to understand the impact on NANP exhaust.

Results based on Assumptions

As recognized in previous NANP exhaust analyses, the model is sensitive to the yearly CO code demand rate. Using the October 2020 NPA Exhaust Analysis and the CO code demand included in NRUF submissions, an average yearly demand rate of 4,030 CO codes was calculated. This yearly demand rate was compared with U.S. CO code demand rates in 2015 through 2020.

Year	Annual Gross CO Code Demand	Annual Net CO Code Demand
2015	3,700	3,500
2016	3,500	3,300
2017	2,700	2,500
2018	2,800	2,500
2019	2,926	2,650
2020	4,030	3,346

To project the exhaust of the NANP, an average annual demand of 4,030 CO codes was used. This demand factors in the forecast data submitted as part of the August 2020 NRUF process and the demand in non-US NANP member area codes.³

Model Based on Projected Demand

Using an average CO code demand rate of 4,030 codes assigned per year, the projected NANP exhaust date is beyond 2050, assuming the quantity of NPAs available remains 674⁴.

Sensitivity Analysis

For comparison purposes, NANPA performed a sensitivity analysis using an average annual demand to 4,836 CO codes, a 20% increase in the base model demand. This analysis also resulted in a projected exhaust beyond 2050.

¹ NPAs 880, 881, 882, 883, 884, 885, 886, 887 and 889.

² These include the 22 codes reserved for non-geographic services (526, 527, 528, 529,532, 538, 542, 543, 545, 547, 549, 552, 553, 554, 556, 569, 578, 589, 550, 535, 546 and 558) and 5 of the codes reserved for Canada (633, 644, 655, 677 and 688).

³ NANPA included an annual forecast of 1,043 CO codes for non-US NANP member countries.

⁴ The base model used in the October 2020 study used an average demand rate of 4,030 codes and projected an exhaust date beyond 2050.

Attachment 8 - October 2020 5XX NPA Exhaust Analysis

Introduction

NANPA projects the exhaust of the 5XX NPA resource based upon the utilization and forecast data submitted by service providers via the NRUF process. The following assumptions were used in this exhaust analysis. The 5XX NPAs currently in service include the 500, 533, 544, 566, 577, 588, 522, 521, 522, 523, 524 and 525 codes.

October 2020 5XX Exhaust Projection Assumptions

The following is a list of assumptions used in the development of the October 2020 5XX NPA exhaust projection prepared by NANPA.

- 1. The 5XX NPA exhaust study uses as its basis the NXX code forecasts submitted via the NRUF reporting process and historical NXX code assignment information. The five year total forecasted demand is used to calculate the number of 5XX NPAs that will be needed over the next five years. This demand is also used to forecast when the current quantity of assigned and reserved 5XX NPAs will exhaust.¹
- 2. A new NPA will be required when the number of assigned and unassignable NXX codes reaches 800.
- 3. It is assumed that each new NPA will require the same number of unassignable codes as the current NPA.
- 4. Using the August 2020 NRUF data, the aggregated forecasted demand for 5XX-NXXs for 2020 through 2025 ranges from 1,000 codes to 1,800 NXXs per year. This demand rate was compared to actual assignment data from 2010 through 2020.

Year	Annual Gross 5XX NXX Code Demand	Annual Net 5XX NXX Code Demand
2010	717	717
2011	757	707
2012	365	357
2013	341	330
2014	639	570
2015	658	630
2016	827	777
2017	781	700
2018	1,146	1,108
2019	700	618
2020	1,054	1,186

This comparison shows the yearly forecasted demand starting in 2010 is in line with the actual demand experienced from 2010 to 2020.

To project the exhaust of the currently-assigned 5XX NPAs, an average annual demand of 1,500 5XX-NXX codes was used. This quantity is higher than 2017 demand and accounts for an increase in forecasted demand over the next five years. Using this demand rate, the projected 5XX exhaust date of the assigned 5XX NPAs is second half of 2019. Further, it is expected that ten new 5XX NPAs will be needed over the next five years.

In projecting the exhaust of the assigned and reserved 5XX NPAs (11 assigned 5XX NPAs and 22 reserved 5XX NPAs), an annual demand rate of 1,500 5XX-NXXs was used, resulting in the projected exhaust of the 5XX resource is approximately 10 years.

¹ The 5XX NPAs reserved for future expansion include the following: 526, 527, 528, 529, 532, 538, 542, 543, 545, 547, 549, 552, 553, 554, 556, 569, 578, 589, 550, 535,546 and 558.

Attachment 9 – Where to Find Numbering Information

Many key numbering documents are available through the Internet. Here are some useful sites.

www.nanpa.com

This is the official NANPA website. Its contents include:

Assignment listings for NANP numbering resources, including area codes, CICs, 5XX NXX codes, 900-NXX codes, N11 codes, and vertical service codes.
Relief planning information for the U.S. and its territories, including an NPA relief planning status chart, planning letters, and information on the relief planning process.
Central office code assignment information for the U.S. and its territories.
Contact information for numbering resources.
Information for NRUF submissions.
Area code maps.

www.cnac.ca

This is the Canadian Numbering Administrator's site. This site is the master reference for Canadian numbering assignment information and includes information similar to that provided by **www.nanpa.com** for the U.S. and its territories.

www.nationalpooling.com

This is the national Thousands-Block Pooling Administrator's (PA's) site. Information concerning thousands-block assignments and availability can be found here.

https://www.nationalpani.com/

This is the national Routing Number Administrator's (RNA's) site. Information concerning assignment of non-dialable p-ANIs (Pseudo-Automatic Number Identification) which are used to support the routing of wireless and VoIP 9-1-1 calls, out of the 211 NXX and 511 NXX on a national basis including Puerto Rico and the Virgin Islands

www.numberportability.com

This is the site for the Number Portability Administration Center or NPAC for the United States. The NPAC facilitates local number portability, the ability to change your service provider while retaining your number.

www.numberportability.com/the-npac/portable-open-codes provides a listing of central office codes open in the NPAC.

www.npac.com

This is the site for the Number Portability Administration Center or NPAC for Canada.

www.fcc.gov

Sections of the FCC's website of particular interest are:

- www.fcc.gov/wireline-competition-bureau the home page of the Wireline Competition Bureau. Orders related to numbering topics, including the Number Resource Optimization (NRO) orders, can be found here.
- www.fcc.gov/encyclopedia/north-american-numbering-council the home page for the North American Numbering Council (NANC), a federal advisory committee of the FCC that provides analysis and recommendations to the FCC on numbering issues. This site contains their charter, meeting minutes and membership lists.
- http://apps.fcc.gov/cgb/form499/499a.cfm provides an address and telephone number for each provider and identifies whether the provider offers local, wireless or toll services. The listed providers are those filing FCC Form 499-A, Telecommunications Reporting Worksheets.

www.nanc-chair.org

This is the home page for the Chair of the NANC. It contains presentations and reports provided to the NANC on issues currently being addressed by the Council. Also included is documentation from the various NANC working groups and issue management groups.

www.crtc.gc.ca

This is the site for the Canadian Radio-television and Telecommunications Commission, the Canadian regulator.

www.atis.org

This is the Alliance for Telecommunications Industry Solutions (ATIS) site. It has several sections of interest for numbering. Of particular interest is the Industry Numbering Committee (INC). All finalized INC documents are available for download, including assignment guidelines for numbering resources.

www.itu.int

This is the home page of the International Telecommunications Union in Geneva, Switzerland, the group that sets international standards for telephone numbers. Although much of the information on the site is available to ITU members only, some documents are available to all, including a list of assigned country codes.

www.naruc.org

This is the home page of the National Association of Regulatory Utility Commissioners. NARUC and its committees frequently take positions on numbering issues. Links to all of the state commissions' websites can be found at this site.

 https://www.naruc.org/about-naruc/regulatory-commissions/ - provides links to state regulatory commission websites.

www.somos.com

This site contains information about the 800 Service Management System (SMS/800) which is the central administration system for the management of Toll-Free Services.

www.mbiadmin.com

This is the home page for the U.S. and Puerto Rico wireless number resource administrator for Mobile Identification Numbers (MIN), called the MIN Block Identifier (MBI). MBI Administration was created in 2002 when the MIN was separated from the Mobile Directory Number (MDN) and became a new number resource to support nationwide roaming, wireless number portability and number pooling.

www.neca.org

This is the site of the National Exchange Carriers Association (NECA). NECA administers the FCC's "access charge" plan. (Access charges are the fees long distance companies pay to access the local phone network to complete calls.)

www.nanpfund.com

The North American Numbering Plan (NANP) is a numbering scheme for the Public Switched Telecommunications Network within the United States, Canada and participating Caribbean countries. The NANP Fund was established to cover the costs of the NANP and is funded by United States telecommunication service providers, and from Canada and Caribbean member countries. Section 52.17 of the Federal Communications Commission's rules state that all telecommunications carriers in the United States shall contribute on a competitively neutral basis to meet the costs of establishing numbering administration.

www.trainfo.com

This is the home page for Telecom Routing Administration, compilers and publishers of the LERGTM Routing Guide and other numbering documentation.

www.nena.org

This is the site of the National Emergency Number Association (NENA). NENA's mission is to foster the technological advancement, availability and implementation of universal emergency telephone number system (9-1-1).

www.usshortcodes.com

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This is the site of the Common Short Code Administration (CSCA). CSCA administers Common Short Codes. Short codes are codes to which an SMS or text message can be sent. Short codes are common across many wireless service providers in the U.S.

Attachment 10 - Contacts in the Countries Participating in the North American Numbering Plan

COUNTRY	CONTACT FOR FORMAL LETTERS AND POLICY ISSUES	CONTACT FOR DAY-TO-DAY REGULATORY NUMBERING ISSUES	CONTACT FOR CENTRAL OFFICE CODE ADMINISTRATION
Bahamas	Stephen Bereaux Chief Executive Officer, Utilities Regulation and Competition Authority (URCA) FredrickHouse FredrickStreet P O Box 4860 Nassau, N.P., The Bahamas Phone: 242-393-0234 Fax: 242-393-0153 info@urcabahamas.bs		
Barbados	Jehu Wiltshire Division of Energy and Telecommunications Office of the Prime Minister Trinity Business Centre Country Road St Michael Barbados. BB11081 permanentsecretary@energy. gov.bb jwiltshire@energy.gov.bb	Reginald Bourne Chief Telecommunications Officer Telecommunications Unit Trinity Business Centre Country Road, St. Michael, Barbados. BB11081 Phone: 246-535- 2502 Reginald.bourne@telecoms .gov.bb	
Bermuda	Matthew Copeland Chief Executive Bermuda Regulatory Authority Craig Appin House, 1st Floor 8 Wesley Street Hamilton HM 11, Bermuda Phone: 441-405-6000 Fax: 441-474-6048 info@rab.bm	Matthew Copeland Chief Executive Bermuda Regulatory Authority Craig Appin House, 1st Floor 8 Wesley Street Hamilton HM 11, Bermuda Phone: 441-405-6000 Fax: 441-474-6048 info@rab.bm	
British Virgin Islands	Hon. Mark Vanterpool Minister of Communications and Works 33 Admin Drive Road Town, Tortola British Virgin Islands, VG1110 Phone: 284-468-2183	Guy L. Malone Chief Executive Officer, Telecommunications Regulatory Commission P.O. Box 4401 Road Town, Tortola British Virgin Islands, VG1110	

	Fax: 284-468-3090	Phone: 284-468-4165	
	mcw@gov.vg	Fax: 284-494- 6786	
	mcw@gov.vg	contact@trc.vg	
		gmalone@trc.vg	
Canada		Joseph Cabrera	Edward Antecol
Carraua		Senior Analyst - Dispute	Canadian Numbering
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Attachment 11 - List of Acronyms

ABEC - Alternate Billing Entity Code

ACNA – Access Customer Name Abbreviation

AOCN – Administrative Operating Company Number

ANI – Automatic Number Identification

ASR – Access Service Request

ATIS – Alliance for Telecommunications Industry Solutions

CIC – Carrier Identification Code

CLEC – Competitive Local Exchange Carrier

CD – Compact Disc

CMRS - Commercial Mobile Radio Service

CNA - Canadian Numbering Administrator

CO – Central Office

CRTC – Canadian Radio-television and Telecommunications Commission

DDR - Donation Discrepancy Report

EFT – Electronic File Transfer

ERC – Easily Recognizable Code

FCC – Federal Communications Commission

FG B – Feature Group B

FG D – Feature Group D

FRN - FCC Registration Number

FTP - File Transfer Protocol

ILEC – Incumbent Local Exchange Carrier

INC – Industry Numbering Committee

IPD – Initial Planning Document

ITU – International Telecommunications Union

LEC – Local Exchange Carrier

LRN – Location Routing Number

MTE - Months-to-Exhaust

NANC - North American Numbering Council

NANP – North American Numbering Plan

NANPA - North American Numbering Plan Administrator

NARUC - National Association of Regulatory and Utility Commissioners

NAS – NANP Administration System

NNS - NANP Notification System

NAOWG - Numbering Administration Oversight Working Group

NPA – Numbering Plan Area

NRO – Number Resource Optimization

NRUF – Numbering Resource Utilization/Forecast

OCN – Operating Company Number

p-ANI – Pseudo-Automatic Number Identification

PA – Pooling Administrator

PAS – Pooling Administration System

POTS - Plain Old Telephone Service

PSTN - Public Switched Telephone Network

RNA – Routing Number Adminsitrator

RND - Reassigned Numbers Database

TBCOCAG – Thousands Block Central Office Code (NXX) Assignment Guidelines

TN – Telephone Number

UMR – Utilization Missing Report

VoIP – Voice over Internet Protocol

VSC - Vertical Service Code

USB - Universal Serial Bus

WCB – Wireline Competition Bureau

About Somos, Inc.

Somos is a leading provider of registry management and data solutions. Our mission is to empower more intimate and trusted connections between brands, consumers, and communities. We accomplish this through our suite of authentication enablement solutions as well as our numbering administration roles.

Somos serves as the North American Numbering Plan Administrator for more than 800 million local and wireless telephone numbers and as the Reassigned Number Database Administrator. We operate the SMS/800 TFN Registry for more than 42 million Toll-Free Numbers in North America, and the TSS Registry, the centralized registry for the use of Toll-Free Numbers in text messaging and multimedia services.

Through our portfolio of products and services, and a collaborative approach in everything we do, Somos helps ensure trust in an increasingly digital world while delivering value, innovation, and results to consumers. To learn more about Somos, please visit www.somos.com.

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