

NANPA

North American Numbering Plan Administrator

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Annual Report 2019

Table of Contents

<i>NORTH AMERICAN NUMBERING PLAN</i>	4
NANP History	4
North American Numbering Plan Administration	4
NANPA Neutrality	5
<i>NANP ADMINISTRATION SYSTEM</i>	5
NAS Central Office Code Administration.....	6
5XX NPA Resource Administration	7
Applying On-line for Other Numbering Resources.....	7
NANP Notification System	8
NAS NRUF.....	9
NAS Reports	9
NAS User Registration.....	10
<i>CODE ADMINISTRATION</i>	10
Resource report–NPA codes	11
2019 Activities	11
Table 1a: NPAs Introduced in 2019	12
Table 1b: NPAs Assigned in 2019	12
Table 2: NPAs planned but not yet introduced (as of December 31, 2019).....	13
Overlays.....	13
Table 3: NPA Overlays.....	13
Dialing plans	15
Resource report–Central office codes.....	16
Central Office Code Activity	17
Table 4: 2019 Monthly CO Code Activity	17
Central Office Code Activity (Year-over-Year).....	18
Table 5: Year-over-Year CO Code Assignments	18
Central Office Code Administration Quality Measurements	19
Table 6: 2019 CO Code Administration Quality Results.....	19
Abandoned CO Codes	20
Code Conservation efforts.....	20
Improvement Processes and Education	20
Managing Jeopardies.....	20
Mass Modification Process.....	21
Table 7: 2019 CO Code Reclamation Quality Results	22
Resource report–5XX-NXX codes.....	23
Resource report–900-NXX codes	23

Resource report–555 line numbers	24
Resource report–Carrier Identification Codes	24
Data Integrity	25
FG D CIC activity	25
Table 8: 2019 Monthly FG D CIC assignments, denials and reclamations.....	26
FG B CIC activity	26
Table 9: 2019 Monthly FG B CIC assignments, denials and reclamations	27
Resource report–N11 codes.....	27
Table 10: N11 Code Assignments	28
Resource report–456-NXX codes	28
Resource report–800-855 numbers	28
Resource report–Automatic Number Identification “II” digits	28
Resource report–Vertical Service Codes.....	29
NANPA Help Desk	29
<i>NPA RELIEF PLANNING OVERVIEW.....</i>	29
Relief planning quality measurements	31
Table 11: Relief planning timeliness	31
Relief planning process	32
<i>NUMBERING RESOURCE UTILIZATION/FORECAST.....</i>	33
Table 12: Summary of the volume of NRUF submissions and associated items for 2019 ...	34
2019 NRUF exhaust forecasts	34
<i>OTHER NANPA SERVICES.....</i>	35
AOCN enterprise service.....	35
Entry of Paper Submissions of Resource Applications.....	35
Entry of Paper NRUF Submissions.....	35
NANPA Testimony in State Regulatory Hearings	35
Customized Reports.....	36
INC Participation	36
Table 13: INC Issues Introduced in 2019.....	36
NANPA website.....	36
Support for NANP countries other than the U.S.	38
Support to the FCC, state commissions and the NANC.....	39
<i>Attachment 1 – Area code inventory.....</i>	41
<i>Attachment 4 – Non-geographic NPAs in service.....</i>	61
<i>Attachment 5 – NPA Dialing Plans.....</i>	63
<i>Attachment 6 – October 2019 NPA Exhaust Projections</i>	71

<i>Attachment 7 - October 2019 NANP Exhaust Analysis.....</i>	<i>78</i>
<i>Attachment 8 - October 2019 5XX NPA Exhaust Analysis.....</i>	<i>81</i>
<i>Attachment 9 - Where to find numbering information.....</i>	<i>83</i>
<i>Attachment 10 - Contacts in the Countries Participating in the North American Numbering Plan.....</i>	<i>86</i>
<i>Attachment 11 - List of Acronyms.....</i>	<i>91</i>

NORTH AMERICAN NUMBERING PLAN

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 twenty 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 seventy years.

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. 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. In 2012, Neustar was again selected by the FCC to serve as the NANPA for another five-year term. 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 one year-term was extended to six months and the option of two additional three months.

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 (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. The NANPA function is performed under an FCC contract on a fixed-price basis.

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.

NANPA Neutrality

In accordance with FCC regulations, the NANPA shall be 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.

NANP ADMINISTRATION SYSTEM

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.

At the end of 2019, there were 1,134 registered NAS users. Over 1,065 were service provider or service provider consultant users. Thirty-seven of the users represented federal and state regulatory users. Twenty-three "Other" users were registered in the system. Along with the NAS-registered users, there were 2,351 email list participants that receive NANP notifications but do not have access to NAS functionality.

There were several system changes in 2019, including the implementation of Change Order A. The Change Order resulted in system changes to NAS which were made on 10/30/19, concurrently with the implementation in PAS. The Change Order required updates to NAS to reflect the new form titles and updated footnotes, which were part of the resolution of INC Issue 839, Combine the Central Office Code (NXX) Assignment Guidelines (COCAG) and the Thousands-Block (NXX-X) Administration Guidelines (TBPAAG) into one document.

Change order B was approved and expected to be implemented in NAS in 2020. The 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 will allow assignment of the 32 designated/reserved non-geographic 5XX NPAs (i.e., 5XX-N11 codes), with the exclusion 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).

Two additional system builds were implemented in late June and December as maintenance builds to improve the applications in advance of the August 1, 2019 and February 1, 2020 NRUF cycles.

One NAS trouble ticket was opened in June 2019. Multiple NNS emails had been sent to NAS users. It was determined the cause was due to slow response from uploading a document exceeding the 10MB limit. The workaround put in place was to upload documents through an internal server. NANPA determined that changing the upload limit was not a proposed resolution due to system overload concerns. The permanent fix is that NANPA will continue to ensure that large documents are uploaded via the internal server only.

There were no instances of unscheduled NAS downtime in 2019.

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 additional central office 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 a Part 5 Form, 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.

NAS also 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 central office 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.

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

Applying On-line for Other Numbering Resources

NAS allows on-line application submissions not only for central office 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.

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;
- Announcements by regulators of changes that affect NANP processing; and
- Data related to the status of resources associated with state conservation deliberations.

Non-geographic 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 and quarterly Newsletters;
- 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.

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 provider industry and appropriate regulatory agencies.

NANPA distributed 112 notifications in 2019. 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	58
Other Non-Geographic	14
NRUF	19
Planning Letters	6
Code Administration	5
INC Guidelines	7
Jeopardy	3
Other Geographic	0
Total	112

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.

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.

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.

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 1) submit requests for central office codes from geographic area codes, 2) access and utilize NRUF capabilities, 3) register for various geographic and non-geographic notifications, 4) submit applications for other NANP resources such as CICs, 5XX-NXXs, 900-NXXs and 800-855 line numbers and 5) 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.

CODE ADMINISTRATION

Code administration includes 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);
- 800-855 line numbers;
- 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

Resource report–NPA codes

NPA codes, often called "area codes," are the first three digits of the 10-digit NANP telephone number. NPA codes are in NXX format, where N is any digit from 2 through 9 and X is any digit from 0 through 9. Attachment 1 to this annual report provides an inventory of all NPA codes.

Most NPA codes designate specific geographic areas; for example, NPA 701 serves North Dakota and NPA 804 covers a portion of Virginia. NPA codes used in this manner are called geographic NPA codes. As of December 31, 2019, 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 to this annual report are tables of geographic NPA codes currently in use, sorted by location and numerically.

Other NPA codes designate special services such as toll-free calling rather than geographic areas. These codes are called non-geographic NPA codes. NPA 524 was assigned to augment the 5XX NPAs and went into service in July. Attachment 4 lists the non-geographic NPA codes currently in service.

Introduction of a new geographic NPA code 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 code is assigned for a geographic area, an implementation period follows. The most visible implementation activities include preparing the network to accept the new NPA code, introducing any required changes to the dialing plan and informing the public about how the new code is to be used. The new code is said to be "in service" when it becomes generally dialable.

2019 Activities

Five new NPA codes went into service in 2019, as shown in the table below.

Table 1a: NPAs Introduced in 2019

NPA	Date in Service	Location	Overlay?	Parent NPA	Planning Letter Number(s)	NPA Overlay Complex
658	4/30/19	Jamaica	Yes	876	525 510	876/658
689	6/04/19	Florida	Yes	407	519 325 323	407/689
341	7/22/19	California	Yes	510	518	510/341
659	11/19/19	Alabama	Yes	205	523 289 284	205/659
524	07/12/19	Non-Geographic	Yes	500	527 528	500/588/577/566/544/533/522/521/523/524

Six NPAs were assigned this past year as shown in the table below. NPA 354 was assigned as the relief area code for the Quebec, Canada 450/579 overlay complex. NPA 368 was assigned as the relief area code for the Alberta, Canada 825/403/597/780 overlay complex. NPA 474 was assigned as the relief area code for the Saskatchewan 639/306 overlay complex. NPA 840 was assigned as the relief code for the California 909 NPA. NPA 448 was assigned as the relief code for the Florida 850 NPA. Finally, the 524 non-geographic NPA was assigned and introduced in 2019.

Table 1b: NPAs Assigned in 2019

NPA	Assign Date	Location	Overlay?	Parent NPA	Planning Letter Number(s)	NPA Overlay Complex
354	01/27/19	Quebec Canada	Yes	450	526 533	354/450/579
368	5/03/19	Alberta Canada	Yes			
341	6/25/18	California	Yes	510	518	341/510
839	7/18/18	South Carolina	Yes	803	520	803/839
428	11/13/18	New Brunswick, Canada	Yes	506	522	428/506
523	06/13/18	Non Geographic	Yes	500	516	500/588/577/566/544/533/522/521/523

At year end, 19 previously-assigned NPA codes 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 code. 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 or revised 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, 2019)

New NPA	Location	Country	Antioipated In Service Date	Existing NPA(s)	Status	Planning Letter Number(s)
227	Maryland	US		301/240	Pending	
274	Wisconsin	US		920	Pending	442 417 385
283	Ohio	US		513	Suspended	316 286 264
326	Ohio	US	3/8/20	937	Scheduled	517
327	Arkansas	US		870	Suspended	437 400
354	Quebec	Canada		450	Suspended	526 533
428	New Brunswick	Canada	11/21/20	506	Scheduled	522
447	Illinois	US		217	Pending	
448	Florida	US	03/30/21	850	Scheduled	534
464	Illinois	US		708	Pending	195
474	Saskatchewan	Canada	10/02/21	639	Scheduled	530
557	Missouri	US		314	Suspended	303 279 261
679	Michigan	US		313	Suspended	227 209
730	Illinois	US		618	Pending	
839	South Carolina	US	05/26/20	803	Scheduled	520
822	NANP area	US		800	Pending	214
840	California	US	05/23/21	909	Scheduled	529
879	Newfoundland	Canada	5/20/22	709	Scheduled	514 503
975	Missouri	US		816	Suspended	304 280 262

Overlays

In an overlay, two or more NPA codes serve all or part of the same geographic area. The term "overlay complex" describes the list of NPA codes included in the overlay. All of the overlays in service today are full-service overlays; that is, numbers in the overlay NPA code(s) are not restricted to any specific service or services. Four NPA overlays were implemented in 2019. Listed in Table 3 are the overlay complexes in service as of December 31, 2019.

Table 3: NPA Overlays

Location	Overlay Complex
Alabama	256/938
Alabama*	659/205
Alberta, Canada	403/780/587/825
British Columbia, Canada	250/604/778/236
California	213/323
California	310/424
California*	341/510
California	408/669
California	415/628
California	714/657
California	760/442

California	805/820
California	818/747
California	916/279
Colorado	303/720
Connecticut	203/475
Connecticut	860/959
Dominican Republic	809/829/849
Florida	305/786
Florida	407/321
Florida*	689/407
Florida	954/754
Georgia	404/770/678/470
Georgia	706/762
Idaho	208/986
Indiana	317/463
Indiana	812/930
Illinois	312/773/872
Illinois	630/331
Illinois	815/779
Illinois	847/224
Jamaica*	658/876
Kentucky	270/364
Manitoba, Canada	204/431
Maryland	301/240
Maryland	410/443/667
Massachusetts	508/774
Massachusetts	617/857
Massachusetts	781/339
Massachusetts	978/351
Michigan	248/947
Mississippi	601/769
Nebraska	402/531
Nevada	702/725
New Jersey	201/551
New Jersey	609/640
New Jersey	732/848
New Jersey	973/862
New York	212/646/917/332
New York	315/680
New York	518/838
New York	631/934
New York	718/347/917/929
North Carolina	336/743
North Carolina	704/980
North Carolina	919/984
Nova Scotia/Prince Edward Island, Canada	902/782
Ohio	330/234
Ohio	419/567
Ohio	614/380
Ohio	740/220

Oklahoma	918/539
Ontario, Canada	416/647/437
Ontario, Canada	519/226/548
Ontario, Canada	613/343
Ontario, Canada	705/249
Ontario, Canada	905/289/365
Oregon	503/971
Oregon	541/458
Pennsylvania	215/267/445
Pennsylvania	412/724/878
Pennsylvania	570/272
Pennsylvania	610/484
Pennsylvania	717/223
Puerto Rico	787/939
Quebec, Canada	418/581/367
Quebec, Canada	450/579
Quebec, Canada	514/438
Quebec, Canada	819/873
Saskatchewan, Canada	306/629
South Carolina	843/854
Tennessee	615/629
Texas	210/726
Texas	214/469/972
Texas	512/737
Texas	713/281/832/346
Texas	817/682
Texas	903/430
Utah	801/385
Virginia	703/571
Washington	360/564
West Virginia	304/681
Wisconsin	715/534

*New in 2019

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. Basic dialing plans for U.S. NPAs are listed in Attachment 5 to this annual report.

Key variables in determining a dialing pattern are 1) whether or not the call originates and terminates within the same NPA, 2) 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.

Resource report—Central office codes

Central office codes, also known as prefixes, exchanges, or NXX codes, are digits 4 through 6 of the 10-digit telephone number. The following discussion addresses central office codes within geographic area codes.

NANPA administers all geographic central office 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 to this annual report.

Service providers obtain numbers for their customers by applying for and receiving central office code assignments. Each central office 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 central office codes in order to 1) to request the assignment of a central office code for Location Routing Number (LRN) purposes, 2) to request a code to replenish the inventory pool or 3) to request a code to meet a service provider's need for 10,000 consecutive telephone numbers for a single customer. NANPA tracks 170,125 assigned central office codes in the U.S. and its territories. NANPA processed 7,869 requests in 2019 (compared to 9,567 requests in 2018) for central office code assignments, returns or changes to existing assignments.

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 central office 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), *ATIS030019*, can be found at the Alliance for Telecommunications Industry

Solutions (ATIS) website at
http://www.atis.org/01_committ_forums/INC/documents/.

Central Office Code Activity

Central office code monthly application and assignment activities during 2019 are shown in Table 4. The rows in the table should be interpreted as follows:

Assignments—Applications that resulted in the assignment of a 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 Central Office Code (NXX) Assignment Guidelines, Appendix C, Procedures for Code Holder Exit.

Table 4: 2019 Monthly CO Code Activity

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Assignments	330	282	328	222	390	224	210	307	283	407	185	265	3,433
Changes	96	252	133	291	330	268	177	245	426	824	317	164	3,523
Denials	50	30	42	44	86	60	64	70	86	72	132	70	806
Cancellations (Note 1)	0	18	4	14	5	4	3	0	0	0	0	0	48
Canceled Returns (Note 1)	0	0	0	0	1	0	0	0	0	0	0	0	1
Returns	10	8	26	25	26	20	16	48	88	16	9	13	305
Reservations	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Processed	486	554	529	467	832	572	467	674	883	1,319	643	443	7,869
Pooling Pass- Thru	482	436	442	393	686	541	411	593	656	591	476	443	6,150
Abandoned Codes	0	0	2	3	3	0	69	0	0	0	5	5	87

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

A total of 7,869 applications were processed in 2019 as compared to 9,567 processed in 2018 and 11,491 in 2017. A total of 3,433 central office code assignments were made in 2019 as compared to 2,846 in 2018 and 2,713 in 2017. The majority of assignments (2,654 as compared to 2,185 in 2018) were pool replenishment. There were 679 (as compared to 532 in 2018) code assignments for LRN requests, 45 (as compared to 57 in 2018) for dedicated customer requests and 55 (as compared to 88 in 2018) non-pooled assignments. Out of the 7,869 applications processed, 6,150 CO Code Applications were passed through to NAS from the Pooling Administration System (PAS), as compared to 6,697 in 2018.

A total of 3,523 change requests were processed in 2019. These includes transfers to other service providers, switch changes, tandem changes, OCN changes due to mergers/acquisitions, and effective date changes. This compares to 5,453 changes processed in 2018.

A total of 279 return requests were approved in 2019 as compared to 279 in 2018. In addition, a total of 87 CO codes were treated as abandoned in 2019, as compared to 115 in 2018. A total of 48 applications were cancelled/withdrawn, as compared to 91 withdrawals in 2018.

As part of its code administration responsibilities under the Debt Collection Improvement Act of 1996, 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 2019, fourteen (fifteen were denied in 2018) central office code assignment requests were denied by NANPA in compliance with this requirement.

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 2019 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
2007	3,216	2,467	749
2008	2,946	2,162	784
2009	2,144	1,610	534
2010	2,795	2,484	311
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
2018	2,846	2,567	279
2019	3,433	3,128	305

3	Percent of administrator phone calls returned by end of next business day	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
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2019 Activities

Below is a summary of central office code administration activities in 2019.

Abandoned CO Codes – NANPA identified 87 codes to be treated as abandoned. During the year, NANPA coordinated the recovery/transfer of these codes with the FCC as well as with 11 state regulators.

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 22 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 central office code from one service provider to another service provider in need of a code for a Location Routing Number (LRN). NANPA coordinated with regulators, the Pooling Administrator and service providers in an attempt to transfer 48 codes in ten states, where possible, to avoid opening new codes for LRN purposes.

Improvement Processes and Education – NANPA provided numerous reminders concerning the requirement to build new codes in industry databases, to perform work necessary to transfer codes and return codes not in use. These efforts resulted in resolving discrepancies on over 200 central office codes. In addition, NANPA code administration automated a process to ensure daily NAS entries and updates matched daily ACD screen entries and updates in the BIRRDs system.

NANPA completed additional cleanup work with iconectiv's TRA (Traffic Routing Administration) and service providers (CIGGR C241 – Common Interest Group on Routing and Rating) for consistent representation of "oddball codes" (e.g. information service, test codes, high volume codes, etc.) in all databases. NANPA also worked with TRA on improving the mass modification process under CIGGR C253 – Standard Excel Templates for Utility/Mass Modification Requests

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).

At the end of 2019, two NPAs were in jeopardy (Illinois 217 and 618 NPAs).

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 2019, NANPA processed 521 record changes via the mass modification process.

Reclamation – Each central office 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 2019, 3,230 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 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. Table 7 reflects the reclamation activity in 2019.

Table 7: 2019 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)	16	11	10	14	13	9	8	3	3	23	19	3
	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	1	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).

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; the NXX identifies the service provider.

There were ten 5XX NPAs in-service at the end of 2019: NPAs 500, 521, 533, 544, 566, 577, 588, 522, 523 and 524. In May 2019, NANPA published Planning Letter 527 (Assignment of NPA 524 for Non-Geographic Services). In July 2019, NANPA initiated NXX assignments from the 524 NPA and published Planning Letter 528.

During 2019, NANPA assigned 994 new 5XX-NXX codes. This compares with 940 5XX-NXX codes assigned in 2018 and 781 5XX-NXX codes assigned in 2017.

At the end of 2019, a total of 7,569 5XX-NXX codes were assigned. Twenty-six 5XX-NXX codes were returned in 2019 and 232 codes remained available for assignment. Eighty-one 5XX-NXX codes are not available for assignment (5XX-555 and all 5XX-N11). 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: 525, 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™).

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*.

No 900-NXX codes were assigned in 2019. One (1) code was returned. Forty-nine (49) 900-NXX codes were unavailable for assignment as of December 31, 2019.

These include eight 900-N11 codes and 41 900-NXX codes reserved for Canadian use.

At the end of 2019, a total of 52 900-NXX assignments were in effect. The number of 900-NXX codes available for assignment was 699. 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.

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.

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 for CIC assignments (via NAS). 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 separately be provided 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 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.

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 sent out over 150 notifications in 2019 in an effort to work with the industry to maintain the accuracy of the CIC assignment information.

FG D CIC activity

During 2019, NANPA assigned 7 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 76 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 2019, 1,815 FG D CICs were assigned in total, leaving 7,962 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 2019, NANPA identified 138 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' 2019 semi-annual CIC reports.

Table 8: 2019 Monthly FG D CIC assignments, denials and reclamations

Month	Assigned	Reclaimed/ returned codes	Applications denied	Applications withdrawn
January	1	4	0	1
February	0	0	0	0
March	0	2	0	0
April	1	5	0	0
May	0	10	0	0
June	1	4	0	0
July	1	5	1	0
August	0	5	0	2
September	1	16	0	0
October	1	4	5	1
November	1	4	1	0
December	0	17	0	0
Total	7	76	7	4

FG B CIC activity

In 2019, no FG B CICs were assigned and 15 FG B CICs were returned or reclaimed. At the end of 2019, 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 2019, NANPA had identified 58 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' 2019 semi-annual CIC reports.

Table 9: 2019 Monthly FG B CIC assignments, denials and reclamations

Month	Assigned	Reclaimed/ returned codes	Applications denied	Applications withdrawn
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	1	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	5	0	0
October	0	4	0	0
November	0	1	0	0
December	0	4	0	0
Total	0	15	0	0

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.

As part of the proceedings under the National Suicide Hotline Improvement Act of 2018, the Commission directed the North American Numbering Council (NANC) to provide a report back to the Commission to include a recommendation on which N11 code or non-N11 3 digit code should be designated for a national suicide prevention and mental health crisis hotline system. On December 16, 2019, the FCC issued a Proposed Rulemaking in WC Docket No. 18-336, seeking comment on the designation of "988" as the three-digit code for a national suicide prevention and mental health crisis hotline.

Table 10: 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 Telerriage Services (Canada)
911	Emergency

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, it was determined there was no longer a need for the 456 NPA. INC 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.

Resource report—800-855 numbers

800-855 numbers are used only for the purpose of accessing public services on the PSTN intended for the deaf, hard of hearing or speech impaired. 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 *800-855 Number Assignment Guidelines, ATIS-0300047*.

No 800-855 number assignments were made in 2019. A list of 800-855 assignments can be found on the NANPA website, www.nanpa.com.

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 2019. A list of ANI II digit assignments can be found on the NANPA website, www.nanpa.com.

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 2019. There was a total of 61 VSCs assigned at the end of 2019. A list of assigned VSCs is available on the NANPA website, www.nanpa.com.

NANPA Help Desk

In 2019, the NANPA Help Desk responded to over to over 1000 emails sent to the NANPA Help Desk and responded to 500 telephone calls. All emails and phone calls were either answered immediately or within one business day.

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 document entitled *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 major role in NPA relief planning. At least 36 months before the anticipated exhaust of an NPA in the U.S. or its territories, NANPA's relief planners notify the local industry and state regulatory commission of the impending exhaust

and convene a preliminary planning meeting to discuss local dialing arrangements, communities of interest and other pertinent issues to identify viable methods of relief. Using input from this meeting, relief planners prepare and distribute an initial planning document (IPD) for consideration 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.

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 relating to 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 a plan, which may not be one of the options considered by the industry, NANPA requests assignment of the NPA relief code 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 on the NANPA website. The planning letter announces the method of relief selected, the identity of the new area code, the schedule for relief, the new dialing plan, the test number(s) for the new area code, a rate center map and, in the case of a split, a list of the prefixes moving to the new area code and those remaining in the area code 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 relief plan petition 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 Administrators 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 2019, NANPA initiated four new area code relief planning projects (VA 757, VA 540, FL 850, and FL 813) and filed four NPA relief petitions/applications with the appropriate state public regulatory commission (VA 757, VA 540, FL 850 and FL 813). NANPA facilitated eight relief planning meetings, facilitated three initial NPA implementation meetings (CA 909/840, IL 217/447, and FL 850/448) and conducted industry trigger and jeopardy review meetings for AR 870 and FL 407.

NANPA relief planners facilitated a total of 13 industry meetings, conducted entirely by conference calls. They shadowed 42 industry NPA relief subcommittee

meetings. To keep the industry informed, NANPA issued 58 notifications using the NNS, which included reminder notices of relief planning meetings that were distributed a few days prior to the meeting. NANPA also created and published three planning letters describing the details of ongoing geographic area code relief projects, as well as published 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.

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, as shown in Table 11. In 2019, NANPA completed 100% of the 38 tracked activities on schedule.

Table 11: Relief planning timeliness

Performance Measurement	Events in 2019	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 of relief meeting date.	1	1	100%
Distributed IPD within 4 weeks of relief meeting date.	3	3	100%
Distributed meeting minutes within 2 weeks or date set at the meeting.	16	16	100%
Held minutes review by date set at the meeting.	4	3	100%
Filed relief-related petitions by date set at the meeting.	4	4	100%
Requested relief NPA assignment within 1 week of regulatory approval.	2	2	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.	2	2	100%
Held jeopardy meeting within 30 calendar days after jeopardy declaration.	1	1	100%
Posted planning letter or notice of industry meeting on website within 3 weeks after implementation meeting.	2	2	100%
Posted planning letter on website within 10 business days after regulatory change.	0	N/A	N/A
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	38	38	100%

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

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 or a single NPA with only one rate center, 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.
- All meetings are conducted by conference call to reduce travel costs and increase participation. Further, NANPA uses an on-line meeting capability, allowing participants to view relevant documentation and where appropriate, make real-time updates.
- NANPA has created various tools to be used in conjunction with the on-line meeting capability. These tools include:
 - A "Pros & Cons" table for NPA relief planning meetings, allowing the participants to view this table via the on-line meeting capability and select those pros and cons applicable to the relief alternative being discussed.
 - 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 conference call, 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.

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., Excel™ workbook), Electronic File Transfer (EFT), compact disc or paper. In 2019, NANPA processed over 12,000 NRUF submissions (See Table 14) 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 over 900 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. Forty-eight reports were provided to the states, covering both NRUF submission cycles in 2019.

NANPA implemented a new email address for NRUF filings (nruf@nanpa.com) in November 2019. Reminders of the decommissioning of the older email address had been sent out regularly during the year via the NNS system to ensure all were aware of the changed address. Industry notifications were also sent 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.

Table 12: Summary of the volume of NRUF submissions and associated items for 2019

Measurements	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Form 502 Email Submissions	2,742	388	364	116	133	96	2,575	398	195	64	37	46	7,154
Form 502 FTP Submissions	548	204	0	0	0	0	701	11	5	0	0	0	1,469
Form 502 Web Submissions	992	269	176	203	125	63	1,039	254	155	96	124	84	3,580
Total Submissions	4,282	861	540	319	258	159	4,315	663	355	160	161	130	12,203
Error Notifications Sent	439	75	137	42	22	20	390	66	51	14	9	9	1,274
Missing Utilization Notifications Sent	0	291	4	0	0	0	0	217	0	0	0	0	512
Anomalous Notifications Sent	0	3	201	55	0	0	0	10	220	11	0	0	500
Confirmation Notifications Sent	2,792	586	227	71	110	76	2,854	342	146	47	28	37	7,316
Phone Calls/Emails Received	177	96	68	82	27	35	191	99	51	46	17	12	901
State Reports Created	0	0	23	0	1	0	1	1	18	4	0	0	48
Job Aids Created/Revised	2	0	0	0	2	0	2	0	0	0	2	0	8

2019 NRUF exhaust forecasts

One of the primary uses for NRUF data is to support forecasts of the exhaust date for each geographic NPA as well as the exhaust date for the 5XX NPA and the entire NANP. Detailed projections can be found in Attachments 6, 7 and 8 to this annual report. The methodology used to produce the 2019 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 the 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 if necessary. NANPA did not issue any revised exhaust dates in 2019.

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.

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."

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 2019, NANPA processed no paper resource applications.

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 2019, no service provider used this service.

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 2019, NANPA provided testimony on one occasion (VA 757).

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 2019, NANPA created no customized reports.

INC Participation

NANPA was an active participant and contributor to the INC in 2019, 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 13: INC Issues Introduced in 2019

871	Additional Updates to Facilities Readiness Pre-Planning Checklist in TBPAG Section 4.3.1.2 and COCAG Section 4.2.2 – updated TBPAG and COCAG on 4/5/19 (joint NANPA/PA issue)
874	Requirement for FGD access for assignment and retention of a Carrier Identification Code (CIC). Issue was closed with no Guideline changes
877	Customer Letter Requirement for Vanity Code Request. Issue closed with no Guideline changes
879	Revisit Assignment of 800-855 line numbers and the 800-855 Assignment Guidelines (joint NANPA/iconectiv issue)
881	Further streamline NPA Relief Planning & Not. Guidelines Section 5.6.1
880	Updates to the TBCOCAG Appendix A – Business Plan/Pre-Planning Checklist. Guideline changes to be reflected on 01/10/20 (joint NANPA/PA issue)

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, newsletters, 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™).
- 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 as well as area codes introduced over the last ten years.
- U.S. NPA dialing plans and area codes requiring 10-digit dialing.
- Search for Area Code listings query and a City/Town/NPA search.
- An NPA database (CSV file) containing information about all area codes.
- 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.
- 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 Central Office 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 2019 include:

- Refreshed NANPA website for easier navigation in August 2019
- Created (jointly with Pooling Administrator) Job Aid for Voluntary Code Transfer Process for Establishing an LRN. Located under Tools/NAS User Guides.
- Updated the *NAS Mass Modify User Guide* in September 2019 to reflect updated industry process. Located under Tools/NAS User Guides.
- Continually updated the *State Safety Valve Process Quick Sheet* that identifies the states that participate in the safety valve process. The safety valve process is used by a service provider that initially makes an application for numbering resources and is denied by the resource administrator because the applicant does not meet the resource assignment requirements as stated in FCC rules (e.g., months to exhaust (MTE) or utilization requirements). The service provider may appeal to the state regulatory authority to override the guidelines and permit the assignment of the resource. If a state does not participate in the process, the safety valve request is submitted to the FCC. Located under Reports/Central Office Codes.
- Updated the *NRUF Geographic and Non Geographic Job Aids and the NRUF Common Errors 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, monthly statistics)

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.

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

NANPA continued to participate in conference calls 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 monthly reports to the NANC throughout 2019. These reports 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 interfaced with the NANC's subtending organizations as well. NANPA participated in meetings with the Numbering Administration Oversight Working Group (NAOWG) Contract Oversight Subcommittee (COSC), providing reports on performance measurements, NAS updates and trouble tickets, and a review of relevant numbering activities. As requested in the FCC's February 22, 2019 correspondence to the NANC regarding the National Suicide Hotline Improvement Act of 2018 and direction to consult with NANPA, in March 2019 NANPA provided the NANC NAOWG with background and a recommendation on the type of NPA that could be used if the decision is made to use a non N11 3-digit code. NANPA also systematically blocked further assignment of 988 as a Central office code (NPA-NXX) as of 09/19/19. These NXXs will remain unavailable pending decisions surrounding the August 14, 2019 FCC WCB recommendation in response to the National Suicide Hotline Improvement Act of 2018, to initiate a rulemaking proceeding to consider designating 988 as the 3-digit code to be used solely for the purpose of a national suicide prevention and mental health hotline.

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 $8 \times 10 \times 10 = 800$ combinations. Of these, 120 are not assignable or have been set aside by the Industry Numbering Committee (INC) for special purposes. These 120 codes are listed below.

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

Subtracting 120 from 800 leaves 680 assignable NPA codes. Of these, 433 have been assigned. Of these 433, 409 are in service and 24 are awaiting introduction. Of the 409 NPA codes in service, 391 are geographic and 18 are non-geographic.

Of the 680 assignable NPA codes, 249 are currently unassigned. Of these codes, 42 are easily recognizable codes (ERCs) currently allocated for non-geographic use, and 207 are general-purpose codes. Of these 207, 165 are reserved,¹ leaving 42 available, unreserved, general-purpose codes.

Of the 42 unassigned ERCs, 5 are reserved,² leaving 37 available.

¹ These codes have been designated for the relief of NPAs that are forecasted to exhaust in the next ten years. Also included are 23 NPAs reserved for future 5XX–NXX expansion (525, 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.

² These 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.

221	230	232	235	238
247	257	258	259	261
263	265	271	273	278
280	286	287	324	328
329	341	342	350	353
357	359	362	363	369
381	382	384	387	389
420	421	427	428	429
436	439	449	451	453
457	459	460	461	462
465	468	471	472	476
474	476	481	483	485
486	487	489	536	537
560	565	568	572	582
583	584	589	621	624
625	627	632	634	642
645	652	656	663	665
673	676	683	685	686
687	728	729	735	738
739	741	742	745	746
748	749	750	752	753
756	761	764	768	776
789	821	823	824	826
835	837	841	851	852
861	871	875	921	923
924	926	927	935	942
943	945	946	948	953
957	981	982	983	987
948				

Attachment 2 – Geographic NPAs sorted by location

Country	Location	NPA
Anguilla	Anguilla	264
Antigua and Barbuda	Antigua and 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	778
Canada	Manitoba	204
Canada	Manitoba	431
Canada	New Brunswick	506
Canada	Newfoundland	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
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
Dominica	Dominica	767
Dominican Republic	Dominican Republic	809
Dominican Republic	Dominican Republic	829
Dominican Republic	Dominican Republic	849
Grenada	Grenada	473
Jamaica	Jamaica	658
Jamaica	Jamaica	876
Montserrat	Montserrat	664
Sint Maarten	Sint Maarten	721
St. Kitts and Nevis	St. Kitts and Nevis	869
St. Lucia	St. Lucia	758
St. Vincent and Grenadines	St. Vincent and Grenadines	784
Trinidad and Tobago	Trinidad and Tobago	868
Turks and Caicos Islands	Turks and Caicos Islands	649
US	AK	907
US	AL	205
US	AL	251
US	AL	256
US	AL	334
US	AL	658
US	AL	938
US	American Samoa	684
US	AR	479
US	AR	501
US	AR	870
US	AZ	480
US	AZ	520
US	AZ	602
US	AZ	623
US	AZ	928
US	CA	209
US	CA	213
US	CA	279
US	CA	310
US	CA	341
US	CA	323
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	CNMI	670
US	CO	303
US	CO	719
US	CO	720
US	CO	970
US	CT	203
US	CT	475
US	CT	860
US	CT	959
US	DC	202
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	Guam	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
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
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
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	OH	216
US	OH	220
US	OH	234
US	OH	330
US	OH	380
US	OH	419
US	OH	440
US	OH	513
US	OH	567
US	OH	614
US	OH	740
US	OH	937
US	OK	405
US	OK	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	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
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	956
US	TX	972
US	TX	979
US	US	710
US	US Virgin Islands	340
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
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

Note: All geographic NPAs were in service as of December 31, 2019.

Attachment 3 – Geographic NPAs sorted numerically

NPA	Country	Location
201	US	NJ
202	US	DC
203	US	CT
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	OH
217	US	IL
218	US	MN
219	US	IN
220	US	OH
223	US	PA
224	US	IL
225	US	LA
226	Canada	Ontario
228	US	MS
229	US	GA
231	US	MI
234	US	OH
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
254	US	TX
256	US	AL
260	US	IN
262	US	WI
264	Anguilla	Anguilla

267 US	PA
268 Antigua and Barbuda	Antigua and 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	CO
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
330 US	OH
331 US	IL
332 US	NY
334 US	AL
336 US	NC
337 US	LA
339 US	MA
340 US	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	OH
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	OH
423 US	TN
424 US	CA
425 US	WA
430 US	TX
431 Canada	Manitoba
432 US	TX
434 US	VA
435 US	UT
437 Canada	Ontario
438 Canada	Quebec
440 US	OH
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	CT
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	OH
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
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	OH
570 US	PA
571 US	VA
573 US	MO
574 US	IN
575 US	NM
579 Canada	Quebec
580 US	OK
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	OH
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
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 and Caicos Islands	Turks and 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 US	CNMI
671 US	Guam

678 US	GA
680 US	NY
681 US	WV
682 US	TX
684 US	American Samoa
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
710 US	US
712 US	IA
713 US	TX
714 US	CA
715 US	WI
716 US	NY
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	OH
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 and Grenadines	St. Vincent and Grenadines
785 US	KS
786 US	FL
787 US	Puerto Rico
801 US	UT
802 US	VT
803 US	SC
804 US	VA
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
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	CT
862 US	NJ
863 US	FL
864 US	SC
865 US	TN
867 Canada	Yukon, NW Terr., Nunavut
868 Trinidad and Tobago	Trinidad and Tobago
869 St. Kitts and Nevis	St. Kitts and Nevis
870 US	AR
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	OK
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	OH
938 US	AL
939 US	Puerto Rico
940 US	TX
941 US	FL

947 US	MI
949 US	CA
951 US	CA
952 US	MN
954 US	FL
956 US	TX
959 US	CT
970 US	CO
971 US	OR
972 US	TX
973 US	NJ
978 US	MA
979 US	TX
980 US	NC
985 US	LA
984 US	NC
986 US	ID
989 US	MI

Note: All geographic NPAs were in service as of December 31, 2019.

Attachment 4 – Non-geographic NPAs in service

The table below lists the non-geographic NPAs in service as of December 31, 2019, 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
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
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, and 524 (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 524, 525, 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 this 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 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, 888, 877, 866, 855, 844 and 833 are used as toll-free codes. The 833 NPA was open in June 2017. NPA code 822 has been assigned for future use as a toll-free code and will be introduced as 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	Home NPA Local Calls	Home NPA Toll Calls	Foreign NPA Local Calls	Foreign NPA Toll Calls	Notes
AK	907	7D	1+10D	1+10D	1+10D	
AL	659	10D	1+10D	10D	1+10D	
AL	251	7D	1+10D	10D	1+10D	1
AL	256	10D	1+10D	10D	1+10D	
AL	334	7D	1+10D	10D	1+10D	
AL	659	10D	1+10D	10D	1+10D	
AL	938	10D	1+10D	10D	1+10D	
AR	479	7D	1+10D	10D	1+10D	
AR	501	7D	1+10D	10D	1+10D	
AR	870	7D	1+10D	10D	1+10D	
AS	684	7D	NA	NA	1+10D	
AZ	480	7D	1+10D	10D	1+10D	
AZ	520	7D	1+10D	10D	1+10D	
AZ	602	7D	1+10D	10D	1+10D	
AZ	623	7D	1+10D	10D	1+10D	
AZ	928	7D	1+10D	10D	1+10D	
CA	209	7D	7D	1+10D	1+10D	
CA	213	1+10D	1+10D	1+10D	1+10D	
CA	279	1+10D	1+10D	1+10D	1+10D	
CA	310	1+10D	1+10D	1+10D	1+10D	
CA	323	1+10D	1+10D	1+10D	1+10D	
CA	341	1+10D	1+10D	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	510	1+10D	1+10D	1+10D	1+10D	
CA	530	7D	7D	1+10D	1+10D	
CA	559	7D	7D	1+10D	1+10D	
CA	562	7D	7D	1+10D	1+10D	
CA	619	7D	7D	1+10D	1+10D	
CA	628	1+10D	1+10D	1+10D	1+10D	
CA	626	7D	7D	1+10D	1+10D	
CA	650	7D	7D	1+10D	1+10D	
CA	657	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	

Location	NPA	Home NPA Local Calls	Home NPA Toll Calls	Foreign NPA Local Calls	Foreign NPA Toll Calls	Notes
CA	831	7D	7D	1+10D	1+10D	
CA	858	7D	7D	1+10D	1+10D	
CA	909	7D	7D	1+10D	1+10D	
CA	916	1+10D	1+10	1+10D	1+10D	
CA	925	7D	7D	1+10D	1+10D	
CA	949	7D	7D	1+10D	1+10D	
CA	951	7D	7D	1+10D	1+10D	
CNMI	670	7D	1+10D	NA	1+10D	
CO	303	10D	1+10D	10D	1+10D	
CO	719	7D	1+10D	10D	1+10D	
CO	720	10D	1+10D	10D	1+10D	
CO	970	7D	1+10D	10D	1+10D	
CT	203	10D	1+10D	10D	1+10D	
CT	475	10D	1+10D	10D	1+10D	
CT	860	10D	1+10D	10D	1+10D	
CT	959	10D	1+10D	10D	1+10D	
DC	202	7D	NA	10D	1+10D	
DE	302	7D	1+10D	10D	1+10D	
FL	239	7D	1+10D	10D	1+10D	
FL	305	10D	1+10D	10D	1+10D	
FL	321	10D	1+10D	10D	1+10D	3
FL	352	7D	1+10D	10D	1+10D	
FL	386	7D	1+10D	10D	1+10D	
FL	407	10D	1+10D	10D	1+10D	
FL	561	7D	1+10D	10D	1+10D	4
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	5
FL	786	10D	1+10D	10D	1+10D	
FL	813	7D	1+10D	10D	1+10D	
FL	850	7D	1+10D	10D	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	
GA	229	7D	1+10D	10D	1+10D	
GA	404	10D	1+10D	10D	1+10D	
GA	470	10D	1+10D	10D	1+10D	
GA	478	7D	1+10D	10D	1+10D	
GA	678	10D	1+10D	10D	1+10D	
GA	706	10D	1+10D	10D	1+10D	
GA	762	10D	1+10D	10D	1+10D	

Location	NPA	Home NPA Local Calls	Home NPA Toll Calls	Foreign NPA Local Calls	Foreign NPA Toll Calls	Notes
GA	912	7D	1+10D	10D	1+10D	
GU	671	7D	1+10D	NA	1+10D	
HI	808	7D	1+10D	NA	1+10D	
IA	319	7D	1+10D	10D	1+10D	
IA	515	7D	1+10D	10D	1+10D	
IA	563	7D	1+10D	10D	1+10D	
IA	641	7D	1+10D	10D	1+10D	
IA	712	7D	1+10D	10D	1+10D	
ID	208	10D	1+10D	10D	1+10D	
ID	986	10D	1+10D	10D	1+10D	
IL	224	1+10D	1+10D	1+10D	1+10D	
IL	309	7D	1+10D	1+10D	1+10D	
IL	312	1+10D	1+10D	1+10D	1+10D	
IL	331	1+10D	1+10D	1+10D	1+10D	
IL	618	7D	1+10D	1+10D	1+10D	
IL	630	1+10D	1+10D	1+10D	1+10D	
IL	708	7D	1+10D	1+10D	1+10D	
IL	773	1+10D	1+10D	1+10D	1+10D	
IL	779	1+10D	1+10D	1+10D	1+10D	
IL	815	1+10D	1+10D	1+10D	1+10D	
IL	847	1+10D	1+10D	1+10D	1+10D	
IL	872	1+10D	1+10D	1+10D	1+10D	
IN	219	7D	1+10D	10D	1+10D	
IN	260	7D	1+10D	10D	1+10D	
IN	317	10D	1+10D	10D	1+10D	
IN	463	10D	1+10D	10D	1+10D	
IN	574	7D	1+10D	10D	1+10D	
IN	765	7D	1+10D	10D	1+10D	
IN	812	10D	1+10D	10D	1+10D	
IN	930	10D	1+10D	10D	1+10D	
KS	316	7D	1+10D	10D	1+10D	
KS	620	7D	1+10D	10D	1+10D	
KS	785	7D	1+10D	10D	1+10D	
KS	913	7D	1+10D	10D	1+10D	
KY	270	10D	1+10D	10D	1+10D	
KY	364	10D	1+10D	10D	1+10D	
KY	502	7D	1+10D	7D	1+10D	
KY	606	7D	1+10D	10D	1+10D	6
KY	859	7D	1+10D	10D	1+10D	6
LA	225	7D	1+10D	10D	1+10D	
LA	318	7D	1+10D	10D	1+10D	
LA	337	7D	1+10D	10D	1+10D	
LA	504	7D	1+10D	10D	1+10D	

Location	NPA	Home NPA Local Calls	Home NPA Toll Calls	Foreign NPA Local Calls	Foreign NPA Toll Calls	Notes
MA	339	10D	1+10D	10D	1+10D	
MA	351	10D	1+10D	10D	1+10D	
MA	413	7D	1+10D	10D	1+10D	
MA	508	10D	1+10D	10D	1+10D	
MA	617	10D	1+10D	10D	1+10D	
MA	774	10D	1+10D	10D	1+10D	
MA	781	10D	1+10D	10D	1+10D	
MA	857	10D	1+10D	10D	1+10D	
MA	978	10D	1+10D	10D	1+10D	
MD	240	10D	1+10D	10D	1+10D	
MD	301	10D	1+10D	10D	1+10D	
MD	410	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	231	7D	1+10D	10D	1+10D	
MI	248	10D	1+10D	10D	1+10D	
MI	269	7D	1+10D	10D	1+10D	
MI	313	7D	1+10D	10D	1+10D	
MI	517	7D	1+10D	10D	1+10D	
MI	586	7D	1+10D	10D	1+10D	
MI	616	7D	1+10D	10D	1+10D	
MI	734	7D	1+10D	10D	1+10D	
MI	810	7D	1+10D	10D	1+10D	
MI	906	7D	1+10D	10D	1+10D	
MI	947	10D	1+10D	10D	1+10D	
MI	989	7D	1+10D	10D	1+10D	
MN	218	7D	1+10D	7D	1+10D	
MN	320	7D	1+10D	7D	1+10D	
MN	507	7D	1+10D	7D	1+10D	
MN	612	7D	1+10D	10D	1+10D	
MN	651	7D	1+10D	10D	1+10D	
MN	763	7D	1+10D	10D	1+10D	
MN	952	7D	1+10D	10D	1+10D	
MO	314	7D	1+10D	10D	1+10D	
MO	417	7D	1+10D	10D	1+10D	
MO	573	7D	1+10D	10D	1+10D	
MO	636	7D	1+10D	10D	1+10D	
MO	660	7D	1+10D	10D	1+10D	
MO	816	7D	1+10D	10D	1+10D	
MS	228	7D	1+10D	10D	1+10D	
MS	601	10D	1+10D	10D	1+10D	
MS	662	7D	1+10D	10D	1+10D	

Location	NPA	Home NPA Local Calls	Home NPA Toll Calls	Foreign NPA Local Calls	Foreign NPA Toll Calls	Notes
MS	769	10D	1+10D	10D	1+10D	
MT	406	7D	1+10D	7D	1+10D	
NC	252	7D	1+10D	10D	1+10D	
NC	336	10D	1+10D	10D	1+10D	
NC	704	10D	1+10D	10D	1+10D	
NC	743	10D	1+10D	10D	1+10D	
NC	828	7D	1+10D	10D	1+10D	
NC	910	7D	1+10D	10D	1+10D	
NC	919	10D	1+10D	10D	1+10D	
NC	980	10D	1+10D	10D	1+10D	
NC	984	10D	1+10D	10D	1+10D	
ND	701	7D	1+10D	7D	1+10D	
NE	308	7D	1+10D	7D	1+10D	
NE	402	10D	1+10D	10D	1+10D	
NE	531	10D	1+10D	10D	1+10D	
NH	603	7D	7D	1+10D	1+10D	
NJ	201	10D	10D	1+10D	1+10D	7
NJ	551	10D	10D	1+10D	1+10D	7
NJ	609	10D	10D	1+10D	1+10D	
NJ	640	10D	10D	1+10D	1+10D	
NJ	732	10D	10D	1+10D	1+10D	8
NJ	848	10D	10D	1+10D	1+10D	8
NJ	856	7D	7D	1+10D	1+10D	
NJ	862	10D	10D	1+10D	1+10D	9
NJ	908	7D	7D	1+10D	1+10D	
NJ	973	10D	10D	1+10D	1+10D	9
NM	505	7D	1+10D	10D	1+10D	
NM	575	7D	1+10D	10D	1+10D	
NV	702	10D	1+10D	10D	1+10D	
NV	725	10D	1+10D	10D	1+10D	
NV	775	7D	1+10D	10D	1+10D	
NY	212	1+10D	1+10D	1+10D	1+10D	
NY	315	10D	10D	1+10D	1+10D	
NY	347	1+10D	1+10D	1+10D	1+10D	
NY	332	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	585	7D	7D	1+10D	1+10D	
NY	607	7D	7D	1+10D	1+10D	
NY	631	10D	10D	1+10D	1+10D	
NY	646	1+10D	1+10D	1+10D	1+10D	
NY	680	10D	10D	1+10D	1+10D	
NY	718	1+10D	1+10D	1+10D	1+10D	

Location	NPA	Home NPA Local Calls	Home NPA Toll Calls	Foreign NPA Local Calls	Foreign NPA Toll Calls	Notes
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	
NY	929	1+10D	1+10D	1+10D	1+10D	
OH	216	7D	1+10D	10D	1+10D	10
OH	220	10D	1+10D	10D	1+10D	10
OH	234	10D	1+10D	10D	1+10D	10
OH	330	10D	1+10D	10D	1+10D	10
OH	419	10D	1+10D	10D	1+10D	10
OH	380	10D	1+10D	10D	1+10D	10
OH	440	7D	1+10D	10D	1+10D	10
OH	513	7D	1+10D	10D	1+10D	10
OH	567	10D	1+10D	10D	1+10D	10
OH	614	10D	1+10D	10D	1+10D	10
OH	740	10D	1+10D	10D	1+10D	10
OH	937	7D	1+10D	10D	1+10D	10
OK	405	7D	1+10D	7D	1+10D	
OK	539	10D	1+10D	10D	1+10D	
OK	580	7D	1+10D	7D	1+10D	
OK	918	10D	1+10D	10D	1+10D	
OR	458	10D	1+10D	10D	1+10D	
OR	503	10D	1+10D	10D	1+10D	
OR	541	10D	1+10D	10D	1+10D	
OR	971	10D	1+10D	10D	1+10D	
PA	215	10D	10D	(see note)	1+10D	11
PA	223	10D	10D	1+10D	1+10D	
PA	267	10D	10D	(see note)	1+10D	11
PA	412	10D	10D	(see note)	(see note)	12
PA	445	10D	10D	(see note)	1+10D	11
PA	484	10D	10D	(see note)	1+10D	11
PA	570	10D	10D	1+10D	1+10D	
PA	610	10D	10D	(see note)	1+10D	11
PA	717	10D	10D	1+10D	1+10D	
PA	724	10D	10D	(see note)	(see note)	12
PA	814	7D	7D	1+10D	1+10D	
PA	878	10D	10D	(see note)	(see note)	12
Puerto Rico	787	10D	1+10D	10D	1+10D	
Puerto Rico	939	10D	1+10D	10D	1+10D	
RI	401	7D	7D	1+10D	1+10D	
SC	803	7D	1+10D	10D	1+10D	
SC	843	10D	1+10D	10D	1+10D	

Location	NPA	Home NPA Local Calls	Home NPA Toll Calls	Foreign NPA Local Calls	Foreign NPA Toll Calls	Notes
SC	864	7D	1+10D	10D	1+10D	
SD	605	7D	1+10D	7D	1+10D	
TN	423	7D	1+10D	10D	1+10D	
TN	615	10D	1+10D	10D	1+10D	
TN	731	7D	1+10D	10D	1+10D	13
TN	865	7D	1+10D	10D	1+10D	
TN	901	7D	1+10D	10D	1+10D	
TN	931	7D	1+10D	7D	1+10D	
TX	210	10D	1+10D	10D	1+10D	
TX	214	10D	1+10D	10D	1+10D	
TX	254	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	409	7D	1+10D	10D	1+10D	
TX	430	10D	1+10D	10D	1+10D	
TX	432	7D	1+10D	10D	1+10D	
TX	469	10D	1+10D	10D	1+10D	
TX	512	10D	1+10D	10D	1+10D	
TX	682	10D	1+10D	10D	1+10D	
TX	713	10D	1+10D	10D	1+10D	
TX	726	10D	1+10D	10D	1+10D	
TX	806	7D	1+10D	10D	1+10D	
TX	817	10D	1+10D	10D	1+10D	
TX	830	7D	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	936	7D	1+10D	10D	1+10D	
TX	940	7D	1+10D	10D	1+10D	
TX	956	7D	1+10D	10D	1+10D	
TX	972	10D	1+10D	10D	1+10D	
TX	979	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	276	7D	1+10D	10D	1+10D	
VA	434	7D	1+10D	10D	1+10D	
VA	540	7D	1+10D	10D	1+10D	
VA	571	10D	1+10D	10D	1+10D	
VA	703	10D	1+10D	10D	1+10D	

Location	NPA	Home NPA Local Calls	Home NPA Toll Calls	Foreign NPA Local Calls	Foreign NPA Toll Calls	Notes
VA	757	7D	1+10D	10D	1+10D	
VA	804	7D	1+10D	10D	1+10D	
VT	802	7D	1+10D	1+10D	1+10D	
WA	206	7D	1+10D	10D	1+10D	
WA	360	10D	1+10D	10D	1+10D	
WA	425	7D	1+10D	10D	1+10D	
WA	509	7D	1+10D	10D	1+10D	
WA	564	10D	1+10D	10D	1+10D	
WI	262	7D	1+10D	1+10D	1+10D	
WI	414	7D	1+10D	1+10D	1+10D	
WI	534	10D	1+10D	1+10D	1+10D	
WI	608	7D	1+10D	1+10D	1+10D	
WI	715	10D	1+10D	1+10D	1+10D	
WI	920	7D	1+10D	1+10D	1+10D	
WV	304	10D	1+10D	10D	1+10D	
WV	681	10D	1+10D	10D	1+10D	
WY	307	7D	1+10D	7D	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 2019 NPA Exhaust Projections

NANPA projects NPA exhaust on a semi-annual basis. These projections were produced in April and October 2019. The table below shows the current quarter/year in which each NPA is projected to exhaust, based on analysis performed in October 2019 and any subsequent changes made through December 31, 2019. 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, 2019 for the US and January 1, 2019 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	2019.2 FCST		2019.1 FCST		Change 2019.1 to 2019.2	Notes Comments
		Year	Quarter	Year	Quarter		
New Jersey	201/551	2045	2Q	2042	2Q	12Q	a
District of Columbia	202	2023	2Q	2022	4Q	2Q	a
Connecticut	203/475						k
Canada	204/431	2026	3Q	2026	3Q	N/C	c
Alabama	205	2020	3Q	2020	2Q	1Q	a
Washington	206	2026	4Q	2027	1Q	6Q	a
Maine	207	2024	3Q	2026	2Q	-7Q	b
Idaho	208/986						k
California	209	2027	3Q	2026	3Q	4Q	a
Texas	210/726						k
New York	212/646/332	2045	2Q			-36Q	b
California	213/323	2031	3Q	2031	2Q	1Q	a
Texas	214/469/972	2021	2Q	2021	2Q	N/C	
Pennsylvania	215/267/445						k
Ohio	216						k
Illinois	217	2022	1Q	2022	1Q	N/C	a
Minnesota	218						k
Indiana	219						k
Ohio	220/740						k
Pennsylvania	223/717						k
Illinois	224/847			2047	4Q		k
Louisiana	225						k
Canada	226/519/548	2026	4Q	2026	4Q	N/C	c
Mississippi	228						k
Georgia	229	2047	1Q			-10Q	b
Michigan	231						k

Ohio	234/330						k
Canada	236/250/604/778	2020	3Q	2020	3Q	N/C	c
Florida	239						k
Maryland	240/301	2025	3Q	2024	3Q	4Q	a
Michigan	248/947						k
Canada	249/705	2025	3Q	2025	3Q	N/C	c
Alabama	251						k
North Carolina	252						k
Washington	253						k
Texas	254						k
Alabama	256/938						k
Indiana	260						k
Wisconsin	262			2044	3Q		k
Michigan	269						k
Kentucky	270/364						k
Pennsylvania	272/570						k
Virginia	276						k
California	279/916						k
Texas	281/346/713/832	2029	1Q	2028	2Q	3Q	a
Canada	289/365/905	2022	2Q	2022	2Q	N/C	c
Delaware	302	2042	2Q	2043	4Q	-6Q	b
Colorado	303/720	2023	1Q	2023	3Q	-2Q	b
West Virginia	304/681	2034	4Q	2039	3Q	-19Q	b
Florida	305/786	2023	4Q	2024	2Q	-2Q	b
Canada	306/639	2022	2Q	2022	2Q	N/C	c
Wyoming	307						k
Nebraska	308						k
Illinois	309	2028	1Q	2026	3Q	6Q	a
California	310/424	2046	3Q	2048	3Q	-8Q	b
Illinois	312/773/872						k
Michigan	313	2026	2Q	2032	2Q	-24Q	b
Missouri	314	2024	3Q	2024	2Q	1Q	a
New York	315/680						k
Kansas	316						k
Indiana	317/463						k
Louisiana	318	2029	1Q	2032	3Q	-14Q	b
Iowa	319			2048	4Q		k
Minnesota	320						k
Florida	321/407/689	2045	3Q	2019	3Q	104Q	a
Florida	321A						g, k
Texas	325						k
Illinois	331/630						k
Alabama	334	2036	4Q	2036	4Q	N/C	

North Carolina	336/743						k
Louisiana	337						k
Massachusetts	339/781						k
Virgin Islands	340						k
California	341/510			2019	4Q		k
Canada	343/613	2023	4Q	2023	4Q	N/C	c
New York	347/718/929	2027	4Q	2028	2Q	-2Q	b
Massachusetts	351/978						k
Florida	352	2037	1Q	2039	3Q	-10Q	b
Washington	360/564						k
Texas	361						k
Ohio	380/614						k
Utah	385/801	2037	3Q	2041	1Q	-14Q	b
Florida	386						k
Rhode Island	401						k
Nebraska	402/531						k
Canada	403/587/780/825	2022	2Q	2022	2Q	N/C	c
Georgia	404/470/678/770	2023	2Q	2022	4Q	2Q	a
Oklahoma	405	2021	4Q	2021	4Q	N/C	
Montana	406	2027	3Q	2029	2Q	-7Q	b
California	408/669						k
Texas	409						k
Maryland	410/443/667	2041	2Q	2037	4Q	14Q	a
Pennsylvania	412/724/878						k
Massachusetts	413						k
Wisconsin	414						k
California	415/628						k
Canada	416/437/647	2024	1Q	2024	1Q	N/C	c
Missouri	417	2030	3Q	2031	3Q	-4Q	b
Canada	418/581/367	2029	4Q	2029	4Q	N/C	c
Ohio	419/567						k
Tennessee	423	2029	1Q	2028	2Q	3Q	a
Washington	425	2041	2Q	2046	3Q	-21Q	b
Texas	430/903						k
Texas	432						k
Virginia	434						k
Utah	435	2041	1Q			-34Q	b
Canada	438/514	2023	4Q	2023	4Q	N/C	c
Ohio	440	2028	2Q	2026	4Q	6Q	a
California	442/760						k
Canada	450/579	2024	2Q	2024	2Q	N/C	c
Oregon	458/541						k
Georgia	478						k
Arkansas	479	2046	4Q	2044	3Q	9Q	a

Arizona	480	2025	1Q	2024	4Q	1Q	a
Pennsylvania	484/610	2023	1Q	2022	4Q	1Q	a
Arkansas	501						k
Kentucky	502	2040	4Q	2041	2Q	-2Q	b
Oregon	503/971			2048	3Q		k
Louisiana	504	2049	3Q			-23Q	b
New Mexico	505	2041	2Q	2043	3Q	-9Q	b
Canada	506	2022	3Q	2022	3Q	N/C	c
Minnesota	507	2033	1Q	2033	1Q	N/C	
Massachusetts	508/774	2049	2Q	2046	3Q	11Q	a
Washington	509	2026	1Q	2027	1Q	-4Q	b
Texas	512/737	2047	3Q	2048	2Q	-3Q	b
Ohio	513	2025	1Q	2023	4Q	5Q	a
Iowa	515	2044	1Q	2042	2Q	7Q	a
New York	516	2024	3Q	2025	2Q	-3Q	b
Michigan	517						k
New York	518/838	2045	3Q	2045	1Q	2Q	a
Arizona	520			2049	2Q		k
California	530	2029	1Q	2028	1Q	4Q	a
Wisconsin	534/715						k
Oklahoma	539/918						k
Virginia	540	2022	2Q	2022	2Q	N/C	
California	559	2045	1Q	2039	1Q	24Q	a
Florida	561	2025	2Q	2027	2Q	-8Q	b
California	562	2048	1Q	2044	4Q	13Q	a
Iowa	563			2043	1Q		k
Virginia	571/703	2036	4Q	2036	3Q	1Q	a
Missouri	573	2028	3Q	2027	1Q	6Q	a
Indiana	574						k
New Mexico	575						k
Oklahoma	580	2030	2Q	2033	1Q	-11Q	b
New York	585	2036	4Q	2036	1Q	3Q	a
Michigan	586			2045	3Q		k
Mississippi	601/769						k
Arizona	602	2030	3Q	2031	4Q	-5Q	b
New Hampshire	603	2030	3Q	2030	1Q	2Q	a
South Dakota	605	2028	4Q	2031	3Q	-11Q	b
Kentucky	606						k
New York	607						k
Wisconsin	608	2027	2Q	2027	4Q	-2Q	b
New Jersey	609/640						k
Minnesota	612	2039	2Q	2037	2Q	8Q	a
Tennessee	615/629						k

Michigan	616	2046	3Q	2048	2Q	-7Q	b
Massachusetts	617/857			2048	1Q		k
Illinois	618	2029	4Q	2027	3Q	9Q	a
California	619/858	2043	2Q	2046	1Q	-11Q	b
Kansas	620	2037	4Q	2046	1Q	-33Q	b
Arizona	623						k
California	626	2033	3Q	2034	3Q	-4Q	b
New York	631/934						k
Missouri	636						k
Iowa	641			2043	2Q		k
California	650	2029	3Q	2031	2Q	-7Q	b
Minnesota	651						k
California	657/714	2039	3Q	2047	2Q	-31Q	b
Missouri	660						k
California	661	2048	3Q	2047	3Q	4Q	a
Mississippi	662	2047	2Q	2044	1Q	13Q	a
CNMI	670						k
Guam	671						k
Texas	682/817	2049	1Q	2047	2Q	7Q	a
American Samoa	684						k
North Dakota	701	2030	1Q	2032	3Q	-10Q	b
Nevada	702/725						k
North Carolina	704/980	2048	1Q	2045	2Q	11Q	a
Georgia	706/762						k
California	707	2025	2Q	2026	4Q	-6Q	b
Illinois	708	2024	1Q	2023	4Q	1Q	a
Canada	709	2023	3Q	2023	3Q	N/C	a
Iowa	712	2036	2Q	2037	4Q	-6Q	b
New York	716	2030	4Q	2029	1Q	7Q	a
Colorado	719	2045	3Q	2045	2Q	1Q	a
Florida	727	2048	4Q	2044	3Q	17Q	a
Tennessee	731			2049	2Q		k
New Jersey	732/848						k
Michigan	734	2038	1Q	2035	3Q	10Q	a
California	747/818						k
Florida	754/954						k
Virginia	757	2022	1Q	2021	4Q	1Q	a
Minnesota	763						k
Indiana	765	2048	2Q	2044	2Q	16Q	a
Florida	772						k
Nevada	775						k
Illinois	779/815						k
Canada	782/902	2034	2Q	2034	2Q	N/C	c

Kansas	785	2037	4Q	2037	2Q	2Q	a
Puerto Rico	787/939	2042	4Q	2040	2Q	10Q	a
Vermont	802						k
South Carolina	803	2021	2Q	2020	4Q	2Q	a
Virginia	804	2025	2Q	2025	2Q	N/C	
California	805/820						k
Texas	806	2026	1Q	2025	1Q	4Q	a
Canada	807						d
Hawaii	808	2045	1Q	2044	3Q	2Q	a
Michigan	810						k
Indiana	812/930						k
Florida	813	2022	3Q	2022	3Q	N/C	
Pennsylvania	814	2021	4Q	2022	2Q	-2Q	b
Missouri	816	2026	2Q	2026	2Q	N/C	
Canada	819/873	2025	4Q	2025	4Q	N/C	c
North Carolina	828	2040	4Q	2037	4Q	12Q	a
Texas	830						k
California	831						k
South Carolina	843/854						k
New York	845	2025	3Q	2025	2Q	1Q	a
Florida	850	2021	3Q	2022	1Q	-2Q	b
New Jersey	856	2042	1Q	2048	2Q	-25Q	b
Kentucky	859						k
Connecticut	860/959						k
New Jersey	862/973						k
Florida	863						k
South Carolina	864	2029	1Q	2026	3Q	10Q	a
Tennessee	865						k
Canada	867	2042	3Q	2042	3Q	N/C	c
Arkansas	870	2023	2Q	2022	3Q	3Q	a
Tennessee	901	2047	1Q	2042	2Q	19Q	a
Florida	904	2031	2Q	2032	1Q	-3Q	b
Michigan	906						k
Alaska	907	2048	3Q			-8Q	b
New Jersey	908	2039	1Q	2038	1Q	4Q	a
California	909	2022	2Q	2021	3Q	3Q	a
North Carolina	910	2023	1Q	2024	1Q	-4Q	b
Georgia	912	2044	3Q	2047	4Q	-13Q	b
Kansas	913	2045	1Q	2047	3Q	-10Q	b
New York	914	2036	2Q	2040	2Q	-16Q	b
Texas	915						k
New York	917						e
North Carolina	919/984						k

Wisconsin	920	2026	4Q	2028	2Q	-6Q	b
California	925	2046	3Q			-44Q	b
Arizona	928						k
Tennessee	931						k
Texas	936						k
Ohio	937	2021	4Q	2021	2Q	2Q	a
Texas	940	2045	2Q			-52Q	b
Florida	941						k
California	949	2033	2Q	2033	2Q	N/C	
California	951	2036	3Q	2039	1Q	-10Q	b
Minnesota	952						k
Texas	956	2036	1Q	2036	1Q	N/C	
Colorado	970	2029	4Q	2029	3Q	1Q	a
Texas	979						k
Louisiana	985						k
Michigan	989	2035	3Q	2035	2Q	1Q	a

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 2019 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 2019 NANP Exhaust Projection Assumptions

The following is a list of assumptions used in the development of the October 2019 NANP exhaust projection prepared by NANPA.

1. 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.
2. 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 2019 NPA Exhaust Analysis and the CO code demand included in NRUF submissions, an average yearly demand rate of 2,926 CO codes was calculated. This yearly demand rate was compared with U.S. CO code demand rates in 2014 through 2019.

Year	Annual Gross CO Code	Annual Net CO Code
2014	3,400	3,200
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

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

² These include the 25 codes reserved for non-geographic services (524, 525, 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).

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 2019 NPA Exhaust Analysis and the CO code demand included in NRUF submissions, an average yearly demand rate of 2,926 CO codes was calculated. This yearly demand rate was compared with U.S. CO code demand rates in 2014 through 2019.

Year	Annual Gross CO Code	Annual Net CO Code
2014	3,400	3,200
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

To project the exhaust of the NANP, an average annual demand of 4,050 CO codes was used. This demand factors in the forecast data submitted as part of the August 2019 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 4,050 codes assigned per year, the projected NANP exhaust date is beyond 2049, assuming the quantity of NPAs available remains 672⁴.

Sensitivity Analysis

For comparison purposes, NANPA performed a sensitivity analysis using an average annual demand to 4,860 CO codes, a 20% increase in the base model demand. This analysis also resulted in a projected exhaust beyond 2049.

³ NANPA included an annual forecast of 1,124 CO codes for non-US NANP member countries.

⁴ The base model used in the April 2019 study used an average demand rate of 4,050 codes and projected an exhaust date beyond 2049.

Attachment 8 – October 2019 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, 523 and 524 codes.

October 2019 5XX Exhaust Projection Assumptions

The following is a list of assumptions used in the development of the October 2019 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.

¹ The 5XX NPAs reserved for future expansion include the following: 525, 526, 527, 528, 529, 532, 538, 542, 543, 545, 547, 549, 552, 553, 554, 556, 569, 578, 589, 550, 535, 546 and 558.

Results based on Assumptions

Using the August 2019 NRUF data, the aggregated forecasted demand for 5XX-NXXs for 2019 through 2022 ranges from 800 codes to 1,200 NXXs per year. This demand rate was compared to actual assignment data from 2010 through 2019.

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

This comparison shows the yearly forecasted demand starting in 2016 (800 NXXs) is in line with the actual demand experienced from 2016 to 2019.

To project the exhaust of the currently-assigned 5XX NPAs, an average annual demand of 1,000 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 seven new 5XX NPAs will be needed over the next five years.

In projecting the exhaust of the assigned and reserved 5XX NPAs (10 assigned 5XX NPAs and 23 reserved 5XX NPAs), an annual demand rate of 1,000 5XX-NXXs was used, resulting in the projected exhaust in 20 years. For comparison purposes, NANPA performed a sensitivity analysis using an average annual demand of 1,500 NXX codes, which represented a 50% increase in the base model demand. Using this annual demand, the projected exhaust of the 5XX resource is approximately 13 years.

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.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.nationalpooling.com

This is the National Thousands-Block Pooling Administration's site. Information concerning thousands-block assignments and availability can be found here.

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.crtc.gc.ca

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

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.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.nationalpani.com

This is the site of the permanent Routing Number Administrator (RNA) for the pseudo Automatic Number Identification (p-ANI) codes which are used for routing emergency calls for Voice over Internet Protocol (VoIP) 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 LERG™ 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

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
Anguilla	<p>Mr. Kenneth Banks Ministry of Infrastructure, Communications, Utilities and Housing P.O. Box 60 The Valley Anguilla. British West Indies Tel: 264 497-2651 Fax: 264-497-3651 kbanks@gov.ai</p>	<p>Mr. Kenneth Banks Ministry of Infrastructure, Communications, Utilities and Housing P.O. Box 60 The Valley Anguilla. British West Indies Tel: 264 497-2651 Fax: 264-497-3651 kbanks@gov.ai</p>	<p>Mr. Kenneth Banks Ministry of Infrastructure, Communications, Utilities and Housing P.O. Box 60 The Valley Anguilla. British West Indies Tel: 264 497-2651 Fax: 264-497-3651 kbanks@gov.ai</p>
Antigua and Barbuda	<p>Hon. Melford Nicholas Minister of Information, Broadcasting, Telecommunications, Science and Technology Coolidge Business Complex, Sir George Walter Highway St. John's, Antigua, West Indies www.ab.gov.ag</p>	<p>Joan Joseph Jackson Permanent Secretary Ministry of Information, Broadcasting, Telecommunications, Science and Technology Telecommunications Division Coolidge Business Complex, Sir George Walter Highway St. John's, Antigua, West Indies Phone: 268- 468-4616</p>	
Bahamas	<p>Stephen Bereaux Chief Executive Officer, Utilities Regulation and Competition Authority (URCA) Fredrick House Fredrick Street P O Box N 4860 Nassau, N.P., The Bahamas Phone: 242-393-0234 Fax: 242-393-0153 info@urcabahamas.bs</p>		
Barbados	<p>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</p>	<p>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</p>	

Country	Contact for Formal Letters and Policy Issues	Contact for Day-to-Day Regulatory Numbering Issues	Contact for Central Office Code Administration
Bermuda	Matthew Copeland Chief Executive Bermuda Regulatory Authority Craig Appin House, 1 st 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, 1 st 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 Fax: 284-468-3090 mcw@gov.vg	Guy L. Malone Chief Executive Officer, Telecommunications Regulatory Commission P.O. Box 4401 Road Town, Tortola British Virgin Islands, VG1110 Phone: 284-468-4165 Fax: 284-494- 6786 contact@trc.vg gmalone@trc.vg	
Canada		Joseph Cabrera Senior Analyst - Dispute Resolution and Regulatory Implementation Canadian Radio-television and Telecommunications Commission 1 Promenade du Portage Gatineau QC J8X 4B1 Canada Phone: 819-934-6352 Fax: 819-997-4610 joseph.cabrera@crtc.gc.ca	Edward Antecol Canadian Numbering Administrator General Manager 150 Isabella Street, Suite 605, Ottawa, ON K1S 5H3 Canada Phone: 613-702-0016, ext. 106 Fax: 613-702-0017 Edward.Antecol@cnac.ca www.cnac.ca
Cayman Islands	Alee Fa'amoe Executive Director ICT OfReg P.O. Box 2502 Grand Cayman KY 1-1104 Cayman Islands Phone: 345-946-4282 Fax: 345-945-8284 alee.faamoe@ofreg.ky	Utility Regulation and Competition Office 3rd Floor, Alissta Towers, 85 North Sound Rd. Grand Cayman, Cayman Islands Phone: 345-946-4282 Fax: 345-945-8284 info@ofreg.ky	Utility Regulation and Competition Office 3rd Floor, Alissta Towers, 85 North Sound Rd. Grand Cayman, Cayman Islands Phone: 345-946-4282 Fax: 345-945-8284 info@ofreg.ky

Country	Contact for Formal Letters and Policy Issues	Contact for Day-to-Day Regulatory Numbering Issues	Contact for Central Office Code Administration
Dominica	Honorable Kelder Darroux Minister for Information, Science, Telecommunications and Technology 3 rd Floor, Government Headquarters, Roseau Commonwealth of Dominica Phone: 767-266-3294 Fax: 767-448-0182 information@dominica.gov.dm	Executive Director National Telecommunications Regulatory Commission 26 King George V Street P.O. Box 649 Roseau, Commonwealth of Dominica Phone: 767-440-0627 Fax: 767-440-0835 director@ntrcdom.org	Executive Director National Telecommunications Regulatory Commission 26 King George V Street P.O. Box 649 Roseau, Commonwealth of Dominica Phone: 767-440-0627 Fax: 767-440-0835 director@ntrcdom.org
Dominican Republic	INDOTEL Av. Lincoln No. 962, Santo Domingo, Road 10148 Phone: 829-732-5555 dau@indotel.gob.do	Executive Management and Technical Management of INDOTEL Phone: 829-732-5555 Ext. 6171 serviciosDT@indotel.gob.do	Executive Management and Technical Management of INDOTEL Phone: 829-732-5555 Ext. 6171 serviciosDT@indotel.gob.do
Grenada	Hon. Gregory Bowen Minister for Communications, Works, Physical Development, Public Utilities, ICT & Community Development Ministerial Complex, Botanical Gardens, St. George's, Grenada Phone: 473-440-2271/2 Fax: 473-440-4122 ministryofworks@gov.gd	Dr. Spencer Thomas, Chairman National Telecommunications Regulatory Commission Maurice Bishop Highway Grand Anse P.O. Box 854, St. George, Grenada Phone: 473-435-6872 Fax: 473-435-2132 gntre@ectel.int	ECTEL 5 th Floor, Conway Business Center Waterfront PO Box 1886 Castries, Saint Lucia Phone: 758-458-1701/1702 ectel@ectel.int
Jamaica	Maurice Charvis Deputy Director General Office of Utilities Regulation 3 rd Floor, PCJ Resource Centre 36 Trafalgar Road Kingston 10, Jamaica Phone: 876-968-6053 Fax: 876-929-3635 mcharvis@our.org.jm	Curtis N. Robinson Consultant - Numbering Administration and ICT Networks Office of Utilities Regulation 3 rd Floor, PCJ Resource Centre 36 Trafalgar Road Kingston 10, Jamaica Phone: 876-968-6053 Fax: 876-929-3635 crobenson@our.org.jm	Curtis N. Robinson Consultant - Numbering Administration and ICT Networks Office of Utilities Regulation 3 rd Floor, PCJ Resource Centre 36 Trafalgar Road Kingston 10, Jamaica Phone: 876-968-6053 Fax: 876-929-3635 crobenson@our.org.jm

Country	Contact for Formal Letters and Policy Issues	Contact for Day-to-Day Regulatory Numbering Issues	Contact for Central Office Code Administration
Montserrat	Hon. Mr. Paul J. Lewis Honorable Minister of Communications, Works, Energy & Labour P.O. Box 344, Mahogany Drive, Woodlands, Montserrat Phone: 664-491-2521/2522 Fax: 664-491-6659 lewisp@gov.ms or mcw@gov.ms	Mr. Clifton Riley Executive Manager - Montserrat Info-Communications Authority P.O. Box 165 St. Peters Montserrat, West Indies Phone: 664-491-3789 Fax: 664-491-3789 rileyc@mica.ms	Mr. Clifton Riley Executive Manager - Montserrat Info- Communications Authority P.O. Box 165 St. Peters Montserrat, West Indies Phone: 664-491-3789 Fax: 664-491-3789 rileyc@mica.ms
St. Kitts & Nevis	Hon. Vincent Byron Jr. Attorney General and Minister of Justice, Legal Affairs and Communications Church Street, P.O. Box 186 Basseterre St. Kitts and Nevis Tel: 869-467-2812 Fax: 869-465-0198	Mr. Ervin Williams Director National Telecommunications Regulatory Commission (NTRC) P.O. Box 1958 Corner of Wigley Avenue & Jones St. Fortlands Basseterre, St. Kitts Phone: 869-466-6872 Fax: 869-466-6817 ntreskn@ectel.int	Mr. Ervin Williams Director National Telecommunications Regulatory Commission (NTRC) P.O. Box 1958 Corner of Wigley Avenue & Jones St. Fortlands Basseterre, St. Kitts Phone: 869-466-6872 Fax: 869-466-6817 ntreskn@ectel.int
Sint Maarten	Antony Carty Director Bureau Telecommunications and Post St. Maarten C.A. Cannegieter Street #15 – Unit 5.1 Philipsburg, St. Maarten, Dutch Caribbean Phone: 721-542-4699 Fax: 721-542-4817 info@sxmregulator.sx	Antony Carty Director Bureau Telecommunications and Post St. Maarten C.A. Cannegieter Street #15 - Unit 5.1 Philipsburg, St. Maarten, Dutch Caribbean Phone: 721-542-4699 Fax: 721-542-4817 info@sxmregulator.sx	
St. Vincent and the Grenadines	Apollo Knights Director National Telecommunications Regulatory Commission 2 nd Floor NIS Building Upper Bay Street Kingstown, St. Vincent and the Grenadines Phone: 784-457-2279 Fax: 784-457-2834 ntrc@ntrc.vc	Apollo Knights Director National Telecommunications Regulatory Commission 2 nd Floor NIS Building Upper Bay Street Kingstown, St. Vincent and the Grenadines Phone: 784-457-2279 Fax: 784-457-2834 ntrc@ntrc.vc	Apollo Knights Director National Telecommunications Regulatory Commission 2 nd Floor NIS Building Upper Bay Street Kingstown, St. Vincent and the Grenadines Phone: 784-457-2279 Fax: 784-457-2834 ntrc@ntrc.vc

Country	Contact for Formal Letters and Policy Issues	Contact for Day-to-Day Regulatory Numbering Issues	Contact for Central Office Code Administration
Trinidad and Tobago	<p>Dr. John Prince Chief Executive Officer Telecommunications Authority of Trinidad and Tobago #5, Eighth Avenue Extension, off Twelfth Street, Barataria, Republic of Trinidad and Tobago Phone: 868-675-8288 Fax: 868-674-1055 Info@tatt.org.tt</p>	<p>Kirk Sookram Executive Officer, Technical Services and Development Telecommunications Authority of Trinidad and Tobago #5, Eighth Avenue Extension, off Twelfth Street, Barataria, Republic of Trinidad and Tobago Phone: 868-675-8288 Fax: 868-674-1055 Info@tatt.org.tt</p>	<p>Kirk Sookram Executive Officer, Technical Services and Development Telecommunications Authority of Trinidad and Tobago #5, Eighth Avenue Extension, off Twelfth Street, Barataria, Republic of Trinidad and Tobago Phone: 868-675-8288 Fax: 868-674-1055 Info@tatt.org.tt</p>
Turks and Caicos Islands	<p>John Williams Director General TCI Telecommunications Commission PO Box 203 Business Solutions Building Leeward Highway Providenciales Turks & Caicos Islands Phone: 649-946-1900 Fax: 649-946-1119 johnwilliams@tcitelecommission.tc</p>	<p>John Williams Director General TCI Telecommunications Commission PO Box 203 Business Solutions Building Leeward Highway Providenciales Turks & Caicos Islands Phone: 649-946-1900 Fax: 649-946-1119 johnwilliams@tcitelecommission.tc</p>	<p>John Williams Director of Technology TCI Telecommunications Commission PO Box 203 Business Solutions Building Leeward Highway Providenciales Turks & Caicos Islands Phone: 649-946-1900 Fax: 649-946-1119 kenvawilliams@tcitelecommission.tc</p>
United States	<p>Kris Monteith Acting Chief, Wireline Competition Bureau, Federal Communications Commission 445 12th St., SW Washington, DC 20554 Phone: 202-418-1500 Fax: 202-418-2825</p>	<p>Marilyn Jones Sr Counsel for Number Administration Competition Policy Division Wireline Competition Bureau Federal Communications Commission 445 12th St., SW Washington, DC 20554 Phone: 202-418-2357 Marilyn.jones@fcc.gov</p>	<p>Beth Sprague Director, NANPA Somos 2411 Dulles Corner Park Suite 250 Herndon, VA 20171 Phone: 571-363-3821 Fax: 571-363-3838 bsprague@somos.com</p>

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
COCAG – Central Office Code (NXX) Assignment Guidelines
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
FoN – Future of Numbering
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
TBPAG – Thousands-Block Number (NXX-X) Pooling Administration 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