NANPA
North American Numbering Plan Administration

NORTH AMERICAN
Numbering Plan Administration

Annual

1999 Report

NEU STAR
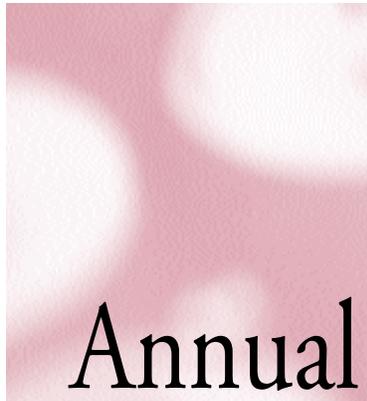
NEU STAR

All,

It is with great pleasure that NeuStar, Inc., submits the 1999 North American Numbering Plan Administration (NANPA) Annual Report. This second annual report covers NANPA's activities from January 1 – December 31, 1999, and is divided into four main sections—Overview, Code Administration, Relief Planning, and Other NANPA Activities and Services. As a supplement to this report, NANPA's Activity and Quality Report for Code Administration and NPA Relief Planning can be found on our website, www.nanpa.com. It provides a comprehensive discussion of NANPA's performance, detailing each performance measure—analyses, operational improvements, and outlook for 2000.

While the challenge in 1998 was to simultaneously build a new organization and seamlessly transition into the NANPA role, 1999's focus was to build robust processes and systems that would deliver consistently excellent performance to our customers. Having gained the advantage of a year's experience, and after receiving substantive performance feedback and guidance from the NOWG, NANPA is determined to build on what worked and committed to improvements where necessary.

To do that, we have taken great steps to demonstrate NANPA's commitment to provide high-quality, neutral services to the entire industry. For example, we completed all transitions from incumbent administrators on time; introduced a new electronic document distribution service resulting in a more efficient distribution of information, and added qualified NANPA staff to handle the increased workload and improve responsiveness to our customers. Most importantly, these enhancements resulted in a substantial improvement in our performance measurements for both Code Administration and Relief Planning. I am proud of our accomplishments, but not satisfied. We will not accept our current performance as the best we can do. We will continue to improve our performance. Our commitment is unwavering. The process reengineering and system enhancements that will be made in 2000 will yield increasingly superior services.

When we began 1999, NANPA was served by the Communications Industry Services (CIS) group of Lockheed Martin IMS. However, in November 1999, the FCC approved the transfer of NANPA from CIS to NeuStar, Inc., a new, independent, free-standing company. As NeuStar, we remain focused on providing high-quality, neutral third-party clearinghouse services to the telecommunications industry.

While NeuStar plans to continue these annual performance reports, we are aware of the dynamic impact our service has on the telecommunications industry. Please contact any of the NeuStar staff, including myself, with comments, suggestions, observations or concerns. Thank you for the opportunity to perform as the NANPA. We realize the great contribution that a successful NANPA brings to the industry and consumers, and look forward to a successful working relationship with the industry in serving as the NANPA.

Sincerely,

Jeffrey Ganek
Chairman and CEO
NeuStar, Inc.

Following is a brief year in review of 1999 for NANPA.
Many of these items are discussed in detail throughout this report.

JANUARY

In **January,** NANPA distributed the 1999 COCUS form, beginning the annual COCUS process. As proposed by the FCC, we included a request for utilization data along with the traditional request for central office code needs.

FEBRUARY

In **February,** as an effort to promote open communication and feedback between NANPA and its customers, NANPA led the first of a series of roundtable meetings with the industry and regulators. Several roundtable meetings were held with the California industry. The feedback has helped us to improve our responsiveness to customer needs.

In **February** and **March,** NANPA completed central office code transitions in Southwestern Bell and Ameritech, the largest remaining transitions in the sequence of sixteen.

MARCH

The end of **March** marked the official completion of the NPA relief planning transition. As of March 31, NANPA assumed responsibilities for all of the in-progress relief activities still led by the incumbents.

In **March** and **April,** NANPA conducted a "trial" central office code audit of a major carrier with standards developed for that purpose by a NANC subgroup. By prior agreement, results were kept confidential between NANPA and the service provider, but comments on the process were shared with the NANC and FCC.

APRIL

In **April,** the NOWG completed its evaluation of NANPA's 1998 performance. The evaluation was very thorough, and pointed out key areas where changes were needed. In response, NANPA developed a performance improvement plan (PIP), with steps to address each of the identified areas of improvement. We made this our highest priority, and reviewed our progress with the NOWG monthly.

MAY

In **May,** we completed the central office code transition in Hawaii (GTE), Guam, and CNMI. Also in May, the inaugural issue of *The State Scene* was published. The newsletter provides State Commissions topical information regarding numbering. It is available on the NANPA website www.nanpa.com under newsletters.

JUNE

June marked the beginning of a series of conference calls with NANPA and state commission staff. The goal of the meetings was to establish better communications with state regulators by identifying issues of concern to them and resolving them quickly.

The transition of Alaska in **June** marked the end of the central office code administration transitions. All 16 transitions, with assignment data covering approximately 100,000 assigned codes, were completed on schedule.

JULY

In **July,** NANPA began using a commercial fax service to distribute relief planning information. As a result, information reached the industry much faster and more reliably than it had in the past.

AUGUST

In **August/September,** the *NANPA Numbering News,* a bi-monthly newsletter dedicated to numbering, was published and mailed to a host of industry members and customers. With a growing circulation of over 500, the newsletter provides topical items of interest regarding numbering to interested parties.

SEPTEMBER

In **September,** NANPA introduced the Document Distribution Service (DDS), which notifies industry members of new relief planning documents and allows them to review that information—all online. DDS has been so well received that 90% of relief planning information recipients have signed up for it.

OCTOBER

In **October,** NeuStar's Chief Financial Officer updated NOWG on the required audit of the mandatory enterprise (AOCN) service, and presented an audit program for review. The audit was subsequently performed in January 2000.

NOVEMBER

In **November,** NeuStar Quality Assurance audited the way in which code administration measurements and results were collected and calculated. A summary of the results of the audit are presented later in this report.

DECEMBER

In **December,** we completed requirements for the new NANPA system.

On **December 1,** Lockheed Martin's CIS division became NeuStar, Inc., an independent, stand-alone company committed to providing neutral, third-party services, such as NANPA, to the telecommunications industry. NANPA was unaffected by this change since all NANPA personnel and the infrastructure that supports them moved wholly to NeuStar.

NANPA and Its History

AT&T conceived the North American Numbering Plan (NANP) in 1947 to standardize telephone numbering and to simplify dialing of long distance calls. AT&T realized early on that centralized administration of the shared numbering resources would be necessary, and established a group called NANP Administration (NANPA) for that purpose. NANPA remained part of AT&T until divestiture. In 1984, NANPA moved to Bellcore under the Plan of Reorganization. On October 9, 1997, the Federal Communications Commission (FCC), acting on a recommendation from the North American Numbering Council (NANC), named the Communications Industry Services division of Lockheed Martin IMS (CIS) to serve as the NANPA for a five-year period that began formally on February 21, 1998. On December 1, 1999 CIS became an independent company called NeuStar, Inc.

The NANP is an integrated numbering plan and currently serves the needs of 19 North American countries that share its resources.

NANP resources are not generally pre-allocated to participating countries; instead, the participating countries share the resources cooperatively. This approach has been effective for more than 50 years, and the nations involved have successfully and efficiently resolved any differences in the best interests of all participants.

Regulators within each of the countries participating in the NANP have plenary authority over numbering and have named national administrators to oversee the resources they use.

NeuStar, as the NANPA, is the national administrator for the U.S. and its territories. In Canada, Science Applications International Corp. (SAIC) Canada has been selected as the Canadian Numbering Administrator. In other countries participating in the NANP, regulators have either assumed this function, or have delegated the responsibility to a dominant carrier.

The division of responsibilities between NANPA and the national administrators is clear-cut.

NANPA oversees numbering resources that must be shared by all NANP-participating countries. NANPA, in its overall coordinating role, consults with and provides assistance to regulators and administrators in all countries participating in the NANP in order to assist them as needed, to promote cooperation among the participants, and to ensure that numbering resources are used in the best interests of all participants. The national administrators request numbering resources from NANPA, who serves as custodian of the shared pool, and administer these resources once assigned. NANPA serves as a consultant to the national administrators and regulators as needed. The costs of administering the shared resource pool are shared by all of the countries participating in the NANP, in proportion to population.

Over the years, the responsibilities of NANPA have grown.

Today NANPA has two major responsibilities that occupy most of its employees' efforts. The first major responsibility, code administration, includes not only area codes but central office codes (in the US), carrier identification codes, international inbound 456-NXX codes, PCS/N00 (500-NXX) codes, 900-NXX codes, N11 service codes, 800-855 line numbers, 555 line numbers, vertical service codes, ANI II digits, and non-dialable toll points. The second major responsibility, NPA relief planning, involves assisting the industry to develop relief plans for areas where the supply of numbers is approaching exhaust. The full scope of NANPA's responsibilities is delineated in the FCC's rules and in the North American Numbering Plan (NANP) Administration Requirements Document, dated February 20, 1997. This document can be downloaded from the FCC Common Carrier Bureau web site, www.fcc.gov/ccb.

The NANPA Oversight Working Group (NOWG), a subgroup of the NANC, provides continuous oversight to NANPA on behalf of the NANC and evaluates its performance once each year.

How NANPA is Funded

NANPA work is performed on a fixed-price basis. The payment amounts are determined according to the pricing included in the Lockheed Martin CIS NANPA bid. During the second year of our tenure as NANPA, which began officially in February 1999, we received monthly payments of approximately $357,000.

NANPA costs are allocated to participating countries in proportion to population. In the US, NANPA is funded by the telecommunications industry under an arrangement specified in FCC rules. Carriers pay in proportion to their gross revenues, less payments to other carriers. Canada, Bermuda, and the Caribbean islands participating in the NANP pay only their share of the costs of the NANPA services they require. Funds are collected by NBANC, a corporation established for this purpose, which then distributes monthly payments to NANPA.

NANPA is entitled to earn additional revenue by providing "enterprise services" to the industry. One such service, inputting to Telcordia's rating and routing databases, is mandatory. Details of this service, including earnings, can be found later in this report.

NANPA Project Organization

NeuStar's NANPA Project Organization grew significantly in 1999.

NeuStar has two major "contracts" with the telecommunications industry. We serve as NANPA and as local number portability administrator. NeuStar has "line organizations" for each of these functions. The following exhibit shows the current NANPA line organization. As might be expected, the organization is divided into two parts. Code administration administers NANP number resources, and relief planning coordinates the development of NPA relief plans. Central office code administration, the major segment of code administration, and relief planning are organized into three US regions. This parallel structure facilitates communication between central office code administration and relief planning.

The current NANPA organization grew significantly in 1999 and is considerably larger than the one in the original CIS proposal. The personnel growth is the result of two things. First, heavier workload has necessitated an increase in the number of code administrators. Second, our customers asked for more relief planners, particularly in California. Further, to help us better understand our customers needs, NeuStar hired three recognized numbering experts to work with specific segments of our customer community. Brent Struthers, formerly of the Illinois Commerce Commission, focuses specifically on relations with state commissions and the FCC. Cathy Handley, formerly with PCIA, now works with our customers and represents NeuStar in the ITU Study Group 2. John Manning, formerly of ATIS, represents NANPA at the NANC, coordinates NANPA's work on COCUS, and coordinates NANPA's participation in industry numbering forums. Note that Brent, Cathy, and John are not part of the NANPA organization, but spend much of their time supporting NANPA work.

NeuStar Infrastructure is a key part of our operation.

NANPA is supported by NeuStar's infrastructure. Here are a few examples:

- Our media relations department handles inquiries from the press, primarily about new area codes. This year, the department handled more than 500 media inquiries and issued 30 press releases as part of the relief planning process.

- Our technical support and program management departments are responsible for the development of the new NANPA system described further in this report, as well as the engineering and day-to-day maintenance of our network.

- Our quality assurance staff monitors and evaluates NANPA volume and quality measurements.

Corporate Oversight
Jeff Ganek, Chairman and CEO
Joe Franlin, VP, Operations
Chris Rowe, VP, Finance
Mark Foster, CTO

Corporate Support
J. Manning, Technical Liaison
C. Handley, Industry Liaison
B. Struthers, Regulatory Liaison
R. Barnhart, Media Relations
B. Blackwell, Media Relations
J. Denemark, Quality Assurance

NANPA
Ron Conners
Director

Code Administration
Bruce Bennett
Regional Director

Relief Planning
Jim Deak
Regional Director

Eastern Region
G. Light, Sr. Code Administrator
F. Weber, Code Administrator
A. Davi, Code Administrator
M. Ogilvie, Code Administrator
S. Gatlin, Code Administrator

Central Region
C. Dixon, Sr. Code Administrator
G. Paulino, Code Administrator
J. Rano, Code Administrator

Western Region
C. Louie, Sr. Code Admnistrator
P. Hustead, Code Administrator
S. Bacich, Code Administrator
T. Adger, Code Administrator
D. Wirth, Code Administrator

Other Resources
N. Fears, CIC Administrator
B. Sprague, NPA Administrator

AOCN Services
M. Mapula, Chief Administrator
T. Farquhar, Administrator
A. Velilla, Administrator

Technical Support
(Vacant), Project Manager
F. Cooper, Reports Manager
D. Thompson, Database Consultant

Office Management
B. McLen, Office Mgr.
K. Wenger, Admin Assist.

Eastern Region
W. Milby, Sr. Relief Planner
P. Kenworthy, Relief Planner
F. Colaco, Relief Planner
T. Foley, Relief Planner

Central Region
S. Tokarek, Sr. Relief Planner
L. Hymans, Relief Planner
B. Childers, Relief Planner

Western Region
J. Cocke, Sr. Relief Planner
D. Burcham, Relief Planner
C. Wiseman, Relief Planner
B. Armstrong, Relief Planner
T. Booth, Relief Planner

Central Support
L. Stroman, Supervisor
S. Whitlock, Central Support Assoc.
M. Strickland, Central Support Assoc.
E. Fitzpatrick, Central Support Assoc.

About Code Administration

Management of NANP resources includes processing applications, making assignments, reclaiming unused resources, and alerting the industry as resources approach exhaust.

Code administration involves management of NANP numbering resources; NPA codes; central office codes; carrier identification codes; 456-, 500-, and 900-NXX codes; vertical service codes, ANI II digits, 555 line numbers, 800-855 numbers; and non-dialable toll points.

NANPA manages these resources according to guidelines developed by the Industry Numbering Committee (INC) and regulatory directives.

The central office code transition is now complete.

Central office code administration is the most complex part of code administration. Prior to our appointment as NANPA in 1997, 16 different groups were responsible for central office code administration within their sphere of operation. One of our first activities as NANPA was to work with the industry to develop a transition plan to centralize this work. The transition plan, approved by the NANC, called for 16 sequential transitions, nine to be completed in 1998 and seven to be completed in 1999.

Central office code administration becomes more complex as the supply of available central office codes within an NPA nears exhaust. Seventy-five NPAs are in jeopardy with rationing.

If and when the supply of codes in a particular NPA is at risk of exhausting before a new area code or other relief techniques can be introduced, the code administrator declares "jeopardy" in that NPA. After jeopardy is declared, the administrator limits or withholds additional assignments temporarily until the industry, with the assistance of the code administrator and relief planner, can develop jeopardy procedures. These procedures specify how many codes can be assigned each month and identify the lottery or other means of determining who gets the available codes each month. Once determined, jeopardy procedures are posted to the NANPA web site, www.nanpa.com. At the end of 1999, there were 75 NPAs in jeopardy with rationing, out of a total of approximately 260 geographic NPAs.

HIGHLIGHTS

During 1999, NANPA Code Administration completed the following activities:

- Processed 42,175 central office code applications resulting in 15,907 assignments
- Assigned 45 new NPA codes
- Managed 75 NPAs in jeopardy with rationing
- Followed up on 4,599 assignments made by incumbent administrators

Transitions

Of the 16 required Code Administration transitions, NANPA completed the final seven in 1999-all on time.

Detailed planning, which began several months before each transition, included NANPA and the incumbent administrator reviewing assignment records; identifying contact lists, assignment tools, documents, and job aids; and notifying code holders and applicants of the upcoming change.

1999 CO CODE TRANSITIONS SCHEDULE		
Sequence	Incumbent Region	Transition Date
1	Southwestern Bell	February 1999
2	Ameritech	March 29, 1999
3	Hawaii-GTE	May 10, 1999
4	Northern Mariana Island (CMNI)	May 10, 1999
5	Guam	May 10, 1999
6	Puerto Rico	June 14, 1999
7	Alaska-AT&T Alascom	June 25, 1999

During the transition, dedicated NANPA personnel worked side-by-side with the incumbent administrators to learn their procedures. In parallel, NANPA technical support personnel developed custom programs to move the incumbent's assignment records into NANPA's assignment databases. As a cross-check, the assignment records were verified against Telcordia's Local Exchange Routing Guide (LERG).

In addition, NANPA personnel led six one-day informational seminars and two one-day tutorials on the proper completion of Part 1 and Part 2 Code Request forms for code holders and applicants, explaining the change and how to do business with NANPA and the entity that they would select to enter their data into the Telcordia rating and routing databases.

On the day of the transition, the final transfer of assignment records to NANPA databases took place, and NANPA personnel assumed all responsibility for new assignment requests.

The transitions took place under the oversight of the Central Office Code Transition Task Force (COCTTF), an ad-hoc industry group established for this purpose. There were many issues that needed attention, and the COCTTF was instrumental in getting these issues expeditiously resolved.

Staffing

NANPA Code Administration has evolved into a more efficient, results-oriented organization.

The following 1999 staffing adjustments helped to improve overall performance, efficiency, and customer service:

■ The number of central office code administrators increased from 11 to 15.

■ Central office code administrators were divided into three groups, each led by a senior code administrator. The regions served by these groups correspond to the NPA relief planning regions, thus facilitating communication and clarifying responsibilities.

■ Administration of NPA codes, carrier identification codes, etc. was made part of code administration. This work was formerly kept separate to allow code administration to focus on successful completion of the central office code transition.

Incumbent Part 4 Follow-Up

Follow-up was needed on final assignments made by incumbents.

The guidelines require service providers who receive central office code assignments to file Part 4 forms certifying that the assigned codes have been opened. During the 1998 performance evaluation, the NOWG noted that although NANPA was following up on Part 4 returns for the codes we assigned, there was not a uniform process for follow up on assignments made by the incumbent administrator during their last months in that role. The NOWG recommended that NANPA complete this activity and we agreed to do so. Steps in this process are as follows:

1. Determine the areas where follow up was required.

2. Obtain records of assignments made by these incumbent administrators during their last six months of operation. The records include not only the assignment, but whether or not a Part 4 was received as required. There were 4599 such assignments.

3. Contact assignees that had not provided Part 4s to remind them of their obligation.

4. Follow the procedures specified in the central office code assignment guidelines, leading either to receipt of the required documentation or reclamation of the code.

As of January 1, 2000, the first three steps had been completed and we have contacted all of the service providers with outstanding Part 4s. What remains is to follow through on the responses and seek INC approval to reclaim the codes for which no Part 4s are submitted. As of January 1, 2000, 304 codes have been recovered. We expect to submit to the INC in March the final list of codes to be reclaimed.

Responsiveness

Responsiveness and customer relations were NANPA's focus areas for improvement in 1999.

One of NeuStar's critical missions is to provide unmatched customer service to our clients. Only through responsiveness to their needs can we achieve this. In an effort to improve customer service/relations, code administration personnel took the class Achieving Extraordinary Customer Relations, taught by Achieve Global, an award-winning personnel training firm. This course, which was highly recommended by service providers, proved very beneficial to NANPA personnel. Several administrators reported that the class opened their eyes to the importance of high quality customer service and provided them practical ways of following through.

We have also taken steps to use our measurement system to improve responsiveness. For example, code administrators record their phone calls and whether or not the calls are returned by the end of the next business day. Measurements are tallied monthly as part of NeuStar's key service indicators and corrective action is taken accordingly.

The goal for NANPA and NeuStar management is to continually place customer service and responsiveness at the highest level of importance and to take the necessary steps to achieve this through continued training, enhanced methods and procedures, and/or performance incentives.

Reports

The number of specialized reports needed primarily by regulators has grown significantly.

NANPA hired a dedicated reports manager in August and began formal tracking of report requests. Since August, the reports manager has responded to more than 80 requests, plus approximately 50 additional informal data requests. These reports varied from simple counts of NXX status in an NPA to complete detail for each NXX, sorted and aggregated in a variety of ways. Each request for a report is logged and tracked separately. The average work effort required to complete a report was 8.5 hours.

Code Administration Activities

As indicated earlier in this report, NANPA Code Administration is responsible for many numbering resources. Volume and quality reports for all of these resources may be found in a separate report that can be downloaded from our website at www.nanpa.com. Most Code Administration activity, however, centers around central office codes.

NANPA Code Administration processed a total of 42,175 Central Office code applications in 1999. The following table shows the total number of central office code requests by month, and categorizes the request according to the disposition of the requests. The rows in the table should be interpreted as follows:

Assignments: The number of applications that resulted in the assignment of a new central office code.

Changes: The number of applications that notified NANPA of a change to an existing central office code assignment.

Suspensions: The number of applications that were suspended, which occurs if required data is incorrect or missing from the application. Suspension continues until the data has been corrected.

Denials: The number of applications that were denied because the criteria set by the assignment guidelines were not met.

Cancelled: The number of applications that were cancelled or withdrawn by the applicants during processing.

Disconnects: The number of applications reporting the return of a previously assigned central office code.

Reservations: The number of applications requesting reservation of a particular central office code for future use under the terms allowed by the assignment guidelines.

Lottery denial: The number of applications denied because the service provider was not selected in the lottery.

Lottery priority: The number of applications held pending a future lottery and assigned a priority number for use in the lottery.

Total: The sum of the above categories, equal to the total number of applications processed.

CENTRAL OFFICE CODE ACTIVITY 1999													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Assignments	832	911	1276	1651	1453	1589	1478	1386	1338	1073	1460	1460	**15907**
Changes	518	541	927	751	832	1184	932	984	1153	873	908	1156	**10759**
Suspensions	127	119	257	180	327	339	312	204	180	122	150	258	**2575**
Denials	76	83	226	137	157	209	58	124	184	35	282	179	**1750**
Cancelled	46	11	11	15	67	103	112	28	69	32	61	29	**584**
Disconnects	0	0	0	0	0	95	23	27	114	88	163	294	**804**
Reservations	0	1	9	0	0	2	0	78	30	9	14	0	**143**
Lottery Denial	827	869	474	574	890	597	953	740	647	633	615	477	**8296**
Lottery Priority	117	114	77	126	120	106	107	128	152	138	115	57	**1357**
Total	**2543**	**2649**	**3257**	**3434**	**3846**	**4224**	**3975**	**3699**	**3867**	**3003**	**3768**	**3910**	**42175**

Code Administration Performance Measurements

The following are performance commitments we made to the industry:

1. Process central office code applications within 10 business days.
2. Assign central office codes without conflict.
3. Begin reclamation on assignments for which Part 4 returns are delinquent.
4. Enter routing and rating data within five working days for customers who have chosen us as their AOCN (mandatory enterprise service).
5. Return phone calls by the end of the next business day.
6. Complete central office code transitions on schedule.
7. Complete informational seminars on schedule.

The following table summarizes our performance in meeting these commitments. Our target is 100% for each. Note that measurements 6 and 7 were not relevant after July, when the last transition was completed.

1999 INDUSTRY PERFORMANCE MEASUREMENTS SUMMARY

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1. Central office code applications processed within 10 days	99.7%	99.9%	99.8%	95.3%	98.2%	99.6%	99.3%	97.1%	98.8%	99.8%	99.8%	99.8%
2. Central office codes assigned without conflict	99.5%	100%	99.6%	99.7%	99.8%	99.9%	99.8%	99.9%	100%	100%	100%	99.9%
3. Reclamation begun on codes with delinquent Part 4s	50%	30%	68.4%	62.6%	30.9%	80%	90.7%	16.7%	0%	79.7%	99.7%	84.5%
4. Routing and rating entry requests filled within 5 days	100%	62%	79.5%	99.1%	99.4%	99.5%	99%	100%	100%	100%	100%	100%
5. Phone calls returned by end of next business day	100%	100%	100%	100%	100%	99.5%	99.7%	99.8%	100%	99.8%	99.9%	99.9%
6. Transitions completed on schedule	100%	100%	100%	100%	100%	100%	100%	—	—	—	—	—
7. Informational seminars scheduled & completed on schedule	100%	100%	100%	100%	100%	100%	100%	—	—	—	—	—

In summary, based on the average of applicable measurements, the quality of NANPA's work improved significantly in the second half of 1999. In fact, if we exclude our performance in measurement #3, those percentages are 97.1% and 99.7% respectively. Highlights include an average of 98.8% of code requests processed within the 10-business-day limit, 99.8% of codes assigned without code conflict and completion of all transition activities on time.

While certain measures did exhibit some volatility as the number of code requests grew over the course of the year, NANPA took the necessary steps to stabilize performance.

In particular, in the last quarter of 1999, four out of five measurements averaged between 99% and 100%. Significant opportunities for improvement still remain in measurement #3, the timely beginning of the reclamation process. Corrective action activities are currently underway.

A comprehensive discussion, including anomaly causes and corrective actions, of our quality assurance and performance measurements is provided in NeuStar's *Activity and Quality Report for Code Administration and NPA Relief Planning* on the NANPA website at www.nanpa.com.

The NANPA Code Administration System

The new NANPA Code Administration System will be fully operational by September 2000.

In our proposal to become NANPA, we committed to build a software system to support code administration. The system was to be composed of two major components. The first component, an Oracle database, would store all assignment information. The second component, a work-flow management system, would assist in managing the applications and other activities that make up administration. The NANPA system would run on replicated hardware to ensure reliability.

Our original intent was to base the NANPA system on commercially available systems tailored to our needs, and we acquired and installed an existing ORACLE-based system for this purpose. By mid-1999, however, it became necessary to reevaluate our plans. First, the number of code applications received was four times the originally anticipated volume. Second, the NANC's endorsement of NANPA as pooling administrator, subject to agreement on pricing and terms, would require interworking between the NANPA system and the pooling system.

We concluded that it would be more efficient for us to build the system from scratch rather than rely on modified commercial products. In mid-1999, we began to develop requirements for the new system–that effort is now complete. Currently, system design is well underway, and we expect to have the system operational no later than September 1, 2000. There is a project plan for development activities, and we will share progress regularly with the NOWG, beginning in February 2000.

The new system will offer all of the features described in the original CIS proposal, including the ability for an applicant to complete and submit forms through the world wide web. We have designed the NANPA system to be a comprehensive one incorporating assignment information for all of the NANP resources that we administer. The first priority, however, has been allocated to central office codes where the need is greatest. Once this is complete, we will incorporate additional resources into the new system.

Although it has taken us some time to get to where we are today, it is important to note that we have not asked and do not expect the industry to lower any of the quality and productivity expectations associated with code administration.

Road Ahead for Code Administration

In addition to continuing to improve performance and customer service, we plan to focus our efforts on the following areas in 2000 to ensure program success:

Avoiding Code Conflicts–There are many areas in the U.S. where state commissions have allowed seven-digit dialing across area code boundaries within certain restricted areas. This complicates choosing new central office codes to assign in these areas. The administrator must ensure that any code chosen is not assigned in the 1) home area code, 2) "other" area code within the restricted area and 3) local calling area for any of the codes within the restricted area of the "other" area code. If these conditions are not met, a code conflict results.

When a code conflict occurs, local exchange carriers typically find translation problems when they attempt to activate the new code. If the problem is not found and quickly corrected, substantial problems can occur; for instance, if customers have already been assigned numbers within the conflicting code. There have been several such occurrences in 1999, and we acknowledge the cooperation of the local exchange carriers in getting the problem resolved.

Our assignment software will identify these conditions and prevent code conflicts, provided all of the relevant information has been included in its data tables and the data included is complete and correct.

Data Integrity–Once a central office code assignment was made and the code was activated, the LERG became the controlling document for the key information. During the transition, our primary goal was to translate the incumbent's records into a standard format. In many cases, additional updating and consistency checking is needed. It is our goal to update these records in 2000.

About NPA Relief Planning

In the simplest terms, relief planning is the process of deciding what to do when an area code is running out of numbers. Relief planning begins with the identification of the need by COCUS or other means, then proceeds with scheduling and conducting relief planning meetings, preparing and distributing meeting minutes, filing industry recommendations with state regulators and conducting an implementation meeting resulting in the completion of the project, etc.

HIGHLIGHTS

During 1999, NANPA NPA Relief Planning completed the following activities:

■ Completed the transition of all relief planning activities from incumbent administrators on March 31, 1999

■ Began 48 new relief projects, not including four projects begun by the Ohio PUC

■ Conducted 89 face-to-face industry meetings

■ Conducted 156 conference calls (jeopardy, minutes review, etc.)

■ Wrote and filed 41 NPA relief plans reflecting the results from the industry meetings

■ Conducted 19 initial implementation meetings

■ Issued 30 press releases announcing new relief plans and area codes

NPA Relief Planning Accomplishments

NANPA Relief Planning listened to its customers needs.

Specific areas of improvement completed by NANPA during 1999 include the following:

1. NPA relief planning staff increased to its current level of 12 planners.

2. A new electronic Document Distribution Service (DDS) was introduced on September 15, 1999. DDS has more than 1,300 subscribers. DDS provides e-mail notifications of industry activities to those signed up for the service. Related documentation can be efficiently downloaded at the discretion of the recipient. More than 200 notifications have been distributed thus far, and customers have been pleased with the service. Customer suggestions for improvements to DDS in 2000 will be implemented, such as an on-demand list of industry participants and contact information. To those who must receive notifications by fax, a new and improved automated process ensures overnight delivery.

3. We developed and implemented improved standards and consistency requirements for conducting industry meetings, including the following:

   ■ Meeting minutes content and format
   ■ E-mail notifications content and format
   ■ Planning letter content
   ■ Industry notification of new relief codes and related press releases

4. Rate center maps used in the preparation of relief alternatives have been improved. By contracting with a database firm and a business mapping consultant, we have been able to improve the accuracy and overall quality of our maps. Modifications to the maps to suit industry needs are made quickly and distributed electronically via DDS.

5. To improve the quality of our initial planning documents (IPDs), NANPA conducted informal fact-finding conference calls with industry participants in an effort to learn more about a particular area code undergoing relief planning, e.g., local calling scopes, leading to a better understanding of the NPA.

6. NANPA has also taken steps to improve lists used in each state for notifying interested parties of upcoming relief activities. In addition to DDS, in which an industry participant can easily sign up electronically, planners review state regulatory websites for new market entrants, contact state telephone associations, and tap other sources of information. A centralized database of industry contacts has been created and updated on a weekly basis by NANPA's central support staff.

7. Recent improvements have been made to NANPA's spreadsheet model that is used to calculate the expected lives of various relief planning alternatives. This model will be used nationwide and provides a consistent tool for all relief planners. It will also allow better use of the industry's time since alternatives proposed at the industry meetings can be analyzed in real time, and minimizes the likelihood of the need for an additional meeting.

8. Each relief planner attended a training course to improve his/her ability to facilitate industry meetings effectively.

9. NANPA developed a standard jeopardy activities flow process which was presented to the NOWG. In addition, for every jeopardy situation, code administration and relief planning conducted an internal pre-jeopardy conference call to review all aspects of the jeopardy situation in the NPA, such as available codes, unavailable codes, projected rationing amounts, etc.

In addition, in 1999, NANPA:

1. Co-chaired, with SBC, an industry effort to eliminate hundreds of protected codes in the Kansas City area, thereby forestalling the need for relief planning.

2. Participated in the Ohio commission's relief planning efforts in four NPAs and provided support for all projects, as requested, including calculations of all relief alternatives.

3. Coordinated, at the request of the Texas commission, an industry meeting that resulted in a voluntary code rationing plan in 409 NPA.

4. Conducted quarterly utilization and forecast studies for five Chicago NPAs and filed the results with the Illinois Commerce Commission.

5. Coordinated reopening jeopardy consensus procedures when requested to do so by the industry.

6. Planned, scheduled, and conducted quarterly statewide meetings in California.

7. Recommended modifications to NPA relief planning guidelines to bring them up to date.

NPA Relief Planning Performance Measurements

Our performance measures show continuous improve-ment in 1999. NPA Relief Planning met an average of 87.2% of performance targets in the first half of 1999, versus an average of 97.6% in the second half of 1999.

The following are the basic commitments that NANPA has agreed to meet. These timeframes are either specified in the guidelines or established by NANPA when the guidelines are not specific.

1. NANPA will conduct COCUS at least once a year, to determine when each NPA in the NANP will exhaust. Within four weeks after such a study has been published, NANPA will publish a schedule for initiating NPA relief for all NPAs that will exhaust within the next 10 years.

2. NANPA will notify industry participants at least six weeks prior to each initial relief planning meeting.

3. NANPA will distribute an Initial Planning Document (IPD) describing a number of relief alternatives, e.g., geographic splits and overlays, no later than four weeks prior to the initial meeting.

4. NANPA will publish meeting minutes within two weeks after each meeting or conference call, or within an interval agreed to by the participants.

5. NANPA will conduct a conference call to review meeting minutes three weeks after an industry meeting or conference call, or at a time interval set by the industry.

6. NANPA will file the industry's relief recommendation with the responsible state regulatory agency normally within a period not to exceed six weeks from meeting, or by an alternate date specified by the industry.

7. An NPA relief planner will request the assignment of the new NPA relief code within one week after a state regulatory authority has formally approved a relief plan.

8. After the new relief code has been assigned, NANPA will issue a press release, within two weeks, announcing the details of the relief plan to the public.

9. After the new relief code has been assigned, within three weeks, NANPA will announce the date when the first industry implementation meeting will be held.

10. When an area code has been declared to be in jeopardy, NANPA will schedule a meeting or conference call no later than four weeks after the declaration so that the industry may review and approve final conservation plans.

The following table summarizes our performance in meeting these goals. The dark purple areas represent above average scores, while the shaded areas represent average or below average scores. Please note that the table shows both the number of events entered into the calculation and the percentage of those events that met our commitments.

With some exceptions, performance measurements were met 100% from June 1999 onward. A comprehensive discussion, including anomaly causes and corrective actions, of our quality assurance and performance measurements is provided in NeuStar's *Activity and Quality Report for Code Administration and NPA Relief Planning* on the NANPA website at www.nanpa.com.

1999 PERFORMANCE MEASUREMENTS RESULTS

RELIEF PLANNING PERFORMANCE MEASUREMENTS	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1. Set relief dates 4 weeks after COCUS												
EVENTS/% COMPLETION	0/-	0/-	0/-	0/-	0/-	1/100	0/-	0/-	0/-	0/-	0/-	0/-
2. Notice of initial industry meeting on time												
EVENTS/% COMPLETION	4/75	0/-	3/33	2/100	5/80	7/100	3/100	4/100	2/100	6/100	4/100	2/100
3. IPD delivered on time												
EVENTS/% COMPLETION	5/0	1/0	0/-	5/100	4/100	6/100	5/100	4/100	2/100	6/67	5/100	4/100
4. Publish meeting notes on time												
EVENTS/% COMPLETION	8/75	15/87	16/88	9/89	20/75	17/100	14/100	22/100	12/100	19/95	11/100	15/93
5. Conduct minutes review on time												
EVENTS/% COMPLETION	4/100	2/100	2/100	3/100	3/100	9/100	5/100	8/100	4/100	7/100	2/100	5/100
6. File relief plan w/PSC on time												
EVENTS/% COMPLETION	4/100	5/100	1/100	0/-	0/-	2/100	7/100	5/80	4/100	0/-	5/100	4/100
7. Request relief NPA 1 week after plan approval												
EVENTS/% COMPLETION	1/100	0/-	3/100	4/75	3/100	1/100	5/100	5/100	3/100	3/100	1/100	2/100
8. Issue press release 2 weeks after assignment												
EVENTS/% COMPLETION	0/-	1/100	0/-	4/100	3/100	0/-	1/100	2/100	2/100	3/100	1/100	2/50
9. Schedule implementation meeting on time												
EVENTS/% COMPLETION	0/-	0/-	0/-	5/100	3/66	2/100	1/100	4/75	0/-	4/100	1/100	0/-
10. Meeting within 4 weeks of jeopardy declaration												
EVENTS/% COMPLETION	3/100	0/-	1/100	6/100	3/100	3/100	5/100	0/-	4/100	6/100	0/-	3/100

Customer Survey Feedback

Throughout 1999, NANPA NPA relief planners conducted over 80 face-to-face industry meetings and over 150 conference calls.

For each face-to-face industry meeting, NANPA requests participants to complete a 10-question evaluation form rating such items as timely notification, facilitation skills, value of information, knowledge, preparedness, overall satisfaction with the meeting, etc. The scale is 1- 5, with 5 being the best. The following table summarizes the customer survey scores for the 10-question survey. The dark green-colored areas represent above average scores, while the shaded areas represent average or below average scores.

1999 CUSTOMER SURVEY FEEDBACK SUMMARY

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
1. Was adequate notice of the meeting given?	4.5	4.3	4.3	4.5	4.5	4.4	4.6	4.5	4.6	4.8	4.9	4.8	4.56
2. Was timely information distributed?	4.3	4.0	4.0	4.3	4.1	4.0	4.3	4.3	4.5	4.8	4.7	4.8	4.33
3. Was information received beneficial?	4.3	4.0	4.1	4.2	4.2	4.1	4.2	4.2	4.3	4.8	4.6	4.6	4.30
4. Was NANPA well prepared for the meeting?	4.2	4.1	4.0	4.4	4.0	4.2	4.3	4.5	4.5	4.7	4.6	4.7	4.35
5. Did NANPA possess detailed knowledge of the NPA?	4.2	3.8	3.9	4.3	4.1	4.1	4.2	4.2	4.3	4.5	4.4	4.6	4.21
6. Was NANPA an effective facilitator?	4.3	4.3	4.1	4.3	4.2	4.2	4.3	4.4	4.5	4.8	4.5	4.7	4.38
7. Did NANPA conduct the meeting impartially?	4.7	4.6	4.5	4.5	4.6	4.6	4.6	4.7	4.6	4.8	4.7	4.8	4.64
8. Was NANPA courteous & professional?	4.7	4.7	4.7	4.6	4.6	4.7	4.7	4.8	4.8	4.9	4.8	4.9	4.74
9. Was there adequate opportunity to express your opinions?	4.7	4.6	4.7	4.6	4.7	4.7	4.7	4.7	4.7	4.9	4.8	4.9	4.72
10. What was your overall satisfaction level with the conduct of the meeting?	4.5	4.2	4.1	4.4	4.3	4.3	4.4	4.5	4.6	4.8	4.7	4.7	4.46
Average	4.44	4.26	4.24	4.41	4.33	4.33	4.43	4.48	4.54	4.78	4.67	4.75	4.47

The results for 1999 show that although the scores varied throughout the year, the trend toward improvement was definite and can be, in part, attributed to improvements in procedures and administration tools.

In addition to conducting customer surveys and performance measurements, NANPA met periodically with customers, individually and in groups, to obtain direct feedback on areas of quality improvement. For example, informal quarterly meetings with California industry and regulatory representatives improved communication, leading to a steady improvement in NANPA's performance.

A comprehensive discussion, including anomaly causes and corrective actions of our quality assurance and performance measurements, is provided in NeuStar's *Activity and Quality Report for Code Administration and NPA Relief Planning* on the NANPA website at www.nanpa.com.

NPA Relief Planning Issues

Relief planning must evolve to meet new challenges.

The following are some of the challenges we face:

- The types of relief plans adopted have become far more complex than they were a few years ago. The recent concentrated overlays in Florida and Oregon provide good examples. Relief planning tools and procedures must be modified and adapted to work in these more complex environments.

- Recent splits along municipal boundaries rather than rate center boundaries have introduced complications for the industry as a whole. New impacts continue to be discovered, and relief planning has taken an active role in getting these issues resolved.

- Resistance to overlays has stalled many relief activities in California, making it difficult for relief planners to accomplish their functions and satisfy the need for relief.

- The implementation of number pooling, initially through special authority granted by the FCC to select states, will impact many aspects of relief planning, particularly the calculation of exhaust of relief alternatives. A standardized model will be needed for use in relief planning, similar to the current spread sheet model, to make the appropriate calculations taking into account more complex data collection, e.g., block demand by rate center, and an assortment of assumptions generally agreed upon by the industry.

- The large number of relief projects and the resultant need for NPA relief assignments is putting a strain on the NPA resources and the current reservation process. To further complicate matters, in some jurisdictions, the demand for numbers has been so high or frustration over short relief intervals has prompted regulators to adopt relief plans calling for multiple NPA codes. As the number of available codes continues to dwindle, it may become difficult in some states to find an acceptable relief code that does not create dialing conflicts.

Road Ahead for NPA Relief Planning

Performance and customer service enhancements will drive our efforts in 2000.

We will work to improve our tools–A new relief planning model will be developed to take into account the impact of thousands block number pooling. We will continue to incorporate user-suggested improvements into DDS.

We will take steps to improve our internal operations and customer service/relations–More specifically, we will develop a relief planning methods and procedures manual to provide a greater level of consistency across all regions and to assist in training new relief planners. All relief planners will receive media and witness training to be more effective in dealing with the media and representing NANPA in regulatory hearings. Additional performance measurements will be developed to measure the quality of conference calls. And, we will continue to monitor the volume of NPA relief planning projects to make sure the staff size is sufficient to meet work demands. In addition, we will continue to meet with customers to obtain feedback on how to improve performance and the quality of relief planning.

Mandatory Enterprise Service

NANPA is permitted, with FCC approval, to offer enterprise services, which are for-fee services over and above our basic responsibilities. One of these enterprise services is mandatory, and requires us to enter service providers' routing and rating data into the Telcordia databases, given that an appropriate business arrangement can be established. This operation is critical. The industry uses these databases to configure the network for the proper routing and rating of calls, and if the necessary information is not input, calls cannot be routed to the newly assigned code.

NANPA is not the only provider of this service. Code assignees may input their own data-many of the larger companies do. Code assignees that do not wish to enter their own data must select an agent to enter their data. Telcordia's Local Exchange Routing Guide currently lists 19 different companies who compete for this business.

Each provider of this data entry service is identified by a number, called the Administrative Operating Company Number (AOCN). In numbering jargon, choosing a provider is referred to as "choosing an AOCN." After contractual arrangements are completed, the AOCN becomes the primary interface with Telcordia Traffic Routing Administration.

Telcordia recovers the cost of maintaining their databases through an arrangement called the Fair Share Plan. Each code assignee is expected to pay a share of the cost in proportion to the number of records it has in the databases, which is a function of the number of central office codes assigned. To simplify its internal operation, Telcordia bills each code assignee's AOCN for these costs, and expects each AOCN to rebill its customers.

New central office code assignees often do not realize that having their data entered into Telcordia's databases is just as important as getting a code assignment from NANPA. For that reason we have devoted space to this topic on our website, explaining what a code assignee must do to select an AOCN. We also devoted time to the topic in each of the transitional seminars. On average, three or four of the companies providing AOCN service would attend these seminars to meet potential customers.

Staffing for this service consists of three full-time employees, supplemented by temporary staff, when necessary, to meet demand.

1999 Financial Results

The number of service providers requesting the mandatory enterprise service and the corresponding billing amounts increased as the transitions were completed, but have leveled off. We currently provide AOCN service for more than 270 service providers, up from 237 cited in last year's report.

Although companies providing AOCN services typically do not make their fees public, NANPA's fees for this service are explained in detail on our website, www.nanpa.com. The current fee to enter or change data associated with a central office code assignment is $53.46.

Monthly billed amounts for our AOCN service are shown in the following table. These amounts reflect both data entry fees as well as pass-through charges from Telcordia.

1999 MANDATORY ENTERPRISE SERVICE BILLING (DOLLARS)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
16,833	19,125	28,115	48,509	65,401	32,488	198,100	50,469	41,079	68,124	48,581	38,426

Our revenues from this service in 1999 was equal to the sum of these monthly amounts-$655,249-less the amount paid to Telcordia for Fair Share charges-$169,427.

Mandatory Enterprise Service Audit

The required audit of the mandatory enterprise service was conducted during the week of January 17, 2000, by an external auditing firm. The audit was based on procedures developed by NeuStar. These procedures were reviewed with NOWG before the audit took place. Results of the audit will be delivered to NOWG directly.

NANPA Website

The NANPA website remains a good resource for the general public to learn about numbering-50 to 75 people send in questions daily.

Throughout 1999, in our continuing efforts to improve the NANPA website, www.nanpa.com, we:

- Replaced the hand-drawn area code maps with commercial equivalents that are much more accurate and informative. The new maps download more rapidly than the old ones.

- Simplified navigation within the site and added pointers to frequently visited pages so that visitors to the site could reach them with one click on the home page.

- Added a page of "frequently asked questions" with answers to the most common questions asked by visitors to the site.

- Increased the update frequency for assignment data and added "as of" dates.

- Added additional information to the downloadable central office code assignment data.

In the 1998 performance evaluation, the NOWG rightly identified the timing of planning letters, which are posted to the website, as an area for improvement. In response, we have looked closely at the process for preparing these letters. Planning letters contain many different types of information about relief activities. Some items, notably test numbers, do not become available until well into the implementation phase of relief. Planning letters are not issued until all of the information is available.

Until a solution can be found, we have augmented our press releases, when possible, to contain maps and NXX lists along with whatever additional information is available at the time. We are committed to improving upon this process in 2000.

COCUS

NANPA has substantially enhanced COCUS.

One of NANPA's responsibilities is to predict the potential exhaust date of geographic NPA codes within the U.S. The Canadian Numbering Administrator has a similar responsibility in Canada. A principle tool used for this analysis is the Central Office Code Utilization Survey (COCUS). In January 1999, NeuStar, as the new NANPA, distributed its first COCUS. Each service provider was requested to provide the following information:

- The total number of NXX codes assigned to it in each NPA as of January 1, 1999

- A forecast of the number of additional central office codes the service provider would require in each of the next five years (1999-2003)

- Telephone number utilization data aggregated at the NPA level

- Company name, address, service provider type, Operating Company Number (OCN), and contact information.

Rather than relying solely on the input provided by COCUS, NANPA incorporated other data elements into its analysis in determining the projected exhaust time frame of each geographic NPA in the U.S. These additional data elements included the following:

- Historical central office code assignment data by industry segment over past two years

- Number of service providers and expansion of footprint over the same time period

- Recent NPA relief activity

- Central office code rationing.

The historical central office code data included NXX code assignments by month starting in March 1, 1997 through April 1, 1999, for the four industry segments (i.e., ILEC, CLEC, CMRS and Paging).[1] Data concerning the number of service providers by industry segment and the number of rate centers served by these providers over the same time period was also collected.[2] Since the 1999 COCUS responses were missing the input of a number of code holders, the aggregated COCUS forecast for an NPA was modified to account for this situation. Specifically, the aggregated year-by-year forecast for an NPA was scaled based upon the ratio of reported codes assigned as of January 1, 1999, to actual codes assigned as reflected in the LERG. For example, if 80% of the January 1, 1999, codes assigned per the LERG were reported in the COCUS input, the forecast was scaled up by 20%.

Additional data elements that factored into the analysis included the following:

- Central office code assignments as of April 1, 1999
- Total number of codes available for assignment
- Rate centers per NPA
- Rationing amounts
- Other miscellaneous data
  (e.g., last relief, split vs. overlay)

The total number of codes available for assignment accounted for those codes that had been identified, for whatever reason, as not available for assignment (e.g., home NPA, test codes, protected NXXs, etc.). The total number of ILEC rate centers in an NPA was also identified along with any NPAs that were rationing central office codes and the rationing amounts.

Using the information above, a linear central office code forecast was developed for each NPA. Of particular importance in developing this linear projection was the presence of CLECs. The historical data was important in understanding the growth of local competition in a specific NPA as new service providers were established. The expansion of their service was evidenced by the number of rate centers in which they had assignments. Close attention was paid to the historical data that reflected or "represented"

what was occurring in the NPA. For example, there were a number of NPAs where local competition was just beginning to impact code assignment trends. NANPA focused on this data. This historical data allowed us to see the impact of new service providers entering the NPA-how quickly new service providers were entering the NPA, the number of central office codes requested when service was established, and the expansion of these providers into new rate centers. Similar data was examined for CMRS providers. A linear central office code growth forecast was developed using this historical data and adjusted, as appropriate, based upon the NPA's COCUS results.

Recognizing the need to account for the impact of unanticipated new entrants and/or expansion of footprint in an NPA, NANPA projected a potential number of central office codes needed for "non-forecasted" growth over the life of the NPA. These codes account for the non-linear aspects of code assignments. The primary drivers in determining the amount of central office codes needed for this "non-forecasted" demand were the current number of CLECs in an NPA and the number of rate centers in the NPA. NANPA developed a factor based upon the number of current CLECs in an NPA and applied it to the total number of rate centers to develop an initial pool of codes for unanticipated demand (referred to as a "growth pool").

NANPA staff, including NPA relief planning and central office code administration personnel, examined the size of this growth pool, and appropriate modifications were made to the size of the pool. Included in this analysis was an NPA's months-to-exhaust based upon the linear forecast. The number of months until NPA exhaust was determined by adding the forecasted central office code growth with the amount of codes need for "non-forecasted" demand.

As part of its ongoing effort to monitor NPA exhaust, NANPA continuously examined its NPA exhaust projections throughout the year and published an update to the April 1999 NPA Exhaust Analysis in December 1999. This update allowed NANPA to refine and improve the analysis used in April in projecting NPA exhaust. Further, it provided NANPA the necessary information to plan for new area code relief activities.

Conclusion

In conclusion, NeuStar is proud to serve as NANPA. We understand the importance of the work performed and the need to do it well. While we are proud of our accomplishments, we have taken measures to improve program performance and service delivery to our customers and will

continue to do so. We are excited about the future of this program and look forward to working in true partnership with the industry and regulators to provide high quality services – meeting and overcoming any challenges that may arise.

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[1]Assignment data from the LERG was used. The actual months included in the analysis were March 1, 1997, March 1, April 1, July 1 and October through December 1, 1998 and January 1 through April 1, 1999.
[2]Source: LERG