### Before the TENNESSEE REGULATORY AUTHORITY Nashville, Tennessee 37243

NeuStar, Inc., in its role as North American	)	
Numbering Plan Administrator	)	
-	)	Docket No. <u>11-00018</u>
Petition for Approval of Numbering Plan	)	
Area Relief Plan for the 615 NPA	)	

# PETITION OF THE NORTH AMERICAN NUMBERING PLAN ADMINISTRATOR ON BEHALF OF THE TENNESSEE TELECOMMUNICATIONS INDUSTRY

NeuStar, Inc., the North American Numbering Plan Administrator ("NANPA"), in its role as the neutral third party NPA Relief Planner for Tennessee under the North American Numbering Plan and on behalf of the Tennessee telecommunications industry ("Industry"), 1 petitions the Tennessee Regulatory Authority ("TRA")² to approve the Industry's consensus decision³ to recommend to the TRA an all services distributed overlay of the 615 numbering plan area ("NPA") as the preferred method for relief for the 615 NPA. 4 The Industry submits its recommendation to the TRA based upon NANPA's projections that absent NPA relief, the supply of central office codes (often referred to as "CO" or "NXX" codes) for the 615 NPA will

<sup>&</sup>lt;sup>1</sup> The Industry is composed of current and prospective telecommunications carriers operating in, or considering operations within, the 615 area code of Tennessee.

<sup>&</sup>lt;sup>2</sup> The Federal Communications Commission ("FCC") delegated authority to review and approve NPA relief plans to the states. *See* 47 C.F.R. § 52.19.

<sup>&</sup>lt;sup>3</sup> Consensus as used in this document means: Consensus is established when substantial agreement has been reached among those participating in the issue at hand. Substantial agreement means more than a simple majority, but not necessarily unanimous agreement. ATIS Operating Procedures, section 7.1, version 5.0, August 17, 2009.

<sup>&</sup>lt;sup>4</sup> As the neutral third party administrator, NANPA has no independent view regarding the relief option selected by the Industry.

exhaust during the fourth quarter of 2013. In order to allow sufficient time for completion of the selected relief plan prior to exhaust of CO codes in the 615 NPA, the Industry recommends that the TRA approve its recommended 15-month implementation schedule. In support of this petition and on behalf of the Industry, NANPA submits the following:

### I. BACKGROUND

The October 2010 NRUF (Number Resource Utilization Forecast) and NPA Exhaust Analysis ("2010 NRUF Report") indicates that the 615 NPA will exhaust during the fourth quarter of 2013. Based upon the projected exhaust, NANPA notified the TRA and the Industry on October 7, 2010 that NPA relief needed to be addressed. The Industry met via conference call on December 13, 2010 to discuss various relief alternatives. Pursuant to the NPA Relief Planning Guidelines, NANPA distributed an Initial Planning Document ("IPD") to the Industry prior to the relief planning meeting. The IPD contained descriptions, maps, general facts and assumptions, and the projected lives of an all-services distributed overlay relief alternative, referred to in the IPD as Alternative #1, a two-way geographic split alternative, referred to as Alternative #2, and a concentrated overlay, referred to as Alternative #3. No additional alternatives were proposed.

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<sup>&</sup>lt;sup>5</sup> 2010 NRUF and NPA Exhaust Analysis October 2010 Update ("2010 NRUF Report").

<sup>&</sup>lt;sup>6</sup> In order to plan for the introduction of new area codes, NANPA and the Industry utilize the NPA Code Relief Planning & Notification Guidelines (ATIS – 0300061, November 12, 2010) ("NPA Relief Planning Guidelines"). The NPA Relief Planning Guidelines assist NANPA, the Industry and Regulatory Authorities within a particular geographic NPA in the planning and execution of relief efforts. The NPA Relief Planning Guidelines can be accessed on the ATIS web site located at <a href="http://www.atis.org">http://www.atis.org</a>.

<sup>&</sup>lt;sup>7</sup> A copy of the December 13 meeting minutes, including a list of attendees, is attached as Exhibit A.

<sup>&</sup>lt;sup>8</sup> A copy of the IPD is included in Exhibit B.

<sup>&</sup>lt;sup>9</sup> Additional relief alternatives can be proposed at any time during the relief planning process including the initial relief planning meeting.

During the relief planning meeting, the Industry members evaluated the three relief alternatives, described more fully below:

- Alternative #1 All Services Distributed Overlay: A new NPA code would be assigned to
  the same geographic area as the existing 615 NPA. Alternative #1 has a projected life of 19
  years.
- Alternative #2 Two-Way Geographic Split: In a two-way geographic split, the exhausting NPA is split into two geographic areas and a new NPA is assigned to one of the areas formed by the split. For Alternative #2, the proposed split boundary line runs along the Nashville rate center boundary and encompasses that single rate center. The Nashville rate center is referred to as Area A and has a projected life of 13 years. The remainder of the 615 rate centers is referred to as Area B and would have a projected life of 28 years. This alternative creates an imbalance in projected lives of each of the proposed NPAs and therefore violates the NPA Relief Planning Guidelines which state that severe imbalances of more than 10 years are to be avoided. A more balanced geographic split alternative cannot be created because the Nashville rate center already is the sole rate center in Area A of alternative #2. 10
- Alternative #3 Concentrated Overlay: In a concentrated overlay, a new NPA code is assigned to only certain rate centers in the same geographic area occupied by the existing 615 NPA. Customers would retain their current telephone numbers; however, ten-digit local dialing would be required by all customers within the overlay area and between NPAs in the affected rate areas. Codes in the overlay NPA will be assigned upon request with the effective date of the new area code. All remaining 615 NXX codes would be assigned only to the non-overlaid area. Those customers in the non-overlaid area of the 615 NPA would

<sup>&</sup>lt;sup>10</sup> The 615 NPA is comprised of 49 rate centers. The Nashville rate center alone accounts for 406 of the 682 CO codes assigned in that NPA. See "Rate Center Table" in Exhibit B attached hereto.

retain seven-digit dialing until the remaining 615 NXX codes were assigned and the overlay would then be extended to all rate centers in the 615 NPA. At exhaust of the 615 all future code assignments will be made in the overlay area code. The proposed boundary for the concentrated overlay area in Alternative #5 runs along the boundary of the Nashville rate center, referred to as Area A, of the 615 NPA. The number of years before the overlay will need to be expanded is projected to be 1.7 years. In total, the NPA overlay is projected to last 19 years. It was assumed for the calculation of these lives that the concentrated overlay will be introduced in the next 24 months.

At the December 13 meeting, the participants discussed the attributes of the relief alternatives and reached consensus to recommend to the TRA Alternative #1, the all-services distributed overlay plan, as the preferred method of relief for the 615 NPA.<sup>11</sup>

# II. DESCRIPTION OF THE RECOMMENDED ALL SERVICES DISTRIBUTED OVERLAY

Alternative #1, the all-services distributed overlay, would superimpose a new NPA over the same geographic area covered by the existing 615 NPA. All existing customers would retain the 615 area code and would not have to change their telephone numbers. When the 615 NPA exhausts, all CO code assignments will be made from the new overlay area code. Consistent with FCC regulations, the relief plan would require 10-digit dialing for all calls within and between the 615 NPA and the new NPA. The industry recommends that local calls within the 615 NPA and between the 615 NPA and other NPAs, including the new NPA, be dialed as 10-digits, or permissively as 1+10 digits at each service provider's discretion. Toll calls must be

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<sup>&</sup>lt;sup>11</sup> For a listing of the pros and cons of each alternative as discussed by the Industry members at the December 13, 2010 meeting, see pages 5-8 of Exhibit A.

<sup>&</sup>lt;sup>12</sup> 47 C.F.R. §52.19(c)(3)(ii).

dialed as 1 +10 digits. Operator services calls would require customers to dial 0+10 digits. The following table illustrates the recommended dialing plan:

### Recommended Overlay Dialing Plan for All Services Distributed Overlay

Type of Call	Call Terminating in	Dialing Plan
Local Call	Home NPA (HNPA) or	10 digits (NPA-NXX-XXXX)*
	Foreign NPA (FNPA)	
Toll Call	HNPA or FNPA	1+10 digits (1+NPA-NXX-XXXX)
Operator Services Credit card, collect, third party	HNPA or FNPA	0+10 digits (0+NPA-NXX-XXXX)

<sup>\*1+10</sup> digit dialing permissible at service provider discretion.

Industry participants reached consensus to recommend to the TRA a 15-month schedule for implementation of the overlay. The recommended schedule is as follows:

### **Recommended Implementation Schedule for All Services Distributed Overlay**

EVENT	TIMEFRAME
Network Preparation Period	7 months
Permissive 10-Digit Dialing and Customer Education Period	7 months
(Calls within 615 NPA can be dialed using 7 or 10 digits)	
Mandatory Dialing Period begins at the end of the Permissive	
Dialing Period	
First Code Activation after end of Permissive dialing period	1 month (after Mandatory
(Effective date for codes from the new NPA)	Dialing Period)
Total Implementation Interval	15 months

Adhering to the proposed timeframe will avoid the denial or delay of service to telecommunications providers' customers due to the unavailability of numbering resources.

### III. CONCLUSION

The Industry has determined the need to initiate relief efforts for the 615 NPA in Tennessee to prevent the exhaust of numbering resources. The Industry respectfully requests that the TRA issue an order approving the Industry's recommended relief method for the

615 NPA, an all services distributed overlay. The Industry also requests that the order approve the Industry recommended 15-month relief implementation schedule.

Respectfully submitted,

Kimberly Wheeler Miller

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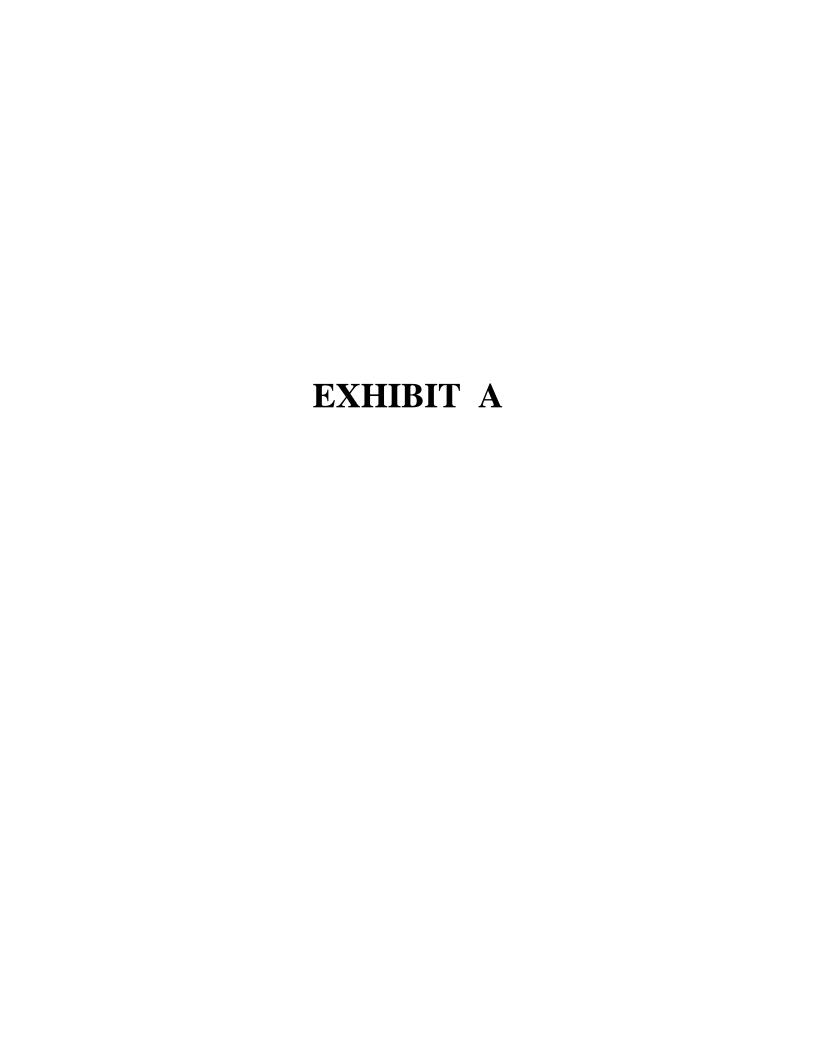
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January 31, 2011



# TENNESSEE – 615 NPA INITIAL RELIEF PLANNING MEETING VIA CONFERENCE CALL FINAL MINUTES December 13, 2010

### WELCOME, INTRODUCTIONS & AGENDA REVIEW

Wayne Milby, Senior NPA Relief Planner – NANPA, welcomed the participants and reviewed the objective of the meeting. A list of attendees can be found in Attachment 1. Wayne mentioned there would be a quality survey sent via email to those attending today's call. Wayne then reviewed the agenda and NANPA's roles and responsibilities.

### NANPA'S ROLE AND RESPONSIBILITIES

Wayne reviewed NANPA's role and responsibilities for today's meeting as follows:

- NANPA starts the relief planning process 36 months prior to exhaust of the NPA. (The October 2010 NRUF projects the 615 NPA will exhaust 4Q2013.)
- Facilitate a Pre-IPD conference call with the industry six weeks prior to the NPA Relief Planning meeting.
- Distribute the Initial Planning Document (IPD) at least four weeks prior to the Relief Meeting.
- Review the relief alternatives presented in the IPD
- Check to see if there are any additional relief alternatives from the participants
- Discuss the alternatives and list some pros and cons for each alternative
- Then, through a process of elimination of all but one alternative, the main objective is achieved by reaching consensus on the relief alternative the industry wants to recommend to the TRA.
- Also determine any additional items to include in a filing with the TRA such as dialing plan and implementation intervals.
- Then NANPA is charged with the responsibility of filing a relief petition, on behalf of the industry, with the regulatory authority. Once the industry comes to consensus on what should be included in the filing, NANPA will file the legal document within six weeks of today's meeting or the date set by the Industry.

# REVIEW CONSENSUS PROCESS AND NPA RELIEF PLANNING GUIDELINES

Wayne stated that the ATIS (Alliance for Telecommunications Industry Solutions) approved industry consensus process would be followed. He reviewed the consensus process and explained how consensus is determined. In addition, Wayne stated that the minutes would be comprised of consensus agreements, and that issues not captured by consensus could be expressed in the form of a Statement for the Record, which could be conveyed at any point during the meeting.

Wayne reviewed the most pertinent items from the Industry Numbering Committee (INC) NPA Code Relief and Planning and Notification Guidelines for this meeting as follows:

- The NPA Relief Planning, as well as other relevant NPA assignment and relief guidelines, may be downloaded from the ATIS web site at: (www.atis.org/inc/incguides.asp).
- The most pertinent items in the guidelines concerning this meeting are the relief options/alternatives shall cover a period of five years beyond the forecasted exhaust of the existing area code.
- If there is a split, it is recommended that customers who undergo number changes shall not be required to change again for a period of 8-10 years.
- The guidelines also state for split alternatives, that a difference in NPA lifetimes of more than 10 years shall be avoided.
- Relief should be in place at least three months prior to the exhaust of the existing NPA.

### STATUS OF TENNESSEE 615 NPA

Beth Sprague, Regional Director – NANPA CO Code Administration, reviewed the status of the 615 NPA, which reflects a total of 683 NXX codes currently assigned. As of December 13, 2010, 97 NXX codes remain available for assignment in the 615 NPA, while 20 additional NXX codes are classified as unavailable (See Attachment 2). Also the October 2010 Number Resource Utilization Forecast (NRUF) projects exhaust of the 615 NPA during the Fourth quarter 2013.

The annual NXX code assignment history in the 615 NPA has been as follows:

2007 assignments: 20 codes 2008 assignments: 14 codes 2009 assignments: 20 codes

2010 assignments year to date: 23 codes

### STATUS OF ONE-THOUSAND-BLOCK POOLING IN 615 NPA

Cecilia McCabe, NeuStar Number Pooling Implementation Manager, stated all 49 rate centers in the 615 NPA are in mandatory pooling and pooling began March 14, 2002. There have been 245 blocks assigned in the last 12 months and 593 blocks are available as of December 10, 2010. Pooling has assigned 24 codes in the last twelve months; 18 for pool replenishment and 6 for LRNs. The forecasted need for codes for the next twelve months is 9 codes for pool replenishment and dedicated customers. (See attachment 3).

### PRE-IPD CONFERENCE CALL RE-CAP

Wayne provided a recap of the pre-IPD conference call held October 28, 2010. The purpose of this pre-IPD call was to solicit industry input on the proposed relief plans and to discuss additional alternative relief plans for consideration prior to the issue of the IPD. No additional relief alternatives were suggested during the optional meeting and no final decisions were made. Informal meeting notes resulting from the pre-IPD industry conference were posted to NANPA's NAS-NNS service on November 3, 2010. Wayne

noted the main purpose of that call was to obtain additional relief alternatives for consideration and he stated the industry will still have the opportunity to propose additional relief alternatives during the call today.

### REVIEW INITIAL PLANNING DOCUMENT (IPD) FOR THE 615 NPA

Wayne reviewed the Initial Planning Document (IPD) distributed prior to the meeting.

### **General Facts - Tennessee:**

On July 1, 2009 the population of Tennessee was 6,296,254 compared to a population of 5,689,276 on April 1, 2000. Tennessee stretches from the scenic Great Smoky Mountains of the east 440 miles to the banks of the Mississippi River in the west. Within Tennessee's 42,145 square miles of scenic beauty and diversity lives the greatest variety of birds of any state in the nation. Memphis holds the title "Birthplace of the blues". Nashville hosts more than a hundred recording studios and is famous as the country music capital of the world. Tennessee is bordered by Kentucky and Virginia on the north, North Carolina, Georgia, Alabama and Mississippi on the south, North Carolina on the east and Missouri and Arkansas on the west. The state flower is the Iris and the state bird is the Mockingbird.

Tennessee currently has 6 NPAs. The 615 NPA was created in January 1954. The 615 NPA covers the north-central portion of Tennessee and the State Capital is in the center of the NPA in the Nashville Rate Center.

Wayne then briefly reviewed Appendix E to the NPA Code Relief Planning Guidelines which provides the General Attributes of Common Relief Alternatives. The following maps and related documents were then reviewed:

Map showing location of all NPAs in Tennessee

NPA 615 County & Rate Center Map of the 49 rate centers

NPA 615 table of the population of each County in the 615 NPA with the percentage change in population from 4/1/00 to 7/1/09.

NPA 615 Rate Centers & Cities with a Population > 10 K Map

NPA 615 Rate Center & Major Highways Map

NPA615 Rate Center & LATA Map

Rate Center Table

Code Holder Table

Wayne stated the IPD includes an all services distributed overlay (Alternative #1) a 2-way geographic split (Alternative #2) and a concentrated overlay (Alternative #3). He reviewed them as follows:

### **OVERLAY ALTERNATIVE**

### ALTERNATIVE #1 – ALL SERVICES DISTRIBUTED OVERLAY

A new NPA code would be assigned to the same geographic area occupied by the existing 615 NPA. Customers would retain their current telephone numbers; however, ten-digit local dialing by all customers within and between NPAs in the affected area would be required. Codes in the overlay NPA will be assigned upon request with the effective date of the new area code. At exhaust of the 615 NPA all future code assignments will be made in the overlay area code.

Total CO Codes = 682 Total rate centers = 49 Area Code Life in Years = 19

Alternative #1 above is the only alternative that will meet the requirements set forth in the NPA Code Relief Planning and Notification Guidelines.

### NPA SPLIT ALTERNATIVE

The exhausting NPA is split into two or more geographic areas and a new NPA is assigned to one of the areas formed by the split. All split plans would require ten-digit dialing between NPAs in the same extended local calling area. Within an NPA, seven-digit dialing would be permitted.

### ALTERNATIVE #2 – NPA SPLIT

The proposed split boundary line runs around the Nashville rate center.

 $\frac{AREA "A"}{Total CO Codes = 406} \qquad \frac{AREA "B"}{Total CO Codes = 276}$   $Total rate centers = 1 \qquad Total rate centers = 48$   $Area Code Life in Years = 13 \qquad Area Code Life in Years = 28$ 

According to the NPA Code Relief Planning and Notification Guidelines, severe imbalances of more than 10 years are to be avoided.

### CONCENTRATED OVERLAY ALTERNATIVE

A new NPA code would be assigned to only certain rate centers in the same geographic area occupied by the existing 615 NPA. Customers would retain their current telephone numbers; however, ten-digit local dialing would be required by all customers within and between NPAs in the affected rate areas. Codes in the overlay NPA will be assigned upon request with the effective date of the new area code. Those customers in the non-overlaid area of the 615 NPA would retain seven-digit dialing until the remaining 615 NXX codes were assigned and the overlay would then be extended to all rate centers in the 615 NPA. All remaining 615 NXX codes would be assigned only to the non-overlaid area. At exhaust of the 615 all future code assignments will be made in the overlay area code.

### ALTERNATIVE #3 – CONCENTRATED OVERLAY

This would be a concentrated-overlay distributed across only the Nashville rate center in Area A. It was assumed for the calculation of these lives that the concentrated overlay will be introduced in the next twenty-four months.

Total CO Codes = 406 Total rate centers = 1 Years before Expansion of Overlay: 1.7 Area Code Life in Years = 19

This alternative would require the concentrated overlay to be expanded over the entire 615 NPA in 1.7 years.

### INDUSTRY RECOMMENDED ALTERNATIVES

Wayne asked the industry participants if there were additional suggestions for relief alternatives. There were no additional alternatives proposed during the relief planning meeting.

### DISCUSSION OF PROS AND CONS OF RELIEF ALTERNATIVES

A general discussion ensued regarding the Pros and Cons of each relief alternative and the industry agreed to the following:

## The following Pros and Cons were listed for Alternative # 1 (Overlay) Pros:

- 1 All existing customers would retain the 615 area code and would not have to change their telephone numbers.
- 2 Does not discriminate against customers on different sides of a boundary line as does a geographic split

- 3 Less customer confusion and easier education process
- 4 Less financial impact on business customers because there is no need to change signage, advertising and stationery unless they currently only show 7-digit numbers.
- 5 Residential customers do not have to update personal printed material such as checks and websites, etc. unless they currently show 7-digit numbers.
- 6 Provides the most efficient distribution of numbering resources by allowing assignments to follow demand not withstanding forecasts for growth
- 7 No need for synchronization of old and new NPAs in NPAC databases
- 8 Minimizes call routing issues, especially with ported numbers
- 9 Easier for service providers to implement from a translations, billing and service order system perspective
- 10 Minimal data entries handled in national databases such as BIRRDS, LERG and the Terminating Point Master Table
- 11 The TRA would not have to decide which side gets the new NPA, so no winners and losers.
- 12 Does not split cities or counties into different area codes.
- 13 Keeps communities of interest in tact.
- 14 No impact on some wireless carriers that have to reprogram handsets manually
- 15 No technical impacts to number portability, text messaging or multimedia messaging
- 16 Meets the requirements of the INC NPA Code Relief Planning and Notification Guidelines.
- 17 No impact to non-telephone company databases that use the full ten-digit telephone number as a search criteria, i.e. airlines, doctors, utilities, grocery reward programs, pharmacies, National Missing Children Database, etc.

### Cons:

- 1 Consistent with FCC regulations, the relief plan would require 10-digit dialing for all local calls within and between the 615 NPA and the new NPA.
- 2 Financial costs to add NPA to signage and printed material where only 7-digit number is shown.
- 3 Customers would have to reprogram any auto-dialing equipment currently programmed to dial 7-digits to dial 10-digits; equipment such as alarm systems, PSAP dial systems, security gates, PBXs, life safety systems, computer modems, voicemail systems, fax machines, etc.

### The following Pros and Cons were listed for Alternative # 2 (Split) Pros:

- 1 Maintains seven digit dialing for local calls within the same NPA
- 2 Approximately ½ of customers would experience no change if they keep the XXX NPA

- 1 Projected lives are severely imbalanced, 15 years difference, could become more imbalanced if demand changes in future years
- 2 This alternative does not meet the requirements of the INC NPA Code Relief Planning and Notification Guidelines that states severe imbalances of more than ten years are to be avoided.
- 3 Requires approximately ½ of 615 NPA customers to change their telephone numbers thus creating winners and losers.
- 4 Financial impact to half of businesses to incur costs to change their advertising for telephone #'s and stationery if currently show 10-digit telephone numbers or are close to the split line.
- 5 May create customer 10-digit dialing confusion across the new NPA boundary.
- 6 Difficult TRA decision on which side retains the old NPA.
- 7 Longer time period needed for service providers to implement this type of relief.
- 8 Customers that change must contact friends, family and business associates with the telephone changes.
- 9 More complicated and costly to implement for service providers in their billing, translations and database systems.
- 10 Negative impacts to E911, industry and alarm system databases that must be updated with customers' new telephone numbers.
- 11 Negative impact to directories and directory assistance databases and other nontelephone company databases that use the full ten-digit telephone number as a search criteria, i.e. airlines, doctors, utilities, grocery stores, pharmacies and the National Missing Children's database that must be updated with customers' new telephone numbers.
- 12 Split requires significant challenges to service provider's operational support systems and network elements.
- 13 Splits cause customer confusion with caller ID during implementation.
- 14 Older wireless handsets without over-the-air programming must be manually programmed for those numbers that are changing.
- 15 Splits require the old and new NPAs to be synchronized with the NPAC database to ensure accurate call routing and facilitation of port requests.
- 16 Splits require a more challenging customer education process for service providers that have customers on both sides of the split line.
- 17 Splits require the 800/SMS database to be updated.
- 18 Splits reduce the geographic area served by one area code.
- 19 Splits the city(s), counties or legislative districts into different area codes.
- 20 Splits communities of interest.
- 21 For some wireless carriers, text messaging and multimedia service can only handle one version of the 10-digit number so they will fail if they are sent using the old area code during permissive dialing.
- 22 Customers with abducted or run-away children are waiting for that call that their child has been found home and business numbers are registered in national databases and on posters; Splits can cause great anguish to those parents with missing loved ones that have their numbers changed.

### The following Pros and Cons were listed for Alternative # 3 (Concentrated Overlay) Pros:

- 1 Does not impact as many customers at once
- 2 Only area of greatest code usage is overlaid (initial impact)

#### Cons:

- 1 Very short life before expansion is required
- 2 Will require two customer education notices, the second when the overlay is expanded to cover entire area code; two full relief efforts.
- 3 Customer confusion and education problems since it will have to be expanded in 1.7 years.
- 4 Service providers that use one switch for multiple NPAs: a conc. Overlay is difficult to implement with complicated translations
- 5 Would have to start implementation immediately and come back in a short amount of time to expand the overlay
- 6 Discriminates against customers inside the overlay area that have to dial 10-digits immediately vs. those that get to keep 7-digit dialing outside of the concentrated overlay.
- 7 Requires judgment in projecting exhaust of specific rate centers that may be false over time.

### CONSENSUS ON ELIMINATION OF RELIEF ALTERNATIVES

After discussion and review of the above listed Pros and Cons, proposals were made and consensus reached to eliminate the following Alternatives:

A proposal was made and consensus was reached to eliminate Alternative #2 and #3 due to cons listed above.

### CONSENSUS ON RELIEF ALTERNATIVE RECOMMENDATION

After further discussion, a proposal was made and consensus was reached to recommend Alternative #1, the all services distributed overlay alternative, to the Tennessee Regulatory Authority ("TRA") as the industry's preferred method of relief for the 615 NPA.

### **CONSENSUS ON DIALING PLAN (ALTERNATIVE #1)**

Consensus was reached to recommend the following dialing plan for Alternative #1:

### **Overlay Dialing Plan for Alternative #1:**

Type of Call	Call Terminating in	Dialing Plan
Local Call	Home NPA (HNPA) or	*10-digits (NPA-NXX-XXXX)
	Foreign NPA (FNPA)	
Toll Call	HNPA or FNPA	1+10-digits (1+NPA-NXX-XXXX)
Operator Services Credit card, collect, third party	HNPA or FNPA	0+10-digits (0+NPA-NXX-XXXX)

<sup>\* 1+10</sup> digit permissible at service provider discretion

### CONSENSUS ON IMPLEMENTATION INTERVALS

A recommendation was made and consensus reached to recommend to the Commission a 15-month schedule for implementation of the overlay.

The recommended schedule is as follows:

Intervals for Alternative # 1 – Overlay:

EVENT	TIMEFRAME
Network Preparation Period	7 months
Permissive 10-Digit Dialing and Customer Education Period	7 months
(Calls within 615 NPA can be dialed using 7 or 10 digits)	
Mandatory dialing period begins at the end of Permissive	
Dialing Period	
First Code Activation after end of Permissive dialing period.	1 month (after Mandatory
(Effective date for codes from the new NPA)	Dialing Period)
Total Implementation Interval	15 months

### STATEMENTS FOR THE RECORD

No statements for the record were submitted.

### NANPA FILING INDUSTRY EFFORTS WITH TRA

Consensus was reached that NANPA will prepare a draft of the petition that will be filed with the Tennessee Regulatory Authority ("TRA") informing them of the outcome of this relief meeting. The draft filing will be reviewed by the industry on the conference call that will be held to approve these minutes. The INC guidelines reflect the relief petition is to be filed with the regulator within 6 weeks of the initial relief planning meeting unless otherwise agreed.

### REVIEW OF DRAFT MEETING MINUTES & DRAFT TRA FILING

Consensus was reached that the draft minutes resulting from this meeting will be distributed to the industry by January 4, 2011 and the draft relief petition distributed to the industry by January 11, 2011. Consensus was also reached to conduct a conference call to review and approve the draft minutes and draft filing to the TRA on January 18, 2011.

Details of the call are as follows:

**Date: January 18, 2011** 

Time: 2:00 PM ET; 1:00 PM CT; 12:00 PM MT; 11:00 AM PT

Dial-in number: 630-827-6799

Pass code: 9141146#

Adjourned

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During the January 18, 2011 call to review and approve the draft minutes and draft petition, consensus was reached to approve the draft petition and draft minutes, with one minor edit that has been incorporated in these final minutes, and file the petition with the TRA no later than February 2, 2011.

# TENNESSEE – 615 NPA INITIAL RELIEF PLANNING MEETING Meeting Attendees December 13, 2010

NAME	COMPANY
George Guerra	AT&T
Mary Ann Palmisano	AT&T
Nicole Trimble	Cavalier Telephone
Brad Higgitt	Comcast
Dena Hunter	Cricket Communications
Sue Collins	Dekalb Telephone Cooperative
Jana Crook	Dekalb Telephone Cooperative
Mike Eaton	Dekalb Telephone Cooperative
Stefanie Gaither	Dekalb Telephone Cooperative
Sonja Hammond	Dekalb Telephone Cooperative
Monica Hendrixson	Dekalb Telephone Cooperative
Dale Johnson	Dekalb Telephone Cooperative
Shannon Jones	Dekalb Telephone Cooperative
Stacey Martin	Dekalb Telephone Cooperative
Vinnie Neal	Dekalb Telephone Cooperative
Jerry Strait	Dekalb Telephone Cooperative
Susan Washer	Dekalb Telephone Cooperative
Petra Malik	Global Crossing Local Services
Lynne Powers	Global Crossing Local Services
Joe Cocke	NANPA Relief Planning
Wayne Milby	NANPA Relief Planning
Beth Sprague	NANPA CO Code Admin
Linda Hymans	NeuStar Pooling Regulatory
Cecilia McCabe	NeuStar Pooling Implementation
Kevin Gatchell	NeuStar Pooling Admin.
Dan Meldazis	Peerless Network
Bruce Bennett	Qwest
Shaunna Forshee	Sprint
Anne Chism	TDS Telecom
Paul Nejedlo	TDS Telecom
Natalie McNamer	T-Mobile
Josefina Musquiz	TW Telecom
Brian Frase	US Cellular
Joe Hurlbert	US Cellular
Yun Lee	Verizon Business
Dana Crandall	Verizon Wireless
Paula Hustead	Windstream

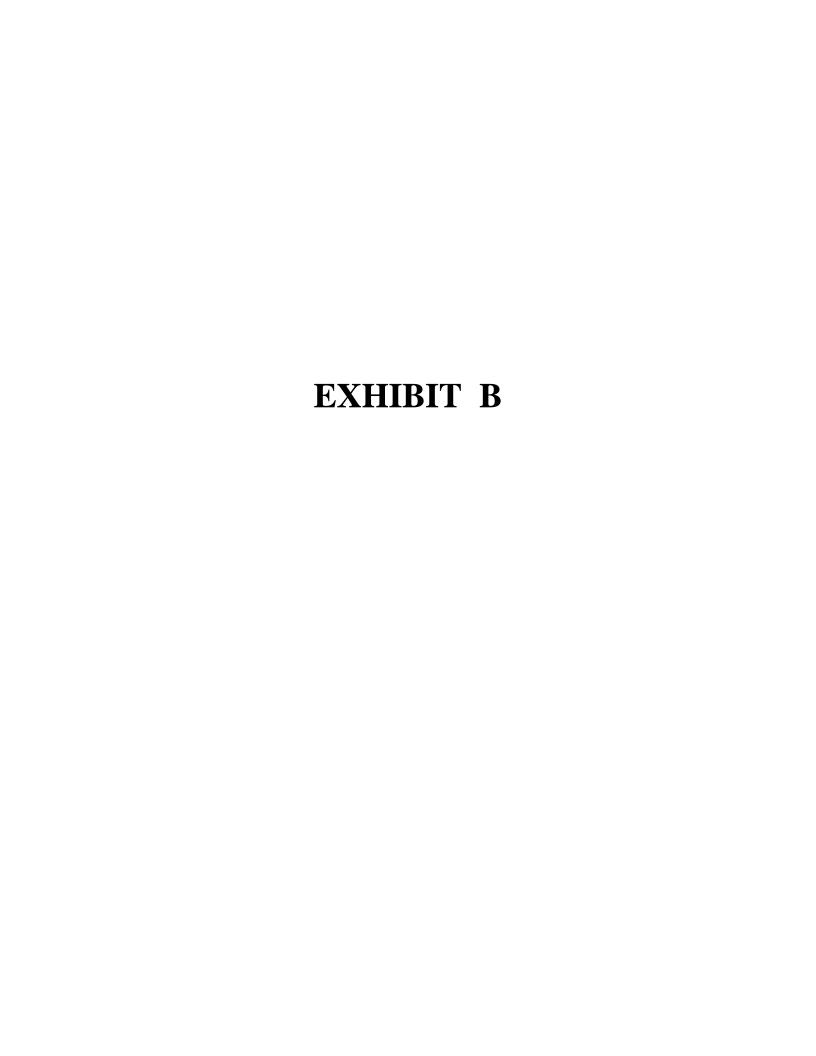
# Tennessee NPA 615 NXX Summary

Data as of December 13, 2010

683 0 0 20 97	See N	_			
0 20	See N	_			
20	See N				
	See N	_			- <del></del>
97		Vote			
800					
01/2007		03/2007	04/2007	05/2007	<u>06/2007</u>
1	3	1	0	4	3
07/2007	08/2007	09/2007	10/2007	<u>11/2007</u>	12/2007
2	2	3	1	0	0
01/2008	02/2008	03/2008	04/2008	05/2008	06/2008
1	1	0	0	0	2
07/2008	08/2008	09/2008	10/2008	11/2008	12/2008
1	2	0	2	4	1
01/2009	02/2009	03/2009	04/2009	05/2009	06/2009
0	2	2	1	0	5
07/2009	08/2009	09/2009	10/2009	11/2009	12/2009
3	1	0	3	2	1
01/2010	02/2010	03/2010	04/2010	05/2010	06/2010
5	4	1	3	4	2
07/2010	08/2010	09/2010	10/2010	11/2010	12/2010
1	0	2	0	1	*0
	01/2007 1 07/2007 2 01/2008 1 07/2008 1 01/2009 0 07/2009 3 01/2010 5 07/2010	01/2007     02/2007       1     3       07/2007     08/2007       2     2       01/2008     02/2008       1     1       07/2008     08/2008       1     2       01/2009     02/2009       0     2       07/2009     08/2009       3     1       01/2010     02/2010       5     4       07/2010     08/2010	01/2007         02/2007         03/2007           1         3         1           07/2007         08/2007         09/2007           2         2         3           01/2008         02/2008         03/2008           1         1         0           07/2008         08/2008         09/2008           1         2         0           01/2009         02/2009         03/2009           0         2         2           07/2009         08/2009         09/2009           3         1         0           01/2010         02/2010         03/2010           5         4         1           07/2010         08/2010         09/2010           1         0         2	01/2007         02/2007         03/2007         04/2007           1         3         1         0           07/2007         08/2007         09/2007         10/2007           2         2         3         1           01/2008         02/2008         03/2008         04/2008           1         1         0         0           07/2008         08/2008         09/2008         10/2008           1         2         0         2           01/2009         02/2009         03/2009         04/2009           0         2         2         1           07/2009         08/2009         09/2009         10/2009           3         1         0         3           01/2010         02/2010         03/2010         04/2010           5         4         1         3           07/2010         08/2010         09/2010         10/2010           1         0         2         0	01/2007         02/2007         03/2007         04/2007         05/2007           1         3         1         0         4           07/2007         08/2007         09/2007         10/2007         11/2007           2         2         3         1         0           01/2008         02/2008         03/2008         04/2008         05/2008           1         1         0         0         0           07/2008         08/2008         09/2008         10/2008         11/2008           1         2         0         2         4           01/2009         02/2009         03/2009         04/2009         05/2009           0         2         2         1         0           07/2009         08/2009         09/2009         10/2009         11/2009           3         1         0         3         2           01/2010         02/2010         03/2010         04/2010         05/2010           5         4         1         3         4           07/2010         08/2010         09/2010         10/2010         11/2010           1         0         2         0         <

Note: Unavailable indicates codes that are unavailable for assignment. These codes include, but are not limited to, test and special use codes (e.g., 958, 959, 555, time), N11 and other unique codes (e.g., 976, 950), and codes with special dialing arrangements (e.g., 7-digit dialing across NPA boundary).

POOLING STATISTICS	
Provided By: Cecilia McCabe	
ST/NPA:	TN 615
MEETING DATE:	12/13/2010
	12/13/2010
MEETING SUBJECT:	*7
Relief Planning	X
Jeopardy Leonards States Basican	
Jeopardy Status Review	
UA NXXs Other	
	2/14/2002
POOL START DATE (PSD)	3/14/2002
RATE CENTERS	
# Total	49
# Mandatory	49
# Mandatory-Single Service Providers (M*)	0
# Optional	0
# Excluded	0
BLOCKS ASSIGNED	
# Total	245
(For time period 12/01/09-12/10/10)	
BLOCKS AVAILABLE	
#Total	593
(As of preparation date: 12/10/10)	
CODES ASSIGNED	
# Total	24
# for Pool Replenishment	18
# for Dedicated Customers	0
#for LRNs	6
(For time period 12/01/09-12/10/10)	
CODES FORECASTED	
# Total	9
# for Pool Replenishment and Dedicated Customers	9
#for LRNs	0
(For the next twelve months as of 12/10/10)	







November 11, 2010

To: Tennessee 615 NPA Code Holders and Other Industry Members

Re: Initial Planning Document to Plan Relief for the 615 NPA in Tennessee

As stated in our memo dated October 7, 2010, the 615 area code in Tennessee is projected to exhaust during the 4Q2013. Enclosed is the Initial Planning Document (IPD) for your review prior to the December 13, 2010 scheduled industry NPA Relief Planning conference call meeting.

The IPD contains the projected life of several possible relief alternatives. NANPA welcomes the submission of additional relief alternatives from interested parties. While additional relief alternatives will also be accepted during the December meeting, advance submission is recommended to allow interested parties adequate time to review them prior to the meeting.

Accordingly, on December 13, 2010, NANPA will convene an industry NPA relief planning conference call to develop a recommended relief plan for the 615 NPA. The primary objective of this meeting is to review the alternatives included in the IPD and other industry proposed alternatives in order to secure industry consensus on a single relief plan for the 615 NPA. The resulting relief plan will be filed with the Tennessee Regulatory Authority for their consideration. The Industry recognized consensus process developed by the Alliance for Telecommunications Industry Solutions (ATIS) will be applied in the decision-making efforts (See attached copy).

Because the resulting impacts of NPA relief planning are so significant, NANPA strongly encourages your participation at the December 13, 2010 meeting. Past experience demonstrates that this could be the only meeting of the industry before a decision is reached on a recommended relief plan. The details of the December meeting are as follows:

Date: December 13, 2010

Time: 2:00 PM ET; 1:00 PM CT; 12:00 PM MT; 11:00 AM PT

**Dial-in number: (630) 827-6799** 

Pass code: 9141146#

Please feel free to distribute this notice to others in the industry that you feel should attend this important NPA relief planning conference call. If you received this notice from someone else, and would like to receive additional information in the future about the 615 NPA relief, you are encouraged to sign up to NANPA's NAS-NNS by going to <a href="www.nanpa.com">www.nanpa.com</a>, then selecting NAS Login and then selecting New Registration and following the sign-up process.

If you plan on attending the NPA Relief Planning conference call on December 13, 2010, please let me know by sending an email to <a href="wayne.milby@neustar.biz">wayne.milby@neustar.biz</a>. This will help us determine if all industry parties will be represented at the 615 NPA relief meeting.

If you have any questions regarding the above relief planning conference call, any aspect of relief planning, or have any questions about receiving notices and documents via NAS-NNS, please do not hesitate to contact me at 804-795-5919 or via email at the address above.

Sincerely,

D. Wayne Milby

Senior NPA Relief Planner – NANPA e-mail: <a href="mailto:wayne.milby@neustar.biz">wayne.milby@neustar.biz</a>

CC: Lewis DeBoard – TRA Staff

Attachments

# TENNESSEE - NPA 615 INITIAL RELIEF PLANNING MEETING VIA CONFERENCE CALL

**Dial-In Number: 630-827-6799, Pass code 9141146**#

### **DECEMBER 13, 2010** 2:00 PM – 4:30 PM (ET)

### **AGENDA**

2:00	Welcome & Introductions
	NANPA's Role & Responsibilities
	Consensus, Minutes & Statements for the Record
	Industry Guidelines/Relief Alternatives
	Review Code Assignment History
	Re-cap Pre-IPD Conference Call
	Additional Relief Alternatives
	Identify Pros & Cons of Alternatives
	Elimination of Alternatives

- 3:30 Break
- 3:45 Consensus on Recommended Relief Alternative
  Consensus on Dialing Plan
  Consensus on Implementation Intervals
  Statements for the Record
  Consensus on NANPA Filing Industry Efforts with
  Tennessee Regulatory Authority (TRA)

**Set Date for Conference Call to Review Meeting Notes and Draft Petition** 

4:30 Adjourn

### INDUSTRY CONSENSUS PROCESS

8/17/2009

ATIS OPERATING PROCEDURES

Version 5.0

### **7 RESOLUTION PROCESS**

### 7.1 Consensus

Consensus is the method used by the ATIS Forums and Committees to reach resolution of Issues, unless specifically otherwise provided for in these Operating Procedures or in the "ATIS Procedures for the Development of an American National Standard".

Consensus is established when substantial agreement has been reached among those participating in the Issue at hand. Substantial agreement means more than a simple majority, but not necessarily unanimous agreement.

Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution. Under some circumstances, consensus is achieved when the minority no longer wishes to articulate its objection. In other cases, the opinions of the minority should be recorded with the report of the substantial agreement, or consensus, of the majority.

When there are questions or disputes regarding consensus, leaders or participants should ask an objecting participant(s) to state the rationale for the objection and provide an opportunity for full discussion aimed at achieving full understanding and consideration of the objection.

A participant's silence is perceived as agreement by the committee and its leadership. If participants do not agree, they should be encouraged to speak up and voice their opinion.

Alliance for Telecommunications Industry Solutions

### Tennessee NPA 615 NXX Summary Data as of November 10, 2010

<u>NPA</u>	<u>615</u>					
Assigned NXXs	682					
Protected NXXs	0					
Reserved NXXs	0					
Unavailable NXXs	20	See I	Note			
Available NXXs	98					
Total	800					
Codes Assigned NPA 615	01/2007	02/2007	03/2007	04/2007	05/2007	06/2007
	1	3	1	0	4	3
	07/2007	08/2007	09/2007	10/2007	11/2007	12/2007
	2	2	3	1	0	0
	01/2008	02/2008	03/2008	04/2008	05/2008	06/2008
	1	1	0	0	0	2
	07/2008	08/2008	09/2008	10/2008	11/2008	12/2008
	1	2	0	2	4	1
	01/2009	02/2009	03/2009	04/2009	05/2009	06/2009
	0	2	2	1	0	5
	07/2009	08/2009	09/2009	10/2009	11/2009	12/2009
	3	1	0	3	2	1
	01/2010	02/2010	03/2010	04/2010	05/2010	06/2010
	5	4	1	3	4	2
	07/2010	08/2010	09/2010	10/2010	11/2010	
	1	0	2	0	*0	
As of 11/10/10						

Note: Unavailable indicates codes that are unavailable for assignment. These codes include, but are not limited to, test and special use codes (e.g., 958, 959, 555, time), N11 and other unique codes (e.g., 976, 950), and codes with special dialing arrangements (e.g., 7-digit dialing across NPA boundary).

POOLING STATISTICS Provided By: Cecilia McCabe	
ST/NPA:	TN 615
MEETING DATE:	
	12/13/2010
MEETING SUBJECT:	
Relief Planning	X
Jeopardy	
Jeopardy Status Review	
UA NXXs	
Other	
POOL START DATE (PSD)	3/14/2002
RATE CENTERS	
# Total	49
# Mandatory	49
# Mandatory-Single Service Providers (M*)	0
# Optional	0
# Excluded	0
BLOCKS ASSIGNED	
# Total	234
(For time period 12/01/09-11/04/10)	
BLOCKS AVAILABLE	
#Total	594
(As of preparation date: 11/04/10)	
, VI I	
CODES ASSIGNED	<u> </u>
# Total	23
# for Pool Replenishment	17
# for Dedicated Customers	0
# for LRNs	6
(For time period 12/01/09-11/04/10)	
1	
CODES FORECASTED	
# Total	7
# for Pool Replenishment and Dedicated Customers	7
# for LRNs	0
(For the next twelve months as of 11/04/10)	,

### **NPA RELIEF PLANNING MEETING AID**

## INDUSTRY DEVELOPED PROS AND CONS FOR RELIEF ALTERNATIVES FROM RECENT NPA RELIEF PLANNING MEETINGS

### **Overlay Pros and Cons:**

### Pros:

- 1 All existing customers would retain the \_\_\_ area code and would not have to change their telephone numbers.
- 2 Does not discriminate against customers on different sides of a boundary line as does a geographic split
- 3 Easier education process
- 4 Less customer confusion and easier education process
- 5 Less financial impact to business customers because there is no need to change signage, advertising and stationery
- 6 Less financial impact on business customers because there is no need to change signage, advertising and stationery unless they currently only show 7-digit numbers.
- 7 Residential customers do not have to update personal printed material such as checks and websites, etc. unless they currently show 7-digit numbers.
- 8 Customers do not have to update personal printed material such as checks and websites, etc.
- 9 Provides the most efficient distribution of numbering resources by allowing assignments to follow demand not withstanding forecasts for growth
- 10 No need for synchronization of old and new NPAs in NPAC databases
- 11 Minimizes call routing issues, especially with ported numbers
- 12 Easier for service providers to implement from a translations, billing and service order system perspective
- 13 Minimal data entries handled in national databases such as BIRRDS, LERG and the Terminating Point Master Table
- 14 The PSC/PUC would not have to decide which side gets the new NPA, so no winners and losers.
- 15 Does not split cities or counties into different area codes.
- 16 Keeps communities of interest in tact.
- 17 No impact on some wireless carriers that have to reprogram handsets manually
- 18 No technical impacts to number portability, text messaging or multimedia messaging

- 1 Consistent with FCC regulations, the relief plan would require 10-digit dialing for all local calls within and between the NPA and the new NPA.
- 2 Financial costs to add NPA to signage and printed material where only 7-digit number is shown.
- 3 Customers need to reprogram phone systems for 10-digit dialing: faxes, alarms, etc.

- 4 Customers would have to reprogram any auto-dialing equipment currently programmed to dial 7-digits to dial 10-digits; equipment such as alarm systems, PSAP dial systems, security gates, PBXs, life safety systems, computer modems, voicemail systems, fax machines, etc.
- 5 Loss of geographic identity with an overlay.
- 6 Confusion between local and toll calling 10-d Vs 1+10-d in some states.

### **NPA Split Pros and Cons**

### Pros:

- 1 Customers retain seven-digit dialing for all calls within the same NPA.
- 2 Maintains seven digit dialing for local calls within the same NPA
- 3 Approximately ½ of customers would experience no change if they keep the XXX NPA
- 4 Projected lives are balanced
- 5 The projected lives are slightly more balanced than alternative # \_.
- 6 The projected lives are more balanced
- 7 This alternative allows \_\_\_\_\_\_ to maintain operations on one side of the split line.
- 8 \_\_\_\_\_ operating territory is kept in tact
- 9 Retains the geographic identity with one area code.
- 10 Keeps the cities on both sides of the split lines intact.

- 1 Splits \_\_\_\_\_operating territory between two NPAs
  2 \_\_\_\_\_EAS calling is heavily disrupted
- 3 Projected lives are imbalanced, \_ years difference, least balanced of the split alternatives, could become more imbalanced if demand changes in future years
- 4 Requires approximately ½ of \_\_\_ NPA customers to change their telephone numbers thus creating winners and losers.
- 5 Requires NPA change for approximately ½ of \_\_\_\_ NPA customers
- 6 Requires half of the businesses to incur costs to change their advertising for telephone #'s and stationery.
- 7 Financial impact to half of businesses to incur costs to change their advertising for telephone #'s and stationery if currently show 10-digit telephone numbers or are close to the split line.
- 8 Creates widespread customer 10-digit dialing confusion across the new NPA boundary.
- 9 All \_\_\_ NPA customers previously went through a split \_ years ago and half will have to change again
- 10 Difficult PSC/PUC decision on which side retains the old NPA.
- 11 Longer time period needed for service providers to implement this type of relief.
- 12 Customers that change must contact friends, family and business associates with the telephone changes.
- 13 More complicated and costly to implement for service providers in their billing, translations and database systems.

- 14 Splits affect alarm systems and E-911 databases.
- 15 Negative impacts to E911, industry and alarm system databases that must be updated with customers' new telephone numbers.
- 16 Negative impact to directories and directory assistance databases that must be updated with customers' new telephone numbers.
- 17 Timing of publication of telephone directories must be coordinated with the implementation of the new NPA.
- 18 Split has a larger impact to greater number of existing customers due to change in existing customers' telephone numbers.
- 19 Split requires significant challenges to service provider's operational support systems and network elements.
- 20 Splits cause customer confusion with caller ID during implementation.
- 21 Older wireless handsets without over-the-air programming must be manually programmed for those numbers that are changing.
- 22 Splits require the old and new NPAs to be synchronized with the NPAC database to ensure accurate call routing and facilitation of port requests.
- 23 Splits require a more challenging customer education process for service providers that have customers on both sides of the split line.
- 24 This split disrupts the SP's host-remote switch arrangement.
- 25 Splits require the 800/SMS database to be updated.
- 26 Splits reduce the geographic area served by one area code.
- 27 Splits the city(s), counties or legislative districts into different area codes.
- 28 Splits communities of interest.
- 29 For some wireless carriers, text messaging and multimedia service can only handle one version of the 10-digit number so they will fail if they are sent using the old area code during permissive dialing.

### **Concentrated Overlay Pros and Cons:**

### Pros:

- 1 Does not impact as many customers at once
- 2 Only area of greatest code usage is overlaid (initial impact)

- 1 Splits host-remote arrangements for \_\_\_\_\_\_ Telco.
- 2 Very short life before expansion is required
- 3 A number of EAS routes cross this boundary
- 4 Will require two customer education notices, the second when the overlay is expanded to cover entire area code; two full relief efforts.
- 5 Customer confusion and education problems since it will have to be expanded in \_\_\_\_\_ years.
- 6 Service providers that use one switch for multiple NPAs: a conc. Overlay is difficult to implement with complicated translations
- 7 Concentrated overlay boundary splits time zone
- 8 Would have to start implementation immediately and come back in a short amount of time to expand the overlay

- 9 Discriminates against customers inside the overlay area that have to dial 10-digits immediately vs. those that get to keep 7-digit dialing outside of the concentrated overlay.
- 10 Requires judgment in projecting exhaust of specific rate centers that may be false over time.

### **Variation of the Concentrated Overlays:**

A variation of concentrated overlays is where the outer area would change to a new area code using the geographic split method and later when the original NPA runs out of codes in the inner area the new NPA would be expanded over it. The industry developed the following Cons for all the variations of the concentrated overlay alternatives:

### **Pros:**

The industry did not develop any Pros for these alternatives.

- 1 Projected lives are imbalanced, can be greater than 78 years to greater than 145 years difference in lives.
- 2 Requires customers in outer areas to change their telephone numbers thus creating winners and losers.
- 3 Financial impact to businesses to incur costs to change their advertising for telephone #'s and stationery if currently show 10-digit telephone numbers or are close to the split line.
- 4 Creates widespread customer 10-digit dialing confusion across the new NPA boundary.
- 5 Longer time period needed for service providers to implement this type of relief.
- 6 Customers that change must contact friends, family and business associates with the telephone changes.
- 7 More complicated and costly to implement for service providers in their billing, translations and database systems.
- 8 Negative impacts to E911, industry and alarm system databases that must be updated with customers' new telephone numbers.
- 9 Negative impact to directories and directory assistance databases that must be updated with customers' new telephone numbers.
- 10 Split requires significant challenges to service provider's operational support systems and network elements.
- 11 Splits cause customer confusion with caller ID during implementation.
- 12 Older wireless handsets without over-the-air programming must be manually programmed for those numbers that are changing.
- 13 Splits require the old and new NPAs to be synchronized with the NPAC database to ensure accurate call routing and facilitation of port requests.
- 14 Splits require a more challenging customer education process for service providers that have customers on both sides of the split line.
- 15 This split disrupts the SP's host-remote switch arrangement.

- 16 Splits require the 800/SMS database to be updated.
- 17 Splits reduce the geographic area served by one area code.
- 18 Splits the city(s), counties or legislative districts into different area codes.
- 19 Splits communities of interest.
- 20 For some wireless carriers, text messaging and multimedia service can only handle one version of the 10-digit number so they will fail if they are sent using the old area code during permissive dialing.
- 21 Very short lives before expansion is required
- 22 Will require two customer education notices, the second when the overlay is expanded to cover entire area code; two full relief efforts.
- 23 Customer confusion and education problems since it will have to be expanded within a short time frame.
- 24 Service providers that use one switch for multiple NPAs: a conc. Overlay is difficult to implement with complicated translations
- 25 Would have to start implementation immediately and come back in a short amount of time to expand the overlay
- 26 Discriminates against customers inside the overlay area vs. those that get to keep 7-digit dialing outside of the concentrated overlay.
- 27 Requires judgment in projecting exhaust of specific rate centers that may be false over time.

The industry reached consensus and developed the following statement regarding the variation of concentrated overlays:

These variation-of-concentrated-overlay alternatives do not meet the criteria set by the INC NPA Code Relief Planning and Notification Guidelines that a difference in projected lives shall not be greater than ten years. The differences in lives can vary from greater than 78 years to greater than 145 years. These alternatives present the very worst of all the options which include Cons for splits, Cons for concentrated overlays, require multiple relief efforts; cause significant confusion for the customers, increased expenses to the service providers and are difficult to implement from a network translations perspective.

### **FINAL**

# FOR RELIEF OF THE TENNESSEE - 615 NPA

### NORTH AMERICAN NUMBERING PLAN ADMINISTRATION

### WAYNE MILBY SENIOR NPA RELIEF PLANNER

### **615 NPA Background Information**

### **General Facts:**

On July 1, 2009 the population of Tennessee was 6,296,254 compared to a population of 5,689,276 on April 1, 2000. Tennessee stretches from the scenic Great Smoky Mountains of the east 440 miles to the banks of the Mississippi River in the west. Within Tennessee's 42,145 square miles of scenic beauty and diversity lives the greatest variety of birds of any state in the nation. Memphis holds the title "Birthplace of the blues". Nashville hosts more than a hundred recording studios and is famous as the country music capital of the world. Tennessee is bordered by Kentucky and Virginia on the north, North Carolina, Georgia, Alabama and Mississippi on the south, North Carolina on the east and Missouri and Arkansas on the west. The state flower is the Iris and the state bird is the Mockingbird.

Tennessee currently has 6 NPAs. The 615 NPA was created in January 1954. The 615 NPA covers the north-central portion of Tennessee and the State Capital is in the center of the NPA in the Nashville Rate Center.

### **General Facts and Assumptions**

The October 2010 NRUF NPA Exhaust Projection is 4Q2013 and reflects an annualized central office code growth of 31 NXX codes or 2.6 codes per month for the 615 NPA.

During 2010 the total code assignments through October was 22 codes or 2.2 codes per month.

• Assignment History: 2009 – 20 assigned; 2008 – 14 assigned; 2007 – 20 assigned

There are 44 code holders in the 615 NPA

The 615 NPA has 49 rate centers: 11 rate centers have one NXX code assigned, 10 rate centers have two NXX codes assigned and one rate center has 406 codes assigned (Nashville, the second largest city in Tennessee; Memphis is about 10% larger).

Thousand-Block-Number Pooling started in March 2002. There are 49 rate centers that have mandatory pooling, 0 mandatory-single service provider rate centers, 0 rate centers that have optional pooling and 0 rate centers that are excluded from pooling.

As of November 10, the 615 NPA has 98 codes available and 20 unavailable codes.

The 615 NPA is in the 470 LATA.

### **Dialing Procedures for 615 NPA**

Type of call	Call terminating to	Dialing plan
Local calls	Home NPA (HNPA)	7-digits (NXX-XXXX)
Local calls	Foreign NPA (FNPA)	7-digits (NXX-XXXX)
Toll calls	HNPA or FNPA	1+10-digits (1+NPA-NXX-XXXX)
Operator Services Credit card, collect, third party	HNPA or FNPA	0+10-digits (0 + NPA-NXX-XXXX)

### Appendix E

### **General Attributes of Common Relief Alternatives**

Geographic Splits	Overlays	Concentrated Growth Overlay
Splits provide a single area code for each geographic area. This may minimize confusion for customers outside the area. Implementation is generally understood.	With an overlay there will be more than one area code in a geographic area.     Where the overlay is a new concept some customer education is desirable.	Special and unique monitoring methods, not currently available, are required for exhaust for the area outside of the concentrated overlay, and it is difficult to predict the exhaust of the area outside of the concentrated overlay area.
Splits require an area code change for approximately one-half of customers in a two-way split, and two-thirds of customers in a three-way split.	An overlay will not require existing customers to change their area code.	Normally, no existing customers will be required to change their telephone number.
Geographic splits permit 7-digit dialing within an area code.	An overlay requires customers to dial 10 digits (or 1 + 10 digits) for all calls.	A concentrated growth overlay minimizes implementation of 10 digit dialing for customers
Stationery, business cards and advertising containing a ten-digit phone number will need to be revised by customers receiving the new area code.	There is no need to revise stationery, business cards and advertising unless they contain only seven digit phone numbers.	Customer confusion pertaining to dialing for a concentrated overlay could exist.
Future splits will reduce the geographic size of the area code.	An overlay will end further shrinking of the geographic size of the area code because subsequent relief will likely be another overlay.	In order to preserve codes, the NPA must be identified as needing relief and the relief plan needs to be approved much earlier in order to preserve enough codes to serve the non-concentrated overlay area.



TN - Tennessee



Follow these directions to save the map above to your computer.

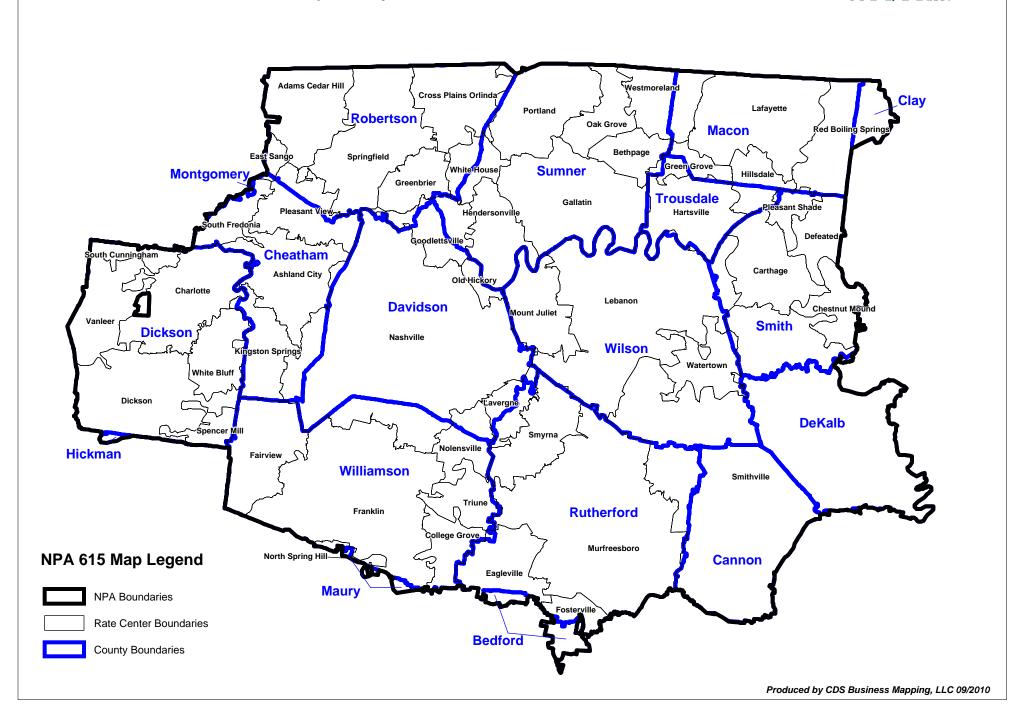
- **PC Users** Right click on the image and select "Save Image As" (Netscape) "Save Picture As" (Internet Explorer).
- MAC Users Hold down button and select "download image to disk" in the box that pops up.
- Choose the folder on your computer where you wish to save it to.

Print Map | Close Window

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### **TENNESSEE NPA 615 Rate Center Map, County**





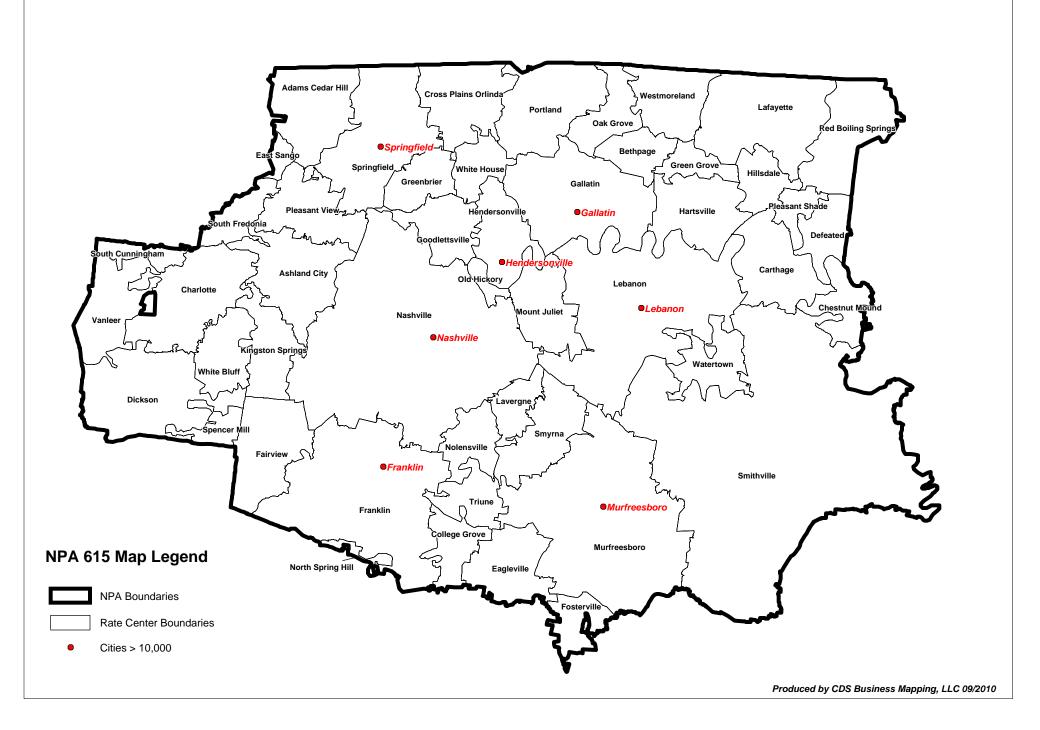
# **TENNESSEE 615 NPA**

		<u>POPULATION,</u> <u>PERCENT CHANGE</u>
COUNTY	POPULATION 7/1/09	4/1/00 TO 7/1/09
BEDFORD	45,947	22.2%
CANNON	13,860	8.1%
CHEATHAM	39,876	11.0%
CLAY	7,895	-1.0%
DAVIDSON	635,710	11.5%
DEKALB	18,954	8.8%
DICKSON	48,230	11.8%
HICKMAN	23,805	6.8%
MACON	22,057	8.2%
MAURY	84302	21.3%
MONTGOMERY	160,978	19.4%
ROBERTSON	66,581	22.3%
RUTHERFORD	257,048	41.2%
SMITH	19,201	8.4%
SUMNER	158,759	21.7%
TROUSDALE	7,922	9.1%
WILLIAMSON	176,838	39.6%
WILSON	112,377	26.5%
STATE OF TENNESSEE	6,296,254	10.7%
OTATE OF TENINESSEE	0,230,207	10.7 /0

Source: www.census.gov

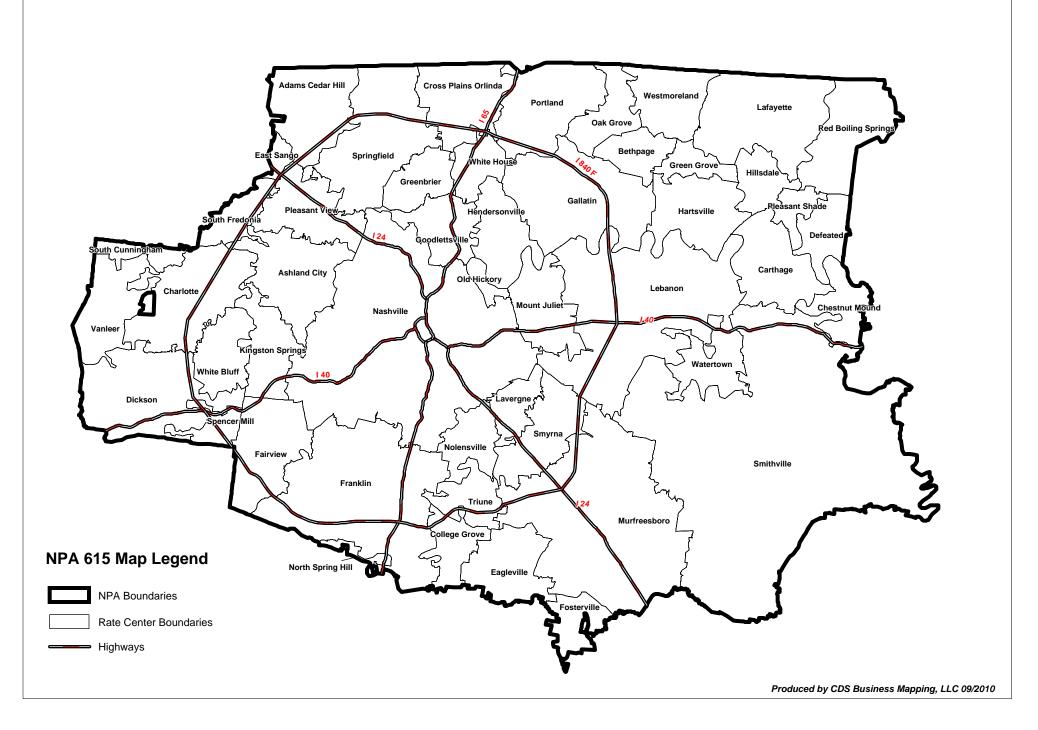
## **TENNESSEE NPA 615 Rate Center Map, Cities**





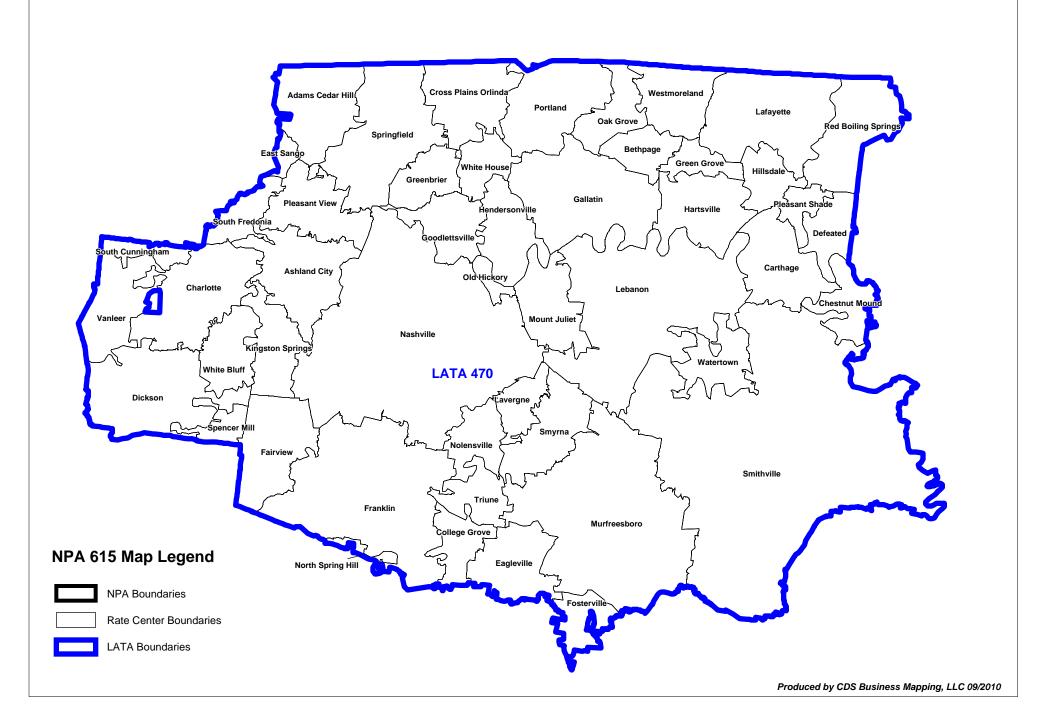
# **TENNESSEE NPA 615 Rate Center Map, Highways**





## **TENNESSEE NPA 615 Rate Center Map, LATA**





#### **RATE CENTER TABLE**

NPA: 615

Date: November 10, 2010

Source: NANP Administration System

D. I. C	0.1
Rate Center Name	Codes
ADMSCDARHL	2
ASHLAND CY	6
BETHPAGE	1
CARTHAGE	5
CHARLOTTE	2
CHSTNUMOND	1
COLLEGEGRV	1
CRSPLORLND	2
DEFEATED	1
DICKSON	7
EAGLEVILLE	2
EASTSANGO	2
FAIRVIEW	4
FOSTERVL	1
FRANKLIN	28
GALLATIN	12
GOODLETSVL	14
GREENBRIER	3
GREENGROVE	1
HARTSVILLE	4
HENDERSNVL	14
HILLSDALE	1
KINGSTNSPG	3
LAFAYETTE	5
LAVERGNE	9
LEBANON	13
MT JULIET	7
MURFREESBO	38
NASHVILLE	406
NOLENSVL	4
NSPRINGHIL	3
OAK GROVE	3
OLDHICKORY	11
PLEASANTVW	3
PLEASASHAD	1
PORTLAND	3
RDBOLNGSPG	1

SCUNNINGHA	1
SMITHVILLE	15
SMYRNA	14
SOFREDONIA	2
SPENCERMIL	2
SPRINGFLD	9
TRIUNE	2
VANLEER	2
WATERTOWN	2
WESTMORELD	1
WHITEBLUFF	3
WHITEHOUSE	5

Total 682

#### **CODE HOLDER TABLE**

NPA: 615

Date: November 10, 2010

Source: NANP Administration System

OCN Name	OCN	Codes
DEKALB TELEPHONE COOPERATIVE	0562	13
NORTH CENTRAL TELEPHONE COOPERATIVE, INC TN	0573	10
TENNESSEE TELEPHONE CO.	0575	9
TWIN LAKES TELEPHONE COOPERATIVE CORP.	0579	1
UNITED TEL CO INC.	0581	4
TCG MIDSOUTH, INC TN	114F	14
BANDWIDTH.COM CLEC, LLC - TN	124F	4
XSPEDIUS, LLC - TN	2432	12
ALEC, INC TN	2588	3
YMAX COMMUNICATIONS CORP TN	284E	1
AENEAS COMMUNICATIONS, LLC - TN	2891	1
GLOBAL CROSSING LOCAL SERVICES, INCTN	2966	22
BIRCH COMMUNICATIONS, INC TN	3290	1
NETWORK TELEPHONE CORPORATION - TN	3633	4
COMCAST PHONE OF TENNESSEE, LLC - TN	408D	3
BUSINESS TELECOM INC BTI - TN	4265	2
HALO WIRELESS, INC	429F	1
DELTACOM, INC TN	4622	10
LEVEL 3 COMMUNICATIONS, LLC - TN	4806	8
SBC INTERNET SERVICES, INC.	516C	4
NEUTRAL TANDEM-TENNESSEE, LLC - TN	525E	1
MATRIX TELECOM, INC DBA TRINSIC COMMUNICATIONS-TN	5468	1
NORLIGHT, INC TN	5514	1
CRICKET COMMUNICATIONS, INC.	6017	19
NEW CINGULAR WIRELESS PCS, LLC - GA	6214	52
NEXTEL COMMUNICATIONS, INC.	6232	9
UNITED STATES CELLULAR CORP TENNESSEE	6278	2
TELETOUCH COMMUNICATIONS, INC.	6591	2
USA MOBILITY WIRELESS, INC.	6630	27
SPRINT SPECTRUM L.P.	6664	25
CELLCO PARTNERSHIP DBA VERIZON WIRELESS - TN	6673	63
MID-STATE PAGING INC/MID-STATE MOBILE RELAY	6845	1
ADVANTAGE CELLULAR SYSTEMS, INC.	6935	1
TELCOVE OF NASHVILLE, LP - TN	7236	21
XO TENNESSEE, INC.	7344	33
AT&T LOCAL	7421	4
POWERTEL NASHVILLE LICENSES, INC.	7476	19
TIME WARNER COMMUNICATIONS AXS OF MEMPHIS, TN	7517	1

INTERMEDIA COMMUNICATIONS INC TN	7977	3
US LEC OF TENNESSEE, INC	8356	20
ADVANTAGE CELLULAR SYSTEMS, INC TN	841F	1
NUVOX COMMUNICATIONS	8660	26
BELLSOUTH TELECOMM INC DBA SOUTH CENTRAL BELL TEL	9419	222
PEACE COMMUNICATIONS, LLC - TN	967F	1

Total 682

## 615 NPA - RELIEF ALTERNATIVES

#### **TENNESSEE**

Numbering Plan Area Born on Date: January 1, 1954

#### NPA RELIEF PLANING TOOL ASSUMPTIONS

NRUF DATE	October 2010
PROJECTED EXHAUST DATE	4Q2013
ANNUALIZED CODE DEMAND PROJECTION	31
MONTHLY CO CODE DEMAND PROJECTION	2.6

#### NPA RELIEF ALTERNATIVE

#### **OVERLAY ALTERNATIVE**

#### ALTERNATIVE #1 – ALL SERVICES DISTRIBUTED OVERLAY

A new NPA code would be assigned to the same geographic area occupied by the existing 615 NPA. Customers would retain their current telephone numbers; however, ten-digit local dialing by all customers within and between NPAs in the affected area would be required. Codes in the overlay NPA will be assigned upon request with the effective date of the new area code. At exhaust of the 615 NPA all future code assignments will be made in the overlay area code.

Total CO Codes = 682 Total rate centers = 49 Area Code Life in Years = 19

Alternative #1 above is the only alternative that will meet the requirements set forth in the NPA Code Relief Planning and Notification Guidelines.

#### NPA SPLIT ALTERNATIVE

The exhausting NPA is split into two or more geographic areas and a new NPA is assigned to one of the areas formed by the split. All split plans would require ten-digit dialing between NPAs in the same extended local calling area. Within an NPA, seven-digit dialing would be permitted.

#### ALTERNATIVE #2 – NPA SPLIT

The proposed split boundary line runs around the Nashville rate center.

According to the NPA Code Relief Planning and Notification Guidelines, severe imbalances of more than 10 years are to be avoided.

#### CONCENTRATED OVERLAY ALTERNATIVE

A new NPA code would be assigned to only certain rate centers in the same geographic area occupied by the existing 615 NPA. Customers would retain their current telephone numbers; however, ten-digit local dialing would be required by all customers within and between NPAs in the affected rate areas. Codes in the overlay NPA will be assigned upon request with the effective date of the new area code. Those customers in the non-overlaid area of the 615 NPA would retain seven-digit dialing until the remaining 615 NXX codes were assigned and the overlay would then be extended to all rate centers in the 615 NPA. All remaining 615 NXX codes would be assigned only to the non-overlaid area. At exhaust of the 615 all future code assignments will be made in the overlay area code.

#### ALTERNATIVE #3 – CONCENTRATED OVERLAY

This would be a concentrated-overlay distributed across only the Nashville rate center in Area A. It was assumed for the calculation of these lives that the concentrated overlay will be introduced in the next twenty-four months.

Total CO Codes = 406 Total rate centers = 1 Years before Expansion of Overlay: 1.7 Area Code Life in Years = 19

This alternative would require the concentrated overlay to be expanded over the entire 615 NPA in 1.7 years.

# 615 NPA - RELIEF ALTERNATIVES

# **TENNESSEE**

# PROJECTED LIVES OF RELIEF ALTERNATIVES IN YEARS

Alternative	Area A	Area B	Overlay
#1	-	-	19
ALTERNATIVES TH	AT DO NOT ME	ET GUIDELINE	REQUIREMENTS
#2	13	28	
#3	-	1.7	19

#### neustar **TENNESSEE NPA 615 Rate Center Map ALTERNATIVE #1 ALL SERVICES DISTRIBUTED OVERLAY** Cross Plains Orlinda Westmoreland Adams Cedar Hill **Portland** Lafayette Oak Grove Red Bolling Spring Bethpage Springfield White House Green Grove Hillsdale Greenbrier Pleasant Shade Pleasant View Gallatin Hartsville Goodlettsville Defeated S<u>outh</u> Cunninghan Carthage Ashland City Lebanon Charlotte Mount Juliet Chestnut Mound Nashville Vanleer & OVERLAY NPA Watertown White Bluff Dickson Fairview Smithville Franklin NPA 615 Map Legend Murfreesboro College Grove **NPA** Boundaries North Spring Hill Eagleville Rate Center Boundaries Alt#1 Projected\_Life Distributed Overlay 19 Years Produced by CDS Business Mapping, LLC 11/2010

