# Switching Codes:

# Kentucky's Area Code Split and its Implications

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## Background

The North American Numbering Plan (NANP) was introduced in 1947 by Bell Labs and AT&T. NANP is the numbering system for the Public Switched Telephone Network (PSTN) in the United States and its territories, Canada, Bermuda, and many Caribbean nations. NANP numbers are in the following format: NXX-NXX-XXXX. They are ten digits in length, where N is any digit 2-9 and X is any digit 0-9. According to Harry Newton in the Newton's Telecom Dictionary, "the first three digits are called the numbering plan area (NPA) code, often simply called the area code. The second three digits are called the central office code or prefix. The final four digits are called the line number" (Newton, 1999). All telecommunications devices that require a telephone number in NANP zones are required to follow this format.

Prior to January 1995 the second digit of an area code was required to be either a "1" or "0". With the introduction of "interchangeable" NPA codes, this restriction was removed, thus dramatically increasing the number of possible area codes from 152 to 792. Interchangeable codes increased the quantity of possible phone numbers to a little more than six billion (Newton, 1999).

Traditionally, when phone numbers are allocated to phone companies or other businesses that require numbers, they are allocated in blocks of 10,000. "Currently, federal regulations require NANPA to allocate phone companies numbers in huge blocks, regardless if fewer are needed" (Fort, 1999a). Because of this allocation practice, millions of phone numbers are sitting unused, therefore

wasted. Some metropolitan areas such as New York and Chicago are attempting to combat the wasting of area codes with a “pooling” system. This system would reduce the size of number blocks passed out to phone companies from 10,000 to 1,000 (Arnett, 1999). In other areas, lawmakers, state agencies, and consumer advocates are trying to persuade state and federal regulators to change the current number allocation methods.

The area served by the North American Numbering Plan is divided into smaller areas each identified by a three-digit area code. According to the NANPA website, non-geographic codes are also established to designate toll-free or toll calls such as 800, 888, and 900 (Numbering Plan, 1999). New area codes are typically needed when the current supply of numbers in a given area code is about to run out. The process of determining when codes will be exhausted and planning for the introduction of a new area code is called "NPA relief planning." The industry has established guidelines to decide when and how to provide NPA relief planning. A copy of the NPA code relief planning and notification guidelines can be found online at the Alliance for Telecommunications Industry Solutions (ATIS) website (Alliance, 1999).

Relief is typically provided by the introduction of a new area code. Either a geographic split or an overlay of the new area code is necessary. “In a split, a line is drawn on a map – everyone on one side keeps the old area code, everyone on the other switches to a new one” (Fortt, 1999a). With an overlay, everyone keeps their existing area codes and phone numbers. All newly issued numbers will have the new area code. New NPA codes are also assigned to

alleviate the exhaust of numbers for non-geographic services such as toll-free 800 numbers.

**NPA Relief for KY**

For many years Kentucky has had two Area Codes 502 and 606. Due to the enormous growth in telecommunications devices that require a telephone number such as cell phones, pagers, and fax machines, all number combinations in these area codes are being depleted. The only solution is to keep adding area codes where they are needed. One new area code, 270 was added for Western Kentucky on May 1, 1999 to alleviate the exhaustion of the 502 area code. (Kentucky Public, 1999). The PSC ruled for a geographic split in that case. The Louisville Metropolitan area got to keep the old 502 code, while the rest of Louisville assumed the new 270 code. According to Senior NPA Relief Planner, Stan Washer, “based on current demand projections for Central Office (CO) codes, it is estimated that without any means of relief, the supply of CO codes in Kentucky’s 606 area code will exhaust in approximately the fourth quarter of 2000” (Washer, 1998).

With advice from the neutral third party, Lockheed Martin, the Kentucky PSC elected to introduce another new area code in Kentucky to help alleviate the exhaustion of the 606 code. On July 23, 1998, in compliance with NPA Code Relief and Planning Notification Guidelines, NPA Relief Planner Sandy Tokarek, sent notification letters all industry leaders and 606 area code holders. The letter was to inform them of the future exhaust of the 606 area code and to notify them of an upcoming meeting to discuss the relief planning. (Tokarek & Washer,

1998). In August of 1988, NANPA met with the Kentucky PSC and phone companies to discuss relief options for the number shortage.

A month later NANPA presented several options to solve the area code problem. The choices available were variations of the geographic split or a simple overlay of the new area code (Tokarek & Washer, 1998). Regardless, there are numerous negative issues associated with all of these relief options. However, the issues must be weighed and "the relief plan chosen will seek to minimize end users' confusion while balancing the cost of implementation by all affected parties" (Alliance, 1999). In other words, the relief option which will best serve the public interest is the one that should be chosen.

After considering all of the relief plans that were presented, the industry representatives reached a consensus. They proposed that an overlay of the new area code over the 606 code would be the best relief method (Tokarek & Washer, 1998).

**The Decision**

On August 4th 1999, The Kentucky Public Service Commission (PSC) ruled that Central and Northern Kentucky would have a new area code beginning in spring of 2000 (Commonwealth, 1999). The new code will be 859 or the letters "UKY" on the telephone keypad. Eastern KY will keep the 606 code that it has had for the last 44 years (Fortt, 1999a). As indicated by a PSC press release, the new 859 code will go into effect on April 1, 2000. "At that time a "permissive dialing" period will begin. That means customers can dial either 606 or "UKY" and

successfully complete the call to the new area code region" (Commonwealth, 1999). After six months the permissive dialing period will end. On October 1, 2000 it will be mandatory for customers to dial the 859 area code to complete a call.

This ruling by the PSC came as a surprise, given that in virtually all cases the geographic area with the fastest population growth and the most industry keeps the old area code. According to Rebecca Barnhart, spokeswoman for NANPA, "We're not aware of any examples in which a rural area has kept the area code and the larger metropolitan area has gotten the new one" (Fortt, 1999b). It simply costs less in both money and confusion for a more populous area to retain the old area code.

Eastern KY leaders pushed to keep the 606 area code. They stressed concerns that the transition to a new area code would hurt their already depressed economy. The PSC felt that Eastern KY could not afford the "financial and strategic expense of a change" (Fortt, 1999a). The Commission therefore determined that the public interest would best be served if the eastern part of Kentucky kept the 606 area code.

The PSC decision caused some unrest within the community. President of the Greater Lexington Chamber of Commerce, Bob Douglass, was upset with the PSC's decision. "This is a big surprise both in terms of the decision itself and the timing of the decision – and we don't like it. The good business sense would be to keep 606 here," Douglas said (Jordan, 1999). Some feel that Governor Paul Patton unduly influenced the PSC to allow Eastern KY to keep the 606 area

code. Patton who is from Pike County and previously served as the judge executive sent a letter to the PSC siting the poor economic concerns of Eastern KY (Associated Press, 1999).

On the other hand, some folks were excited about the 859 area code, especially the University of Kentucky. “It’s nice to have an area code named after you,” said Lloyd Axelford, UK public relations director (Fortt, 1999c).

**Implications of the New Area Code**

Changing to a new area code affects everyone, not exclusively the people in that geographic area. Friends, relatives, and business contacts must be informed of the switch. It will be easier for large corporations in the area to absorb costs. Small businesses will be among those who are financially hit the hardest. They must deal with the expense of reprinting new letterheads, brochures, and personal cards (Jordan, 1999). Re-painting signs and company trucks, updating Internet sites, informing out of town customers, and reprogramming telecommunications devices requires the biggest expenditures. Lexington Herald-Leader Business Writer, Jim Jordan, says, “one redeeming factor is that toll free numbers that many businesses rely on, such as those that begin with 800 and 888 won’t be affected by the area-code change” (Jordan, 1999).

Central and Northern KY taxpayers will foot the bill for the re-printing that government agencies must endure.

Losing the 606 area code is not only a financial burden upon citizens, but it creates confusion and stress. Lexington resident Miriam Woolfolk expressed her dismay with the new code. “I think it’s stupid. If you have to change it, how about 909 – because it turns our world upside down” (Butters, 1999).

**Conclusion**

Experts predict that the 859 code will last for approximately 7.3 year before it is exhausted (Fortt, 1999c). This means another relief plan is not far away. Hopefully

“The number of area codes has nearly doubled in the last 10 years, and the last area code is expected to be issued sometime in 2007 (Arnett, 1999).” Unless something is done we will tie up all six billion numbers.

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