

- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

In the Matter of the Request of the North American ) Numbering Plan Administrator for a New Area Code ) within the (801) Area Code )	<u>DOCKET NO. 99-999-05</u>  <u>REPORT AND ORDER</u>
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ISSUED: April 26, 2000

By the Commission:

For many years, since the introduction of direct distance dialing in the United States, long distance calls which move over the publicly available switched network have been routed over the telecommunications network through the use of 1+ a10 digit number. The first three digits are "area codes," or "NPA codes."<sup>(1)</sup>

Originally these digit codes were subject to the convention that the middle digit must be either a "1" or a "0" in order to avoid confusion with central office codes, resulting in a maximum number of available codes in North America of 152. Effective January 1, 1995, this convention was eliminated, increasing the possible number of NPA codes to 792.<sup>(2)</sup> The network has been managed to insure that each ten digit number, including area code, identifies a unique telephonic address within North America, so that there is no ambiguity about the routing of calls to reach the desired called party.

The second portion of the ten digit number, the "NXX" or central office code, identifies the switch which is physically connected to the called party. The network recognizes these codes and uses this information to route the call to its final destination. Each central office code can serve a theoretical maximum of 10,000 customers. Because of greater demand for phone lines (many residential homes have multiple lines, while large business customers may have hundreds of lines), new technologies that use the telecommunications system, and entry into the local exchange market by competitors, central office codes have become scarce along the Wasatch front area of Utah (the current 801 area code service territory). As new uses for telecommunications have been developed, such as cell phones (analog and digital), home computer connections to the Internet, pagers, facsimile machines, and so forth, more telephone numbers have been assigned. As new types of providers of telecommunications have entered the market, more central office codes have been assigned than ever before. The industry projects that at current and expected rates of consumption, the available central office codes in the 801 area code may be exhausted within approximately one year from now, during or at the end of the second quarter 2001. Once central office codes are exhausted, there is no way to accommodate demand for further numbers or central office codes, without the provision of a new area code.

Members of the industry met on August 23, 1999, in Salt Lake City, to discuss a resolution of this issue. Of the two possible methods of expansion, the industry proposed the area code overlay method. Under the overlay approach, new numbers in the entire area served by the current 801 code would be subjected to the new area code, such a system requires that all calls within the NPA be either ten digit (local calls) or 11 digit (long distance as is currently the case). Under the other relief method, the area code split, physical boundaries would be drawn within which the existing area code would continue to be used, and outside of which a new area code would be implemented. Under the area code split approach, there would be a period of several months during which calls made to numbers assigned to the new area code, would continue to connect even if they were preceded by the old or existing area code. The time for this "permissive dialing" period is limited by the forecasted exhaustion of available central office codes.

Once a decision has been made with respect to the overlay or split method, an order must be issued with sufficient lead time for the new area code to be obtained from the administrator of the North American Numbering Plan, and for notice to be given to network administrators and customers around the country, so that calls may be routed to Utah destinations using the new area code.

The Commission issued public notice and held hearings earlier this year on

March 14th in Provo, March 15th in Bountiful, March 16th in Salt Lake City, and March 22nd in Ogden. The Commission heard the evidence of U.S. WEST Communications, Inc.

("U.S. West"), other interested parties, and the general public.

### DISCUSSION

The Commission considered many points of view and different objectives in reaching a decision, it was primarily concerned with minimizing the impact on the general populace.

The industry's recommendation of an overlay would have required every call placed by every customer along the Wasatch Front to be either 10 or 11 digits, even if the call was to a neighbor, or even a second phone line within a given premise. Second, it was felt that the overlay option imposed a burden in terms of the required information one needs to complete a call. Again, every single call would require an area code so this information would need to be obtained for every call. In the event of a future numbering exhaust, the only option available would have then been another overlay, thus raising the possibility of three or more area codes serving the same geographic area. The Commission found this to be unacceptable.

This left the Commission with the job of choosing a boundary for the new and old area codes. While a simple north south split had a certain intuitive appeal, there was no boundary that could be drawn that would both (1) satisfy federal guidelines in terms of a balanced outcome for future predicted growth/exhaust, and (2) not split a significant community of interest. Basically, Salt Lake county would have needed to have been split right down the middle, having Salt Lake City proper going with the northern half of the area and all other Salt Lake county rate centers going with the southern half of the area. The unacceptability of the foregoing option left the alternative of finding a group of core rate centers that could be combined to form an "island" that would achieve the federally mandated balance. On the southern end of the Salt Lake county, the choice was relatively straightforward as the local calling area ends at the county line. All residents of Utah county already have to dial 11 digits to reach any of the Salt Lake county rate centers, and likewise all Salt Lake county residents must dial 11 digits to reach any Utah county customer. This is true even for the contiguous rate centers of Lehi and American Fork on the Utah county side and Midvale on the Salt Lake county side. Therefore, drawing the new area code boundary at the Utah/Salt Lake county line imposed no new extra digit dialing on anyone in the Utah/Salt Lake county area.

On the northern side, the situation was much more complicated. The various rate centers between Salt Lake county and Ogden are overlapping. There is no absolute boundary as is the case on the southern side of Salt Lake county. Further complicating the process is the fact that the rate center boundaries (which determine the central office a particular customer is served from) were drawn up significantly prior to the impressive population growth the Wasatch Front has experienced in recent years. As a result, many boundaries which primarily bisected farms or open land in the past now often split communities. As the cities in Davis, Weber, and Morgan counties have grown, they have annexed new land without regard to the existing rate center boundaries. Thus, most of the potential splits were not serious contenders because of the complications involved in imposing two area codes on one or more individual cities. This left the Commission with the option of placing the boundary at the county line (between Davis and Salt Lake counties)<sup>(3)</sup> or moving northward one rate center and placing the boundary through the southern tip of Farmington (imposing a new area code on all of Farmington, except for the southern-most residents, and all current 801 NPA rate centers further north).

The advantage of the county line split was minimal disruption of city boundaries, and the fact that the 801 area code would now provide specific information to callers, i.e., that they were calling a party located somewhere in Salt Lake county. The primary disadvantage was that the residents of the Bountiful rate center (including the cities of Centerville, West Bountiful, Bountiful, North Salt Lake and WoodsCross) will have to dial 10 digits to complete a toll-free call into Salt Lake county.

The advantage of the Farmington split would be that the residents of the Bountiful rate center would not have to dial 10 digits to reach a Salt Lake county number (studying the capacity of the network shows that a majority of the traffic from the Bountiful rate center flows south). However, the disadvantages are that Farmington would be slightly split, the community of interest between Farmington and Centerville would be split, the geographic information inherent in a county line split would be lost, and the dates of future exhaust would become more unbalanced, necessitating a split (or overlay) for the 801 area code sooner than would be the case with the county line split.

The Commission has undertaken efforts to conserve numbers to the extent allowed by federal law. It is the Commission's intention to put off the split as long as is reasonable. To accomplish this the Commission expects the industry to issue numbers within an NXX consecutively. Hence this order which approves the split as the Commission's relief plan also specifies that the split should not occur until the actual exhaust is reached. We anticipate that the Numbering administrator and the industry will soon meet to set out a schedule for implementation and education, we expect that they will also set a date for permissive dialing to start. However, we also anticipate that the end date for permissive dialing (i.e., when the split becomes effective or mandatory) will be triggered by the physical exhaust of the NXX codes available in the 801 NPA, not by an arbitrary date selected well in advance of actual exhaust.

### FINDINGS AND CONCLUSIONS

Based upon the record, the Commission finds that:

- In order that adequate facilities and services may continue to be provided to Utah telecommunications customers, an expansion of telephone numbers and central office codes must be performed through the use of the area code split method. The Commission further determines that the least disruptive manner of performing this expansion is to establish the

boundary of the existing 801 area code primarily around Salt Lake county.<sup>(4)</sup> All other rate areas in the current 801 NPA will be served by the new area code, which will be designated by the administrator of the North American Numbering Plan.

- New telephone numbers in the 801 area code may not be available after second quarter 2001 and the new area code will be available by the end of 2000.
- There should be a permissive dialing period beginning December 31, 2000 and ending at the time of exhaust, currently projected to be June 2001, during which time long distance callers could dial either the new area code or the old 801 area code when placing calls to locations within the new area. After the end of this period, callers would be required to use the new area code.

Based on the foregoing findings, and being fully advised, the Commission now makes the following

### ORDER

NOW, THEREFORE, IT IS HEREBY ORDERED, that:

1. The area code for the Wasatch Front area of the state of Utah be split with the 801 area code being assigned primarily to Salt Lake county with a new area code, to be designated by the administrator of the North American Numbering Plan, to be assigned to the remaining areas in the current 801 NPA.
2. The permissive dialing period begin December 31, 2000, and end at the time of exhaust, currently projected to be June 2001, during which period callers may place calls to areas in the new area code territory by dialing either the new area code or the existing 801 area code.
3. Code holders must issue telephone numbers consecutively within an NXX.
4. Following the completion of the permissive dialing period, callers desiring to place calls to locations in the new area code must use the new area code.

DATED at Salt Lake City, Utah, this 26th day of April 2000.

/s/ Stephen F. Mecham, Chairman

/s/ Constance B. White, Commissioner

/s/ Clark D. Jones, Commissioner

Attest:

/s/ Julie Orchard

Commission Secretary

April 27, 2000

Contact: Julie Orchard

PRESS RELEASE

## PSC SEEKS FCC AUTHORITY TO CONSERVE NUMBERS AND SETS PLAN FOR NEW AREA CODE

Today the Public Service Commission (PSC) re-petitioned the Federal Communications Commission (FCC) for authority to conserve telephone numbers in the area served by the 801 area code to delay the adoption of a third area code for Utah. Despite the proposed number conservation efforts, the FCC and the North American Numbering Plan Administrator (NANPA) required the PSC to establish a plan to relieve the 801 code in the event those efforts do not succeed.

Utah added the 435 area code in 1997 everywhere in the state but in Weber, Morgan, Davis, Salt Lake, and Utah Counties. Those five counties continued to be served by the 801 area code. As in 1997, available telephone numbers in the 801 area are diminishing because of population growth and demand for numbers. The introduction of competition in the telecommunications industry, industry practices, multiple phone lines at home and at the office, wireless phones, and lines devoted to fax machines and Internet access have all contributed to the telephone number shortage. Without any conservation measures, NANPA is projecting there will be no more telephone numbers available in the 801 area code by the end of the second quarter 2001.

The two proposals before the PSC were an area code overlay and an area code split. The overlay would impose a new area code over the top of the entire 801 area. Customers would be required to dial ten digits to complete all local calls. New lines within the area would be assigned the new area code so that, for example, a second home phone line acquired after the new code is implemented could have a different area code than the first line serving the home. Lastly, when Utah needs additional area code relief in the future, a second overlay would be the only option so that three area codes would be serving the area, causing even greater confusion.

To avoid those complications, the PSC ordered an area code split. Local calls within each area code will continue to be completed with seven digits rather than ten. When it becomes necessary to implement the plan, the 801 area code will only serve Salt Lake County. Weber, Morgan, Davis and Utah Counties will be served by the new area code which NANPA has not yet assigned. The Commission reviewed three other boundaries further north in Davis County to preserve seven digit dialing for local calls from Davis to Salt Lake County. Unfortunately, U.S. West's call center boundaries do not correspond with municipal lines so each proposed boundary further north divided cities and important communities of interest. As a result, local calls between Davis and Salt Lake Counties will be completed dialing ten digits but, like today, they will not be long distance calls. "We know the plan is not perfect, but given the alternatives before us, this split is the least confusing and causes the fewest disruptions" said Commission Chairman Steve Meham. "It also reflects the sentiment of the people who attended the four public hearings we held on the issue in March."

In the south the split will occur between Salt Lake and Utah Counties, but the calling patterns will not change since calls between those counties are toll calls today. Customers, however, will have to use the new area code to complete calls to Utah County.

Under the plan, the permissive dialing period, that would allow customers to complete calls to the new area code with seven digit dialing or with ten digits using the new or old code, begins December 31, 2000. Final implementation of the area code split depends on the PSC's success in establishing telephone number conservation measures.

### ####1. 1 Numbering Plan Area

2. There are still some potential codes that are excluded from the possible pool, such as 800, 888, 877, 911, 811, etc.
3. The southern and western boundaries of the Bountiful rate center closely track the Davis/Salt Lake county line, hence the option is referred to as the "county line split."
4. Specifically, the following U.S. West rate centers will be included in the 801 NPA: Salt Lake City, Magna, Kearns, Murray, Holladay, Alta, and Midvale. All other existing 801 rate centers will be included in the new area code (NPA), these include: Ogden, Morgan, Clearfield, Kaysville, Farmington, Bountiful, Lehi, American Fork, Pleasant Grove, Provo, Goshen, Payson, Spanish Fork, Springville, and Spanish Fork Canyon.