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Richard T. Shannin  
210 Homewood Ave.  
Greensboro, NC 27403

March 2, 2001

Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, NC 27699-4325

Dear Chief Clerk:

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Clerk's Office  
N.C. Utilities Commission

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P100 SUB 137C

This letter (which is a slightly edited version of a fax sent to you earlier) is in response to an insert which appeared inside my current telephone bill. This insert was a request by Mr. Robert P Gruber for comments regarding the need for additional telephone numbers.

The current recommendation of 2 area code/10 digit dialing that is before the Commission is the institution of two separate area codes within the area that is now serviced by area code 336. As I understand it, there are four major characteristics of this plan:

1. The new area code would begin to be issued as needed.
2. The two area codes would co-exist within the same geographical confines.
3. Ten numbers would be dialed for local calls.
4. Billing between the two area codes would be the same as if there were only one.

I understand that the need to find new numbers becomes more crucial as the use of telephone equipment continues to grow, and I can only assume that the rate at which new numbers will be needed will grow as well. In the past several years, our area code has been changed twice as the geographical boundaries have shrunk, and now a third change in the form of an additional area code is proposed. What concerns me is not that there have been these changes, but rather that I do not see an end to these changes. Even as the previous change was made, it was hinted that it would only be a few years before another change would have to be implemented.

Knowing this growth to be inevitable, it seems to me that it would be preferable to find an alternative to the pattern of changes which allow the consumer just enough time to adapt to one change just before the next is instituted. Outside of limiting access to new telephone numbers, there would appear to me to be two ways to break this pattern:

1. Make all of the foreseeable changes required for the next fifty or one hundred years at one time, whether this means cutting areas up into little pieces like Swiss cheese, having multiple layers of 3, 4, or 5 area codes, or a combination of both.
2. Institute a new system that would inherently allow for the increased need for telephone numbers.

The first option is what we are doing now, except we are doing it piecemeal, like easing into cold water one inch at a time, instead of taking the plunge. It seems to me that the second option might be a better choice if it could be accomplished.

As you know, a telephone number is not just a string of digits, but rather, is composed of four discrete groups of numbers which are:

1. access to the area code (1 digit)
2. area code (3 digits)
3. exchange (3 digits)
4. personal number (4 digits)

As such, the 7 digits that follow the area code, provide 10 million possible telephone number for each area code used (this is the gross number of combinations, not allowing for numbers that are for special use, reserved for ongoing flexibility, etc.). Thus, each time a new area code is introduced, either by sub-dividing a geographical area or overlaying an existing area, another 10 million numbers are theoretically added. If, however, the 3 digit exchange was increased to 4 digits, each area code would then have 100 million number combinations, giving each area code a 10 fold increase in possible numbers. There are, of course, like most things, advantages and disadvantages to this plan. I do not know all of the issues involved, but a quick review shows the following:

Disadvantages:

1. Every local call made will require 8 digits rather than the present 7 digits.
2. Telephone equipment (both hardware and software) will probably have to be reconfigured. This reconfiguration may need to be very extensive throughout the entire system, from individual handsets to nation-wide switching centers.

Advantages:

1. There will be enough telephone numbers that could be generated so that there should be no concern for future growth.
2. I would suspect that the percentage of possible numbers held back for reserve, etc., could be substantially less than would have to be held back with the present plan.
3. There will be no danger of running out of area codes which might, in the future loom as a problem, especially when the increased rate of new area codes used is compared with the limited pool left after deducting those numbers that are not options for various reasons.
4. People will not have to be concerned that their business or residence telephone numbers may change at any time.
5. People will not have the confusing scenario of having two telephones side by side with different area codes.

In considering the disadvantages listed above, it should be noted that with the plan presently under consideration, each local call will require ten digits to complete, rather than the 8 digits needed by increasing the size of the exchange. The second disadvantage noted above would, I assume, be the main stumbling block to adapting a plan involving a 4 digit exchange. In this regard, there are a number of points to consider:

1. It seems that we are quickly reaching a point where the present system is becoming too unwieldy to continue. You can only make the area so small, or have so many overlaying area codes, before everyday communications become something to avoid rather than embrace.
2. A major change in the way the telephone system operated was required to initially accommodate the use of area codes. While the system is vastly more complicated now than it was then, it will only continue to be even more so in the future.
3. If we run out of 3 digit area codes, the question of whether or not to add an extra digit will become moot.

I readily acknowledge that there may be many more issues involved, many of which I may not be aware of. There may, for instance, be a new technology on the horizon which will by its very nature change all of the parameters under which we are now working. Unless the nature of such a technology is now known or anticipated, however, I think it would be foolish to just go along as we are in the mere hope that something will be developed in the near future.

In conclusion let me say that it would appear that increasing the size of the exchange by 1 digit offers a number of considerable advantages over the 2 area code/10 digit plan now being considered.

Thank you for allowing me to present my comments, and if you have any questions or replies to my remarks, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Richard T. Shannin".

Richard T. Shannin

cc: Mr. Robert P. Gruber  
cc: The Honorable Roy Cooper