State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M

Fá

()

Ċ.

DATE: NOVEMBER 19, 1998

- TO: DIRECTOR, DIVISION OF RECORDS AND REPORTING (BAY6)
- FROM: DIVISION OF COMMUNICATIONS (ILERI, SHELFER) DIVISION OF LEGAL SERVICES (COX, MCKINNEY) (C)
- **RE:** DOCKET NO. 980671-TL REQUEST FOR REVIEW OF PROPOSED NUMBERING PLAN RELIEF FOR THE 407 AREA CODE.
- AGENDA: DECEMBER 1, 1998 REGULAR AGENDA POST HEARING DECISION - PARTICIPATION IS LIMITED TO COMMISSIONERS AND STAFF

CRITICAL DATES: OCTOBER 1, 1999 (EXHAUST DATE)

SPECIAL INSTRUCTIONS: NONE

FILE NAME AND LOCATION: S:\PSC\LEG\WP\980671.RCM

CASE BACKGROUND

The North American Numbering Plan (NANP) was introduced in 1947 by AT&T. The NANP governs the assignment and use of telephone numbers in North America and other World Zone 1¹ Countries. The plan is based on a destination code in which each main telephone number in the NANP is assigned a specific address or destination code. The destination codes are commonly referred to as telephone numbers. NANP telephone numbers are in a 10-digit format, consisting of a 3-digit Numbering Plan Area (NPA) code, a 3-digit central office code, and a 4-digit station address code. The NPA code is commonly known as the area code, and the central office Code is commonly referred to as an NXX code. Lockheed Martin IMS is currently the North American Numbering Plan Administrator (NANPA) with the responsibility of assigning area codes within the NANP.

DOCUMENT NUMBER-DATE

¹ World Zone 1 Countries consist of Anguilla, Antiqua and Barbuda, Commonwealth of the Bahamas, Barbados, Bermuda, British Virgin Islands, Cayman Islands, Canada, Dominican Republic, Grenada, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Turks and Caicos Islands, Trinidad and Tobago, and the United States of America, including Puerto Rico and the Virgin Islands.

Lockheed Martin (LM) is also responsible for assignment of central office codes within NPAs. LM is required to follow guidelines approved by the Industry Numbering Committee (INC) when assigning either NPAs or central office codes. INC is a subcommittee under the Carrier Liaison Committee (CLC), a committee under the Alliance for Telecommunications Industry Solutions (ATIS). INC provides reports to the North American Numbering Council (NANC), a committee formed by the FCC.

Pursuant to the NPA Code Relief Planning and Notification Guidelines (INC 97-0404-016), Mr. Wayne Milby, Senior NPA Relief Planner for the Eastern Region of the North American Numbering Plan (NANP), notified the code holders and other industry members on March 3, 1998, that the 407 area code was approaching exhaustion. The NANP Administrator hosted an industry meeting in Orlando on March 31, 1998 to discuss alternative relief plans. NANPA, at that time, had only six plans. During the meeting, an additional four alternatives were discussed, bringing the total number of alternatives discussed to ten. The industry reached a consensus to recommend Alternative Relief Plan #1, an overlay, as the method of relief for the 407 area code. On April 22, 1998, Mr. Milby notified the Commission of the industry's consensus.

Usually, the Commission does not formally review area code relief plans unless a specific dispute over what plan should be implemented arises between affected members of the industry. The Commission will defer to the industry consensus. In this case, however, the Commission received several objections to the proposed plan from members of the public, asking that the Commission review the proposed 407 relief plans. As a result, the Commission scheduled several public hearings and a full evidentiary hearing in this docket. The notice of public hearings and the industry's consensus plan were printed in the news media, attracting a great deal of attention and public interest in this matter. Because the overlay will require 10-digit² dialing for all local calls, which may be confusing to customers, the Commission determined that it was in the public interest to review not only the industry consensus plan, but also the other alternatives. The Commission conducted hearings in Orlando and Melbourne on August 6 and 7, 1998, and on September 24 and 25, 1998. The Commission also conducted an evidentiary hearing in Orlando on August 7, 1998³. During and after the public hearings, a total of 12,111 customer responses was received by mail, phone, fax, and e-mail. The

²Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, FCC 96-333, Second Report and Order and Memorandum Opinion and Order, 11 FCC Rcd 19392 (1996)

³In this recommendation, citations to the hearing transcripts will be identified with the hearing date followed by the transcript page.

majority of the customers were from Brevard County and strongly opposed the industry's consensus overlay plan.

AT&T Telecommunications of the Southern States, Inc. (AT&T), BellSouth Telecommunications, Inc. (BELLSOUTH), BellSouth Mobility Inc. (BMI), Sprint-Florida, Inc. (SPRINT), MCI Telecommunications Corporation and MCImetro Access Transmission Services, Inc. (MCI), and Vista-United Telecommunications (VISTA) intervened in this proceeding. With the exception of MCI, all of the parties supported the industry's consensus overlay plan in their testimonies and briefs.

Before the public hearings took place, there were ten alternatives. Based on the testimony from the public hearings, staff has suggested two more alternatives. Alternatives #11, and #12 which are described in staff's analysis in Issue 1, are based on the testimony received at the Melbourne public hearing On September 25, 1998.

This recommendation will address which relief plan the Commission should implement, and what specific dialing patterns should apply in order to make calls within the affected area codes.

DISCUSSION OF ISSUES

<u>ISSUE 1</u>: Should the Commission approve the industry's consensus overlay plan for 407 area code relief, and if not, what relief plan should the Commission approve?

RECOMMENDATION: No, the Commission should not approve the industry's plan. Staff recommends that the Commission should implement Alternative #11, a split boundary extension overlay in which (1) Brevard County is split from 407 and placed in a new area code, and (2) the same new area code is <u>simultaneously</u> used as an overlay in the remaining 407 area. The Commission should also order BellSouth and Sprint to send a letter to alarm monitoring companies advising them of the need to reprogram their equipment for 10-digit dialing in the overlay area by December 1, 1999. The letter should be submitted to Commission staff for review by January 13, 1999. After staff's approval, this notice should be mailed by LECs to all alarm monitoring companies by January 27, 1999. (ILERI)

POSITIONS OF THE PARTIES

<u>AT&T</u>: AT&T supports either a geographic split or an overlay based on what is in the best interests of the people living and working within the 407 area code.

BELLSOUTH: Yes. The overlay relief plan for the 407 area code relief is the most appropriate option. If the Commission does not approve an overlay, then BellSouth supports a geographic split as in Alternative #7.

<u>BMI</u>: BMI agrees with the industry recommendation resulting from the industry meeting held on March 31, 1998.

MCI: MCI supports the geographical split relief in Alternative #4. If the Commission chooses an overlay plan (Alternative #1), then MCI requests that the Commission take steps to mitigate the anticompetitive impacts of an overlay, and more efficiently use the limited number resources. Thus, MCI requests that the Commission require Local Number Portability and 10-digit dialing be implemented according FCC requirements to and that all technologically feasible steps be investigated to conserve numbering resources.

<u>SPRINT</u>: Sprint supports either the geographic split or an overlay based on the public hearings and the best interest of the customers. The overlay plan in this particular case is a rational solution which will provide the most long term benefits and make it easier to add future area codes which will clearly be needed in this high growth area.

- 4 -

<u>VISTA</u>: The single overlay, Alternative #1, has many advantages and should be considered by the Commission along with Alternative #4 and #7.

STAFF ANALYSIS: Commissions across the country have struggled over the past few years with the issue of whether a geographic split or some form of area code overlay is the more appropriate method of providing relief from the exhaustion of telephone numbers within an area code. This proceeding is the most complex to date in Florida given the number of alternatives being considered.

Before the public hearings took place, there were ten alternatives. Based on the testimony from the public hearings, staff has suggested two more alternatives. Witness George Mitchell testified that Brevard County has a very well-defined border, the St. John's River. The populated and developed area, however, is situated far from that border, along the East coast. He stated that since Brevard County is geographically separate, it would make sense to establish an overlay for Orange County, but not for (9/25/98 TR 78) Witness Robert Osband also Brevard County. preferred a split that would keep Brevard County as a whole mainly because of the Kennedy Space Center. (9/24/984 TR 16) Of 27 witnesses from Brevard County, 24 expressed the desire to implement a relief plan that would keep Brevard County as a whole, with only one area code. (9/25/98 TR 30, 34, 55, 77, 78, 90) Staff's proposed Alternative #11 addresses the witnesses' concerns.

Alternative #12 is also based on testimonies received at the Melbourne public hearing on September 25, 1998. Witness Patrick Utecht testified that all the recommended alternatives exhaust in less than 4 to 6 years; therefore, rather than dealing with another area code relief plan, the Commission should implement two new area codes now. (9/25/98 TR 34) Staff's proposed Alternative #12 addresses the witness's suggestion.

The NANPA and the industry utilize the NPA Code Relief Planning and Notification Guidelines to identify relief alternatives for area codes nearing exhaustion. On July 13, 1998, the Industry Numbering Committee (INC) reissued the NPA Code Relief Planning and Notification Guidelines (INC97-0404-016). (EXH. 3) The INC currently identifies the following relief alternatives:

⁴9/24/98 Public hearing took place at 2pm unless mentioned.

NPA Split Method

By this method, the exhausting NPA is split into two geographic areas leaving the existing NPA code to serve, for example, an area with the greatest number of customers (in order to minimize number changes) and assigning a new NPA code to the remaining area. This method divides areas by jurisdictional, natural or physical boundaries (counties, cities, river, etc.) between the old and new NPAs.

This method has been the alternative chosen for practically all NPA relief situations prior to 1995. NPA splits have occurred with enough frequency so that technical aspects have been addressed and established implementation procedures are generally understood. Public education and acceptance of the process has been made easier because of the numerous NPA splits that have occurred. This method generally provides long term relief for an area.

Boundary Realignment Method

In an NPA boundary realignment, the NPA requiring relief is adjacent to an NPA, within the same state, that has spare NXX code capacity. A boundary shift occurs so that spare codes in the adjacent NPA can be used in the NPA requiring relief. As a result, the geographic area of the exhausting NPA shrinks and the geographic area of the NPA with spare capacity expands. Only the customers in the geographic area between the old and new boundaries are directly affected by this change. This method applies to multi-NPA states only. It could provide for a better balance of central office (NXX) code utilization in the affected NPAs. This method is viewed as an interim measure because it tends to provide shorter term relief as compared to implementing a new NPA code.

Overlay Method

An NPA overlay occurs when more than one NPA code serves the same geographic area. In an NPA overlay, code relief is provided by opening up a new NPA code within the same geographic area as the NPA(s) requiring relief. Numbers from this new NPA are assigned to new growth on a carrier-neutral basis, i.e., first come, first served. Since the overlay relief method could result in unequal dialing for those customers served out of the overlay NPA, the FCC⁵ requires 10-digit dialing for all of the affected customers' local calls within and between the old and new NPAs in order to ensure that competitors, including small entities, do not suffer

⁵Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, FCC Order No. 96-333, Second Report and Order and Memorandum Opinion and Order, 11 FCC Rcd 19392 (1996)

competitive disadvantages. In addition to requiring 10-digit dialing for all local calls, the FCC requires that every carrier authorized to provide telephone service in the affected area code have the ability to be assigned at least one NXX in the existing area code during the 90-day period preceding the introduction of the overlay.

The overlay method reduces or eliminates the need for customer number changes like those required under the split and realignment methods. It also provides the option of eliminating the permissive dialing period as part of implementation. However, this method will necessitate 10-digit dialing of local calls between the old and new NPAs as central office (NXX) codes are implemented in the new NPA. Four potential implementation strategies have been identified for an NPA overlay. They are:

a) Distributed Overlay - The distributed overlay strategy may be considered in situations when growth in telephone numbers is expected to be more or less evenly distributed throughout the existing NPA requiring relief. The new NPA is added to the NPA requiring relief and shares exactly the same geographic boundaries. When growth telephone numbers are required, they are assigned from the new NPA.

b) Concentrated Growth Overlay - A concentrated growth overlay may be considered in situations when the majority of the new telephone numbers are expected to be concentrated in one section of the existing NPA. For example, a fast growing metropolitan area and a sparsely populated rural area could exist within the same NPA. The overlay NPA would be assigned initially to the section of the NPA experiencing the fastest growth, and new phone numbers in that section would be assigned from the new NPA. As more relief is required, the geographic area served by multiple NPAs could expand.

c) Boundary Extension Overlay - With a boundary extension overlay, the NPA requiring relief is adjacent to an NPA with spare capacity. The boundary between these two NPAs is eliminated, and spare NXX codes from the adjacent NPA are assigned within the original NPA boundary where relief is required. An appropriate use of boundary extension might be in a state consisting of two NPAs, where one NPA has spare capacity. This solution has the advantage of not requiring a new NPA code, but it also has the same limitation as a boundary realignment in that it provides less long term relief.

d) Multiple Overlay - The multiple overlay strategy may be considered where relief is required in two or more NPAs. For example, this solution may be appropriate in a metropolitan area where two or more NPAs cover a small geographic area and where it would be difficult to implement another kind of relief, i.e., a

split or a distributed overlay. The new NPA would be assigned to overlay the multiple existing NPAs serving the entire metropolitan area. As another example, a new NPA could be assigned for new growth within an entire state where more than one NPA exists.

Other

A combination of the methods described above may be used. For example, a concentrated growth overlay could be assigned initially to a section of an NPA experiencing fast growth, and as more relief is required, the section served by two NPAs could expand into a distributed or multiple overlay as demand requires. Other combinations of relief methods may be appropriate. Each NPA requiring relief must be analyzed on the basis of its own unique characteristics with regard to demographics, geography, regulatory climate, technological considerations and community needs and requirements.

Background Information:

As many witnesses explained in their testimonies, each type of relief plan (geographic split or overlay) has inherent advantages and disadvantages. Listed below are some of the advantages and disadvantages that were identified for each type of plan. (Thomas Foley 8/7/98 TR 223, Allen Benson 8/7/98 TR 154, Suzanne Brooks 8/7/98 TR 201. See also Order Nos. PSC-95-1048-FOF-TL, PSC-97-0138-FOF-TL, and PSC-98-0597-FOF-TL)

Advantages of Overlay Plan

- 1. Customers in the overlay area can retain their telephone numbers.
- 2. Customers are not required to change advertisements containing 407 area code telephone numbers.
- 3. Cellular carriers are not required to reprogram their customers' cellular telephones.
- 4. Costs to customers and carriers are minimized.
- 5. This method is the best and simplest migration path to future NPA relief by assuring the elimination of number changes and confusion.
- 6. This method is easy to implement from the telecommunications network perspective.

Disadvantages of Overlay Plan

- 1. 10-digit dialing is required for all local calls within the overlay area.
- 2. Directories and Directory Assistance will be required to provide 10-digit numbers.

- 8 -

- 3. All advertisements that contain 7-digit telephone numbers must be changed to 10-digit numbers.
- 4. Alarm monitoring companies will be required to reprogram their equipment to comply with the 10-digit dialing requirement.

Advantages of Geographic Split

 7-digit dialing would remain for intra-NPA local calls. (This may or may not include ECS calls depending on whether there is IXC competition)

Disadvantages of Geographic Split

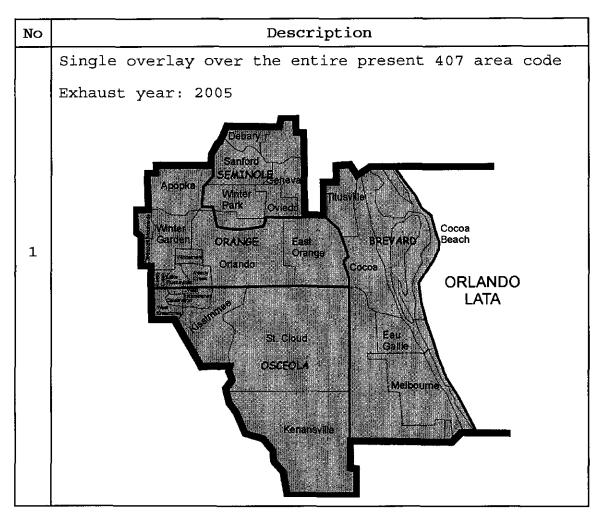
- 1. Customers in an area with a new area code must change the area code portion of their telephone numbers.
- 2. Customers in an area with a new area code must change advertisements which included the 3-digit area code.
- 3. InterNPA EAS/ECS routes will require 10-digit dialing.
- 4. There is a short permissive dialing period.

Witness Wayne Milby indicated that the first consideration is to determine if there is a way to split the area code according to county or physical boundaries, and create two areas with approximately equal life spans. (9/24/98 TR 7) During this proceeding, twelve area code relief options are discussed.

Each alternative is explained with a brief description, a schematic view, and the exhaust years based on Assumption $#1^6$.

Discussion of Alternatives⁷:

Alternative #1:



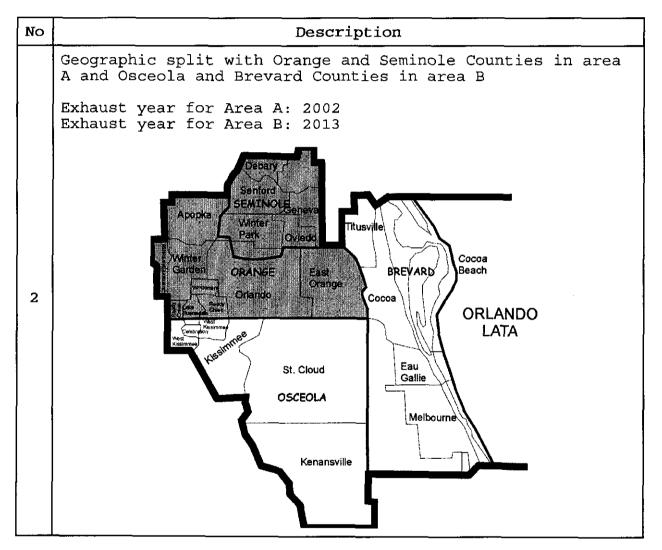
This alternative proposes a single overlay in the 407 area. This is the industry consensus plan. Many witnesses from Brevard County have opposed the idea of an overlay. (9/24/98 8:15pm TR 6; 9/24/98 TR 16, 34, 45, 51, 55, 61, 67; 9/25/98 TR 24, 28, 30, 34, 38, 43, 45, 55, 59, 63, 73, 74, 77, 78, 82, 84, 85, 86, 88, 90, 91,

⁶Assumption #1 is that the area code growth will continue at approximately the same rate as current demand for central office codes. (EXH. 3)

⁷The Montverde and Clermont exchanges have pocket areas located in the 407 area. These areas are physically located in Lake County.

94, 101) At the September 25, 1998, public hearing, 24 of the 27 witnesses opposed the overlay plan. Most of the witnesses stated that they would prefer a split and would not care if they received a new area code. This alternative is one of the best options available in terms of the projected life. Staff notes that Alternative #11 has the same projected life and allows Brevard County to keep using 7-digit dialing (see Table 1, p. 24, and Table 3, p. 32).

Alternative #2:

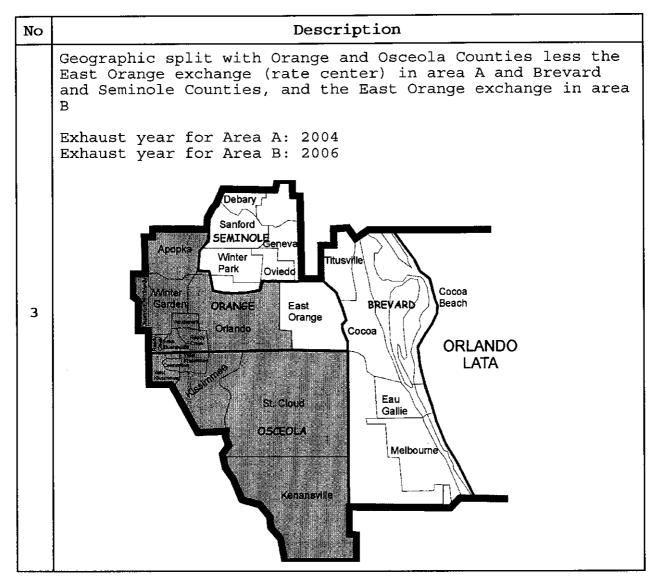


This alternative proposes a geographic split with Orange and Seminole Counties in area A and Osceola and Brevard Counties in area B. This alternative results in an extreme imbalance of projected lives of the two NPAs. This will necessitate another relief plan within 1.9 years. In addition, the EAS/ECS routes

- 11 -

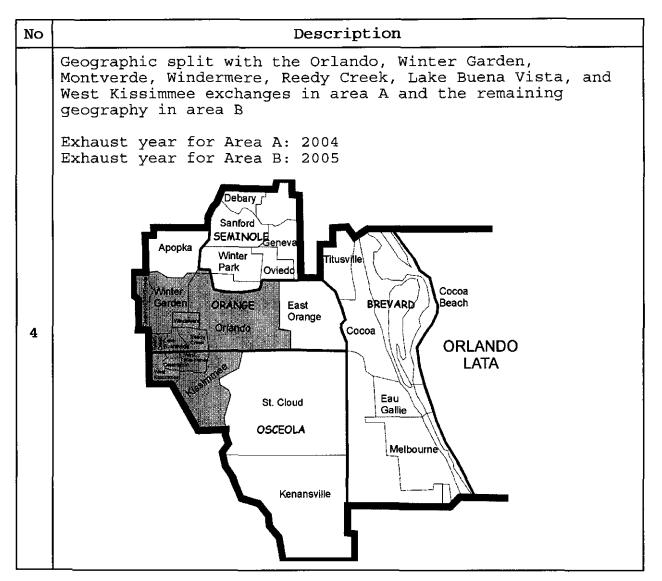
between the Orlando and Kissimmee exchanges will require 10-digit dialing, which was opposed by many customers. (9/24/98 TR 45, 51; 9/25/98 TR 30)

Alternative #3:



This alternative proposes a geographic split with Orange and Osceola Counties less the East Orange exchange (rate center) in area A and Brevard and Seminole Counties, and the East Orange exchange in area B. This alternative would disrupt local calling areas and was not supported by the industry. In addition, the area code boundary would split the EAS/ECS routes between Area A and the Winter Park, Oviedo, and Geneva exchanges, which would divide the community of interest and require 10-digit dialing. (9/24/98 TR 67)

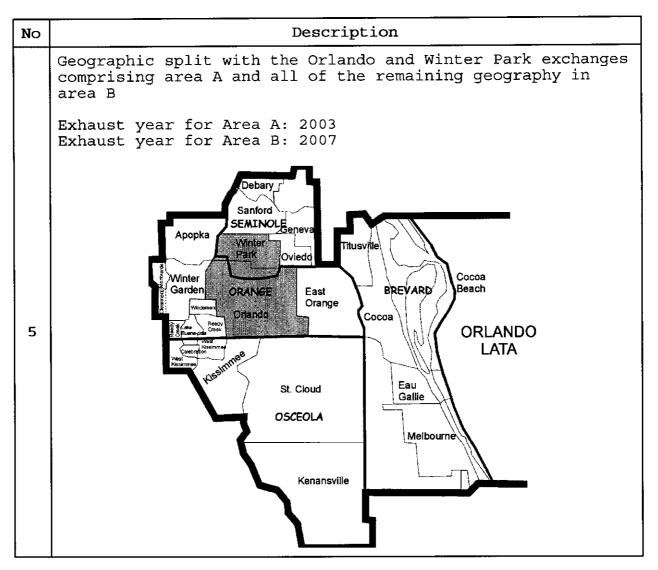
Alternative #4:



This alternative proposes a geographic split with the Orlando, Winter Garden, Clermont, Celebration, Kissimmee, Montverde, Windermere, Reedy Creek, Lake Buena Vista, and West Kissimmee exchanges in area A and the remaining geography in area B. This alternative elicited complaints from the customers in the Winter Park, Apopka, Sanford, and the East Orange exchanges. The customers preferred to be connected to the same area code as the Orlando exchange because of the strong community of interest. Local calling between Area A and Area B would require 10-digit dialing. (8/7/98 TR 67, 75; 9/24/98 TR 45, 51)

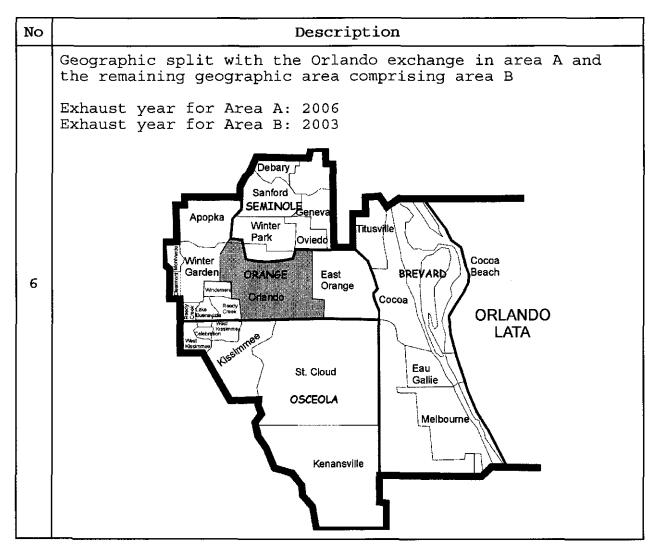
- 13 -

Alternative #5:



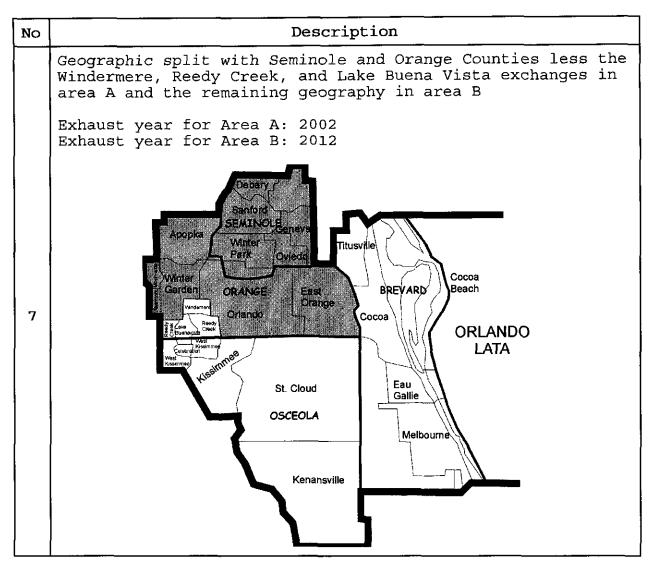
This alternative proposes a geographic split with the Orlando and Winter Park exchanges comprising area A and all of the remaining geography in area B. This alternative elicited customer complaints from the Apopka, Sanford, Windermere, Lake Buena Vista, and East Orange exchanges. Customers preferred to be connected to the same area code as the Orlando exchange. This alternative was also not favored since it would split the community of interest. (8/7/98 TR 67, 75; 9/24/98 TR 67)

Alternative #6:



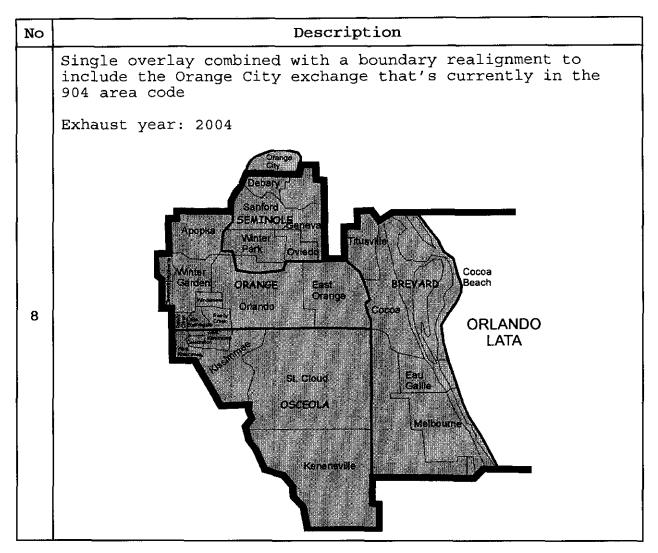
This alternative proposes a geographic split with the Orlando exchange in area A and the remaining geographic area comprising area B. This alternative elicited customer complaints from the Winter Park, Apopka, Sanford, and East Orange exchanges. This alternative was not favored at all since it would split the community of interest. Customers located in exchanges near Orlando preferred to be connected to the same area code as the Orlando exchange. (8/7/98 TR 67, 75; 9/25/98 TR 59)

Alternative #7:



This alternative proposes a geographic split with Seminole and Orange Counties less the Windermere, Reedy Creek, and Lake Buena Vista exchanges in area A and the remaining geography in area B. The projected life of this relief plan is short, requiring additional relief within 2.1 years. Thus, this alternative does not comply with the guidelines.

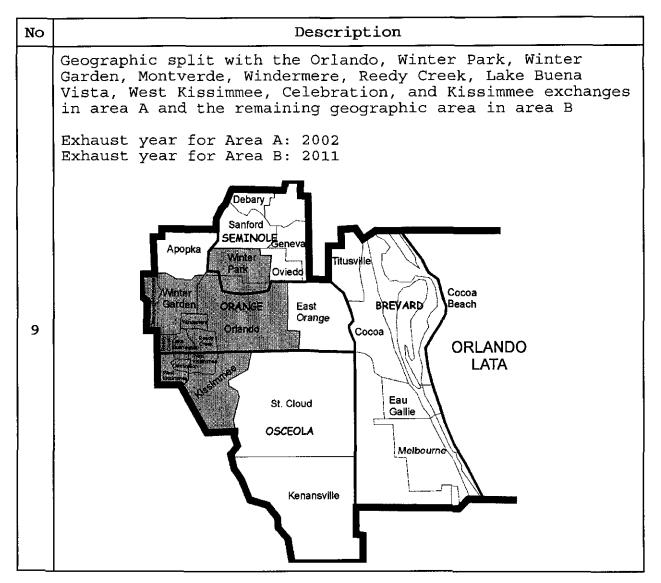
Alternative #8:



This alternative proposes a single overlay combined with a boundary realignment to include the Orange City exchange that's currently in the 904 area code. The Commission has received many complaints from Orange City customers because they already have two area codes, 904 and 407. Therefore, they oppose being included in this overlay. The customers from Brevard County have also opposed a possible overlay plan as in Alternative #1. (9/24/98 TR 15, 61) According to witness Wayne Milby if this alternative were chosen, there would be duplicate central office codes, NXXs, which would require changing the NXXs of Orange City customers. He added that it is possible to keep the last 4 digits of the telephone number. (9/24/98 TR 7) Witness Thomas Foley from Sprint indicated that there are 6 NXX codes where customers would have to make a full

number change. Since full number changes are disruptive to customers, many people opposed this alternative. Witnesses for Orange City argued that an overlay would give them 3 area codes, and it is not acceptable. (9/24/98 TR 15, 61)

Alternative #9:

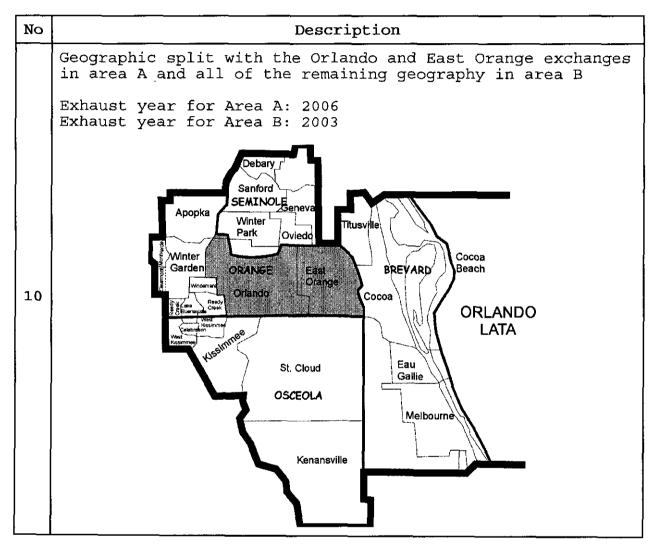


This alternative proposes a geographic split with the Orlando, Winter Park, Winter Garden, Montverde, Windermere, Reedy Creek, Lake Buena Vista, West Kissimmee, Celebration, and Kissimmee exchanges in area A and the remaining geographic area in area B. This alternative elicited not only customer complaints from the Apopka, Sanford, and East Orange exchanges, but also this plan has a projected life of 2.2 years. In addition, the calls between

- 18 -

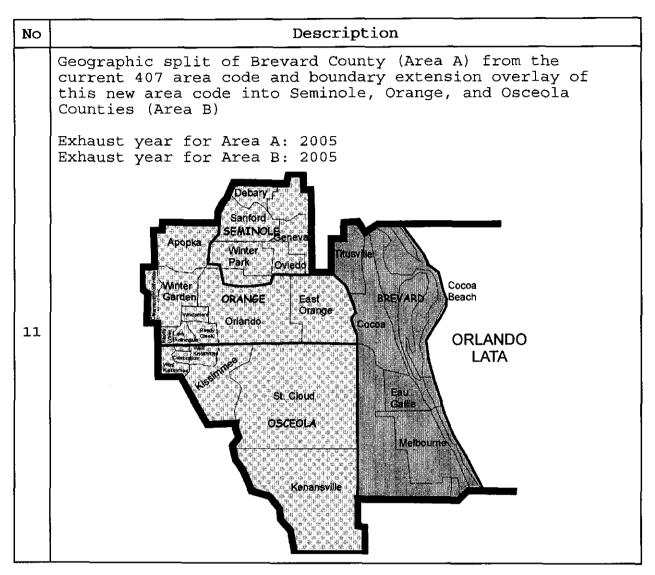
close neighborhoods would require 10-digit local dialing, which was undesired by many people. The customers in the northern Orlando suburbs preferred to be connected to the same area code as the Orlando exchange. (8/7/98 TR 67, 75 9/25/98 TR 59)

Alternative #10:



This alternative proposes a geographic split with the Orlando and East Orange exchanges in area A and all of the remaining geography in area B. Customers located in exchanges near Orlando preferred to be connected to the same area code as the Orlando exchange and did not want 10-digit local calling between close neighborhoods. (9/24/98 8:15pm TR 6; 9/24/98 TR 16, 34, 45, 51, 55, 61, 67; 9/25/98 TR 24, 28, 30, 34, 38, 43, 45, 55, 59, 63, 73, 74, 77, 78, 82, 84, 85, 86, 88, 90, 91, 94, 101)

Alternative #11:



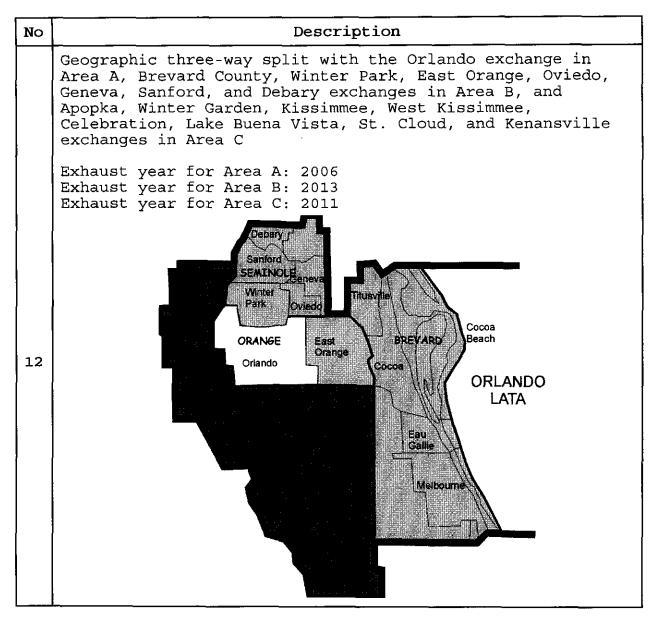
This alternative proposes a geographic split of Brevard County (Area A) from the current 407 area code and boundary extension overlay of this new area code into Seminole, Orange, and Osceola Counties (Area B).

Witness George Mitchell testified that Brevard County has a very well-defined border, the St. John's River. The populated and developed area, however, is situated far from that border, along the East coast. He stated that since Brevard County is geographically separate, it would make sense to establish an overlay for Orange County, but not for Brevard County. (9/25/98 TR 78) Witness Robert Osband also preferred a split that would keep

Brevard County as a whole mainly because of the Kennedy Space Center. (9/24/98 TR 16) Of 27 witnesses from Brevard County, 24 expressed the desire to implement a relief plan that would keep Brevard County as a whole, with only one area code. (9/25/98 TR 30, 34, 55, 77, 78, 90) Staff's proposed Alternative #11 addresses the witnesses' suggestions.

Alternative #11 is a split boundary extension overlay method. This alternative is one of the best options available in terms of the projected life, and will last as long as Alternative #1, an overlay relief plan. However, this option allows customers in Brevard County to have a geographic split and dial 7-digits on all local calls, which is in the best interest of the customers. Brevard County also had the greatest customer turnout in favor of a geographic split. Customers in Seminole, Orange, and Osceola Counties would be required to dial 10-digits due to the FCC's dialing requirements for overlays. (9/24/98 TR 16; 9/25/98 TR 30, 78)

Alternative #12:



This alternative proposes a geographic three-way split with the Orlando exchange in Area A, Brevard County, Winter Park, East Orange, Oviedo, Geneva, Sanford, and Debary exchanges in Area B, and Apopka, Winter Garden, Kissimmee, West Kissimmee, Celebration, Clermont, Lake Buena Vista, St. Cloud, and Kenansville exchanges in Area C. Witness Patrick Utecht testified that all the recommended alternatives exhaust in less than 4 to 6 years; therefore, rather than dealing with another area code relief plan, the Commission

should implement two new area codes now. (9/25/98 TR 34) Staff's proposed Alternative #12 addresses the witness's suggestion.

This alternative would disrupt local calls in that 10-digit dialing would be required between the three areas. This alternative requires an addition of two new area codes. Although the projected life of this relief plan is the best of all, due to the dialing requirements, this alternative should be eliminated. (8/7/98 TR 67, 75; 9/24/98 TR 15, 61 9/25/98 TR 34) Witness Wayne Milby stated that the whole North American Numbering Plan would exhaust prematurely if codes are implemented sooner than absolutely necessary. The NANP has been projected to last until 2030 assuming codes are consumed at the current rate of 30-40 per year. (9/25/98 TR 10)

Facts and Concerns during Public Hearings:

1) The projected life in years of the relief alternatives is shown below in Table 1 based on two different assumptions.

	Assumption #18			Assumption #29		
Alternative	Area A	Area B	Area C	Area A	Area B	Area C
1	4.8		N/A	8.3		N/A
2	1.9	13.1	N/A	2.5	24.9	N/A
3	3.9	5.9	N/A	6.6	10.5	N/A
4	4.4	5.3	N/A	7.5	9.3	N/A
5	3.5	6.9	N/A	5.7	12.6	N/A
6	6.7	3.3	N/A	12.1	5.3	N/A
7	2.1	11.8	N/A	3.0	22.4	N/A
8	4.7		N/A	8.2		N/A
9	2.2	11.4	N/A	3.1	21.6	N/A
10	6.5	3.4	N/A	11.8	5.5	N/A
11	4.8		N/A	8.3		N/A
12	6.7	10.9	13.4	12.1	20.5	25.6

Table 1: The projected exhaust years for all possible 407 area code relief plans

The exhaust year for Alternatives #1 and #11 is exactly the same, which is 2005.

⁸Assumption #1 is that the area code growth will continue at approximately the same rate as current demand for central office codes. (EXH. 3)

⁹Assumption #2 is that the code growth will continue at approximately the same rate as the current assignments until the end of year 2000. Then, the growth rate is reduced by 50 percent to reflect an estimate of the potential impacts of any number conservation efforts. (EXH. 3)

2) The guidelines established by the Industry Numbering Committee¹⁰ require that the new relief plan should last a minimum of five years. As Table 1 indicates alternatives #2, #3, #5, #6, #7, #9, and #10 do not meet this criterion. Due to the population density and the EAS/ECS routes, any split near the Orlando exchange would require 10-digit local dialing. Such a situation is not desired by most of the customers.

3) According to the guidelines¹¹, alternatives #2, #7, and #9 do not meet the requirements due to the imbalances in the projected lives for the two areas based on assumption #2.

4) The INC guidelines (INC97-0404-016, Section 7) clearly state that it is not possible to identify every potential issue which may arise when planning relief for specific NPAs; each state, each metropolitan area and each industry segment will have unique characteristics which could introduce concerns. The INC also states in Section 6.4 that a combination of the different relief plans may be used. The FCC emphasized that all state commissions would continue to be responsible for making the final decision on how new area codes will be implemented, subject to the FCC's guidelines. (EXH. 3)

5) In his testimony, witness Robert Osband suggested that the Commission implement a split using a new area code. He had searched the database of NANPA for all the available area codes, and he recommended that we implement the "321" area code to signify the countdown. (9/24/98 TR 16) However, this particular number is reserved as a Geographic Relief Code¹². Currently, the only numbers available from the North American Numbering Plan (NANP) Administrator are General Purpose Codes. In the Telecommunications Act of 1996, Congress provided that the FCC has exclusive jurisdiction over those portions of the NANP that pertain to the

¹⁰The Industry Numbering Committee (INC) is a subcommittee under the Carrier Liaison Committee (CLC), a committee under the Alliance for Telecommunications Industry Solutions (ATIS). INC provides reports to the North American Numbering Council (NANC), a committee formed by the FCC.

¹¹INC 96-0308-011 Section 9.2.2.2 (h) states that in the long term, the plan shall result in the most effective use of all possible codes serving a given area. Ideally, all of the codes in a given area shall exhaust about the same time in the case of splits. In practice, this may not be possible, but severe imbalances, for example, a difference in NPA lifetime more than 15 years, shall be avoided.

¹²INC 96-0308-011 Section 9.1.3 states that a new geographic NPA that will exhaust and no NPA has been reserved for its relief, a specific geographic NPA relief code will be selected by the NANPA and reserved from the "General Purpose" partition. When the existing geographic NPA with a reserved relief code is projected to exhaust outside of 20 years, the reserved relief code will be released and included in the "General Purpose NPA Codes" partition.

United States. NANPA assigns specific area code numbers on a first-come, first-served basis, unless a jeopardy condition exists.

6) With Alternative #11, none of the ECS/EAS routes in Brevard County would require 10-digit local dialing. All dialing patterns stay the same for Brevard County. The ECS/EAS routes for Brevard County are given in Table 2 below:

Exchange	Nonoptional Extended Area Service Areas (Exchanges available through optional calling plans enclosed in [], and \$0.20, \$0.25 and ECS plans are underlined)		
Сосоа	Cocoa Beach, Eau Gallie, Melbourne, Titusville, [All exchanges in LATA]		
Cocoa Beach	Cocoa, Eau Gallie, Melbourne, Titusville, [All exchanges in LATA]		
Eau Gallie	Cocoa, Cocoa Beach, Melbourne, <u>Titusville</u> , [All exchanges in LATA]		
Melbourne	Cocoa, Cocoa Beach, Eau Gallie, Sebastian, [<u>Titusville</u>][All exchanges in LATA]		
Titusville	Cocoa, Cocoa Beach, <u>Eau Gallie, Melbourne</u> , [All exchanges in LATA]		

Table 2: ECS/EAS routes for exchanges in Brevard County

7) One of the concerns brought up by witness Helen Voltz, a Brevard County Commissioner in the August 6, 1998, Melbourne public hearing and by witnesses Nancy Higgs, a Brevard County (TR 16) Commissioner, (TR 28), E.M. Cunningham (TR 88), and Bruce Bolon (TR 90) in the September 25, 1998, public hearing in Melbourne, was that people in South Brevard County are included in the 561 Area Code and served by the Sebastian exchange. After careful research, staff found that it is necessary to investigate this issue further in a separate docket. On October 14, 1998, the staff opened a docket (Docket No. 981345-TL) to investigate the boundary issues with South Brevard County. This docket will address the possibility of a LATA or exchange boundary change, a new calling scope, an exchange with two area codes, and interLATA calling issues. In their testimonies, witnesses Stan Greer (9/24/98 TR 27) and Allen Benson (8/7/98 TR 156) stated that the switch in the Sebastian exchange can handle NXXs for two area codes. However, in order to determine what the customers want, the economic impact to the customers and the LEC, and engineering requirements, staff believes hearings need to be conducted.

- 26 -

8) Witnesses in Brevard County supported a single area code, regardless of which area code they get. This was also supported by the 12,092 Brevard County customers who have contacted us and indicated that they oppose an overlay relief plan and prefer a split.

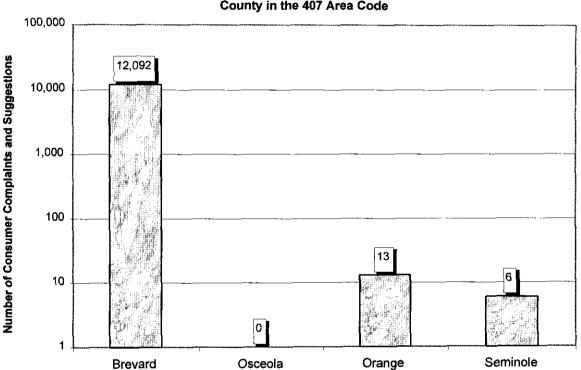
9) Witness Wayne Gardner raised the possibility of transferring the present 407 portion of Volusia County to 904. (9/24/98 TR 61) Although technically possible, this would reduce the projected life of the 904 area code. All EAS/ECS routes would be affected, and this would result in 10-digit calling. Thus, staff recommends keeping the portion of Volusia County in any 407 area code relief plan since this will not harm the calling scopes or the 904 area code in any way.

10) The Commission conducted a hearing in the Altamonte Springs area to receive customer testimony in the undocketed special project involving fair and reasonable rates. A public witness testified that Tangerine customers could not call their own county without incurring a toll charge because they were provided service from a Lake County exchange. The witness requested the Commission's help in resolving this problem. After reviewing the history of this case, the staff determined that in 1990, the Orange County Board of County Commissioners filed Resolution No. 89-M-118 requesting extended area service (EAS) from Mt. Dora to several exchanges in Orange County (Docket No. 900039-TL). The Commission considered this alternative and a ballot failed. The Commission instead balloted the Orange County customers served from the Mt. Dora exchange to see if they were in favor of moving into the Apopka exchange. This would have placed the customers in an Orange County exchange and offered EAS to Orlando. The ballot failed. It is possible, however, that the situation has changed since 1991 and, if balloted again, the survey might pass. Staff has been in contact with the Tangerine Improvement Society (TIS) to see if there is interest from the residents of Orange County in transferring from the Mt. Dora exchange to the Apopka exchange. Essentially, this will result in an increase in local rates and a TIS has indicated that mandatory change of telephone numbers. there does not appear to be sufficient interest to move into the Apopka exchange since customers do not want to lose calling to Lake County or have number changes. TIS asked if they could move into a different exchange in order to retain their Lake County calling and gain calling to Orlando. Staff has reviewed their requests and it does not appear to be feasible since there are not any contiguous exchanges that have the desired calling.

11) Another issue that was brought up during public hearings was who keeps the current area code 407. Traditionally, the larger metropolitan area retains the area code in a geographic split. Because the metro areas usually have the most numbers, there would

be less customer impact if the metropolitan area retained the existing area code. On this basis, Seminole, Orange, and Osceola Counties would retain the 407 area code.

12) Customer contacts include individual letters, petitions signed in a community, phone calls, fax messages, and e-mail messages. The distribution of customer contacts by county can be tabulated as:



Number of Customers Who Have Contacted Us by County in the 407 Area Code

Figure 1: Number of customer contacts by county

As illustrated from Figure 1, the majority of customer concerns was from Brevard County (99.84 percent) stating that they prefer a split. Therefore, the strong community of interest in Brevard County indicates that Alternative #11 would serve as the best plan for them.

In addition to the advantages and disadvantages listed above, in its prior area code relief plan proceedings, the Commission has considered four criteria that are relevant to the issue in this

- 28 -

proceeding: 1) Competitive Concerns; 2) Impacts to Customers; 3) Impacts to Carriers; and 4) Length of Relief.

Competitive Concerns

The Commission explained in its prior orders that neither the split relief plans nor the overlay relief plans would cause any anti-competitive problems since all carriers would be treated the same. Witnesses from the industry indicated that they are all aware of the advantages and the disadvantages of split and overlay relief plans. They also indicated that with an overlay relief plan, 10-digit dialing will be required for all local calls. (8/7/98 TR 156, 201, 219, 236, 253) Therefore, based on the record, staff recommends that there are not any major competitive concerns for any of the proposed relief options.

Impacts to Customers

Any geographic split plan would require the existing customers to change their area code to the new area code. With a split plan, customers keep using 7-digit dialing for all local calling within the area code. With an overlay, however, 10-digit dialing is necessary.

Witnesses indicated that the main advantage for customers with the split plan is that 7-digit local dialing can be maintained within each area code, and 10-digit dialing would only be required for local calling between the area codes.

The main advantage of providing relief with one of the overlay options is that no number changes are required, so that customer inconvenience and cost are minimized. However, the major disadvantage for customers is that 10-digit dialing is required by the FCC for all local calls, and customer confusion may be increased by having two area codes serving the same area. Under an overlay plan, it is possible that businesses or neighbors next door or across the street from each other could have different area codes. These disadvantages would be limited to Seminole, Orange, and Osceola County subscribers under the split boundary extension overlay relief plan. Brevard County would use NXXs exclusively from the new area code, with the advantage of retaining 7-digit dialing.

The Commission held two service hearings, in Orlando and Melbourne, to receive input from customers in the affected areas. Presentations and discussions were made in order to better explain the relief options being considered and the advantages and disadvantages of the split and overlay plans. Based on customer input from the public hearings, it appears that Alternative #11 best reflects the interests of the customers. Staff would note

that almost all of the customer input from public hearings came from Brevard County residents.

In Melbourne, 24 of the 27 public witnesses preferred a split plan as long as they could keep 7-digit local dialing. The witnesses represented various chambers of commerce and citizen groups. The witnesses objected to an overlay plan because they did not want two different area codes serving Brevard County. They stated that they did not want to be a part of the Orlando metropolitan area and that they should not be punished because of the growth in the West. The majority said they would accept a new area code rather than having two. Thus, staff believes that the record shows that from the customer perspective the split boundary extension overlay, splitting the Brevard County subscriber group from the Seminole, Orange, and Osceola Counties subscriber groups, would provide a solution that would best satisfy the collective desires of the customers.

Impacts on Carriers

The record shows that with the implementation of a geographic split, the biggest identified impact to carriers is that the cellular carriers have to reprogram all cellular telephones in the new area code. In an overlay area, there are no number changes, hence no reprogramming of cellular phones. However, some modifications to operational support systems would be necessary in order to handle 10-digit dialing for all local calls. Alarm monitoring companies will be required to reprogram their equipment to comply with the 10-digit dialing requirement.

Length of Area Code Relief

The projected exhaust dates for 407 and the new area code under Alternative #1 (a single overlay), Alternative #8 (a single overlay with Orange City exchange), and Alternative #11 (a split boundary extension overlay) are essentially the same, 2005. Therefore, for the basic decision of overlay versus split boundary extension overlay, the length of relief is not a factor.

Conclusion

Staff believes the Commission should implement Alternative #11, a split boundary extension overlay in which (1) Brevard County is split from 407 and placed in a new area code, and (2) this same new area code is simultaneously used as an overlay in the remaining 407 area. Staff believes that the record shows that only the split boundary extension overlay can meet the customers' interests as expressed at the service hearings in Orlando and Melbourne.

- 30 -

Staff realizes that Alternative #1 and #11 are very similar; however, staff believes Alternative #11 is preferable for Brevard County customers. First, customers in Brevard County would be able to keep their telephone numbers, except with the new area code. Staff realizes that changing an area code will be a serious concern for some businesses. However, having been to the public hearings and having responded to 12,092 customers, staff believes that Alternative #11 will do the best job for Brevard County by maintaining 7-digit dialing. Due to the high population density in the metropolitan cities, staff believes that the best solution is an overlay plan for Seminole, Orange, and Osceola Counties. The split boundary extension overlay meets both needs and has a life span of 4.8 years, assuming no number conservation. Staff is currently working on a utilization study of all area codes in Docket No. 981444-TL (Number Utilization Study: Investigation into Number Conservation Measures).

All alarm monitoring companies will need to reprogram their equipment so that no customers are left without any monitoring services. Thus, staff believes that the Commission should also order BellSouth and Sprint to send a letter to alarm monitoring companies advising them of the need to reprogram their equipment for 10-digit dialing in the overlay area by December 1, 1999. The letter should be submitted to Commission staff for review by January 13, 1999. After staff's approval, this notice should be mailed by LECs to all alarm monitoring companies by January 27, 1999.

<u>ISSUE 2</u>: What should the dialing pattern be for the following types of calls? Local, Toll, EAS, and ECS. If the Commission approves an overlay, when and to what extent should the Commission require 10-digit local dialing? (ILERI)

<u>RECOMMENDATION</u>: Local/EAS and ECS calling which is not subject to IXC¹³ competition should be on a 7-digit basis within a geographic area code, a 10-digit basis within the overlay area, and 10-digit basis between area codes and outside the overlay area. Toll and ECS calling which is subject to IXC competition should be on a 1+10-digit basis. A summary is given in Table 3 below:

Type of Calls	Type of Plans				
	Within Geographic Area Code	Within Overlay	Between Area Codes, Outside Overlay		
Local/EAS	7	10	10		
ECS without IXC Competition	7	10	10		
ECS with IXC Competition	1 +10	1 +10	1 +10		
Toll	1 +10	1 +10	1 +10		

Table 3: Dialing patterns for area code reliefs

The Commission should order 10, 1+10-digit permissive and 10, 1+10-digit mandatory dialing to begin on April 1, 1999, and December 1, 1999, respectively. The effective date for issuing new central office NXX codes in Brevard County should be April 1, 1999.

POSITIONS OF THE PARTIES

<u>AT&T</u>: If the Commission approves an overlay, 10-digit dialing should be required within and between the new and old area codes for all types of calls. In addition, toll calls should be made on a 1+ 10-digit basis. If the Commission approves a geographic split, 10-digit dialing should be required between the new and old area dialing codes for all types of calls. In addition, toll calls should be made on a 1+ 10-digit basis. Local, ECS and EAS calls within an area code may be on a seven-digit basis.

¹³IXC: Interexchange Carrier

BELLSOUTH: A 10-digit dialing pattern is mandatory for local and EAS calls with the overlay solution, and should also apply to ECS calls where interexchange carrier competition is not allowed. A 1+ 10-digit dialing pattern should apply to all tolls calls and those ECS calls subject to allowable interexchange carrier competition.

<u>BMI</u>: If the Commission approves the industry consensus overlay, 10-digit dialing will be mandatory for local, EAS and ECS where interexchange carrier competition is not allowed, and 1+ 10-digit dialing for toll and ECS where interexchange carrier competition is allowed. If Alternative #7 is implemented, seven-digit dialing patterns will be maintained within area codes.

<u>MCI</u>: If the Commission approves an overlay, 10-digit dialing should be required within and between the new and old area codes for all types of calls. In addition, toll and ECS calls should be made on a 1+ 10-digit basis. If the Commission approves a geographic split, 10-digit dialing should be required between the new and old area codes for all types of calls. In addition, toll and ECS calls should be made on a 1+ 10-digit basis. Local and EAS calls within an area code may be on a seven digit basis.

<u>SPRINT</u>: A 10-digit dialing pattern is mandatory for local and EAS/ECS calls with the overlay solution. Toll calls should be dialed on a 1+ 10-digit dialing pattern.

VISTA: The dialing patterns for these types of calls depend on the relief plan adopted. Under either Alternative #4 or #7, a significant number of ORDER NO. PSC-98-1009-PHO-TL DOCKET NO. 980671-TL page 9 EAS/ECS calls that are now seven-digit dialed will require 10-digit dialing.

STAFF ANALYSIS: On August 8, 1996, the Federal Communications Commission (FCC) issued its Second Report and Order, CC Docket No. 96-98, FCC 96-333. Regarding the area code implementation guidelines for the overlay of area codes, Section V, Paragraph 281, states that the guidelines prohibit all service-specific or technology-specific overlays and imposes conditions on the adoption of an all-services overlay. In addition, the numbering administration should: 1) seek to facilitate entry into the communications marketplace by making numbering resources available on an efficient and timely basis; 2) not unduly favor or disadvantage any particular industry segment or group of consumers; and 3) not unduly favor one technology over another. Paragraph 286 further states that if a state Commission chooses to implement an all-services overlay plan, it may do so only if the plan includes: 1) mandatory 10-digit local dialing by all customers between and within area codes in the area covered by the new code; and 2) at least one NXX is made available in the existing area code to every telecommunications carrier, including CMRS providers, authorized to

provide telephone exchange service, exchange access, or paging service in the affected area code 90 days before the introduction of a new overlay area code. The NXXs should be assigned during the 90-day period preceding the introduction of the overlay.

In staff's analysis for Issue 1, three of the twelve relief plans for the 407 area code propose either an overlay or a split boundary extension overlay. The implementation of all three plans must be consistent with the FCC's guidelines governing the overlay The record shows that whether the Commission of area codes. decides on the overlay (Alternative #1 and #8) or split boundary extension overlay (Alternative #11), the technical aspects of the implementation will essentially be the same in that 10-digit dialing will have to be implemented for all calls placed between and within the area codes in the overlaid area. (See FCC 96-333) Therefore, staff recommends that the Commission require 10-digit permissive dialing to begin April 1, 1999, and end on December 1, 1999. Staff believes this will allow carriers ample time to make the necessary modifications to implement 10-digit local dialing and provide their customers with sufficient notification of the dialing requirements that will affect their calls.

Dialing patterns for the split boundary extension overlay relief plan have been difficult to decide. In the overlaid area, the technical aspects of the implementation will essentially be the same as Alternative #1 in that 10-digit dialing will have to be implemented for all local calls placed between and within the area codes in the overlaid area. (See FCC 96-333) (Khazraee 9/7/98 TR 213) ECS calls which are not subject to competition from IXCs should be handled in the same way as local calls. (Benson 9/7/98 TR 148; Brooks 9/7/98 TR 191) Any routes within the overlaid area which are subject to competition from IXCs should be dialed on a 1+10-digit basis. Outside the overlaid area, dialing patterns depend on whether the call is interNPA and whether IXCs may carry the traffic. All interNPA calls should be dialed on a 10 or 1+10digit basis in order to avoid protecting codes and to improve number utilization. (Benson 9/7/98 TR 148; Foley 9/7/98 TR 223) 10digit dialing should only be used on those routes which are not subject to competition from IXCs. Within a geographic area code, calls which are not subject to competition from IXCs should be dialed on a 7-digit basis, and calls which are subject to competition from IXCs should be dialed on a 1+10-digit basis.

Based on the above, staff recommends that the Commission should order 10, 1+10-digit permissive and 10, 1+10-digit mandatory dialing to begin on April 1, 1999, and December 1, 1999, respectively. The effective date for issuing new Central Office NXX Codes in Brevard County should be April 1, 1999.

.

<u>ISSUE 3</u>: Should this docket be closed? (COX, ILERI)

<u>RECOMMENDATION</u>: Yes, with the adoption of staff's recommendation in Issues 1 and 2, this docket should be closed.

<u>STAFF ANALYSIS</u>: Assuming staff's recommendations in Issues 1 and 2 are approved, staff does not believe there is any need to keep this docket open. Therefore, staff recommends the Commission close this docket.