

PR 93-100

# Emergency Communications Center

## County of Wilson

J. DANNY HICKMAN  
Director

TELEPHONE  
(919) 237-8300

P. O. Box 1728  
115 East Nash Street, Courthouse Lower Level  
Wilson, N. C. 27893

8 April 1993

Federal Communications Commissions  
Secretary's Office  
2025 M Street  
Washington, DC 20554

FCC -

Subject: Region 31 800 MHz Plan

RECEIVED  
MAY 5 4 43 PM '93

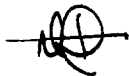
Gentlemen:

Enclosed you will find the finalized North Carolina Regional 31 800 MHz Plan.

We have provided a copy of the North Carolina Plan to each adjacent state for their review and comments. We have received no written feedback on the plan.

Should you have any questions, please feel free in contacting me at 919-237-8300 - press 2.

Sincerely yours,



J. Danny Hickman

CC: APCO Home Office  
Region 31 Advisory Board  
Mr. Frank Huggins - APCO Vice President  
Mr. Dyke Hostettler - NC APCO Coordinator  
Ms. Betty Woolfrod

L93-079

**FCC REGION 31  
NORTH CAROLINA  
800 MHz REGIONAL  
COMMUNICATIONS PLAN**

March 9, 1993

Mr. J. Danny Hickman, Chairman  
County of Wilson  
Post Office Box 1728  
Wilson, North Carolina 27893-0333  
Telephone: (919) 237-8300

**TABLE OF CONTENTS**

1	PREFACE . . . . .	5
2	METHODOLOGY FOR PLAN DEVELOPMENT . . . . .	5
3	INTRODUCTION . . . . .	5
4	COMMITTEE PURPOSE . . . . .	6
5	AUTHORITY . . . . .	7
6	FORMATION AND DISCHARGE OF REGIONAL COMMITTEE . . . . .	7
7	INITIAL MEMBERSHIP . . . . .	8
8	PRELIMINARY ORGANIZATION . . . . .	8
9	ELECTION OF OFFICERS . . . . .	8
10	STRUCTURE OF REGIONAL PLANNING COMMITTEE . . . . .	8
11	EXECUTIVE COMMITTEE . . . . .	9
12	DUTIES AND RESPONSIBILITIES OF THE EXECUTIVE COMMITTEE . . . . .	9
13	CHAIRMAN . . . . .	9
14	VICE CHAIRMAN . . . . .	9
15	SECRETARY/TREASURER . . . . .	10
16	MEMBERSHIP SECRETARY . . . . .	10
17	ADMINISTRATIVE SUBCOMMITTEE CHAIRMAN . . . . .	10
18	TECHNICAL SUBCOMMITTEE CHAIRMAN . . . . .	11
19	GEOGRAPHIC SUBCOMMITTEE CHAIRMEN . . . . .	11
20	QUORUM . . . . .	11
21	MAJORITY . . . . .	11
22	PROXY VOTING . . . . .	11
23	DISSOLUTION OF COMMITTEE . . . . .	12
24	MEMBERSHIP QUALIFICATIONS . . . . .	12
25	MEMBERSHIP APPLICATION PROCESS . . . . .	12

26	EASTERN SUB-REGIONAL GEOGRAPHIC COMMITTEE COUNTIES . . . . .	12
27	CENTRAL SUB-REGIONAL GEOGRAPHIC COMMITTEE COUNTIES . . . . .	13
28	WESTERN SUB-REGIONAL GEOGRAPHIC COMMITTEE COUNTIES . . . . .	13
29	CLASSIFICATION OF REGIONAL COMMITTEE MEMBERS . . . . .	13
30	CHANGE IN MEMBERSHIP CLASSIFICATION . . . . .	13
31	ADMINISTRATIVE FEES . . . . .	13
32	VOTING . . . . .	14
33	OFFICIAL VOTE . . . . .	14
34	OFFICIAL VOTING MEMBER . . . . .	14
35	VOTING PROVISIONS . . . . .	14
36	RULES FOR CONDUCT OF BUSINESS . . . . .	14
37	FISCAL YEAR . . . . .	14
38	OPEN MEETINGS . . . . .	14
39	CLOSED MEETINGS . . . . .	14
40	NOTIFICATION OF MEETING . . . . .	15
41	MINUTES . . . . .	15
42	ELECTION OF OFFICERS . . . . .	15
43	TERM OF OFFICE . . . . .	15
44	TECHNICAL REGIONAL PLAN REQUIREMENTS . . . . .	16
48	COORDINATION APPLICATION FORMS . . . . .	18
49	FREQUENCY APPLICATION PROCESS . . . . .	18
50	APPEAL PROCESS . . . . .	19
51	COMMON CHANNEL IMPLEMENTATION . . . . .	19
52	MUTUAL AID CHANNEL UTILIZATION . . . . .	20
53	INTEROPERABILITY - COMMON CHANNEL IMPLEMENTATION . . . . .	20
54	STANDARD SUBAUDIBLE CONTINUOUS TONE SQUELCH . . . . .	20

55	SECONDARY USERS .....	21
56	OPERATING PROCEDURES ON THE COMMON CHANNELS .....	21
57	OPERATING PROCEDURES .....	21
62	SLOW GROWTH ENTITIES .....	23
65	FREQUENCY ALLOCATION PROCESS GUIDELINES .....	23
66	FREQUENCY ALLOCATION PROCESS .....	24
67	NORTH CAROLINA COUNTIES RANKING .....	24
68	NORTH CAROLINA COUNTIES RANK ORDERING .....	26
69	LISTING OF CHANNELS ASSIGNED .....	32
70	CHANNEL LISTINGS BY LOCATION .....	35
71	GLOSSARY .....	41
72	CHECK LIST OF TECHNICAL REGIONAL PLAN REQUIREMENTS .....	42
73	NAMES OF EXECUTIVE SUBCOMMITTEE .....	43
74	NAMES OF ADMINISTRATIVE SUBCOMMITTEE .....	44
75	NAMES OF TECHNICAL SUBCOMMITTEE .....	44
76	NAMES AND ADDRESSES OF REGIONAL PLANNING COMMITTEE .....	45
77	REFERENCED DOCUMENTS .....	48

**FCC REGION 31  
NORTH CAROLINA REGIONAL  
800 MHz COMMUNICATIONS PLAN**

1        **PREFACE**

- 1.1        This document is the FCC Region 31 North Carolina Regional 800 MHz Communications Plan. The document was developed by the members of the North Carolina Regional Communications Planning Committee (NCRPC) through participation in the committee and subcommittee meetings conducted since the formation of the Committee on February 21, 1989. The document has undergone several revisions since the inception of the document. The document was previously submitted to the Federal Communications Commission in November of 1991. The suggestions and requirements of the FCC review have been incorporated into this current document.
- 1.2        Sections 1.0 (Preface) through 43.0 (Term of Office) were the responsibility of the Administrative Subcommittee which served as the original writing group for these sections. Sections 44.0 (Technical Regional Plan Requirements) through 72.0 (Use of Planning Cells for Determination of Allocations in 800 MHz) was the responsibility of the Technical Subcommittee which functioned as the writing group for these sections.
- 1.3        The technical sections have been revised to accommodate the Federal Communications Commissions requirement that the 800 MHz frequencies be packed by the Associated Public-Safety Communications Officers, Inc. (APCO), which serves as the frequency coordinator for the 800 MHz spectrum.

2        **METHODOLOGY FOR PLAN DEVELOPMENT**

- 2.1        This document has evolved through the continued efforts of the two writing group subcommittees refining their respective sections of the document. Through dissemination and discussion of the draft documents, further comment and input was solicited from all interested individuals and agencies.
- 2.2        All comments or recommendations received have been incorporated into this current document. Any further requests for change in the plan must be specific and clearly referenced to a paragraph number in this document. Comments must include specific recommendations and rationale for change or refinement and include the exact text of how a section should be worded or changed.
- 2.3        Any recommendation for inclusion of new sections must be provided with instructions showing where the new text should be inserted in the plan. The respective responsible subcommittee will review each recommendation for change or addition and will incorporate the content as recommended or as acted upon by the subcommittee.
- 2.4        Both the technical and the administrative plan sections are complete and the Subcommittee Chairmen of both subcommittees have recommended to the Chairman of the Planning Committee that the plan be submitted.

3        **INTRODUCTION**

- 3.1        In December 1983, the United States Congress directed the Federal Communications Commission (FCC) to establish a plan that would ensure the communications needs of state and local public safety authorities would be met. By Notice of Inquiry, over 300 comments were received and

evaluated by the Commission. This resulted in the recognition of public safety agency needs and the subsequent allocation of an additional 6 megahertz of radio spectrum for public safety use nationwide. The FCC additionally recognized the necessity of developing a National Plan to promote interoperability among public safety providers and to insure an efficient use of the newly allocated spectrum.

- 3.2 Recognizing the importance of the public safety agencies participation in the development of the National Plan, the FCC established the National Public Safety Planning Advisory Committee (NPSPAC). With open membership, NPSPAC provided the opportunity for the public safety community and other interested members of the public to participate in an overall spectrum management approach by recommending policy guidelines, technical standards, and procedures to satisfy public safety needs for the foreseeable future.
- 3.3 After consideration of NPSPAC's Final Report and comments filed in FCC Docket No. 87-112, the FCC issued a Report and Order on December 18, 1987. By this Commission action the FCC adopted policies, procedures and rules that constitute a national plan for public safety services. In particular the Commission adopted service rules and technical standards for the 821-824/866-869 MHz bands, which the Commission allocated for public safety use in an order adopted July 24, 1986. Included within the Report and Order are the requirements for the structure of the National Plan and guidelines for the development of regional plans.
- 3.4 The National Plan reflects the FCC's regulatory objective of maximizing spectrum efficiency and ensuring sufficient flexibility to accommodate specific communications requirements in different areas of the United States. The National Plan serves as an umbrella document under which regional plans can be developed and implemented.
- 3.5 When the Federal Communications Commission announced the 800 MHz allocation of reserve radio frequencies to Public Safety Radio Services and Special Emergency Radio Services (SERS) in July 1986, they mandated that a National Plan outlining the use of public safety radio frequencies be in place before any agency would receive channels from this new allocation. As part of this mandate, Regional Plans conforming to the National Plan were to be developed.
- 3.6 A Regional Plan for 800 MHz radio spectrum usage by public safety agencies in the North Carolina Region is to be written by the North Carolina Regional Planning Committee.
- 3.7 This group, representing a cross-section of Public Safety and Special Emergency Radio Service radio users in North Carolina has among its members, the North Carolina APCO frequency advisors, as well as members from the categories of eligible radio users of the 800 MHz reserve spectrum.

#### 4 COMMITTEE PURPOSE

- 4.1 The purpose of the North Carolina 800 MHz Regional Planning Committee is to provide the forum and management mechanism to organize, develop, refine, and submit to the Federal Communications Commission, an approveable plan for utilization of the 6 MHz of 800 MHz radio spectrum designated by the FCC for Public Safety and Special Emergency Radio Service usage within North Carolina FCC Region 31 and to serve as the contact point for North Carolina with adjacent FCC Planning Regions, the Federal Communications Commission and such other organizations as may be required for future plan revision.

5 AUTHORITY

- 5.1 Authority for the Regional Planning Committee to carry out its stated purpose and tasks is derived from the Federal Communications Commission Report and Order, Docket 87-112. Participants in the formation of the Regional Planning Committee represent interested parties from both the Public Safety and the Special Emergency Radio Services.
- 5.2 Principles Governing the procedures for the development and adoption of the North Carolina 800 MHz Plan.
- 5.3 The Federal Communications Commission empowered the formation of the Regional Plan by adoption of the Final Report and Order, FCC Docket 87-112. The North Carolina Regional Plan Steering committee has adopted a policy of voluntary participation in the original formation of the Planning Committee in accordance with the following principles:
- 5.4 Timely and adequate notice of all persons likely to be affected by the plan, or known to have active interest in the plans formation.
- 5.5 Opportunity for all affected interests to participate in the deliberations, discussions, and decisions concerned both with the procedural and substantive matters affecting the proposed plan.
- 5.6 Maintenance of adequate records of discussions, decisions, and technical data accumulated during the plans development.
- 5.7 Timely publication and distribution of minutes of meetings of the Regional Planning Committee and its Subcommittees.
- 5.8 Maintenance of records of official drafts of the proposed plan, proposed amendments, action on amendments, and final promulgation of the 800 MHz Regional Plan.

6 FORMATION AND DISCHARGE OF REGIONAL COMMITTEE

6.1 OFFICIAL NAME - The Official Name of the committee is:

The North Carolina Regional Communications Planning Committee (NCRPC)

6.2 ESTABLISHMENT

Acting under the directive of the Federal Communications Commission, the Associated Public-Safety Communications Officers, Inc. (APCO) identified Mr. Sanford Smith as the Official Convener for the North Carolina (Region 31) Planning Region. In the capacity of convener, Mr. Smith with the assistance of an ad hoc planning committee convened the first official meeting of the committee in the Blueroom of the Greensboro Coliseum on February 21, 1989. The following individuals attended the first official meeting:

Sanford Smith, Convener	City of Greensboro
Don Mabe	Forsyth County Fire Department
Marvin S. Heller	Raleigh-Wake County EOC
Jeff Pegram	NC State Office of EMS
Edward Rankin	Durham Police Department
Cliff Link	City of Charlotte
Carl C. Van Cott	NC State Office of EMS

Harold Meacombs	NC State Highway Patrol
Max Bloodworth	NC State Highway Patrol
Max Hopper	Motorola, Inc.
Billy Vass	City of High Point
L. Richard Nifong	City of High Point
John C. Trail	City of Charlotte
Marcia Simmons	Charlotte Fire Department
Lonnie J. Blake	Charlotte Police Department
Warren Eib, Jr.	RAM Communications Consultants, Inc.
Jon D. Jarvis	Winston Salem Police Department
Ed Howard	C.T.A., Inc.
Don Beuerle	C.T.A., Inc.
T. C. Lemonds	Greensboro Fire Department
R. E. Marine, Jr.	Greensboro Police Department
Larry L. Thomas	Guilford County EMS
Donna L. Langley	General Electric Mobile Radio
Danny Hickman	Wilson County Communications
Bill Fivek	Motorola, Inc.
Larry Simmons	Motorola, Inc.

## 7 INITIAL MEMBERSHIP

- 7.1 The initial membership of the North Carolina Regional Planning Committee was established at the time of the first convened official meeting of the committee and includes those persons listed above. Additional membership shall consist of those persons completing and submitting a membership application to the membership secretary.

## 8 PRELIMINARY ORGANIZATION

- 8.1 The official membership of the Regional Planning Committee shall consist of voluntary planning participant members from public safety or local government agencies eligible to license and operate in the new Public Safety and Special Emergency Radio Service bands of 821-824/866-869 MHz. Other individuals which have an expressed interest in the use of the radio spectrum, but are not eligible to license in the service, may serve on the planning committee, but may not vote on official actions of the committee.

## 9 ELECTION OF OFFICERS

- 9.1 Officers for the North Carolina Regional Planning Committee shall be elected by the initial membership at the first convened official meeting of the committee.

## 10 STRUCTURE OF REGIONAL PLANNING COMMITTEE

- 10.1 The Regional Planning Committee shall be administered by an Executive Committee and five operating subcommittees identified as the Administration Subcommittee; the Technical Subcommittee; the Western Geographic Subcommittee; the Central Geographic Subcommittee; and, the Eastern Geographic Subcommittee. All Executive members shall be full voting members of the Regional Planning Committee.
- 10.2 Subcommittee Assignments - Every member of the Regional Planning Committee shall be assigned by the Membership Secretary to one of the identified subcommittees upon joining the Regional Planning Committee.

11 EXECUTIVE COMMITTEE

11.1 The Executive Committee shall be comprised of the: Chairman; Vice-Chairman; Secretary/Treasurer; Membership Secretary; Administrative Subcommittee Chairman; Technical Subcommittee Chairman; Eastern Subcommittee Chairman; Central Subcommittee Chairman; and, the Western Subcommittee Chairman.

12 DUTIES AND RESPONSIBILITIES OF THE EXECUTIVE COMMITTEE

12.1 The Executive Committee shall be responsible for the administration of the Regional Committee in directing the development of the North Carolina 800 MHz Regional Plan.

13 CHAIRMAN

13.1 The Chairman shall be elected by the membership of the Regional Planning Committee during a duly called meeting.

13.2 The duties and responsibilities of the Chairman are as follows:

13.2.1 Scheduling, Calling and Chairing meetings of the Executive Committee;

13.2.2 Scheduling, Calling and Chairing meetings of the Regional 800 MHz Regional Planning Committee;

13.2.3 Overseeing the direction of the regional plan development activities of the Regional Planning Committee;

13.2.4 Appointing subcommittee chairmen for conformation by the Executive Committee;

13.2.5 Naming of nominating committees;

13.2.6 Serving as the point of contact for the committee and handling correspondence for the regional planning committee;

13.2.7 Conveyance of the final developed Regional Plan to the Federal Communications Commission.

13.3 The Chairman may be removed from office by majority vote of the membership of the planning committee during a duly called meeting.

14 VICE CHAIRMAN

14.1 The Vice Chairman shall be elected by the membership of the Regional Planning Committee during a duly called meeting.

14.2 The duties and responsibilities of the Vice Chairman are as follows:

14.2.1 Assist the Chairman to conduct the business of the Regional Planning Committee;

14.2.2 Serve as replacement should the Chairman be unable to attend meetings or complete his responsibilities as Chairman, until a new Chairman can be elected.

14.3 The Vice Chairman may be removed from office by majority vote of the membership of the Planning Committee during a duly called meeting.

## 15 SECRETARY/TREASURER

15.1 The Secretary/Treasurer is elected by the membership of the Regional Planning Committee during a duly called meeting.

### 15.2 Duties of the Secretary/Treasurer

15.2.1 Maintain the official meeting minutes of the Executive Council Meetings and Regional Planning Meetings.

15.2.2 Maintain the minutes and other business documents of the Planning Committee.

15.2.3 Maintain the financial records and bank accounts of the Committee and make financial disbursements as directed by the Executive Committee.

15.3 The Secretary/Treasurer may be removed from office by majority vote of the membership of the Planning Committee during a duly called meeting.

## 16 MEMBERSHIP SECRETARY

16.1 The Membership Secretary is elected by the membership of the Regional Planning Committee.

### 16.2 Duties of the Membership Secretary

16.2.1 Receive and process applications for membership in the Regional Committee;

16.2.2 Maintain the official membership roster of the Regional Planning Committee and determine applicant members classification;

16.2.3 Assign new members to operational subcommittees and orientate new members to the activity of the subcommittee;

16.2.4 Take attendance at each official meeting and incorporate the attendance listing into the official meeting minutes.

16.3 The Membership Secretary may be removed from office by majority vote of the membership of the Planning Committee during a duly called meeting.

## 17 ADMINISTRATIVE SUBCOMMITTEE CHAIRMAN

17.1 The Administrative Subcommittee Chairman shall be appointed by the Regional Planning Committee Chairman and be confirmed by majority vote of the Executive Committee.

### 17.2 Duties of the Administrative Subcommittee Chairman:

17.2.1 The Administrative Subcommittee Chairman shall chair the meetings of the Administrative Subcommittee and direct the development of the administrative, procedural and financial portions of the Regional Plan.

17.3 The Administrative Subcommittee Chairman may be removed from office by majority vote of the Executive Committee during a duly called meeting.

## 18 TECHNICAL SUBCOMMITTEE CHAIRMAN

18.1 The Technical Subcommittee Chairman shall be appointed by the Regional Planning Committee Chairman and confirmed by majority vote of the Executive Committee.

18.2 The Technical Subcommittee Chairman shall be qualified by education and experience to serve as the engineering and technical advisor to the Regional Planning Committee.

### 18.3 Duties of the Technical Subcommittee Chairman

18.3.1 The Technical Subcommittee Chairman shall chair the meetings of the Technical Subcommittee and be responsible for directing the development of the frequency allocations, engineering aspects and technical content of the Regional Plan.

18.3.2 The Technical Subcommittee Chairman may be removed from office by a majority vote of the Executive Committee during a duly called meeting.

## 19 GEOGRAPHIC SUBCOMMITTEE CHAIRMEN

19.1 The Geographic Subcommittee Chairmen shall be appointed by the Regional Planning Committee Chairman and be confirmed by majority vote of the Executive Committee.

19.2 Each Geographic Subcommittee Chairman shall reside within the geographic region which he represents.

### 19.3 Duties of the Geographic Subcommittee Chairmen

19.3.1 The Geographic Subcommittee Chairmen shall serve as the primary point of contact for the Regional Planning Committee within their respective geographic region. The Geographic Subcommittee Chairmen shall serve on the Executive Committee and represent their respective geographic region on the Executive Committee and during formulation of the North Carolina Regional Plan.

19.4 The Geographic Subcommittee Chairmen may be removed from office by majority vote of the Executive Committee during a duly called meeting.

## 20 QUORUM

20.1 A quorum of the Regional Planning Committee shall consist of the members present at any given duly called meeting.

## 21 MAJORITY

21.1 During a duly called meeting a majority shall consist of 51 percent (51%) of the members present and voting.

## 22 PROXY VOTING

22.1 An official voting Planning Committee member may transfer his vote by writing to the

Membership Secretary and designating an individual to act as a proxy. An individual may not hold nor exercise proxies for more than one member in any committee or subcommittee. The one man, one vote precept shall prevail.

## 23 DISSOLUTION OF COMMITTEE

Upon dissolution of the North Carolina Regional Communications Planning Committee, all assets shall be distributed for one or more exempt purposes within the Internal Revenue Code, or corresponding section of any future Federal tax code, or shall be distributed to the Federal Government, or to the State or local government for a public purpose.

## 24 MEMBERSHIP QUALIFICATIONS

Any entity agency or subagency chartered in North Carolina which is eligible to be licensed under subparts B or C of FCC Rules Part 90. Each agency or subagency of a governmental entity which is entitled to hold a license in one or more of the radio services shall be considered to be a separate entity up to a maximum of one agency or subagency for each radio service. For example, a City could have separate entities for local government, police, fire, highway maintenance, forestry and special emergency.

## 25 MEMBERSHIP APPLICATION PROCESS

25.1 All individuals desiring to be routinely informed of the activities of the Committee shall request membership in the committee by completion of a membership application form. The application form with any required administrative fees shall be submitted to the Membership Secretary of the Regional Planning Committee. The Membership Secretary shall review the application and make recommendation to the Chairman for acceptance or rejection of the application.

25.2 Individuals are not eligible to be Official Voting Members. Official Voting Membership shall be reserved to governmental agencies, organizations, or corporations chartered in North Carolina and eligible to hold radio license in the Public Safety or Special Emergency Radio Service.

25.3 Any agency desiring to be identified as an Official Voting Member Agency of the NCRCP shall complete an application form and submit with any required administrative fees to the Membership Secretary of the Regional Planning Committee. The application shall clearly designate the name of the person that will serve as the point of contact for the agency, and be responsible for voting on behalf of the agency. The Membership Secretary shall review the application and make recommendation to the Chairman for acceptance or rejection of the application.

25.4 The Chairman shall acknowledge by letter the acceptance or rejection of the applicant agency as a voting member of the NCRCP. If the application is rejected, the Chairman shall notify the applicant of the reason for the rejection.

25.5 Committee members and member agencies are responsible for providing to the Membership Secretary any updated information concerning changes in agency name, address, telephone number, changes in employment status, or changes in naming the official representative to the NCRCP.

## 26 EASTERN SUB-REGIONAL GEOGRAPHIC COMMITTEE COUNTIES

26.1 Brunswick; Columbus; New Hanover; Pender; Carteret; Craven; Duplin; Green; Jones; Lenoir; Onslow; Pamlico; Wayne; Beaufort; Bertie; Hertford; Martin; Pitt; Camden; Chowan; Currituck; Dare; Gates; Hyde; Pasquotank; Perquimans; Tyrrell; Northampton; Halifax; Nash; Edgecombe;

Wilson; and, Washington.

27 CENTRAL SUB-REGIONAL GEOGRAPHIC COMMITTEE COUNTIES

27.1 Alamance; Caswell; Guilford; Randolph; Rockingham; Davidson; Anson; Montgomery; Moore; Richmond; Davie; Forsyth; Stokes; Surry; Yadkin; Chatham; Durham; Lee; Orange; Wake; Franklin; Granville; Person; Vance; Warren; Cumberland; Harnett; Sampson; Bladen; Hoke; Robeson; and, Scotland.

28 WESTERN SUB-REGIONAL GEOGRAPHIC COMMITTEE COUNTIES

28.1 Cherokee; Clay; Graham; Haywood; Jackson; Macon; Swain; Buncombe; Henderson; Madison; Transylvania; Cleveland; McDowell; Polk; Rutherford; Alleghany; Ashe; Avery; Mitchell; Watauga; Wilkes; Yancey; Alexander; Burke; Caldwell; Catawba; Cabarrus; Gaston; Iredell; Lincoln; Mecklenburg; Rowan; Stanly; and, Union.

29 CLASSIFICATION OF REGIONAL COMMITTEE MEMBERS

29.1 Government Members

An individual who is employed by a government entity, agency or subagency which satisfies criteria of membership qualification shown above. A person who serves in a voluntary capacity of an agency which operates under provisions of the Federal Communications Commission Rules designated under membership qualifications shall be considered a government member.

29.2 Commercial Members

An individual who is an employee of a company which designs, manufacturers, sells, services, maintains, leases, rents or provides consulting services for profit by the development, implementation, operation or training of personnel systems or equipment utilized by eligible members described in membership qualifications listed above.

29.3 Affiliate Members

An individual or agency interested in participating but not eligible for membership as described in membership qualifications.

30 CHANGE IN MEMBERSHIP CLASSIFICATION

30.1 A member who has a change in employment which would affect membership classification shall so inform the membership secretary in writing on letterhead stationery of the new agency or subagency. The Membership Secretary shall assign the individual to the member classification in accordance with the change of employment.

31 ADMINISTRATIVE FEES

31.1 The Executive Committee may establish a nominal fee structure to defray the costs for printing, copying, mailing, distribution and other administrative costs associated with the development of the plan.

31.2 Administrative fees shall be uniformly applied and collected from all agencies or members.

32 VOTING

32.1 All Planning Committee members are entitled to vote on administrative matters such as election of officers, committee administrative procedures, committee bylaws and determination of when formal balloting of the plan documents are required. All members of the Planning Committee may additionally comment on Committee or Subcommittee ballot items or actions and may participate in reviewing actions such as official voting.

33 OFFICIAL VOTE

33.1 Only the ballots and votes of designated Agency Official Voting members shall be counted in the official vote on Planning Committee ballot actions. Each member organization shall clearly indicate the name of its Official Voting Member.

34 OFFICIAL VOTING MEMBER

34.1 Official Voting Membership shall be limited to agencies that are eligible to hold radio license in the 800 MHz band or the Public Safety Radio Service or Special Emergency Radio Service under FCC Part 90 Rules and Regulations.

34.2 Each eligible membership agency shall, at the time of its original application for membership, designate to the Membership Secretary the official point of contact for that organization and the person responsible for casting the Official Vote of the member agency.

35 VOTING PROVISIONS

35.1 For official balloted items, only one voting member shall be designated for each member agency or organization. The voting member may be changed by written notification of the Membership Secretary. All such notifications of change in name of voting member shall be received at least seven days prior to any official ballot by the Regional Planning Committee. All changes shall be confirmed in writing to the Membership Secretary.

36 RULES FOR CONDUCT OF BUSINESS

36.1 Meetings shall be governed by "Robert's Rules of Order"

37 FISCAL YEAR

37.1 The Fiscal Year for the NCRPC shall begin January 1 and end December 31.

38 OPEN MEETINGS

38.1 The meetings of committees and subcommittees shall be open to all parties having an interest in the activities of the planning committee.

39 CLOSED MEETINGS

39.1 It is permissible to hold closed meetings of the Executive Committee when technical matters relating to the development of the Regional Plan are not discussed.

40 NOTIFICATION OF MEETING

40.1 Members of committees and subcommittees shall receive written notifications of all NCRPC meetings no later than one week prior to any called meeting date. Notification of unscheduled meetings may be made by telephone no less than one week prior to the meeting.

41 MINUTES

41.1 Minutes of all committee and subcommittee meetings shall be taken and copies shall be sent to the Secretary/Treasurer of the Regional Planning Committee for retention. Minutes of all Regional Planning Committee meetings shall be provided to all members of record at the time of the meeting.

42 ELECTION OF OFFICERS

42.1 The Regional Planning Committee shall elect a Chairman, Vice-Chairman, Secretary/Treasurer and Membership Secretary, by ballot conducted at the first Formal Organization of Regional Planning Committee meeting. A slate of nominees shall be placed in nomination to the Regional Convener by the Nominating Committee of the Steering Committee. The Regional Convener shall additionally call for nominations from the floor. All nominees for any office shall have at the time of the election a written statement from their employer organization or agency that the individual has the official sponsorship of the employing agency, and will be permitted to devote adequate time, effort and resources on the project as necessary to satisfactorily accomplish the development of the Regional Plan.

43 TERM OF OFFICE

43.1 The initial term of office shall be two years beginning January 1, or upon election in the first year, and terminating December 31, of the second year. Each Regional Planning Committee Officer shall serve a normal term of office or until a replacement is elected or named to the office.

43.2 Each Regional Planning Committee officer shall be eligible to succeed himself for one additional term.

43.3 After the initial term of office, elections shall be held for Chairman and Secretary/Treasurer in each odd numbered year. After the initial term of office, elections shall be held in each even numbered year for Vice-Chairman and Membership Secretary.

43.4 Elections shall be from a slate of nominees selected from the members of record named by a three member nominating committee appointed by the Chairman.

43.5 The names of the nominating committee shall be made public by the Chairman at least one month prior to any election.

43.6 Persons interested in holding office in the Regional Planning Committee shall contact the nominating committee making their interest known and providing the official endorsement of their employing agency.

43.7 All candidates for office shall provide a written statement from their employer indicating the individual has the official sponsorship of the employing agency and will be permitted to devote the time, effort and resources necessary to satisfactorily accomplish the objectives and duties of the chosen office.

## 44 TECHNICAL REGIONAL PLAN REQUIREMENTS

### 44.1 APCO Frequency Sorting Program

44.2 The APCO frequency packing programs are a series of programs that create an allocation table of frequencies usable within an area based on certain distance separation rules. These separation rules are an approximation of several engineering principles which dictate the necessary separation between co channel and adjacent channels stations in "real world" environments.

44.3 The methodology itself is not an engineering program but a planning tool used in the allotment of channels in accordance with the national NPSPAC plan and the 55 regional plans resulting from same.

44.4 Certain assumptions are made in the execution of the program. These are the probable 40/5dbu separation for co-channel allotments, the 40/20 dBu separation for adjacent channels and the fact that the 800 MHz environment is quite favorable for the use of transmitter combiners, antennas with specific highly directional patterns, and the use of simulcast for systems required to cover an area larger than (typical) 15 miles in a base-to-mobile configuration and 8 miles in radius in Base/Portable configuration.

44.5 Differences in terrain, anomalies in coverage, and other factors in the "real world" dictate accommodation in this or any other RF planning process. In the case of NPSPAC planning regions this can be accommodated in advance of the packing process by indicating those sites and geo-political areas that have sites with exceptional coverage (due to height advantage or other anomaly). These sites are then placed in the data file with coverage radius's much larger than indicated above to reflect the actual environment.

44.6 Other anomalies found after the packing process is complete such as high signal level coverage within an urban area are accommodated through design of a system intentionally protecting co and adjacent channel users (potential or planned).

44.7 The method used in determining an allotment of a channel is to analyze both the co channel and adjacent channel distances relative to the project coverage areas for each site in a new system.

44.8 The decision to allot a channel to a geographic area is through a formula solution ( $D/R$ ) where  $D$  must equal at least 5 times the larger radius ( $R$ ) of coverage plus one times the smaller radius of coverage, the subject coverage specified is the 40 dbu coverage contour.

44.9 Co-channel assignments must meet a  $D/R$  of 5.0 or greater in order to be considered allottable. Adjacent channel assignments must meet a 3.5 ratio for acceptability.

### 45 PROGRAM PATH

45.1 The program process begins with the creation of a "circulation" file by the National APCO office. This file is created by the ATLAS GRAPHICS (TM) program. These files are then managed by a program to create a flat file containing anywhere from one to a hundred entries representing a geo-political area.

45.2 This data is then developed into separate files containing a "request" criteria of one to several circles (Lat/Long/Radius). A separate file is generated containing the name of each of the requester files and the number of channels to be located for each area. Larger areas, consisting

of more than one geo-political area, called a zone, are also created to reflect state government or regional government or authorities, usually a US Bureau of Census SMSA or an exiting multi-county governmental region.

- 45.3 Each requester file is then compared against each record in a file creating a temporary file containing the results. This file is analyzed for records meeting the 5.0 x 3.5 spacing factors according to an assignment matrix. The requested number of channels meeting the criteria (if available) are then added to the file and the process begins again with the next requestor.
- 45.4 Results are generated throughout the process by noting the "success" level of each iteration on a printer and finally through printing a report for the particular region.

#### 46 FUTURE CHANGES AND ADDITIONS TO A REGIONAL PLAN PACKING

- 46.1 The NPSPAC planning process, like any good planning process, is subject to change as conditions within the region change. These changes, usually a need for additional channels within a planning area, can be accommodated through this packing software.
- 46.2 Any future amendment or revision of the regional channel assignment plan must be submitted through the APCO Area Frequency Coordinators office in order to assure compatibility with the other assignments within the region and adjoining regions.
- 46.3 By reserving the "PACC" channels for use primarily in nonstandard systems which don't require a full block in a given area, standard groups, sets, and blocks will be broken less often and less consideration or coordination will be required when initially assigning those blocks.
- 46.4 The PACC channels, because of their organization, have a minimum expected channel-to-channel spacing of 0.125 MHz. The clusters listed indicate the preferred assignment of up to four channel systems, but since they are not intended to be used only as clusters of four channels, they will be referred to and considered individually with no further implied relationships. Whenever possible "PACC" channels will be assigned from a cluster which has an available channel capacity that most closely meets the needs of the applicant.

#### 47 SPECTRUM UTILIZATION

- 47.1 This portion of the plan provides a basis for proper spectrum utilization. Its purpose is to guide the NCRCP Committee in their task of evaluating the implementation of radio communication systems within the North Carolina region.
- 47.2 All communications systems incorporating five (5) or more channels will be required to be configured and operated in a trunked configuration. Those systems having four (4) or fewer channels may be configured in a conventional system configuration.
- 47.3 The Federal Communications Commission in its report and order states: "Exceptions will be permitted only when a substantial showing is made that alternative technology would be at least as efficient as trunking or that trunking would not be (sic) operational requirements. Exceptions will not be granted routinely. However, strong evidence showing why trunking is unacceptable must be presented in support of any request for exception." Systems of 4 or less channels operating in the conventional mode that do not meet FCC loading standards will be required to share the frequency on a nonexclusive basis.

- 47.4 Those systems that are designed to provide wide area communications coverage must demonstrate their need to require such coverage. Communication coverage beyond the bounds of a jurisdictional area of concern cannot be tolerated unless it is critical to the protection of life and property and can be so demonstrated. If the 800 MHz trunked radio technology is utilized the system design should include as many county/multiple municipality government public safety radio users as can be managed technically.
- 47.5 The county/multiple municipality agency or agencies depending upon systems loading and a need for multiple systems within an area must provide inter-communication between area wide systems in a multi-agency environment. A lead agency using 800 MHz spectrum must implement the common channels in this band as mandated by the national plan. Such implementation must be reviewed and approved by the NCRPC Committee.
- 47.6 Communications for public safety purposes should provide only the communications needed within its boundaries; however, if the total number of radios in service does not reach minimum loading criteria for a trunk system that municipality should consider implementing an interagency shared system with other users.
- 47.7 Where conventional 800 MHz needs are requested, those frequencies to be utilized must not interfere with the region's trunked systems. The 800 MHz trunk radio system is to be considered in greater compliance with the FCC guidelines. Any co-channel interference within an authorized area of coverage will be examined on a case by case basis.
- 47.8 Loading of channels will be in compliance with FCC Rules 90.631 and 90.633. This plan must be used as a guide when establishing any new systems. Overlap or extended coverage must be minimized.
- 47.9 Antenna heights are to be limited to provide only the necessary coverage. The system design shall produce the minimum necessary coverage pattern and effective radiated power for the required geographic area.
- 47.10 Separation of co-channel transmitters will be determined after consideration of the applicants coverage needs, topography, natural barriers and antennae patterns.

#### 48 COORDINATION APPLICATION FORMS

- 48.1 Coordination and Application forms will be adopted by this planning region and will be in conformance with the forms developed by the recognized national frequency coordinator.

#### 49 FREQUENCY APPLICATION PROCESS

- 49.1 To develop an effective and functional plan the following recommendations shall be adopted:

- 49.1.1 A frequency assignment algorithm shall be developed and implemented by the frequency coordinator responsible for the 800 MHz spectrum within North Carolina Region 31.
- 49.1.2 An engineering study shall be provided with each application which describes the geographic location of the site and the technical parameters of the system. Coverage predictions shall be included which are based on that information. The predictions shall define a coverage contour where a minimum signal level of 40 dBu will be provided in accordance with FCC Rule 90.621(c). The coverage prediction shall be provided on a map of 1:25000 scale which clearly shows the location(s) of the proposed transmitters, the political boundaries of the licensee(s),

the county and state lines, and the closest adjacent and co-channel system(s), if within 35 and 70 miles respectively. In addition to the eight standard radials used to determine height above average terrain, one radial between each proposed location and its nearest adjacent and co-channel stations shall be included in a fashion similar to FCC Rule 90.309(a)(4).

- 49.1.3 A clearly written narrative explanation of the need for the system shall be provided by the applicant agency.
- 49.1.4 A financial and budget commitment from the applicant agency or governmental agency requesting the frequency and responsible for the implementation shall be provided by the applicant agency. An applicant's commitment to implement the system must be ensured to maintain the efficient utilization of the 800 MHz frequencies. The funding statement, which shall be in the form of a resolution from the applicant's governing body, shall be included in the application including the method by which the system will be funded.
- 49.1.5 An implementation schedule describing development of the system from the first original system implementation to the fully loaded eventual system implementation.
- 49.1.6 A certification, provided by the applicant agency, that shows compliance with the national plan common channel requirements, and stating how the common channels will be implemented within the system.
- 49.1.7 An applicant shall be required to furnish a schedule detailing the time period required to implement the proposed communications system, including statements to show the progress, including: funding, initial planning, procurement, implementation, initial acceptance, initial operation, system optimization, final acceptance, and maintenance scheduling.
- 49.2 All trunked systems authorized in accordance with this plan shall comply with section 90.631(e) regarding the implementation of systems. All conventional systems shall comply with section 90.633.

## 50 APPEAL PROCESS

Applicants shall be given the opportunity to appeal decisions which result in the rejection of their application throughout the application and frequency allocation process.

- 50.1 Throughout the channel allocation process applicants are given opportunities to appeal decisions which caused rejection of their application. The appeal process has two levels; APCO (or the FCC designated frequency coordinator) then to the Federal Communications Commission. An applicant who decides to appeal a rejection should initiate that appeal immediately with APCO upon notification of the rejection. In the event an appeal reaches the second level, the Federal Communication Commissions decision will be final and binding upon all parties.

## 51 COMMON CHANNEL IMPLEMENTATION

The eligible users in each planning area shall develop an implementation plan for their area based upon a two-tier implementation concept. The plan shall identify the location, frequency, operating parameters of the proposed stations in the area, and the name of the responsible monitoring agency and responsible system agency, if not the same.

- 51.1 The first tier of the plan shall consist of one or more stations operating on the National Calling Channel. The coverage of the stations shall be designed so as to provide coverage throughout a

major portion of the area. Stations may be either mobile relay stations (FB2) or base stations (FB) provided that base stations must be capable of reverting to mobile relay operation upon failure of a control line, control link or control path.

51.2 The monitoring agency shall provide a continuous and effective watch on the nationally designated National Mutual Assistance System (NMAS) calling channel.

51.3 The second tier shall consist of stations operating on the four National Common TACTical Channels (TAC 1, TAC 2, TAC 3, TAC 4). The coverage area of the stations shall be designed so as to maximize utilization of the TAC channels.

## 52 MUTUAL AID CHANNEL UTILIZATION

The mutual aid channels are to be used for coordination activities between different agencies in a mutual aid situation, or emergency activities of a single agency. Priority use levels are described below. When a higher priority of use is required all lower priority use must cease in any area where interference could occur.

52.1 PRIORITY 1 - Disaster and extreme emergency operations, for mutual aid and interagency communications.

52.2 PRIORITY 2 - Emergency or urgent operations involving imminent danger to the safety of life or property.

52.3 PRIORITY 3 - Special event control activities, generally of a preplanned nature and generally involving joint participation of two or more licensed agencies, including drills, tests and exercises of disaster or emergency plans.

## 53 INTEROPERABILITY - COMMON CHANNEL IMPLEMENTATION

In accord with the National Plan, interoperability among federal, state and local governments during both routine and disaster operations will take place primarily on the five common channels designated as the "Calling Channel" and channels "TAC 1 through TAC 4."

## 54 STANDARD SUBAUDIBLE CONTINUOUS TONE SQUELCH

54.1 All mobile and portable radios operating in the 821-824/866-869 MHz frequency band shall be equipped to operate on the five common channels using CTCSS frequency of 156.7 Hz. (Ref. General Docket No. 87-112 par. III.C.2.28.(3))

54.2 Additionally through the use of S-160 or equivalent agreements a licensee may permit federal use of a nonfederal communications system. Such use other than the five identified common channels is to be in full compliance with FCC requirements for federal government use of nonfederal government frequencies.

54.3 The implementation of the common channels designated by the National Plan will separate into two categories designated as: Primary and Secondary.

54.3.1 PRIMARY USERS - All licensees of five or more 800 MHz channels. As a minimum, all primary users shall operate a receiver for continuous monitoring of the "Calling Channel" and a single separate mobile relay/base station that is equipped to operate on all five of the national common channels.

- 54.3.2 Wide area coverage transmitters will be required to be installed to assure area of responsibility coverage. Licensees must be willing to sponsor provision of sufficient satellite receivers for in-street mobile coverage within a system's area, consistent with the coverage requirement.
- 54.3.3 A continuous monitor of the Calling Channel will be maintained using control stations. Any or all agencies may be required to operate a control station for the purpose of monitoring and rendering assistance on the Calling Channel.
- 54.3.4 Direct communications "talk-around" on all four tactical channels will provide additional on scene communications to supplement the mobile relay base stations.

## 55 SECONDARY USERS

- 55.1 Secondary Users are All licensees of four or fewer 800 MHz channels.
- 55.2 All users of four or fewer channels shall, as a minimum, operate a base station for continuous monitoring of the national Calling Channel. All secondary users shall maintain a radio watch for the purpose of monitoring and rendering assistance on the Calling Channel.
- 55.3 A secondary user whose area is encompassed by a primary user may apply for a waiver for the full time monitoring of the Calling Channel, however, the secondary user shall be required to maintain a control station on the national Calling Channel.

## 56 OPERATING PROCEDURES ON THE COMMON CHANNELS

- 56.1 Normally, the five interoperable channels are to be used for activities requiring inter-communications between agencies not sharing any other compatible communications system. Interoperable channels are not to be used by an agency for daily operations or for interagency communications not requiring interoperability. In major emergency situations, one or more tactical channels may be assigned as deemed necessary.
- 56.2 Participants in the interoperable channels include federal, state and local disaster management agencies. Police, fire, and certificated providers of basic and advanced life support services will be the primary using agencies. If radio channels are available, other services provided for in the Public Safety Radio Services and the Special Emergency Radio Service may also participate to the extent required to insure the safety of the public and protection of property.

## 57 OPERATING PROCEDURES

Plain-text "English" language will be used on all five common channels at all times. The use of unfamiliar terms, phrases and codes shall be kept to a minimum. The use of the common channels for normal dispatch or routine agency operations is specifically prohibited.

- 57.1 CALLING CHANNEL - The Calling Channel shall be used to contact other users that can render assistance at an incident. It shall not be used as an ongoing working channel. Once contact is made between agencies, an agreed upon, assigned or predetermined tactical channel shall be used for additional or continued communications.
- 57.2 TACTICAL CHANNELS (TAC 1 - TAC 4) - These frequencies are reserved for use by those agencies involved in interagency or intersystem communications. Incidents requiring multiagency participation will utilize these channels as directed by the agency with responsibility for the incident or area of operation.

## 58 NETWORK OPERATING METHODS

- 58.1 A network will be established on the Calling Channel. The network will be wide area in nature and cover the major sections of North Carolina Region 31. Multiple networks may be required to fully cover outlying areas. Communications systems on TAC 1 - TAC 4 will be implemented by agencies who volunteer on a coordinated basis through system application.
- 58.2 Every geographic section of the North Carolina Region 31 is intended to be covered by at least one of the working tactical channels. In areas not supporting an 800 MHz trunked system, common channels will be utilized through mobile-to-mobile "talk around." Mobile relay stations on TAC 1 - TAC 4 will be of a limited coverage design to permit reuse of the channels several times within North Carolina Region 31.
- 58.2.1 One channel will be designated as federal for use primarily between federal agencies, or between federal and state or local agencies.
- 58.2.2 One channel will be designated as state for use primarily between state agencies, or between state and federal or state and local agencies.
- 58.2.3 One channel would be designated as local for use primarily between local agencies, or between local and state or federal agencies.
- 58.2.4 One channel will be left for noncritical communications, which would be secondary to any essential local, state, or federal communications.
- 58.3 This plan will allow the local users to implement one calling channel and one "local" channel. The state or federal government will then be able to implement its "own channel" in areas deemed necessary. This also allows a state or federal agency to bring in a temporary or itinerant station for use during emergency response or drills. The local cost and responsibility are only to provide a method to coordinate the use of the agencies (calling channel) and their "own" working channel. In cases where a federal or state channel is not warranted, the state or federal agency can still communicate to others on a secondary basis using the local channel. Those areas with sufficient local funding can implement a second (nonessential) working channel without affecting the "state" or "federal" channel operations.
- 58.4 On these channels, mobile relays are allowable, but not mandated.

## 59 LONG-RANGE COMMUNICATIONS

- 59.1 Planning for "long range" communications, those required beyond the local system capability, during incidents of major proportions, where public safety requirements dictate the need for communications in and out of a disaster area, shall be addressed by the primary users within the service area. These agencies shall integrate the appropriate interface to the National Calling Channel as a minimum. The long range communications may additionally require or include interconnection with private carrier systems or the public switched network.

## 60 FREQUENCY GIVE-BACK AND REASSIGNMENT

- 60.1 It is anticipated that in all but the most unusual cases, frequencies presently used by a licensee will be turned back for reassignment. Frequency coordinators for the service affected will be responsible for reassignment of the channels to other agencies awaiting channels in the Public Safety Communications lower frequency bands. Normal coordination procedures will be

followed with these "give-back" frequencies.

- 60.2 All frequencies are to be returned to their respective pools to be assigned for the most beneficial public use. The frequency coordinator will consider the communication needs of all current eligible under the FCC's Services.

#### 61 EXPANSION OF EXISTING SYSTEMS

- 61.1 Existing systems that are to be expanded to include the frequency bands of 821-824/866-869 MHz must have their mobile radios "grandfathered" and modified in conformance with the Memorandum Opinion and Order, FCC Docket 87-112. Existing base stations in the frequency bands of 806-821/851-866 MHz may not be used in the frequency bands of 821-824/866-869 MHz.

#### 62 SLOW GROWTH ENTITIES

- 62.1 All systems in the 821-824/866-869 MHz bands under this plan will be slow growth in accordance with Section 90.629 of the Commission' rules.

#### 63 TELEPHONE INTERCONNECT

- 63.1 The use of a car radio telephone via interconnect through an 800 MHz trunked radio system or other type two-way radio communications system will normally require a significant amount of air time, therefore, the use of automatic interconnected equipment for interconnection between the public switched telephone network on a routine basis is discouraged. Automatic interconnect for mission dedicated communications may be adopted.

#### 64 UHF TELEVISION SHARING

Even low power UHF television stations (TV channels 57 through 70) operating in near proximity to trunking radio systems can cause interference to trunked radio operations. Trunking repeaters can also cause some viewer interference, but only in low signal strength TV viewer zones. 800 MHz trunked radio system planners must insure repeater sites are well away from high channel UHF Television transmitter sites.

#### 65 FREQUENCY ALLOCATION PROCESS GUIDELINES

- 65.1 Consider future needs of both current and potential users.
- 65.2 Coordinate frequency allocation with neighboring planning regions.
- 65.3 Establish a time schedule for application submission and evaluation.
- 65.4 Develop a scoring system for the evaluation process that assigns weights to the following elements:
  - 65.4.1 Category and class of service including eligibility and function.
  - 65.4.2 Interoperability
  - 65.4.3 Channel loading

- 65.4.4 Implementation factors based on the plan and timeliness of completion.
- 65.4.5 Geographic efficiency, i.e., ratio of mobiles to areas served and channel reuse.
- 65.4.6 Release of currently used frequencies and channels
- 65.4.7 Population served and administrative capability

## 66 FREQUENCY ALLOCATION PROCESS

66.1 Methodology - Frequencies shall be assigned on a geographic basis. The parameters upon which the number of frequencies allocated shall be based on the following:

66.1.1 Population Served

66.1.2 Number of mobile units. Portable radios shall be counted if the agency does not utilize mobile radio units.

66.1.3 Organizations responsible for the delivery of services which protect life and property shall receive priority over other public service organizations.

66.2 Spectrum utilization efficiency.

66.2.1 After initial frequency requests are met the appropriate frequency coordinator will assign frequencies given priority to the initial assignment, but having the latitude to choose frequencies other than those specified at the initial distribution. Coordination with the adjacent regions will be accomplished to ensure spectrum efficiency and effective management of interoperability channels.

## 67 NORTH CAROLINA COUNTIES RANKING

67.1 The Rank Order shall be used to resolve instances of contention for a limited number of available channels. Where two or more entities have applied for channels and insufficient spectrum exists to satisfy those requests, the ranking will be utilized to determine the greatest geographic area and population to be served, while accounting for the possibility of future growth.

67.2 Ranking may additionally be used to determine the redistribution of channels in cases where channel loading has not been met and channels are made available to other applicants.

67.3 The result of this regional communications plan will affect users well into the 21st century. It is impossible at the time of this writing to accurately determine the future demand for the reserved radio spectrum. It is also anticipated that little contention will exist within North Carolina for these channels in the very near future. With time, demographic changes and alternate technologies may alter the need for this spectrum. The ranking guidelines were approached to solve these few identifiable problems, rather than making arbitrary decisions on future needs.

67.4 Most public safety systems are expected to serve political jurisdictions where services are provided to the citizens of a county. In instances where a city provides services within an area of that county, it is expected that a county and city or townships can work cooperatively to build systems which will serve all citizens. This approach will not only conserve spectrum, but

will potentially allow for more cost efficient systems to be installed.

- 67.5 Counties have been ranked by the following method: Information was entered for each county regarding the land area in square miles, and population predictions for the years 1990 and 2010 (obtained from the North Carolina Office of State Budget and Management). Starting with these three figures on each county, the population density and growth were also determined. Rankings were made for the following categories:
- 67.5.1 Area in square miles. This figure is not expected to vary over time.
  - 67.5.2 Raw population figures. One rank was determined by sorting the counties on population predictions, primarily on the year 2010, and secondarily on 1990 figures.
  - 67.5.3 Population density determined by a method similar to the one above.
  - 67.5.4 Growth, which is the same for both raw population and population density. Since this figure represents the change between 1990 and 2010, there was no need for a secondary field.
- 67.6 The counties were then ranked according to the above categories, and an "average" ranking was determined. The final ranking was determined by sorting primarily on this average ranking, and secondarily on the land area.
- 67.7 The following lists contain the results of this ranking method. The first list is organized by ranking, the second alphabetically by county. As can be seen in the list by rank, very few counties obtained similar "average" rankings, and those that did were mostly separated geographically so that the secondary ranking by land area did not have significant impact on (geographically) adjacent counties.

## NORTH CAROLINA COUNTIES RANK ORDERING

COUNTY	NUM	REG	SQ MI	AVG SCORE	OVERALL RANK
WAKE	91	J	858	4.25	1
MECKLENBURG	59	F	530	13.00	2
ONSLow	66	P	765	15.25	3
UNION	89	F	639	17.50	4
BRUNSWICK	9	O	855	19.75	5
RANDOLPH	75	G	798	20.00	6
CRAVEN	24	P	699	21.25	7
BUNCOMBE	10	B	657	22.00	8
PITT	73	Q	655	22.25	9
DAVIDSON	28	G	549	22.75	10
JOHNSTON	50	J	797	23.50	11
CUMBERLAND	25	M	654	23.75	12
GUILFORD	40	G	655	25.50	13
CARTERET	15	P	536	25.75	14
IREDELL	48	F	572	27.00	15
FORSYTH	33	I	418	27.75	16
ROBESON	77	N	949	28.75	17
MOORE	62	H	704	28.75	18
CATAWBA	17	E	394	29.25	19
ORANGE	67	J	400	29.50	20
DURHAM	31	J	295	30.00	21
BEAUFORT	6	Q	826	30.25	22
HENDERSON	44	B	378	30.50	23
NEW HANOVER	64	O	185	32.25	24
ROWAN	79	F	523	33.00	25
HARNETT	42	M	603	33.25	26
CABARRUS	12	F	363	33.25	27
GASTON	35	F	356	35.00	28
FRANKLIN	34	K	491	37.75	29
PENDER	70	O	871	38.50	30
LINCOLN	54	F	297	39.00	31
ALAMANCE	0	G	428	39.50	32
BURKE	11	E	511	39.75	33
RUTHERFORD	80	C	563	40.00	34
GRANVILLE	38	K	537	40.75	35
ROCKINGHAM	78	G	569	41.50	36
LEE	52	J	256	41.50	37
DARE	27	R	391	42.50	38
WILKES	96	D	757	43.25	39
EDGECOMBE	32	L	510	43.50	40
CLEVELAND	22	C	468	43.75	41
CHATHAM	18	J	709	44.00	42
WAYNE	95	P	557	44.00	43
STOKES	84	I	457	44.00	44
SURRY	85	I	536	45.00	45
CALDWELL	13	E	469	46.25	46
MACON	55	A	513	48.25	47
HOKE	46	N	389	48.75	48
COLUMBUS	23	O	944	49.50	49
DAVIE	29	I	265	50.50	50
HALIFAX	41	L	734	51.00	51
NASH	63	L	544	51.00	52
WILSON	97	L	375	51.50	53
STANLY	83	F	398	53.75	54
HAYWOOD	43	A	551	54.00	55
SAMPSON	81	M	944	54.50	56
VANCE	90	K	249	55.25	57
WATAUGA	94	D	317	55.75	58
CURRITUCK	26	R	246	56.00	59
TRANSYLVANIA	87	B	382	57.50	60
ALEXANDER	1	E	259	57.50	61
PASQUOTANK	69	R	228	57.75	62

SCOTLAND	82	N	318	58.00	63
CASWELL	16	G	428	58.50	64
LENOIR	53	P	400	58.50	65
DUPLIN	30	P	815	59.00	66
CHEROKEE	19	A	452	59.00	67
MONTGOMERY	61	H	488	59.25	68
PERSON	72	K	401	59.25	69
RICHMOND	76	H	475	60.50	70
McDOWELL	58	C	435	61.50	71
YADKIN	98	I	336	62.75	72
JACKSON	49	A	491	64.75	73
BLADEN	8	N	883	65.25	74
ASHE	4	D	426	67.25	75
POLK	74	C	239	67.50	76
ANSON	3	H	533	68.00	77
PERQUIMANS	71	R	246	68.25	78
MARTIN	57	Q	454	69.25	79
YANCEY	99	D	312	70.50	80
BERTIE	7	Q	698	71.50	81
CHOWAN	20	R	173	72.25	82
MADISON	56	B	450	74.00	83
SWAIN	86	A	524	75.00	84
GATES	36	R	337	75.00	85
NORTHAMPTON	65	L	536	75.25	86
HERTFORD	45	Q	353	76.25	87
AVERY	5	D	245	76.50	88
JONES	51	P	467	76.75	89
HYDE	47	R	613	77.50	90
WARREN	92	K	424	78.75	91
TYRRELL	88	R	390	79.00	92
PAMLICO	68	P	338	80.50	93
CLAY	21	A	209	80.75	94
GREENE	39	P	267	82.75	95
MITCHELL	60	D	215	86.25	96
WASHINGTON	93	R	343	88.50	97
CAMDEN	14	R	239	89.75	98
ALLEGHANY	2	D	225	90.25	99
GRAHAM	37	A	292	94.50	100

COUNTY	NUM	REG	year: 1990			year: 2010			% CHANGE
			POPULATION	PCT	P/SM	POPULATION	PCT	P/SM	
ALAMANCE	0	G	107,061	1.63%	250	113,807	1.47%	266	6.30%
ALEXANDER	1	E	27,897	0.43%	108	32,759	0.42%	126	17.43%
ALLEGHANY	2	D	9,787	0.15%	43	9,879	0.13%	44	0.94%
ANSON	3	H	26,424	0.40%	50	27,366	0.35%	51	3.56%
ASHE	4	D	23,737	0.36%	56	25,543	0.33%	60	7.61%
AVERY	5	D	15,436	0.24%	63	16,563	0.21%	68	7.30%
BEAUFORT	6	Q	43,666	0.67%	53	58,558	0.76%	71	34.10%
BERTIE	7	Q	21,171	0.32%	30	20,696	0.27%	30	-2.24%
BLADEN	8	N	30,894	0.47%	35	30,158	0.39%	34	-2.38%
BRUNSWICK	9	O	54,884	0.84%	64	95,519	1.24%	112	74.04%
BUNCOMBE	10	B	175,493	2.67%	267	196,968	2.55%	300	12.24%
BURKE	11	E	77,638	1.18%	152	83,564	1.08%	164	7.63%
CABARRUS	12	F	96,679	1.47%	266	114,977	1.49%	317	18.93%
CALDWELL	13	E	71,642	1.09%	153	74,965	0.97%	160	4.64%
CAMDEN	14	R	6,040	0.09%	25	6,362	0.08%	27	5.33%
CARTERET	15	P	54,043	0.82%	101	77,876	1.01%	145	44.10%
CASWELL	16	G	23,116	0.35%	54	27,258	0.35%	64	17.92%
CATAWBA	17	E	119,832	1.83%	304	143,144	1.85%	363	19.45%
CHATHAM	18	J	37,438	0.57%	53	43,872	0.57%	62	17.19%
CHEROKEE	19	A	21,633	0.33%	48	26,118	0.34%	58	20.73%
CHOWAN	20	R	13,906	0.21%	80	15,846	0.20%	92	13.95%
CLAY	21	A	7,415	0.11%	35	8,579	0.11%	41	15.70%
CLEVELAND	22	C	87,373	1.33%	187	90,790	1.17%	194	3.91%
COLUMBUS	23	O	53,546	0.82%	57	55,737	0.72%	59	4.09%
Craven	24	P	83,771	1.28%	120	106,996	1.38%	153	27.72%
CUMBERLAND	25	M	261,839	3.99%	400	282,905	3.66%	433	8.05%
CURRITUCK	26	R	14,676	0.22%	60	22,542	0.29%	92	53.60%
DARE	27	R	22,501	0.34%	58	41,283	0.53%	106	83.47%
DAVIDSON	28	G	127,264	1.94%	232	149,972	1.94%	273	17.84%
DAVIE	29	I	28,473	0.43%	107	35,731	0.46%	135	25.49%
DUPLIN	30	P	41,905	0.64%	51	41,806	0.54%	51	-0.24%
DURHAM	31	J	175,678	2.68%	596	214,757	2.78%	728	22.24%
EDGEcombe	32	L	60,317	0.92%	118	65,996	0.85%	129	9.42%
FORSYTH	33	I	272,780	4.16%	653	312,972	4.05%	749	14.73%
FRANKLIN	34	K	37,158	0.57%	76	49,743	0.64%	101	33.87%
GASTON	35	F	176,505	2.69%	496	195,517	2.53%	549	10.77%
GATES	36	R	9,996	0.15%	30	11,682	0.15%	35	16.87%
GRAHAM	37	A	7,088	0.11%	24	6,496	0.08%	22	-8.35%
GRANVILLE	38	K	39,796	0.61%	74	48,813	0.63%	91	22.66%
GREENE	39	P	16,603	0.25%	62	16,529	0.21%	62	-0.45%
GUILFORD	40	G	339,946	5.18%	519	358,737	4.64%	548	5.53%
HALIFAX	41	L	57,162	0.87%	78	57,633	0.75%	79	0.82%
HARNETT	42	M	67,014	1.02%	111	78,300	1.01%	130	16.84%
HAYWOOD	43	A	48,597	0.74%	88	49,852	0.64%	90	2.58%
HENDERSON	44	B	71,532	1.09%	189	94,005	1.22%	249	31.42%
HERTFORD	45	Q	24,051	0.37%	68	24,032	0.31%	68	-0.08%
HOKE	46	N	25,309	0.39%	65	34,801	0.45%	89	37.50%
HYDE	47	R	5,771	0.09%	9	5,806	0.08%	9	0.61%
IREDELL	48	F	92,667	1.41%	162	108,289	1.40%	189	16.86%
JACKSON	49	A	27,227	0.41%	55	28,976	0.37%	59	6.42%
JOHNSTON	50	J	82,509	1.26%	104	103,063	1.33%	129	24.91%
JONES	51	P	10,234	0.16%	22	10,893	0.14%	23	6.44%
LEE	52	J	43,166	0.66%	169	54,494	0.70%	213	26.24%
LENOIR	53	P	60,535	0.92%	151	57,906	0.75%	145	-4.34%
LINCOLN	54	F	49,353	0.75%	166	62,343	0.81%	210	26.32%
MACON	55	A	24,283	0.37%	47	31,150	0.40%	61	28.28%
MADISON	56	B	17,586	0.27%	39	18,514	0.24%	41	5.28%
MARTIN	57	Q	27,144	0.41%	60	27,880	0.36%	61	2.71%
MECKLENBURG	59	F	489,877	7.46%	924	638,382	8.26%	1204	30.31%
MITCHELL	60	D	14,636	0.22%	68	14,404	0.19%	67	-1.59%
MONTGOMERY	61	H	24,919	0.38%	51	28,612	0.37%	59	14.82%
MOORE	62	H	60,197	0.92%	86	75,524	0.98%	107	25.46%

McDOWELL	58	C	36,805	0.56%	85	38,692	0.50%	89	5.13%
NASH	63	L	24,717	0.38%	45	30,407	0.39%	56	23.02%
NEW HANOVER	64	O	121,218	1.85%	655	152,685	1.98%	825	25.96%
NORTHAMPTON	65	L	22,265	0.34%	42	21,283	0.28%	40	-4.41%
ONSLOW	66	P	130,520	1.99%	171	161,255	2.09%	211	23.55%
ORANGE	67	J	89,722	1.37%	224	110,511	1.43%	276	23.17%
PAMLICO	68	P	10,990	0.17%	33	11,766	0.15%	35	7.06%
PASQUOTANK	69	R	31,226	0.48%	137	35,790	0.46%	157	14.62%
PENDER	70	O	27,803	0.42%	32	38,351	0.50%	44	37.94%
PERQUIMANS	71	R	11,198	0.17%	46	14,244	0.18%	58	27.20%
PERSON	72	K	31,678	0.48%	79	34,972	0.45%	87	10.40%
PITT	73	Q	103,190	1.57%	158	122,871	1.59%	188	19.07%
POLK	74	C	15,097	0.23%	63	18,199	0.24%	76	20.55%
RANDOLPH	75	G	103,977	1.58%	130	125,766	1.63%	158	20.96%
RICHMOND	76	H	46,106	0.70%	97	45,432	0.59%	96	-1.46%
ROBESON	77	N	109,332	1.67%	115	119,107	1.54%	126	8.94%
ROCKINGHAM	78	G	86,825	1.32%	153	89,573	1.16%	157	3.16%
ROWAN	79	F	106,850	1.63%	204	115,458	1.49%	221	8.06%
RUTHERFORD	80	C	58,396	0.89%	104	65,691	0.85%	117	12.49%
SAMPSON	81	M	51,030	0.78%	54	51,304	0.66%	54	0.54%
SCOTLAND	82	N	35,150	0.54%	111	39,062	0.51%	123	11.13%
STANLY	83	F	51,263	0.78%	129	54,100	0.70%	136	5.53%
STOKES	84	I	37,370	0.57%	82	45,911	0.59%	100	22.86%
SURRY	85	I	63,072	0.96%	118	67,224	0.87%	125	6.58%
SWAIN	86	A	10,808	0.16%	21	11,457	0.15%	22	6.00%
TRANSYLVANIA	87	B	26,908	0.41%	70	31,849	0.41%	83	18.36%
TYRRELL	88	R	4,208	0.06%	11	4,729	0.06%	12	12.38%
UNION	89	F	86,169	1.31%	135	118,148	1.53%	185	37.11%
VANCE	90	K	40,027	0.61%	161	44,186	0.57%	177	10.39%
WAKE	91	J	402,330	6.13%	469	592,773	7.67%	691	47.34%
WARREN	92	K	16,683	0.25%	39	16,894	0.22%	40	1.26%
WASHINGTON	93	R	14,604	0.22%	43	13,459	0.17%	39	-7.84%
WATAUGA	94	D	35,706	0.54%	113	40,907	0.53%	129	14.57%
WAYNE	95	P	98,568	1.50%	177	95,376	1.23%	171	-3.24%
WILKES	96	D	62,202	0.95%	82	66,325	0.86%	88	6.63%
WILSON	97	L	66,128	1.01%	176	69,038	0.89%	184	4.40%
YADKIN	98	I	30,526	0.47%	91	33,150	0.43%	99	8.60%
YANCEY	99	D	16,314	0.25%	52	18,695	0.24%	60	14.59%

2010/1990

COUNTY	NUM	REG	2010/1990				GROWTH RANK	AVG SCORE	OVERALL RANK
			AREA RANK	POP RANK	P/SM RANK				
ALAMANCE	0	G	56	19	14	69	39.50	32	
ALEXANDER	1	E	87	65	41	37	57.50	61	
ALLEGHANY	2	D	96	95	85	85	90.25	99	
ANSON	3	H	37	73	82	80	68.00	77	
ASHE	4	D	58	76	73	62	67.25	75	
AVERY	5	D	92	85	66	63	76.50	88	
BEAUFORT	6	Q	8	40	64	9	30.25	22	
BERTIE	7	Q	18	80	94	94	71.50	81	
BLADEN	8	N	4	69	93	95	65.25	74	
BRUNSWICK	9	O	7	24	46	2	19.75	5	
BUNCOMBE	10	B	19	7	11	51	22.00	8	
BURKE	11	E	42	29	27	61	39.75	33	
CABARRUS	12	F	72	18	10	33	33.25	27	
CALDWELL	13	E	48	33	28	76	46.25	46	
CAMDEN	14	R	93	98	95	73	89.75	98	
CARTERET	15	P	34	31	33	5	25.75	14	
CASWELL	16	G	57	74	68	35	58.50	64	
CATAWBA	17	E	65	12	9	31	29.25	19	
CHATHAM	18	J	15	53	70	38	44.00	42	
CHEROKEE	19	A	53	75	79	29	59.00	67	
CHOWAN	20	R	100	87	54	48	72.25	82	
CLAY	21	A	98	96	87	42	80.75	94	
CLEVELAND	22	C	49	27	20	79	43.75	41	
COLUMBUS	23	O	2	43	75	78	49.50	49	
CRAVEN	24	P	17	22	32	14	21.25	7	
CUMBERLAND	25	M	22	5	8	60	23.75	12	
CURRITUCK	26	R	90	78	53	3	56.00	59	
DARE	27	R	66	55	48	1	42.50	38	
DAVIDSON	28	G	31	11	13	36	22.75	10	
DAVIE	29	I	86	61	36	19	50.50	50	
DUPLIN	30	P	9	54	83	90	59.00	66	
DURHAM	31	J	83	6	4	27	30.00	21	
EDGECOMBE	32	L	43	37	38	56	43.50	40	
FORSYTH	33	I	60	4	3	44	27.75	16	
FRANKLIN	34	K	44	48	49	10	37.75	29	
GASTON	35	F	73	8	6	53	35.00	28	
GATES	36	R	77	92	92	39	75.00	85	
GRAHAM	37	A	84	97	97	100	94.50	100	
GRANVILLE	38	K	33	49	55	26	40.75	35	
GREENE	39	P	85	86	69	91	82.75	95	
GUILFORD	40	G	20	3	7	72	25.50	13	
HALIFAX	41	L	14	42	62	86	51.00	51	
HARNETT	42	M	25	30	37	41	33.25	26	
HAYWOOD	43	A	30	47	56	83	54.00	55	
HENDERSON	44	B	70	26	15	11	30.50	23	
HERTFORD	45	Q	74	77	65	89	76.25	87	
HOKE	46	N	68	63	57	7	48.75	48	
HYDE	47	R	24	99	100	87	77.50	90	
IREDELL	48	F	26	21	21	40	27.00	15	
JACKSON	49	A	45	70	76	68	64.75	73	
JOHNSTON	50	J	11	23	39	21	23.50	11	
JONES	51	P	50	94	96	67	76.75	89	
LEE	52	J	88	44	17	17	41.50	37	
LENOIR	53	P	62	41	34	97	58.50	65	
LINCOLN	54	F	82	39	19	16	39.00	31	
MACON	55	A	41	67	72	13	48.25	47	
MADISON	56	B	54	82	86	74	74.00	83	
MARTIN	57	Q	52	72	71	82	69.25	79	
MECKLENBURG	59	F	38	1	1	12	13.00	2	
MITCHELL	60	D	97	88	67	93	86.25	96	
MONTGOMERY	61	H	46	71	77	43	59.25	68	

MOORE	62	H	16	32	47	20	28.75	18
MCDOWELL	58	C	55	58	58	75	61.50	71
NASH	63	L	32	68	80	24	51.00	52
NEW HANOVER	64	O	99	10	2	18	32.25	24
NORTHAMPTON	65	L	35	79	89	98	75.25	86
ONSLOW	66	P	12	9	18	22	15.25	3
ORANGE	67	J	63	20	12	23	29.50	20
PAMLICO	68	P	76	91	91	64	80.50	93
PASQUOTANK	69	R	95	60	31	45	57.75	62
PENDER	70	O	5	59	84	6	38.50	30
PERQUIMANS	71	R	91	89	78	15	68.25	78
PERSON	72	K	61	62	60	54	59.25	69
PITT	73	Q	21	14	22	32	22.25	9
POLK	74	C	94	83	63	30	67.50	76
RANDOLPH	75	G	10	13	29	28	20.00	6
RICHMOND	76	H	47	51	52	92	60.50	70
ROBESON	77	N	1	15	42	57	28.75	17
ROCKINGHAM	78	G	27	28	30	81	41.50	36
ROWAN	79	F	40	17	16	59	33.00	25
RUTHERFORD	80	C	28	38	45	49	40.00	34
SAMPSON	81	M	3	46	81	88	54.50	56
SCOTLAND	82	N	79	57	44	52	58.00	63
STANLY	83	F	64	45	35	71	53.75	54
STOKES	84	I	51	50	50	25	44.00	44
SURRY	85	I	36	35	43	66	45.00	45
SWAIN	86	A	39	93	98	70	75.00	84
TRANSYLVANIA	87	B	69	66	61	34	57.50	60
TYRRELL	88	R	67	100	99	50	79.00	92
UNION	89	F	23	16	23	8	17.50	4
VANCE	90	K	89	52	25	55	55.25	57
WAKE	91	J	6	2	5	4	4.25	1
WARREN	92	K	59	84	88	84	78.75	91
WASHINGTON	93	R	75	90	90	99	88.50	97
WATAUGA	94	D	80	56	40	47	55.75	58
WAYNE	95	P	29	25	26	96	44.00	43
WILKES	96	D	13	36	59	65	43.25	39
WILSON	97	L	71	34	24	77	51.50	53
YADKIN	98	I	78	64	51	58	62.75	72
YANCEY	99	D	81	81	74	46	70.50	80

69 LISTING OF CHANNELS ASSIGNED

602	NC New Bern, City of NC Raleigh, City of	NC Wilmington, City of NC Shelby, City of	NC Fayetteville, City of
604	NC Harnett	NC Sampson	NC Cumberland
606	NC Columbus NC Rutherford NC Durham, City of	NC Pender NC Cleveland	NC Brunswick NC McDowell
609	NC Orange NC Johnston NC Mecklenburg NC Cabarrus	NC Wake NC Lincoln NC Union NC Rowan	NC Chatham NC Gaston NC Stanly NC Iredell
611	NC Hyde NC Perquimans NC Raleigh, City of	NC Dare NC Pasquotank	NC Chowan NC Currituck
613	NC Greene NC Craven	NC Lenoir NC Pamlico	NC Jones NC Carteret
615	NC Hyde NC Perquimans NC wake	NC Dare NC Currituck NC Lee	NC Chowan NC Orange
616	NC Surry	NC Davie	
618	NC Scotland NC Gaston NC Iredell	NC Person NC Union	NC Warren NC Cabarrus
622	NC Durham NC Avery	NC Chatham	NC Wilkes
624	NC Martin NC Brunswick	NC Beaufort NC Mecklenburg	NC Columbus NC Cabarrus
626	NC hertford Nc Cumberland	NC Pitt	NC Harnett
627	NC Warren	NC Gaston	NC Cabarrus
629	NC Columbus	NC Brunswick	
631	NC Nash	NC Caswell	NC Davidson
633	NC Hoke	NC Halifax	NC Edgecombe
634	NC Hoke	NC Northampton	
636	NC Hyde NC Chatham	NC Tyrrel NC Avery	NC Currituck
638	NC Cumberland		
642	NC Sampson		
644	NC New Hanover	NC Anson	

647	NC Johnston	NC Cabarrus	
649	NC Dare	NC Camden	
651	NC Jones		
653	NC Hyde	NC Gates	NC Chatham
656	NC Hoke	NC Franklin	NC Rowan
660	NC New Hanover	NC Rockingham	NC Haywood
662	NC Martin	NC Brunswick	
664	NC Cumberland		
667	NC Pender		
669	NC Person	NC Stanly	
671	NC Halifax		
672	NC Robeson		
674	NC Hyde	NC Camden	NC Ashe
680	NC Harnett		
682	NC Charlotte, City		
687	NC Camden		
689	NC Pamlico		
691	NC Northampton		
694	NC Bladen	NC Rowan	
698	NC Watauga		
700	NC Pender		
702	NC Cumberland		
703	NC Rowan		
707	NC Person		
709	Nash		
710	NC Randolph		
712	NC Orange		
714	NC Sampson		
720	NC Beaufort		
721	NC Pitt		
723	NC Rowan		
727	NC Wayne		
729	NC Robeson		

736	NC Chatham
738	NC Pitt
740	NC Guilford
741	NC Davidson
745	NC Warren
748	NC Edgecombe
750	NC Camden
759	NC Halifax
761	NC Granville
763	NC Charlotte, City
767	NC Gates
770	NC Caswell
774	NC Pitt
775	NC Pitt
778	NC Cumberland
781	NC Brunswick
786	NC Nash
788	NC Union
796	NC Carteret
799	NC Sampson
803	NC Columbus
807	NC Harnett
812	NC McDowell
814	NC Mecklenburg
816	NC Brunswick
819	NC Stanly
823	NC Mecklenburg
825	NC Lee
828	NC Lee

## 70 CHANNEL LISTINGS BY LOCATION

Alamance	631 770	660 801	710 810	740	741	748	759
Alexander	691	729	736	750	774		
Alleghany	622	636	674	698	712		
Anson	644	700	720	738	781		
Ashe	622	636	674	698	712		
Asheville	615 821	653	700	716	767	781	816
Avery	622	636	674	698	712		
Beaufort	624 773 814	626 774 815	662 775 816	700 776 819	720	721 798 799	738 813
Bertie	624 773 814	626 774 815	662 775 816	700 776 819	720	721 798 799	738 813
Bladen	618 691 761	633 694 774	634 707 814	656 709 823	669	671 745	672 747
Brunswick	606 682 776	624 700 781	629 705 801	644 720 803	660	662 743 821	667 763
Buncombe	631	633	671	770	810		
Burke	691	729	736	750	774		
Cabarrus	609 694 814	618 703 819	624 723 823	627 761 825	647	656 786 828	669 788
Caldwell	691	729	736	750	774		
Camden	611 712	615 725	636 750	649 767	653 825	674	687
Carteret	613	651	689	727	765	796	805
Caswell	631 770	660 801	710 810	740	741	748	759
Catawba	691	729	736	750	774		
Charlotte, City of	611 682 763	620 700 772	629 705 776	653 720 803	658	662 738 821	667 743
Chatham	609 698 828	615 712	622 736	636 750	647	653 788	674 825

Cherokee	660	736	774				
Chowan	611 712	615 725	636 750	649 767	653 825	674	687
Clay	660	736	774				
Cleveland	606	662	743	803	812		
Columbus	606 682 776	624 700 781	629 705 801	644 720 803	660 738 816	662 743 821	667 763
Craven	613	651	689	727	765	796	805
Cumberland	604 680 785	626 702 790	638 714 799	642 718 807	664 752 818	665 778 819	676 783
Currituck	611 712	615 725	636 750	649 767	653 825	674	687
Dare	611 712	615 725	636 750	649 767	653 825	674	687
Davidson	631 770	660 801	710 810	740	741	748	759
Davie	616	654	689	727	796	805	
Duplin	613	651	689	727	765	796	805
Durham	609 698 828	615 712	622 736	636 750	647 767	653 788	674 825
Durham, City of	606 705 821	624 720	629 738	662 743	667 776	682 798	700 816
Edgecombe	631 709 770	633 710 779	634 729 786	660 741 801	671 747 810	672 748 823	691 759
Fayetteville, City of	602 794	620	640	658	678	716	754
Forsyth	616	654	689	727	796	805	
Franklin	618 723	627 745	656 761	669	694	703	707
Gaston	609 694 814	618 703 819	624 723 823	627 761 825	647 779 826	656 786 828	669 788
Gates	611 712	615 725	636 750	649 767	653 825	674	687
Graham	660	736	774				

Granville	618 723	627 745	656 761	669	694	703	707
Greene	613	651	689	727	765	796	805
Greensboro, City of	611 772	620 794	649 812	658	687	696	734
Greenville, City of	606 781	629 803	667 821	682	705	743	763
Guilford	631 770	660 801	710 810	740	741	748	759
Halifax	631 709 770	633 710 779	634 729 786	660 741 801	671 747 810	672 748 823	691 759
Harnett	604 680 785	626 702 790	638 714 799	642 718 807	664 752 818	665 778 819	676 783
Haywood	660	736	774				
Henderson	631	633	671	770	810		
Hertford	624 773 814	626 774 815	662 775 816	700 776 819	720	721 799	738 813
Hoke	618 691 761	633 694 774	634 707 814	656 709 823	669 729	671 745	672 747
Hyde	611 712	615 725	636 750	649 767	653 825	674	687
Iredell	609 694 814	618 703 819	624 723 823	627 761 825	647 779 826	656 786 828	669 788
Jackson	660	736	774				
Johnston	609 698 828	615 712	622 736	636 750	647 767	653 788	674 825
Jones	613	651	689	727	765	796	805
Lee	609 698 828	615 712	622 736	636 750	647 767	653 788	674 825
Lenoir	613	651	689	727	765	796	805
Lincoln	609 694 814	618 703 819	624 723 823	627 761 825	647 779 826	656 786 828	669 788
Lumberton, City of	611 812	649	687	696	725	734	772

Macon	660	736	774				
Madison	631	633	671	770	810		
Martin	624 773 814	626 774 815	662 775 816	700 776 819	720 798	72179 9	738 813
McDowell	606	662	743	803	812		
Mecklenburg	609 694 814	618 703 819	624 723 823	627 761 825	647 779 826	656 786 828	669 788
Mitchell	622	636	674	698	712		
Montgomery	644	700	720	738	781		
Moore	644	700	720	738	781		
Nash	631	633	634	660	671	672	691
Nash	710 770	729 779	741 786	747 801	748 810	759 823	
New Bern, City Of	602 734	620 754	640 794	658	678	696	716
New Hanover	606 682 776	624 700 781	629 705 801	644 720 803	660 738 816	662 743 821	667 763
Northampton	631 709 770	633 710 779	634 729 786	660 741 801	671 747 810	672 748 823	691 759
Onslow	613	651	689	727	765	796	805
Orange	609 698 828	615 712	622 736	636 750	647 767	653 788	674 825
Pamlico	613	651	689	727	765	796	805
Pasquotank	611 712	615 725	636 750	649 767	653 825	674	687
Pender	606 682 776	624 700 781	629 705 801	644 720 803	660 738 816	662 743 821	667 763
Perquimans	611 712	615 725	636 750	649 767	653 825	674	687
Person	618 723	627 745	656 761	669	694	703	707
Pitt	624 773 814	626 774 815	662 775 816	700 776 819	720 798	721 799	738 813
Polk	606	662	743	803	812		

Raleigh, City of	602 687 772	611 696 794	620 716 803	640 725 812	649 734	658 754	678 763
Randolph	631 770	660 801	710 810	740	741	748	759
Richmond	644	700	720	738	781		
Robeson	618 691 761	633 694 774	634 707 814	656 709 823	669 729	671 745	672 747
Rockingham	631 770	660 801	710 810	740	741	748	759
Rowan	609 694 814	618 703 819	624 723 823	627 761 825	647 779 826	656 786 828	669 788
Rutherford	606	662	743	803	812		
Sampson	604 680 785	626 702 790	638 714 799	642 718 807	664 752 818	665 778 819	676 783
Scotland	618 691 761	633 694 774	634 707 814	656 709 823	669 729	671 745	672 747
Shelby, City of	602	640	678	716	754		
Stanly	609 694 814	618 703 819	624 723 823	627 761 825	647 779 826	656 786 828	669 788
Stokes	616	654	689	727	796	805	
Surry	616	654	689	727	796	805	
Swain	660	736	774				
Transylvania	631	633	671	770	810		
Tyrrel	725 611	750 615	767 636	825 649		653 674	687
Union	609 694 814	618 703 819	624 723 823	627 761 825	647 779 826	656 786 828	669 788
Vance	618 723	627 745	656 761	669	694	703	707
Wake	609 698 828	615 712	622 736	636 750	647 767	653 788	674 825
Warren	618 723	627 745	656 761	669	694	703	707

Washington	611 712	615 725	636 750	649 767	653 825	674	687
Watauga	622	636	674	698	712		
Wayne	613	651	689	727	765	796	805
Wilkes	622	636	674	698	712		
Wilmington, City of	602 734	620 754	640 772	658 794	678 812	696	716
Wilson	631 709 770	633 710 779	634 729 786	660 741 801	671 747 810	672 748 823	691 759
Winston Salem, City of	606 747	615 767	633 798	671	691	709	729
Yadkin	616	654	689	727	796	805	
Yancey	622	636	674	698	712		

71 GLOSSARY

- Block - A standard grouping of five channels with a channel spacing of 38.
- Cluster - A grouping of four channels above channel 790 with a channel spacing of 10.
- Group - A standard grouping of two ten channel sets.
- Set - A standard grouping of two five channel blocks.
- SICSPACC - System for Incremental Channelization of the Spectrum with Paring of the Associated Contiguous Channels
- NCRCPC - North Carolina Regional Communications Planning Committee
- NMAS - National Mutual Assistance System
- PACC channels - Pared Associated Contiguous Channels

72 CHECK LIST OF TECHNICAL REGIONAL PLAN REQUIREMENTS

The following are requirements of the FCC for inclusion in the Regional Plan, as itemized in Docket No. 87-112 Report and Order released December 18, 1987:

- 72.1 Cover page
- 72.2 Name of Regional Planning Chairman
- 72.3 Mailing Address
- 72.4 Telephone Number
- 72.5 Names of the members of the regional planning committee including organizational affiliation, mailing address and telephone number.
- 72.6 Summary of major elements of the plan.
- 72.7 General description of how the spectrum is to be allotted among the various eligible users within the region.
- 72.8 Explanation of how the requirements of all eligible entities within the region were considered and met.
- 72.9 Explanation of how eligible entities have been prioritized in areas where not all can receive licenses.
- 72.10 Explanation of how the plan has been coordinated with adjacent regions.
- 72.11 Detailed description of how the plan puts the spectrum to the best possible use by requiring system design with minimum coverage areas, by assigning frequencies so that maximum frequency reuse and offset channel use may be made, by using trunking, and by requiring small entities with minimal requirements to join together on a single system where possible.

73 NAMES OF EXECUTIVE SUBCOMMITTEE

Committee Chairman:

J. Danny Hickman, Chairman  
County of Wilson  
Post Office Box 1728  
Wilson, NC 27893-0333  
(919) 237-8300

Vice Chairman:

Edward Rankin  
Durham Police Department  
314 North Mangum Street  
Durham, NC 27701  
(919) 683-4187

Secretary:

Carl C. Van Cott  
North Carolina Office of EMS  
701 Barbour Drive  
Raleigh, NC 27603-2008  
(919) 733-2285

Administrative Subcommittee Chairman:

Marvin Heller  
Raleigh-Wake County ECC  
2012 Eagleton Circle  
Raleigh, NC 27609  
(919) 876-9255

Technical Subcommittee Chairman:

Jeff Pegram  
Commonwealth of VA-EMS  
1538 East Parham Road  
Richmond, VA 23225  
(804) 371-3500

74 NAMES OF ADMINISTRATIVE SUBCOMMITTEE

Marvin Heller, Administrative Subcommittee Chairman  
Max Bloodworth  
David Carter  
Ed Coltrane  
Lee Hester  
Danny Hickman  
Max Hopper  
Jon Jarvis  
Don Mabe  
Edward Rankin  
Carl C. Van Cott  
Ernest Wall

75 NAMES OF TECHNICAL SUBCOMMITTEE

Jeff Pegram, Technical Subcommittee Chairman  
Edward Rankin  
Bill Fivek  
Edward C. Howard  
Cliff Link  
Larry Simmons  
Warren B. Eib, Jr.  
Ed Coltrane, Jr.  
Tim Poston  
Jim Amos  
Max Bloodworth

76 NAMES AND ADDRESSES OF REGIONAL PLANNING COMMITTEE

Sanford Smith  
City of Greensboro  
P.O. Drawer W-2  
Greensboro, NC 27402  
(919) 373-2418

Rick Lemmond  
North Carolina Highway Patrol  
P.O. Box 27687  
Raleigh, NC 27611  
(919) 733-4015

Ed Coltrain  
City of Greensboro  
P.O. Drawer W2  
Greensboro, NC 27402  
(919) 373-2374

L. Richard Nifong  
City of High Point  
Box 230  
High Point, NC 27261  
(919) 887-7800

Edward Rankin  
Durham Police Department  
314 North Mangum Street  
Durham, NC 27701  
(919) 683-4187

Max Bloodworth  
North Carolina Highway Patrol  
1300 Blue Ridge Road  
Raleigh, NC 27607  
(919) 733-7956

Don Mabe  
Forsyth County Fire  
Smith-Reynolds Airport  
Winston-Salem, NC 27105  
(919) 727-8083

Dyke Hostettler  
State Telecommunications Office  
3700 Wake Forest Road  
Raleigh, NC 27609  
(919) 981-5211

Marvin Heller  
Raleigh-Wake Co ECC  
2012 Eagleton Circle  
Raleigh, NC 27609  
(919) 876-9255

Carl C. Van Cott  
North Carolina Office of EMS  
701 Barbour Drive  
Raleigh, NC 27603-2008  
(919) 733-2285

Cliff Link  
City of Charlotte  
2400 The Plaza  
Charlotte, NC 28205  
(704) 336-2068

Billy Vass  
City of High Point  
211 South Hamilton Street  
High Point, NC 27260  
(919) 883-3286

John D. Jarvis  
Winston-Salem Police Dept.  
725 North Cherry Street  
Winston-Salem, NC 27102  
(919) 773-7866

Edward C. Howard  
C.T.A., Inc.  
P.O. Box 4579  
Lynchburg, VA 24502  
(804) 239-9200

Don Beuerle  
C.T.A., Inc.  
P. O. Box 4579  
Lynchburg, VA 24502  
(804) 239-9200

T. C. Lemonds  
Greensboro Fire Department  
1514 North Church Street  
Greensboro, NC 27405  
(919) 373-2177

R. E. Marine, Jr.  
Greensboro Police Dept.  
300 West Washington Street  
Greensboro, NC 27402

Larry L. Thomas  
Guilford County EMS  
P.O. Box 18807  
Greensboro, NC 27419

Donna L. Langley  
General Electric  
2105 Enterprise Road #100  
Greensboro, NC 27408  
(919) 379-0397

Danny Hickman  
Wilson County Communications Center  
P.O. Box 1728  
Wilson, NC 27893  
(919) 237-6600

Bill Fivek  
Motorola, Inc.  
7230 Parkway Drive  
Hanover, MD 21076  
(301) 796-6258

Larry Simmons  
Motorola, Inc.  
P. O. Box 9276  
Greensboro, NC 27429  
(919) 274-7354

Jeff Pegram  
Commonwealth of VA-EMS  
1538 East Parham Road  
Richmond, VA 23225  
(804) 371-3500

Harold Meacombs  
N C State Highway Patrol  
1300 Blue Ridge Road  
Raleigh, NC 27607  
(919) 733-7956

Max Hopper  
Motorola Communications  
4800 I-85 North  
Charlotte, NC 28206  
(704) 597-0950

John C. Trail  
City of Charlotte  
825 East 4th Street  
Charlotte, NC 28202  
(704) 336-3237

Marcia Simmons  
Charlotte Fire Department  
600 East 4th Street  
Charlotte, NC 28202  
(704) 336-3853

Lonnie J. Blake  
City of Charlotte Police Department  
825 East 4th Street  
Charlotte, NC 28202  
(704) 336-2373

Warren Eib, Jr.  
RAM Communications  
10201 Dorel Circle  
Richmond, VA 23236  
(804) 276-5402

Ernest Wall  
Guilford County Communications  
1002 Meadowood Street  
Greensboro, NC 27419  
(919) 333-6545

77 REFERENCED DOCUMENTS

- 77.1 Federal Communications Commission Report and Order GEN. Docket No. 87-112 Adopted: November 24, 1987; Released: December 18, 1987 with Erratum Released: January 6, 1988.
- 77.2 National Public Safety Planning Advisory Committee Final Report to the Federal Communications Commission, September 9, 1987.

# Emergency Communications Center

J. DANNY HICKMAN  
Director

Charlotte, Wilson

TELEPHONE  
(919) 237-8300

P. O. Box 172B  
115 East Nash Street, Courthouse Lower Level  
Wilson, N. C. 27893

8 April 1993

Federal Communications Commissions  
Secretary's Office  
2025 M Street  
Washington, DC 20554

Subject: Region 31 800 MHz Plan

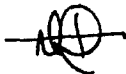
Gentlemen:

Enclosed you will find the finalized North Carolina Regional 31 800 MHz Plan.

We have provided a copy of the North Carolina Plan to each adjacent state for their review and comments. We have received no written feedback on the plan.

Should you have any questions, please feel free in contacting me at 919-237-8300 - press 2.

Sincerely yours,



J. Danny Hickman

CC: APCO Home Office  
Region 31 Advisory Board  
Mr. Frank Huggins - APCO Vice President  
Mr. Dyke Hostettler - NC APCO Coordinator  
Ms. Betty Woolfrod

L93-079

# Emergency Communications Center

## County of Wilson

J. DANNY HICKMAN  
Director

TELEPHONE  
(919) 237-8300

P. O. Box 1728  
115 East Nash Street, Courthouse Lower Level  
Wilson, N. C. 27893

19 March 1993

Mr. Jack Sharp  
State Police Communications  
1240 Airport Rd.  
Frankfort, KY 40601

Dear Mr. Sharp:

Attached you will find the Final Draft of the Region 31 800 MHz Plan for the North Carolina Region.

Please review this plan and replay if you do not concur no later than April 2, 1993. If we have not heard from you by April 2, we plan to proceed with the process of submitting the plan to the FCC.

Thank you for your time and effort in reviewing North Carolina's plan.

Sincerely,



J. Danny Hickman

Attachment

L93-066E

# Emergency Communications Center

J. DANNY HICKMAN  
Director

County of Wilson

TELEPHONE  
(919) 237-8300

P. O. Box 1728  
115 East Nash Street, Courthouse Lower Level  
Wilson, N. C. 27893

19 March 1993

Mr. Boykin Roseborough  
SC Telecommunications  
1026 Sumter St.  
Columbia, SC 29201

Dear Mr. Roseborough:

Attached you will find the Final Draft of the Region 31 800 MHz Plan for the North Carolina Region.

Please review this plan and reply if you do not concur no later than April 2, 1993. If we have not heard from you by April 2, we plan to proceed with the process of submitting the plan to the FCC.

Thank you for your time and effort in reviewing North Carolina's plan.

Sincerely,



J. Danny Hickman

Attachment

L93-066

# Emergency Communications Center

J. DANNY HICKMAN  
Director

County of Wilson

TELEPHONE  
(919) 237-8300

P. O. Box 1728  
115 East Nash Street, Courthouse Lower Level  
Wilson, N. C. 27893

19 March 1993

Mr. David Wolfe  
TN Emergency Management Agency  
3041 Sidco Dr.  
Nashville, TN 37024

Dear Mr. Wolfe:

Attached you will find the Final Draft of the Region 31 800 MHz Plan for the North Carolina Region.

Please review this plan and replay if you do not concur no later than April 2, 1993. If we have not heard from you by April 2, we plan to proceed with the process of submitting the plan to the FCC.

Thank you for your time and effort in reviewing North Carolina's plan.

Sincerely,



J. Danny Hickman

Attachment

L93-066A

# Emergency Communications Center

County of Wilson

J. DANNY HICKMAN  
Director

TELEPHONE  
(919) 237-8300

P. O. Box 1728  
110 East Nash Street, Courthouse Lower Level  
Wilson, N. C. 27893

19 March 1993

Mr. Richard Roley  
State of GA Administrative Services  
200 Piedmont Ave.  
Suite 1402W  
Atlanta, GA 30334-5540

Dear Mr. Roley:

Attached you will find the Final Draft of the Region 31 800 MHz Plan for the North Carolina Region.

Please review this plan and replay if you do not concur no later than April 2, 1993. If we have not heard from you by April 2, we plan to proceed with the process of submitting the plan to the FCC.

Thank you for your time and effort in reviewing North Carolina's plan.

Sincerely,



J. Danny Hickman

Attachment

L93-066B

# Emergency Communications Center

J. DANNY HICKMAN  
Director

County of Wilson

TELEPHONE  
(919) 237-8300

P. O. Box 1728  
115 East Nash Street, Courthouse Lower Level  
Wilson, N. C. 27893

19 March 1993

Captain Braxton  
12711 Old Chestnut Circle  
Midlothian, VA 23112

Dear Captain Braxton:

Attached you will find the Final Draft of the Region 31 800 MHz Plan for the North Carolina Region.

Please review this plan and replay if you do not concur no later than April 2, 1993. If we have not heard from you by April 2, we plan to proceed with the process of submitting the plan to the FCC.

Thank you for your time and effort in reviewing North Carolina's plan.

Sincerely,



J. Danny Hickman

Attachment

L93-066C

# Emergency Communications Center

J. DANNY HICKMAN  
Director

Clarksburg, West Virginia  
P. O. Box 1728  
115 East High Street, Courthouse Lower Level  
Clarksburg, W. Va. 26301

TELEPHONE  
(919) 237-8300

19 March 1993

Mr. Fred Smart  
Office of Emergency Management Services  
RT-3 Box 201  
Clarksburg, WV 26301

Dear Mr. Smart:

Attached you will find the Final Draft of the Region 31 800 MHz Plan for the North Carolina Region.

Please review this plan and reply if you do not concur no later than April 2, 1993. If we have not heard from you by April 2, we plan to proceed with the process of submitting the plan to the FCC.

Thank you for your time and effort in reviewing North Carolina's plan.

Sincerely,



J. Danny Hickman

Attachment

L93-066D