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PREFACE

In December, 1983, the United States Congress directed the Federal Communications Commission (FCC) to establish a plan to ensure that the communications needs of state and local public safety authorities would be met for the future. The Commission issued a Notice of Inquiry on March 7, 1984, and evaluated over three hundred comments from the public safety community and other interested parties.

These comments formed the basis for a Staff Report issued by the Commission's Private Radio Bureau on August 1, 1985. This report suggested various methods of meeting the communications needs of public safety. One option included was the allocation of additional frequencies at 821-825 MHz and 866-870 MHz.

The Commission issued an allocation order on September 19, 1986. Six megahertz of spectrum were selected in the 821-824 MHz and 866-869 MHz bands, since they were adjacent to frequencies already being used for public safety purposes. However, while the Commission made this allocation, it also stipulated that the frequencies could not be used until a National Plan for spectrum utilization was adopted.

The Commission then established the National Public Safety Planning Advisory Committee (NPSPAC) in December, 1986. This committee had open membership and all interested parties were invited to participate in its meetings. The Commission charged NPSPAC with the following tasks: (1) identify communications requirements of public safety agencies; (2) develop a scheme for efficient use of the new frequencies;

(3) develop a scheme to increase the utility of existing public safety frequencies; (4) recommend the manner in which new technologies can be applied to public safety frequencies; and (5) recommend guidelines to ensure compliance with the National Plan.

NPSPAC submitted its Initial Report to the Commission in March, 1987. On May 15, 1987, the Commission issued a Notice of Proposed Rule Making proposing policies and rules for the National Plan. NPSPAC then issued its Final Report in September, 1987. On December 18, 1987, the Commission released a Report and Order regarding the development and implementation of a Public Safety National Plan: General Docket N. 87-112.

In its introductory comments the Commission expresses its belief that "while certain technical concerns must be addressed at the national level, the great diversity of needs in different areas of the country demand that input also be obtained at the State and Local levels." Thus, the United States was divided into Regions, primarily along State boundaries.

The Indiana 800 MHz Planning Region is composed of eighty-two (82) of the ninety-two counties that make up the State of Indiana. Ten (10) northwest Indiana counties have been added to, and now make up part of, the forty-three county Southern Lake Michigan 800 MHz Planning Region, centered on the Chicago metropolitan region.

This document constitutes the Public Safety Communications Plan for Region No. 14: The Indiana Planning Region.

The following Indiana 800 MHz Regional Plan addresses the unique spectrum allocation requirements of the public safety and governmental authorities throughout the eighty-two (82) county Indiana Planning Region. It is respectfully submitted to the Commission this twenty-first day of November, 1989, under the umbrella of the National Plan.

Donald W. Kottlowski

Chairman

THE REGION

ESTABLISHMENT OF REGIONAL BOUNDARIES

For Public Safety Communication purposes, the Indiana Region (the Region) is the geographic area of the State of Indiana except the ten (10) Indiana counties within the Southern Lake Michigan Region. The Indiana Region is comprised of eighty-two counties within the State of Indiana. Its four million three hundred thousand people represent approximately 1.8 percent of the Nation's population.

Protecting the lives and property of these persons is a function of hundreds of Public Safety and Special Emergency agencies which are operated or regulated by a multitude of various political jurisdictions. Personal mobility and the proximity of communities in today's heavily urbanized areas demand cooperation and coordination among these agencies. Whether the activity is search and rescue on Indiana lakes, or the pursuit of a criminal offender along Indiana's Interstate Highways, mobile and portable radios provide the means for the myriad agencies involved to communicate with each other.

Radio communications also provide the means for each agency to accomplish its own individual, day-to-day operations. These communications must be reliable, and free from interference from neighboring agencies. Therefore, frequencies must be assigned to agencies throughout a given area in a manner that make inter-agency communication possible, but prevents inter-agency interference.

Other issues to be considered when determining what area should comprise a Planning Region are: the continuing urbanization of outlying counties; the sophistication of radio technology; and most importantly, the amount of radio spectrum available to public safety agencies throughout the area.

Final boundaries for the Indiana 800 MHz Planning Region were adopted by the F.C.C. on March 30, 1988, after a petition for reconsideration by NPSPAC for re-alignment of boundaries was filed.

The eighty-two (82) counties which comprise the Indiana 800 MHz Planning Region are listed in Table 1, and shown in Figure 1.

Figure 1

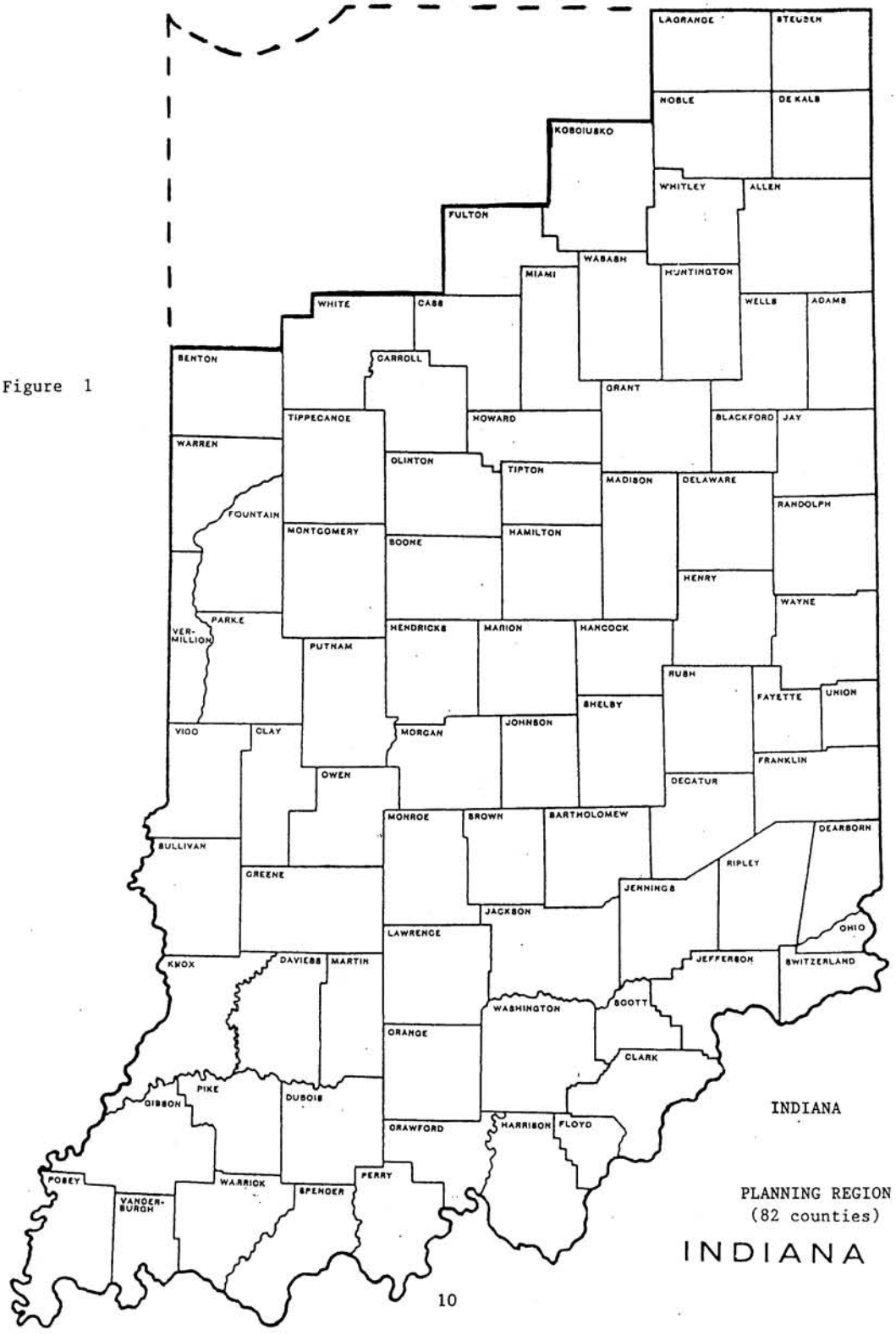

LAGRANGE
STEUBEN
NOBLE
DE KALB
KOSCIUSKO
WHITLEY
ALLEN
FULTON
WABASH
MIAMI
HUNTINGTON
WHITE
CASS
WELLS
ADAMS
BENTON
CARROLL
GRANT
TIPPECANOE
HOWARD
BLACKFORD
JAY
WARREN
CLINTON
TIPTON
MADISON
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILTON
HENRY
WAYNE
PARKE
VER-MILLION
HENDRICKS
MARION
HANCOCK
PUTNAM
RUSH
FAYETTE
UNION
SHELBY
VIGO
CLAY
MORGAN
JOHNSON
FRANKLIN
OWEN
DECATUR
MONROE
BROWN
BARTHOLOMEW
DEARBORN
BULLIVAN
RIPLEY
GREENE
JENNINGS
JACKSON
OHIO
LAWRENCE
KNOX
DAVIESS
MARTIN
JEFFERSON
SWITZERLAND
SCOTT
WASHINGTON
ORANGE
CLARK
PIKE
GIBSON
DUBOIS
INDIANA
CRAWFORD
HARRISON
FLOYD
POSEY
WARRICK
PERRY
SPENCER
VANDER-BURGH
PLANNING REGION
(82 counties)
INDIANA

TABLE 1 **INDIANA 800 MHz PLANNING REGION**

COUNTY POPULATION ESTIMATES

COUNTIES (82)	CURRENT[1]	1995[2]	2005[3]
ADAMS	30900	32170	34070
ALLEN	302000	300250	304850
BARTHOLOMEW	65000	66090	66780
BENTON	9800	10120	9860
BLACKFORD	14600	15020	14590
BOONE	38600	41350	43970
BROWN	13100	13190	13280
CARROLL	19300	18500	17720
CASS	40200	38800	37440
CLARK	89500	91850	93160
CLAY	24800	24170	23510
CLINTON	31400	30850	30600
CRAWFORD	10300	10290	10330
DAVIESS	28800	30490	31690
DEARBORN	37900	39700	41690
DECATUR	23900	23400	23270
DEKALB	34800	34440	35060
DELAWARE	120500	120620	122700
DUBOIS	36300	37760	39010
FAYETTE	27400	27660	27470
FLOYD	64000	65050	65870
FOUNTAIN	18400	18700	18210
FRANKLIN	20000	21490	22460
FULTON	18600	18270	17740
GIBSON	33200	33090	32580
GRANT	76600	75030	75230
GREENE	30700	29980	29400
HAMILTON	98100	108470	121170
HANCOCK	45000	46610	48050
HARRISON	28800	30810	32160
HENDRICKS	76100	80490	85340
HENRY	49600	45980	43130
HOWARD	84400	85520	85670
HUNTINGTON	35900	36240	36560
JACKSON	37300	38800	39740
JAY	21900	20560	19520
JEFFERSON	29400	29440	29760

[1] U.S. Census Bureau, Current Population Reports, 1987.
[2] Indiana State Board of Health, Indiana County Population Projections, 1985-2020 (1988).
[3] Ibid.

JENNINGS	23000	23390	23620
JOHNSON	86100	93150	101080
KNOX	40900	42000	42510
KOSCIUSKO	64200	65590	67780
LAGRANGE	28900	31310	34460
LAWRENCE	42900	42500	42220
MADISON	132800	130680	128120
MARION	790100	809500	821040
MARTIN	11300	10990	10880
MIAMI	38400	38220	39090
MONROE	103600	105620	108890
MONTGOMERY	35800	36690	37450
MORGAN	54300	62160	65300
NOBLE	38300	39470	41280
OHIO	5400	6080	6340
ORANGE	19100	19210	19270
OWEN	17400	17870	18320
PARKE	15900	15860	15530
PERRY	18800	18610	18160
PIKE	12900	12950	12300
POSEY	25800	27310	27740
PUTNAM	30300	30870	31320
RANDOLPH	27800	27820	27040
RIPLEY	25300	26180	27110
RUSH	18400	18720	18350
SCOTT	21100	21390	21840
SHELBY	40500	41260	42470
SPENCER	19900	21300	21840
STEUBEN	27400	27130	27650
SULLIVAN	20300	19770	19080
SWITZERLAND	7500	7440	7540
TIPPECANOE	124800	131280	135450
TIPTON	16500	15730	15130
UNION	6900	7050	7030
VANDERBURGH	166700	169170	168450
VERMILLION	17500	17490	17200
VIGO	107600	106880	106540
WABASH	35500	36410	37630
WARREN	8300	7870	7300
WARRICK	46300	52920	58150
WASHINGTON	23100	23750	24520
WAYNE	72300	69790	67400
WELLS	26100	24130	24480
WHITE	23600	22880	22410
WHITLEY	27600	28180	28990
TOTAL (82 counties)	4,314,300	4,395,820	4,469,940

PRELIMINARY ORGANIZATION

Monthly meetings for the planning process began in early 1988. Deliberations on administrative and technical questions began at that time, using the Regional Planning Tasks published by NPSPAC as a functional basis for organizing small work groups.

In March, 1988, Donald W. Kottlowski was designated by the Associated Public-Safety Communications Officers, Inc. (APCO) as Convenor for the Indiana Region. As Convenor, Mr. Kottlowski prepared and published an announcement of the first official meeting for persons interested in participating in the planning process.

NOTIFICATION OF ELIGIBLES

In General Docket No. 87-112, the FCC declared that since the Public Safety Radio Service and the Special Emergency Radio Service both play important roles in public safety, it is necessary to make both services eligible to operate in the 821-824/866-869 bands. While recognizing that it may not be possible to grant requests for assignments to everyone, the Commission did conclude that membership on regional planning committees must be open to representatives from all potential user groups.

In accordance with the Report & Order, the Indiana 800 MHz Regional Planning Committee took the below listed steps to ensure that its membership was open to as broad a range of eligible participants as possible. (Referenced materials are all contained in Appendix A).

1. On April 12, 1988, the Announcement of the Initial Meeting was mailed to individual public safety agencies as well as professional organizations/associations of all eligible user groups, the National Communication System, and the Federal Management Agency.

2. In May, 1988, the FCC issued a Public Notice announcing the initial meeting.

3. The Announcement was posted throughout the Region from April through June, 1988.

FORMATION OF THE PLANNING COMMITTEE

On June 28, 1988, the first official meeting of the Indiana 800 MHz Regional Planning Committee (the Committee) was held in Ransburg Auditorium, University of Indianapolis, Indianapolis, Indiana. Mr. Donald W. Kottlowski was elected Chairman of the Committee.

The Summary of Proceedings of this meeting (and of all meetings preceding and succeeding it) are available at the offices of the Chairman and the Secretary.

Appendix B contains the names, affiliations, mailing addresses and phone numbers of the officers of the Region. Appendix C contains this information for all persons who have participated in the Indiana 800 MHz Regional Planning Committee.

INDIANA REGION CONFORMANCE REVIEW COMMITTEE (IRCRC)

The Committee realizes that its work does not end with the submission of this Plan. Future modifications to the Plan may be required; applications for radio systems proposed within the Region will need to be reviewed for compatibility with the Plan; implementation of these systems will require monitoring; coordination with the National Plan will continue. Obviously, there must be a mechanism by which future tasks can be accomplished.

To provide this mechanism, the Committee of the Whole has established the Indiana Region Conformance Review Committee (IRCRC) (See Appendix D). This committee will be composed of one representative from each of eight (8) Frequency Planning Areas (areas 1-A, 1-B, and 2 thru 7); one representative from State Agencies; the Frequency Advisory Committee Chairman; and the IRCRC Chairman. Six (6) members plus the IRCRC Chairman must be present to constitute a quorum. Each of the ten (10) members shall vote on issues. The IRCRC Chairman, in the case of a tie vote, may cast a vote. The IRCRC will convene upon the Commission's approval of this Plan.

COORDINATION WITH ADJACENT REGIONS

There are five planning regions which are adjacent to the Indiana 800 MHz Planning Region. They consist of the planning regions of the four states bordering Indiana (namely, Illinois, Kentucky, Ohio, Michigan) and the Southern Lake Michigan Planning Region.

Coordinating the Indiana 800 MHz Regional Plan with the surrounding planning entities has gone forward. One reason for this is that the Chairman and several members of the Indiana Region Planning Committee began early working with Michigan and Illinois membership of the Southern Lake Michigan Regional Plan Committee, and are, in fact, members of that Committee. Contacts are also in place with the Ohio, Kentucky, Michigan, and Illinois Regional Plan Committees. Implementation of each of the six plans have been coordinated through the mutual membership and cooperation of all adjoining regional planning committees.

CONFORMITY WITH THE NATIONAL PLAN

It is the express intent of the Committee to conform with the requirements of the National Plan as defined in paragraphs 11 – 40 of General Docket No. 87-112. This Plan is submitted to the Commission subject to the review process described in the Report and Order.

REVIEW PRIOR TO SUBMISSION

As work progressed on the Regional Planning Tasks, the original small groups were organized into three Subcommittees: Administrative, Technical, and Operational. They codified their suggestions, and wrote draft proposals on individual topics. After reaching a consensus, the subcommittees then presented their proposals to the Committee of the Whole for review and comment.

Upon acceptance of its content by the Committee, each draft was then forwarded to the Administrative subcommittee for collation. The complete final draft was then presented to the Committee of the Whole for page by page review.

AUTHORITY

The Indiana 800 MHz Regional Planning Committee derives its authority to carry out the activities required for composition and implementation of this Plan from the Federal Communications Commission's Report and Order, General Docket No. 87-112 released on December 18, 1987.

NEEDS ANALYSIS

The Report & Order specifies that regional plans explain how the requirements of all eligible entities were considered. This section of the Plan describes how this specification has been met.

QUESTIONNAIRE DEVELOPMENT

It was agreed that the best means of identifying the radio spectrum needs of the Region as a whole was to survey the potential users individually. With regard to the survey instrument, it was decided to employ the instrument developed by the Southern Lake Michigan Planning Region for two reasons: a) Indiana representatives had participated in its development and review; b) employing the same instrument would provide a uniform database for the ten (10) Indiana counties in the Southern Lake Michigan Planning Region and the eighty-two (82) counties in the Indiana Region proper. This survey instrument is provided in Appendix E.

Distribution to potential eligibles began in October, 1988. Over 2,800 copies of the questionnaire were mailed to both individual pubic safety agencies and professional organizations/associations. Appendix F contains a listing of the professional organizations contacted. Through acquiring mailing lists and labels from departments of State Government and professional associations, 1900 of these questionnaires were mailed directly to individual public safety agencies: sheriff departments, municipal police and fire, town marshals, volunteer fire departments, and emergency medical services responders as well as state police, highway, parks and civil defense departments. County

highway and municipal public works, street, parks and emergency management departments also received the questionnaire by mail either directly from the Regional Planning Committee or from the State Department of Civil Defense. Additional questionnaires were distributed by Data Coordinators in the eight Frequency Planning Areas (FPA's) into which the State of Indiana has been divided. (Figure 2, Appendix G). The Data Coordinators also conducted follow-up activities to help make sure that serious potential users, large and small, would return the information requested.

The questionnaire was designed to elicit useful information detailing current as well as future radio frequency needs. The years 1995 and 2005 were used for future projections. Information was requested in four topical sections:

(I) "General Information" asked the respondents to provide agency identification information including the type of service supplied to the public.

(II) "Demographic Information" asked specific questions regarding the agency's service area.

(III) "Frequency Needs" asked questions regarding the agencies current use and future needs and plans for radio frequencies for voice and data transmissions.

(IV) "Equipment" asked the respondents to project their agency's inventory of several radio equipment items.

QUESTIONNAIRE RESULTS

Section I.

Six hundred and thirty-three (633) questionnaires were returned, compiled, and analyzed for the eighty-two county Indiana Plan Region. Computerized database and spreadsheet programs were utilized. The rate of return from the larger public safety organizations in the region was excellent. Sixty-seven (67) or 82% of sheriffs departments and fifty-nine (59) or 79% of the largest city police departments in the region completed and returned questionnaires. Useful levels of response were achieved from all types of agencies engaged in the protection of life and/or property: Law Enforcement, Fire Fighting; Emergency Management; Emergency Medical; state, county and local highway, parks and environmental management; other state and local entities. The average rate of return was 35.4%.

Section II.

Ten agencies reported service areas that encompass the entire State of Indiana. Four hundred and sixty (460) of the agencies reported service areas that are urban, or both urban and rural. Strong continuing suburbanization trends are noted surrounding the largest cities in the region. Two hundred and forty-one (241) volunteer fire departments, many from suburban and rural areas, responded to the survey, underscoring the significance and interest of volunteer fire organizations in the public safety, emergency response and communication picture in Indiana.

Section III.

Thirty-two percent (32%) of the agencies reported that their existing radio systems are not adequate for their needs today. This percentage increases to over sixty percent for the year 1995. Thirty percent (30%) reported that their field units have to wait “often” for access to a voice channel.

Thirty-one (31) or 53% of the fifty-nine largest city police departments in the Indiana Region indicated plans or interest in moving to 800 MHz frequencies. Thirty (30) or 45% of responding sheriffs departments indicated similar interest or need of 800 MHz frequencies.

There is a strong interest among the larger types of public safety entities in mobile data transmission by 1995 (38%). In those counties with high sheriff interest in 800 MHz frequencies, the number of interested smaller towns and town marshals tends to increase. In rural areas, volunteer fire department interest in 800 MHz tends to be lower (15%). In expanding suburban areas, thirty-four (34%) of volunteer fire departments indicate interest in 800 MHz frequencies, an interest approaching that of large urban fire departments (45%).

Based on the survey, the total number of new 800 MHz frequencies reported to be needed in the Indiana Plan Region in the 1990-1995 period is five hundred and thirty-three (533). In the existing 806-821/851-866 MHz band, at this time, nine (9) applications for fifty-seven (57) 800 MHz frequencies have been approved. Another seven (7) applications for

an additional forty-two (42) 800 MHz frequencies have been approved through the APCO Coordinator, or are pending.

Section IV

Based on the returns, the amount of radio equipment in Indiana Region #14 was projected. Mobile and portable radios constitute the most numerous part of this equipment, with approximately 43,100 units owned by public safety related users in 1989. Over 60,000 units are projected to be owned by these users in 2005. By that period, current projections indicate approximately 48,100 radios will be part of trunking 800 MHz systems in Region 14.

High growth rate categories include mobile data terminals and voice encrypted radios. These categories are projected to increase from approximately 425 (MDT) units now to 10,500 in 2005; and from 384 voice encrypted units now to 4,800 in 2005. The need to include future data transmission loads when planning spectrum allocations becomes apparent considering these factors.

It is apparent from the questionnaire results and 800 MHz application activity in 1989 that interest in 800 MHz frequencies and improved 800 MHz radio technologies and peripherals will continue to increase.

It is important, therefore, to indicate that the present Indiana Region 800 MHz Plan provides that all the spectrum needs of all the Public Safety and Special Emergency applicants in the Region have been addressed and satisfied at the time of the filing of this Plan.

This section of the Plan has attempted to highlight for the Commission the primary radio frequency interests and needs of Region 14's potential eligible users. More detailed profiles and survey results are contained in Appendix G. The total information base collected through the 800 MHz questionnaire has been of fundamental importance in the development of this Plan. This Indiana Region frequency database, now fully automated, will be useful in future planning and coordinating activities within the region.

APPLICATIONS

This section of the Plan describes the procedures for applying for a license to operate a radio system in the new 800 Megahertz frequency spectrum, as well as the process by which the application and the supportive documentation will be evaluated. Applications shall be submitted during specific periods of time known as "filing windows". Said filing windows will be designated by the Indiana Region Conformance Review Committee (IRCRC), be opened at least once annually, and be announced in advance. It is the intention of the IRCRC to announce the dates of the first filing window within thirty (30) days of the date of the Federal Communications Commission's approval of this Plan.

APPLICATION REVIEW

Applications to be licensed in the 821-824/866-869 Megahertz frequency bands will be subject to review by the Indiana Region Conformance Review Committee (IRCRC) at the closing of each filing window. This review will be conducted prior to formal submission of the application to the national Associated Public-Safety Communications Officers (APCO) coordination office. Applications may be rejected at the Regional level for non-conformance with this Plan. Also, any application received outside of the designated "filing window" will be returned to the applicant for re-submission during the next filing window.

APPLICATION PROCEDURES

Applications will be submitted to the Indiana Frequency Advisory Committee Chairman. The Frequency Advisory Committee Chairman will study the application packet for completeness, and ascertain the eligibility of the applicant organization. Incomplete or erroneous applications, or applications from entities which are not considered by this Plan to be eligible for the limited 800 Megahertz spectrum, will be returned to the submitting applicant with the appropriate remarks. Copies of complete and accurate applications received from eligible Public Safety entities will be forwarded to the Indiana Region Conformance Review Committee (IRCRC) for evaluation.

INFORMATION REQUIRED

The current standardized Associated Public-Safety Communications Officers (APCO) Frequency Coordination Forms and the Federal Communications Commission (FCC) License Applications will be used. In addition, the applicant will be required to furnish supplemental information in specific categories. These categories are enumerated and briefly defined below. Each category has been assigned a numerical weight for application evaluation purposes. Category weights are contained in Appendix H. Where further comments about a category are made elsewhere in this Plan, the appropriate page numbers(s) are also specified.

1. Service -- What tasks or duties are the agency/applicant charged with accomplishing.

2. System Type -- In narrative form, a description of the radio system being proposed (trunked, conventional, voice, data, voice/data combined, etc.).

3. Intersystem Interoperability -- How agents of the applying organization will communicate with agents of different agencies, organizations or public safety entities (See below, pp. 39-44).

4. Channel Loading Factors -- Equipment inventory total that will be employed in the system, and the maximum number of mobile radios potentially in use at a given time. (See below, pp. 33-34 and 37).

5. Coverage Area -- Details of an engineering survey showing the radio coverage required for minimum coverage of jurisdictional boundaries, prepared by a qualified technical resource. (Page 32).

6. Vacated Frequencies Returned -- Which frequencies the agency will release for potential re-assignment. (Pages 34-35).

7. Implementation Schedule -- An explanation of any budgetary commitment and a proposed time frame for putting equipment into service.

The Indiana Region Conformance Review Committee may request additional information at the time of review to assist in evaluation.

APPLICATION EVALUATION

The Indiana Region Conformance Review Committee (IRCRC) will review each application for its conformity to this Plan. Evaluations will be based upon the seven factors mentioned above. A final point total will be determined by adding the points earned in each category as listed in Appendix H. The IRCRC will base their recommendation for approval or rejection of the application upon the final point total.

Once an application has been reviewed it will be returned to the applicant for filing, additional information, modification, or other appropriate action.

ELIGIBILITY

Agencies applying for frequencies in the 806-809 and 851-854 Megahertz frequency bands will be prioritized according to the degree that the service(s) they provide is fundamental to the protection of life and property. Only Public Safety and Special Emergency Radio Service Agencies are eligible to apply for a license in the 806-809/851-854 Megahertz frequency bands.

APPEAL PROCESS

Throughout the frequency allocation process, applicants are given opportunities to appeal decisions which have caused rejection of their application. The appeal process has two (2) levels: the Associated Public Safety Communications Officers (APCO) and the Federal Communications Commission (FCC). An applicant who decides to appeal a rejection should initiate that appeal immediately upon notification of the rejection. In the

event that an appeal reaches the second level, the FCC, the Commission's decision will be final and binding upon all parties.

SPECTRUM UTILIZATION
FOR RADIO FREQUENCIES IN THE 806-809/851-854 MHz BANDS

This portion of the Plan provides a basis for proper spectrum utilization. Its purpose is to guide the committee in the task of planning and coordinating the allocation of 800 Megahertz frequencies within the Indiana region.

PRIMARY AND SECONDARY ZONES

The demand for frequencies varies depending on population of the area. Dense urban areas contain many individual public safety agencies, all making their own demands for frequencies. This problem is not as intense in more rural areas where the number of individual agencies is fewer. To differentiate between such areas of the Region, Primary and Secondary "zones" have been designated. A Primary zone contains jurisdictions which are severely impacted as a result of an excess demand for scarce spectrum. A Secondary zone contains jurisdictions which are impacted to a lesser degree. The requirement for system implementation in a Primary zone will be more restrictive than in a Secondary zone.

At this time the Primary zones are defined as the following Indiana counties: Marion, Allen, Vanderburgh, Clark, and Floyd. The remaining counties of the Region are all defined as Secondary zones.

TRUNKING

Applicants requesting licenses for five (5) or more channels will be required to trunk those channels. Exceptions to the rule will not be allowed unless an equally

spectrum efficient technology is proposed, or, the applicant can otherwise demonstrate that trunking will not meet the specific operational requirements of the agency.

Applicants requesting licenses for four (4) or less channels within the Secondary zone may be permitted conventional operation. In the Primary zone, conventional operations with four (4) or less channels will only be allowed when all efforts to share communication resources with other agencies are proven to be infeasible.

COVERAGE AREA

The desired coverage of a system is considered to be three (3) miles outside of the boundary of the applicant's service area. The maximum designed mean signal strength at this contour shall not exceed 40 dbu (+40 db above one microvolt per meter) measured with a receiving antenna mounted no less than five feet (5') above ground. Petitions to provide coverage exceeding these parameters will be examined on a case by case basis. Overlap or extended coverage must be minimized even where agencies are proposing to intermix systems for cooperative and/or mutual aid purposes.

ADJACENT CHANNEL ASSIGNMENTS

Adjacent channel assignments will be made when it is determined that the two or more systems will create a signal strength of +25 dbu or less, anywhere within their partners' boundary.

CO-CHANNEL ASSIGNMENTS

Co-channel assignments will be made when it is determined that the two or more systems will create a signal strength of +5 dbu or less, anywhere within their co-channel partners' boundary.

To achieve the most efficient use of the spectrum, distances between transmitters for co-channel reuse will not be held to a seventy (70) mile separation in this Plan. Separation of co-channel transmitters will be determined by the coverage needs of the applicant, natural barriers for separation, antenna patterning, and limited ERP's where possible.

CHANNEL LOADING CRITERIA

In this Plan, existing loading standards will be applied for Priority I level public safety agency's voice communications: minimum 70 mobiles per conventional channel, minimum 100 mobiles for trunked channel. (For Priority Levels, see Appendix H). For all data only systems and Priority level II (or lower) agency voice and/or data systems, the minimum loading criteria may be increased: 100 mobiles per conventional channel, and 150 mobiles per trunked channel. Petitions to deviate from these criteria will be considered by the Indiana Region Conformance Review Committee on an individual basis.

Agencies that support interoperability by permitting Federal use of their frequencies through S-160 (or equivalent) agreements, may augment their channel requirements by a maximum of 2% to account for the increased number of mobile units.

Written documentation detailing the expected number of Federal radios involved will be required at the time of application.

VACATED FREQUENCIES

It is anticipated that as public safety and special emergency radio service agencies implement 800 MHz radio systems, they will be able to vacate or relinquish the VHF and UHF frequencies on which they previously operated.

For each existing or applied for frequency to be relinquished, the application must include a date upon which relinquishment is planned. For each existing or applied for frequency proposed to be retained, include a detailed showing of justification as to why the frequency must be retained rather than relinquished for use by other organizations.

Mutual aid channels, intersystem channels, and other emergency channels, such as 155.370 MHz, 155.475 MHz, 155.025 MHz, 154.280 MHz, 155.340 MHz, emergency medical channels and others used by Public Safety and Special Emergency Radio Services as designated by Indiana State Government planning are exempt from this justification requirement.

The relinquished channels will be returned to their respective pools to be re-assigned by the FCC approved Frequency Coordinator, with recommendations by the Indiana Regional Conformance Review Committee, in order to provide the most beneficial use to public safety and special emergency service users.

INITIAL SPECTRUM ALLOCATION

The methodology used to determine the spectrum allocations at the time of filing this Plan is contained in FCC General Docket 87-112 and is presented in Appendix J. This methodology was employed by the CET, Inc. Frequency Sort program which supported the frequency allocations contained in Appendix K.

Channels labeled “Primary Pool” are unassigned channels that are available for use in limited areas of the Region. Secondary Pool channels may also be available where only one or two assignments per channel were made.

Channels labeled “Reserve” are blocked out primarily for Adjacent Region use except where they may be used within the Region and not harm Indiana State Government systems. Channels labeled “Indiana State Government” are primarily reserved for the Indiana State Government multi-agency statewide trunking systems for statewide use.

TECHNICAL DESIGN CONSIDERATIONS

This section of the Plan discusses topics which must be considered when engineering a new system.

CHANNELING PLAN

The 25 KHz offset channeling plan established by the National Plan will be required of all systems to be licensed in the 806-809/851-854 MHz bands.

INTEROPERABILITY WITH ADJACENT LOWER BANDS

There are several agencies in the Region currently operating on frequencies in the 806-815/851-860 MHz bands. While most of these agencies may continue operating in these frequencies for several years, many of them will be looking to expand their systems into the new spectrum. Any application submitted under the auspices of this Plan must demonstrate technical ability to provide communication between new and existing systems.

SYSTEM DESIGN

When designing a system, engineers will be required to minimize the distance between transmitter sites by using a combination of limited Effective Radiated Power (ERP), tower height, type of terrain, or any other factors which are technically feasible to minimize adjacent and co-channel interference. Information in this subject area, including methods of calculation, actual calculations, and a statement of the credentials of the technical resource person(s) who prepared the application, must be furnished with the application.

DATA TRANSMISSION

The use of radio frequencies for data transmission is an area of "growth" among agencies in the Region. As stated in the "Loading Criteria" section of this Plan, data only transmissions, whether for emergency or routine messages, may demand a higher loading standard.

CELLULAR RADIO TECHNOLOGY

Trunking technology is presently considered the most spectrum efficient use of radio transmissions for public safety. Cellular radio technology has so far proven useful only for telephone communications. However, it may, with future technological improvements, prove useful for public safety. Agencies are cautioned that any proposal of the use of cellular radio as an alternative to a trunked radio system must demonstrate that it can provide the same or greater degree of spectrum efficiency as trunking, and handle communications in an emergency situation.

MOBILE SATELLITE SERVICE (MSS)

During incidents of major proportions such as airline crashes, earthquakes, tornadoes, floods, forest fires or nuclear reactor calamities, public safety requirements might include the need for long-range communications in and out of a disaster area. The planned Mobile Satellite Service (MSS) may prove to be a viable alternative to land based systems in these situations, once technical innovations are developed which will provide uni-directed or corridor-driven communications over a lengthy distance. This service should be restricted to frequencies above 960 MHz, however, and licensing in the Public Safety spectrum shall be limited to public safety eligibles only.

AIRCRAFT TO GROUND COMMUNICATIONS

The use of any 800 MHz radio in an aircraft shall be restricted. Air to ground transmissions shall be limited to a maximum effective radiated power (ERP) of one (1) Watt.*

Since aircraft operation of trunked or conventional radios tends to disrupt adjoining systems because of height of the transmitting aircraft above ground level, aircraft use shall also be limited in height. No transmissions on limited area channels are allowed above 2,000 feet AGL, and no transmissions are allowed 3,000 feet AGL, even on wide area mutual aid channels.

Simplex (talk-around) operation of aircraft radios shall be utilized for on-scene communications. Co-channel and adjacent channel users are not required to provide protection to airborne users.

* Aircraft on the ground will be considered a mobile and can use additional power and the appropriate frequencies.

INTEROPERABILITY CONSIDERATIONS

This section of the Plan outlines the steps taken by the Committee to permit Federal, State and Local agencies to coordinate their activities during an emergency or disaster situation.

INTERSYSTEM INTEROPERABILITY

The intent of this Plan is to enhance interagency communication. Extensive mutual aid communication networks already exist throughout the Region. The National Plan has now set aside five (5) channels in the new spectrum for mutual aid. Agencies applying for licenses in the 806-809 and 851-854 MHz bands will be required to explain how they will implement the new Common Channels. They will also be required to explain how they will maintain intercommunication with their neighboring agencies who do not implement the Common Channels, but still are dependent upon the applying agency for assistance in an emergency.

COMMON CHANNELS

The Common Channels used in this Region comply with the National Plan, and consist of one (1) calling channel and four (4) tactical channels (Tac 1 through Tac 4). (See Table 2).

Communications on Common Channels use a two-tier structure: initial contact (calling), and working (tactical) channels. These channels are not to be used for daily operations, nor for inter-agency communications that do not involve an emergency

situation. The Common Channels shall cover the entire Regional area, with mobile relay stations normally operating in the “repeat disable” mode.

The Common Channels are restricted to required intercommunications among agencies that do not have access to other compatible communications channels. A “Primary Dispatch Center” will assign one or more tactical channels for the duration of a specific emergency or incident requiring multi-agency communications.

Because of the wide variance of voice codes among agencies (“ten” signals, alpha-numeric codes, etc.) agencies will use plain English on the Common Channels. The Primary Dispatch Center, with full support of the Regional Committee, will monitor radio traffic discipline, and resolve serious or chronic infractions.

TABLE 2 **INDIANA 800 MHz PLANNING REGION**

COMMON CHANNEL FREQUENCY DESIGNATIONS

USAGE	**FREQUENCY**	
Calling Channel	806.0125 MHz	(Mobile)
	851.0125 MHz	(Base)
Tactical Channel 1	806.5125 MHz	(Mobile)
	851.5125 MHz	(Base)
Tactical Channel 2	807.0125 MHz	(Mobile)
	852.0125 MHz	(Base)
Tactical Channel 3	807.5125 MHz	(Mobile)
	852.5125 MHz	(Base)
Tactical Channel 4	808.0125 MHz	(Mobile)
	853.0125 MHz	(Base)

PRIMARY DISPATCH CENTER

The State of Indiana will be responsible for the implementation and operation of the National Calling Channel, Tactical Channels, and Primary Dispatch Centers in the eighty-two (82) county Indiana 800 MHz Planning Region. Indiana State Government will ensure that interoperable tactical channel mobile relays exist in specific areas of the

Region. The mobile relay stations will provide the required number of working channels within the Region necessary to assure interoperable communications between Federal, State and Local Government agencies involved in an emergency. Other services shall participate as required, to ensure the public safety.

Agencies involved in an incident will be subject to the Regional rules on inter-agency communications. Radio transmissions will be made in accordance with the directions of the Primary Dispatch Center or controlling agency.

CALLING CHANNEL

Calling Channel base stations will be configured as mobile relays, strategically located to assure complete regional coverage, and connected by a suitable network to Primary Dispatch Centers. Mobile "talk around" is permitted on the Calling Channel to establish initial contact between agencies, for the purpose of determining which Tactical Channel(s) to use for the duration of an incident.

Depending on geographical size and population density, several networks may be necessary to cover the outer areas of the Region. Primary Dispatch Centers, and agencies operating base/control stations in the area shall monitor the Calling channel to provide assistance and/or assign a Tactical Channel to requesting field units.

The Calling Channel shall be used only to make initial contact with other agencies in the Region, or with the Primary Dispatch Center in that section of the Region. After contact is established, a tactical or other mutual aid channel shall be expeditiously agreed

upon, or be assigned by the Primary Dispatch Center. The Calling channel shall not be used as a working channel for continued communications. It shall be vacated as soon as possible, to free it up for the next initial contact.

TACTICAL CHANNELS (TAC 1 THROUGH TAC 4)

Tactical Channels are reserved for agencies involved in multi-agency communications during emergencies or other occurrences requiring interoperable communications. Tactical Channels, like the Calling Channel, will be strategically located to provide maximum coverage throughout the Region. Design criteria will limit Tac Channel coverage to permit multiple re-use of the channels within the Region as required, in coordination with adjacent regions to prevent or minimize interference.

Tac Channel coverage design shall ensure that at least one channel is available for each section for the Region. Multi-agency communications events will be coordinated by the Primary Dispatch Center, or assigned to the controlling agency. The coordinating agency shall relinquish control of the channels when the incident is cleared.

CROSS SYSTEM PATCHES

Cross system patches to existing day-to-day systems, other mutual aid channels, or long-range communications systems must be manually controlled. Automatic patches are not permitted. Cross system patches are normally handled by the Primary Dispatch Center in the section of the Region involved.

IMPLEMENTATION

IMPLEMENTATION SCHEDULES

The majority of eligible public safety organizations are either of State and Local Government, or else are subject to governmental regulations. The nature of governmental planning and budgeting processes, combined with difficult revenue constraints, prohibits most eligibles from implementing newer technology systems in the normal time required by FCC Rules (8 months for construction of conventional stations, 12 months for trunked stations).* In most cases, public safety systems will require multi-year phased-implementation schedules requiring three to five times as long to construct as private or commercial systems. Regional, wide-area, and statewide systems will require even longer periods to construct.

In view of these known situations, this Region Plan establishes an extended implementation schedule ("slow growth") in accordance with FCC Rules** which is available to all eligible applicants, if requested by stating "SLOW GROWTH" on the license application.

* See FCC Rules and Regulations, § 90.155 (a) and § 90.631 (c).

** See FCC Rules and Regulations, § 90.629, and § 90.631 or § 90.633.

APPENDIX

A

Associated Public-Safety Communications Officers, Inc.

INDIANA CHAPTER

ANNOUNCEMENT OF THE INITIAL

REGIONAL PUBLIC SAFETY PLANNING MEETING FOR

THE INDIANA REGION*

The purpose of this Public Notice is to announce the initial meeting of the Indiana Region Public Safety Planning Committee.

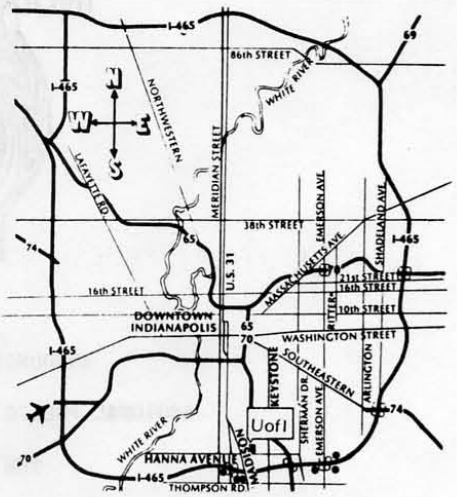
DATE/TIME:	June 28, 1988 10:00 A.M. EST	CONVENOR:	Donald W. Kottlowski Indiana State Police Communications Division 100 North Senate Avenue Indianapolis, IN 46204 (317) 232-8257 or (317) 899-8257 After 5-1-88
LOCATION:	Ransburg Auditorium University of Indianapolis 1400 East Hanna Avenue Indianapolis, IN 46227		

In the Federal Communications Commission's National Plan for Public Safety, Report and Order, Gen. Docket 87-112, 53 Fed. Reg. 1022 (January 15, 1988), the State of Indiana was declared a Planning Region.

All parties located in the Indiana Region* and interested in participating in the public safety planning process are encouraged to contact the convenor listed above for further information. Public Safety and Special Emergency entities who are now using or planning to use 800 MHz radio spectrum should participate in this regional planning. Participants include Local Government, Police, Fire, Highway, Forestry, EMS, School Buses, Veterinarians, and others who qualify for Public Safety and Special Emergency Radio Services.

* The Indiana Region does not include the Indiana Counties in the Chicago Region - Lake, Porter, LaPorte, Newton, Jasper, Pulaski, Starke, Marshall, St. Joseph, and Elkhart.

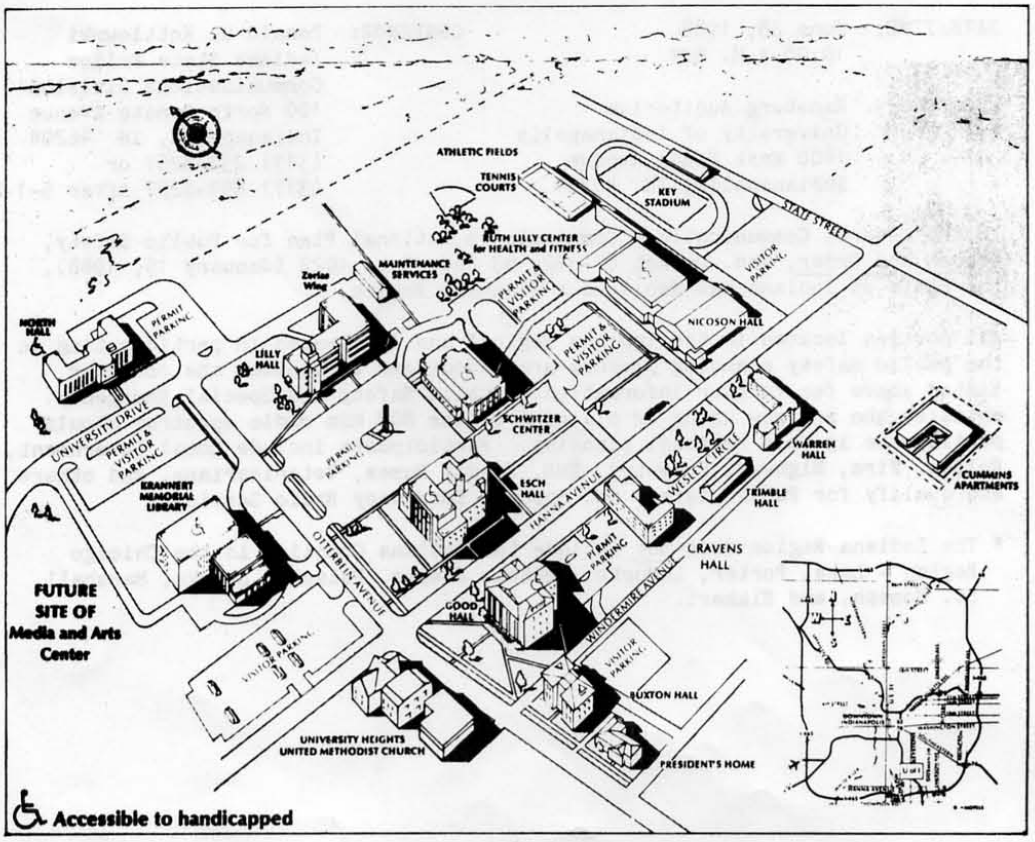
University of Indianapolis



Our campus is easy to reach. Located on Indianapolis' far south side, U of I is just inside the I-465 interstate loop on Hanna Avenue. The campus may be reached by taking the U.S. 31 North exit from I-465 or the Keystone Avenue exit from I-65 (just north of I-465). Indianapolis International Airport is only 15 minutes away.

Parking will be permitted in any of the Visitor or Permit lots.

Ransburg Auditorium is located in Esch Hall.



APPENDIX

B

INDIANA 800 MHz REGIONAL PLANNING OFFICIALS

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Secretary

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APPENDIX

C

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APPENDIX

D

FORMATION OF THE IRCRC

INDIANA 800 MHz REGIONAL PLANNING
MEETING MINUTES
May 31, 1989

The meeting was called to order at 10:02 a.m., with self-introductions.

The minutes of the April 27, 1989, meeting were approved.

Chairman Donald W. Kottlowski reviewed the nationwide planning progress. The New York Metro Area Regional Plan was approved by the FCC on May 10, 1989. The New York Plan was written from the standpoint that all frequencies would be specifically assigned and used up within a short period of time. Our Indiana Plan will have to be written, from the standpoint, that there will be spectrum still available and general assignments would be made. The Northeast-Central Texas plan and Southern Lake Michigan plans will be watched very closely for planning concepts. The SLM Plan is on hold while the Frequency Sort is being done. CET (APCO's computer system) has the information and should be ready to run. The SLM did take the 10 Northwest Indiana Counties into consideration with 5 to 10 pairs to each county. Only after the sort will we know actually how many actually will work out.

The Administrative Sub-Committee Chairman, Marvin Steward (MECA), noted the plan draft update pages prepared by Dr. Howard Phillips (ISP-Planning Division). Dr. Phillips, who was called out of the meeting, gave the updated pages to Chairman Kottlowski who later went over the draft (#4) changes with the group. New updates will be handed out at the next meeting since page numbers have changed, making it hard to insert page numbers.

No reports from the Technical Sub-Committee Chairman Roger Shoemake (IPD), or the Operations Sub-Committee Chairman Tom DeBaun (Shelby County Sheriff).

Formation of the Indiana Regional Conformance Review Committee (IRCRC) was introduced by Chairman Kottlowski. Diagrams were passed out, which were prepared by the Administrative Committee, defining 8 planning areas of the State by geo-political boundaries. Area 8 is the 10 Indiana Counties assigned to the SLM Planning Region. Planning Area 1 is divided into sub-areas (1A and 1B) with Lafayette as 1A and Indianapolis as 1B. Areas 2 through 7 cover the rest of the State . Chairman Kottlowski suggested that one representative from each of the 7 Planning Areas (one additional for the Indianapolis sub-area), 1 from State Agencies, the Frequency Advisory Committee Chairman, and the eleventh would be the Regional Planning Chairman. Five members would have to be present to constitute a quorum. Each of the 10 members would vote on issues. The Regional Planning Chairman would be the tie-breaker vote.

Discussion followed on the issue of boundaries. Attempts were made by the Administrative Sub-Committee to answer the questions in the absence of Dr. Phillips, who had the real answers.

Roger Shoemake made the motion to accept the Frequency Planning Area concept of utilizing a representative from each of the seven planning areas with one additional from the Indianapolis area, a representative of State Government Agencies, the Frequency Advisory Chairman, and the Regional Planning Committee Chairman to form the eleven member Indiana Regional Conformance Review Committee. A quorum would consist of five members plus the Regional Planning Committee Chairman. The Regional Planning Chairman would be the tie-breaker vote.

Richard Finch (IDNR) seconded the motion.

With no discussion to follow, a vote was taken. The motion carried 14 to 0.

Chairman Kottlowski suggested that although one vote from each represented area was permitted, we should try to get three representatives, one from each different services such as police, fire, and EMS from each area. The Administrative Sub-Committee will assist in making recommendations to the IRCRC.

Chairman Kottlowski reviewed the page inserts to the last plan draft (#3) to form the newer draft (#4). Dr. Phillips was not present to make comments on the draft changes. Due to page number changes, it was suggested that a full copy of the draft be passed out at the next meeting.

After discussion, it was decided to leave the proposed Appendix L, dealing with technical computation of the 40 dbu criteria, out of the plan. This was done in the SLM draft also.

THE NEXT MEETING WILL BE HELD ON THURSDAY, JUNE 29, 1989, AT 10:00 A.M. EST AT THE NEW PENDLETON STATE POLICE POST. THE NEW POST IS LOCATED AT 9022 SOUTH SR 67, APPROXIMATELY 1¼ MILES SOUTH OF SR 9. FROM I-69, SR 38 OR SR 9 EXITS CAN BE USED.

The meeting adjourned at 11:43 a.m. EST.

APPENDIX

E

INDIANA 800 MHz REGIONAL PLANNING COMMITTEE

Donald W. Kottlowski
Chairman, Indiana 800 MHz Regional
Planning Committee
c/o Indiana State Police, Planning Division
100 North Senate Avenue
Indianapolis, IN 46204

Dear Sir:

The Federal Communications Commission is making new portions of the radio spectrum available to Public Safety and Special Emergency Radio services.

However, before the FCC will grant licenses in this new spectrum (821-824 & 866-869 MHz), a "Regional Plan" showing a coordinated approach to spectrum allocation among the various eligible users must be submitted.

Regardless of your agency's interest in acquiring the new 800 MHz radio systems and frequency use, your input on the enclosed questionnaire and its return to the above address is critical. What is at stake is the future availability of valuable radio frequencies, on all bands, used by all public safety, emergency and related agencies in Indiana, including your own.

You may be receiving another copy of the enclosed questionnaire from your state fire, police or similar professional association. Your completed questionnaire may be returned to your state association or to me at the above address, whichever you wish.

We welcome your agency's participation in the region planning process. Feel free to contact me at (317) 899-8257.

The questionnaire should be completed and returned to the above address no later than December 21, 1988.

Thank you,

Donald W. Kottlowski

Encl.

SEE REVERSE SIDE FOR INSTRUCTIONS

INDIANA 800 MHz REGIONAL PLANNING PROJECT

Sponsor: Federal Communications Commission

Radio Frequency User Questionnaire

INSTRUCTIONS:

Most items only require a choice or choices to be checked, and can be completed quickly.

For longer answers, please PRINT or type the information asked for.

IT IS MORE HELPFUL TO YOUR FUTURE NEEDS TO COMPLETE AS MANY QUESTIONS AS YOU CAN (AND REPORT THOSE) THAN NOT TO RESPOND AT ALL.

Any additional comments may be attached to the end of this survey.

Should you have any questions, call Donald Kottlowski (317) 899-8257 or Howard Phillips (317) 232-5906.

Remember, in order to have your future radio frequency and usage needs addressed and protected in the eventual FCC-approved Regional Plan, you must return this questionnaire by December 21, 1988, to:

INDIANA 800 MHz REGIONAL PLANNING COMMITTEE
Donald W. Kottlowski, Chairman
c/o Indiana State Police, Planning Division
100 North Senate Avenue
Indianapolis, IN 46204

Radio Frequency Use Plan Questionnaire

The Federal Communications Commission has mandated the Indiana 800 MHz Planning Committee (IMPC) to develop a radio frequency use plan for the Public Safety Radio Spectrum, including 800 MHz ranges, and existing frequencies of public service agencies related to public safety or emergency response.

Please complete this planning questionnaire and return to the address listed by May 8, 1989.

RETURN TO:
Donald W. Kottlowski, Chairman, IMPC
c/o Indiana State Police, Planning Division
100 North Senate Avenue
Indianapolis, IN 46204
(317) 899-8257

SECTION I
GENERAL INFORMATION

1. Name of Agency: _____
2. Address: _____
3. Phone Number: _____
4. Contact Person: _____
5. Title: _____
6. Name of Person Completing Questionnaire: _____
7. Type of Organization:
   (A) [ ] Governmental (B) [ ] Private
8. Type(s) of Service: (Check all that apply)
   (A) [ ] Law Enforcement (G) [ ] Fire Fighting
   (B) [ ] Emergency Medical (H) [ ] Highway Maintenance
   (C) [ ] Forestry/Conservation (I) [ ] Civil Defense
   (D) [ ] Beach Patrol (J) [ ] Disaster Relief
   (E) [ ] Handicapped Assistance (K) [ ] School Bus
   (F) [ ] Other (please specify): (L) [ ] Veterinarian
9. Does your agency utilize a multi-agency dispatch service?
   (A) [ ] Yes (B) [ ] No
10. If your answer to question 9 was "yes", please list the name and address of the dispatch center: _____

SECTION II
DEMOGRAPHIC INFORMATION

1. Please check the state(s) in which you operate:
   (A) [ ] WI (B) [ ] IL (C) [ ] IN (D) [ ] MI
2. Do you service the entire state?
   (A) [ ] Yes (B) [ ] No
   If yes, go to question #8.
3. Does your service area encompass...
   (A) [ ] One County (B) [ ] Multiple Counties
4. Please list the county name(s): _____
5. Does your service area encompass...
   (A) [ ] One City/Town (B) [ ] Multiple Cities/Towns
6. Please list the city/town name(s): _____
7. Is your service area:
   (A) [ ] Urban (B) [ ] Rural (C) [ ] Both
8. What is the size of your service area?
   _____ Square Miles
9. What is the current population or your service area? _____
10. What is the population projected to be in the years...
    1995: _____ 2005: _____

SECTION III
FREQUENCY NEEDS

1. Is your present radio system adequate to meet your current needs?
   (A) [ ] Yes (B) [ ] No
   Your 1995:Needs?
   (A) [ ] Yes (B) [ ] No
   Your 2005 Needs?
   (A) [ ] Yes (B) [ ] No
2. Do you have plans to alter your radio system in the future?
   (A) [ ] Yes (B) [ ] No
3. If you do, please give a brief description of your plans: _____
4. Have you had to use any alternate methods of dispatch because of an inability to acquire sufficient radio spectrum for either financial reasons or spectrum unavailability?
   (A) [ ] Yes (B) [ ] No
5. If yes, please explain: _____
6. Have you had to borrow, share or lease radio frequencies from other agencies in order to maintain your dispatch operation?
   (A) [ ] Yes (B) [ ] No
7. If yes, please explain: _____
8. How often does your agency encounter "wait time" to access a radio channel for voice transmissions from the field?
   (A) [ ] Never (B) [ ] Seldom Less than once a week (C) [ ] Sometimes More than once a week (D) [ ] Often More than once a shift

agency make per hour?

_____

10. How many voice transmissions might occur during your busiest hour?

_____

11. What is the average length of air time used per voice transmission?

_____

12. Do you have any plans to expand your use of radio frequencies for Data transmissions?
(A) [ ] Yes (B) [ ] No

13. Do you have any plans to use voice encryption technology to provide private and secure radio transmissions?
(A) [ ] Yes (B) [ ] No

14. Do you have any plans to incorporate "telephone interconnects" with your mobile or portable radios?
(A) [ ] Yes (B) [ ] No

15. If you answered "yes" to question 14, please indicate the approximate number:

Mobiles _____ Portables _____

16. List the frequencies (channels) for which you now hold a valid FCC license: (List 800 MHz frequencies in #17)

_____ _____ _____ _____

_____ _____ _____ _____

17. Are you presently licensed on existing 800 MHz channels? If yes, list them:

_____ _____ _____ _____

_____ _____ _____ _____

18. If you do not hold a license for 800 MHz channels, do you have an application pending?

(A) [ ] Yes (B) [ ] No

19. Do you have a formal plan on file to construct a 800 MHz system?
(A) [ ] Yes (copy enclosed) (B) [ ] Plan incomplete. A copy will be forwarded by _____ (date) (C) [ ] No

20. Do you have the funding available to proceed with implementing the system?
(A) [ ] Yes (B) [ ] No (see next question)

21. If no, when do you anticipate funding will be available?
(A) [ ] 12 Months (B) [ ] 24 Months (C) [ ] 36 Months
(D) [ ] 48 Months (E) [ ] 60 Months or more

22. How many additional 800 MHz radio frequencies do you expect your agency will need . . . (If none, please indicate zero)

_____ Now _____ In 1995 _____ In 2005

23. If you acquire radio frequencies in the newly allocated spectrum, what frequencies that you now have would you no longer have use for? Be specific:

Frequency	Frequency	Frequency

24. What existing frequencies would you attempt to retain? Be specific.

Frequency	Projected Use

25. If you are awarded the additional frequencies you need in the 800 MHz spectrum, unless you are a current 800 MHz system user, you will have to purchase a new communications system. If you could obtain additional channels in the spectrum you currently use, it may be possible that a significant part of your current system could continue to be used. Given the option, which choice would you prefer?
(Select one):
(A) [ ] Additional channels in the 800 MHz spectrum
(B) [ ] Additional channels in my current spectrum [ ]

26. If you selected "current spectrum," indicate the spectrum you are now using.
(A) [ ] 30-40 MHz (B) [ ] 40-50 MHz
(C) [ ] 150-160 MHz (D) [ ] UHF

27. Please list any other agencies/organizations with whom you would need radio communications in the event of a disaster or large scale emergency:

_____

_____

SECTION IV
EQUIPMENT

1. For the following, please indiciate the total number that your agency owns or operates now, and project for the years listed.

	Now	1995	2005
Mobile Radios			
*Voice Encryption Mobiles			
Portable (Handheld) Radios			
**Voice Encryption Portables			
Mobile Computer Terminals			
Automatic Vehicle Locators			
Radio Control Links			
Radio Alarm/Control Systems			
Vehicular Repeaters			
Transmitters/Repeaters (Base Station)			

2. For the following, please indicate the maximum number in use at any given time; at present, and project for the years listed.

	Now	1995	2005
Mobile Radios			
*Voice Encryption Mobiles			
Portable (Handheld) Radios			
**Voice Encryption Portables			
Mobile Computer Terminals			
Automatic Vehicle Locators			
Radio Control Links			
Radio Alarm/Control Systems			
Vehicular Repeaters			
Transmitters/Repeaters (Base Station)			

*The sum of mobiles and voice encryption mobiles should equal the total number of mobiles in your system.
**Use same methodology noted above for mobiles.

APPENDIX

F

APPENDIX F

Professional Organizations/Associations Contacted

Indiana Sheriffs Association
1398 N. Shadeland Avenue
Indianapolis, IN 46219

Indiana Association of Chiefs of Police
509 E. National Avenue
Indianapolis, IN 46227

Indiana Department of Fire and Building Services
Office of the State Fire Marshal
1099 N. Meridian Street, Suite 900
Indianapolis, IN 46204

Indiana Fire Chiefs Association
1430 N. Lynhurst Avenue
Speedway, IN 46224

Indiana Volunteer Fireman's Association
403 West Jackson Street
Rensselaer IN 47978

Indiana Association of Cities and Towns
150 W. Market Street, Suite 600
Indianapolis, IN 46204

Indiana Association of County Commissioners, Inc.
36 S. Senate Avenue
Indianapolis, IN 46204

Indiana Association of Counties, Inc.
120 Monument Circle, Suite 217
Indianapolis, IN 46204

Indiana State Emergency Medical Services Commission
100 N. Senate Avenue
Indianapolis, IN 46204

Indiana Department of Natural Resources
100 N. Senate Avenue
Indianapolis, IN 46204

Indiana Department of Highways
100 N. Senate Avenue
Indianapolis, IN 46204

Indiana Department of Civil Defense
100 N. Senate Avenue
Indianapolis, IN 46204

Indiana Department of Education, School Traffic Safety
251 East Ohio Street
Indianapolis, IN 46204

Indiana Veterinary Medical Association
4901 Seville Court
Indianapolis, IN 46208

Associated Public Safety Communications Officers, Inc.
Indiana Chapter
c/o Carmel Police Department
31 1st Avenue N.W.
Carmel, IN 46032-1715

APPENDIX

G

APPENDIX G

RADIO USER QUESTIONNAIRE RESULTS

Documenting the needs and plans of Indiana public safety and emergency services agencies with regard to 800 MHz frequencies and trunking systems began with a four step process:

1. Establish and outline the total statistical frame (or statistical universe) establishing the total number of all eligible agencies in the Region, by type of agency and by geographical location.

2. Review the returned questionnaires for completeness and determine the quality of the total returns as a fair, representative sample of the region as a whole as well as each geographical sub-area.

3. Complete reliable projections of 800 MHz systems and frequency requirements for the years 1990, 1995, and 2005.

4. Organize, format, compile, store and report actual survey data as well as projected data in such manner that they effectively support frequency planning and application review in the Region.

QUESTIONNAIRE RESULTS

For the Indiana Region, the following charts outline the total eligible public safety/emergency services users of 806-824/851-869 MHz frequencies (termed **Total Eligible**) in 1989.

The charts also report the total number of agencies returning Questionnaires (termed **Total Returns**) and the total number of agencies indicating active interest in trunking 800 MHz (termed **Interested Respondents**).

The charts additionally display the number of user agencies which are **projected** to apply for 800 MHz frequencies by December, 1990. The number of agencies expected to be using and/or applying for 800 MHz frequencies by December, 1995, and by December, 2005, have also been forecast. These agencies are termed **Projected Users**. The charts include the numbers of mobile and portable radio units projected for each period, for purposes of loading and channel needs determination.

The above users are arranged by type and size of agency, and by geographical sub-area (termed Frequency Planning Area, or FPA's.) Figure 2, below, outlines the individual frequency planning areas which make up the Indiana Plan Region. (Ten of Indiana's counties in the northwest corner of the state are part of the Southern Lake Michigan Plan Region.)

The following "800 MHz Use Projection" Charts begin with the grand total for the 82-county Indiana 800 MHz Plan Region.

Charts profiling user interest and needs in each of the Region's eight Frequency Planning Areas (FPA's) follow.

Similar charts have been prepared for each county in the Plan Region and are available on request.

INDIANA 800 MHZ PLANNING REGION
(82 OF INDIANA'S 92 COUNTIES)

800 MHz USE PROJECTION, PUBLIC SAFETY AND RELATED AGENCIES, INDIANA REGION, 1990-2005

TYPE OF AGENCY	TOTAL # OF ELIGIBLE AGENCIES	EST. # OF RADIOS ELIGIBLE AGENCIES MOBILES	EST. # OF RADIOS ELIGIBLE AGENCIES PORTABLES	TOTAL # OF RETURNS (AGENCIES)	# OF RADIOS FROM RETURNS MOBILES	# OF RADIOS FROM RETURNS PORTABLES	TOTAL # INTERESTED RESPONDANTS	# OF RADIOS MOBILES	# OF RADIOS PORTABLES	1990 # PROJECTED USERS	1990 # MOBILES	1990 # PORTABLES	1995 # PROJECTED USERS	1995 # MOBILES	1995 # PORTABLES	2005 # OF PROJECTED USERS	2005 # MOBILES	2005 # PORTABLES
1. SHERIFFS	82	2,019	2,069	67	1,757	1,797	30	1,013	1,050	37	1,121	1,217	80	2,557	2,940	80	2,629	3,016
2. POLICE/LCPD *	75	2,158	4,019	59	1,916	3,766	31	1,119	2,685	33	1,134	2,705	70	2,537	5,061	70	2,582	5,149
3. MARSHALLS/SCPD **	306	954	1,360	88	304	535	38	136	274	88	280	452	253	881	1,245	281	998	1,403
4. CITY FIRE	75	1,336	1,353	33	629	660	16	432	442	26	607	621	67	1,386	1,423	67	1,417	1,452
5. VOL. FIRE	707	4,773	4,302	241	1,907	1,617	68	591	509	76	745	588	437	3,287	3,044	480	3,514	3,304
6. CIVIL DEFENSE	82	1,599	1,603	18	415	285	4	170	82	13	278	240	77	1,534	1,521	82	1,698	1,673
SUB-TOTAL	1,327	12,839	14,706	506	6,928	8,660	187	3,461	5,042	273	4,165	5,823	984	12,182	15,234	1,060	12,838	15,997
7. EMS	187	1,018	1,100	50	513	552	13	97	142	19	121	164	152	840	972	155	855	991
8. COUNTY HIGHWAY	82	2,425	288	40	1,513	75	2	480	2	4	490	5	77	2,574	412	77	2,625	422
9. CITY STREET DEPTS.	75	1,098	226	12	234	44	0	0	0	3	59	10	72	1,064	233	72	1,086	238
10. CITY PARK	75	731	197	9	267	57	1	9	2	4	41	26	72	733	212	72	745	215
11. CITY OTHER	31	399	286	3	260	165	0	0	0	3	37	12	29	395	282	29	403	286
SUB-TOTAL	450	5,671	2,097	114	2,787	893	16	586	146	33	748	217	402	5,606	2,111	405	5,714	2,152
12. STATE POLICE	1	1,560	1,027	1	1,560	1,027	1	1,560	1,027	1	1,560	1,027	1	1,730	1,135	1	2,109	1,293
13. STATE HIGHWAYS	1	1,773	100	1	1,773	100	1	1,773	100	1	1,773	100	1	2,334	402	1	3,052	529
14. STATE DNR	1	1,132	806	1	1,132	806	1	1,132	806	1	1,132	806	1	1,238	945	1	1,371	1,083
15. CORRECTIONS DF	1	201	773	1	201	773	1	201	773	1	204	774	1	253	882	1	303	1,008
16. OTHER STATE AGENCIES	6	146	131	6	146	131	6	146	131	6	167	151	6	196	168	6	267	222
SUB-TOTAL	10	4,812	2,837	10	4,812	2,837	10	4,812	2,837	10	4,836	2,858	10	5,751	3,532	10	7,102	4,135
17. ALL OTHER[1] (Incl. Federal)	3	90	39	3	90	39	2	76	30	2	76	30	2	85	39	2	90	44
GRAND TOTAL	1,790	23,412	19,679	633	14,617	12,429	215	8,935	8,055	318	9,825	8,928	1,398	23,624	20,916	1,477	25,744	22,328

* LCPD = Larger city/town police departments; pop. > 5,000.

** SCPD = Smaller city/town police departments; pop. < 5,000.

FREQUENCY PLANNING AREA (FPA) 1 - A
LAFAYETTE AREA (8 COUNTIES)

800 MHz USE PROJECTION, PUBLIC SAFETY AND RELATED AGENCIES, INDIANA REGION, 1990-2005

TYPE OF AGENCY	TOTAL # OF ELIGIBLE AGENCIES	EST. # OF RADIOS ELIGIBLE AGENCIES		TOTAL # OF RETURNS (AGENCIES)	# OF RADIOS FROM RETURNS		TOTAL # INTERESTED RESPONDANTS	# OF RADIOS		1990			1995			2005		
		MOBILES	PORTABLES		MOBILES	PORTABLES		MOBILES	PORTABLES	# PROJECTED USERS	# MOBILES	# PORTABLES	# PROJECTED USERS	# MOBILES	# PORTABLES	# OF PROJECTED USERS	# MOBILES	# PORTABLES
1. SHERIFFS	8	95	116	7	93	114	4	72	89	5	74	91	7	124	141	7	126	143
2. # POLICE/LCPD	5	100	143	5	100	143	3	79	106	4	84	116	5	116	156	5	119	159
3. ## MARSHALLS/SCPD	37	65	129	7	13	25	5	9	21	10	17	38	24	44	88	35	82	146
4. CITY FIRE	5	95	72	3	62	45	2	52	33	4	80	57	5	104	82	5	106	83
5. VOL. FIRE	65	356	263	20	115	80	5	35	17	10	72	41	30	191	115	34	204	137
6. CIVIL DEFENSE	8	154	170	4	100	62	1	25	12	4	65	87	6	78	115	8	161	184
SUB-TOTAL	128	865	893	46	483	469	20	272	278	37	392	430	77	657	697	94	798	852
7. EMS	18	63	76	4	19	27	1	3	0	3	11	11	11	35	39	11	35	39
8. COUNTY HIGHWAY	8	228	20	4	133	7	1	40	2	1	40	2	6	190	17	6	192	17
9. DEPTS. CITY STREET	5	92	16	1	35	4	0	0	0	2	35	6	5	97	20	5	99	20
10. CITY PARK	5	39	8	1	5	0	0	0	0	2	20	10	5	43	18	5	44	18
11. CITY OTHER	5	43	14	1	25	5	0	0	0	2	35	10	4	48	14	4	49	14
SUB-TOTAL	41	465	134	11	217	43	2	43	2	10	141	39	31	413	108	31	419	108
12. STATE POLICE	1	94	84	1	94	84	1	94	84	1	94	84	1	107	99	1	126	107
13. STATE HIGHWAYS	1	178	10	1	178	10	1	178	10	1	178	10	1	236	31	1	312	41
14. STATE DNR	1	48	40	1	48	40	1	48	40	1	48	40	1	51	45	1	56	57
15. CORRECTIONS DP	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0
16. OTHER STATE AGENCIES	6	15	14	6	15	14	6	15	14	6	16	15	6	17	15	6	19	16
SUB-TOTAL	10	335	148	10	335	148	10	335	148	10	336	149	10	411	190	10	513	221
17. ALL OTHER (Incl. Federal)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	179	1665	1175	67	1,035	660	32	650	428	57	869	618	118	1,481	995	134	1,730	1,181

FREQUENCY PLANNING AREA (FPA) 1 - B

INDIANAPOLIS-ANDERSON METRO AREA (10 COUNTIES)

800 MHz USE PROJECTION, PUBLIC SAFETY AND RELATED AGENCIES, INDIANA REGION, 1990-2005

TYPE OF AGENCY	TOTAL # OF ELIGIBLE AGENCIES	EST. # OF RADIOS ELIGIBLE AGENCIES MOBILES	EST. # OF RADIOS ELIGIBLE AGENCIES PORTABLES	TOTAL # OF RETURNS (AGENCIES)	# OF RADIOS FROM RETURNS MOBILES	# OF RADIOS FROM RETURNS PORTABLES	TOTAL # INTERESTED RESPONDANTS	# OF RADIOS MOBILES	# OF RADIOS PORTABLES	1990 # PROJECTED USERS	1990 # MOBILES	1990 # PORTABLES	1995 # PROJECTED USERS	1995 # MOBILES	1995 # PORTABLES	2005 # OF PROJECTED USERS	2005 # MOBILES	2005 # PORTABLES
1. SHERIFFS	10	837	794	8	787	739	2	440	460	3	454	490	10	1164	1419	10	1213	1470
2. POLICE/LCPD	19	370	1851	16	285	1766	11	214	1652	11	214	1652	17	386	2510	17	405	2563
3. MARSHALLS/SCPD	53	219	294	29	139	212	14	69	138	14	70	139	42	225	310	48	253	347
4. CITY FIRE	19	397	398	9	233	263	5	169	206	6	180	215	16	441	442	16	457	458
5. VOL. FIRE	93	913	663	49	597	424	23	256	263	23	356	263	57	671	574	62	704	604
6. CIVIL DEFENSE	10	232	220	4	104	62	0	0	0	3	46	56	10	271	244	10	287	257
SUB-TOTAL	204	2968	4220	115	2145	3466	55	1148	2719	60	1320	2813	152	3158	5499	163	3319	5699
7. EMS	35	420	359	11	294	239	4	49	53	4	49	53	22	234	198	24	240	203
8. COUNTY HIGHWAY	10	690	28	6	555	10	1	440	0	1	440	0	10	896	138	10	919	141
9. CITY STREET DEPTS.	19	272	50	4	73	15	0	0	0	0	0	0	18	247	51	18	259	54
10. CITY PARK	19	250	68	2	128	26	0	0	0	0	0	0	18	244	62	18	251	64
11. CITY OTHER	10	316	236	2	235	160	0	0	0	0	0	0	10	303	228	10	310	232
SUB-TOTAL	93	1948	741	25	1285	450	5	489	53	5	489	53	78	1,924	677	80	1979	694
12. STATE POLICE	1	787	327	1	787	327	1	787	327	1	787	327	1	821	324	1	1056	379
13. STATE HIGHWAYS	1	308	16	1	308	16	1	308	16	1	308	16	1	404	88	1	530	115
14. STATE DNR	1	198	138	1	198	138	1	198	138	1	198	138	1	218	159	1	239	184
15. CORRECTIONS DP	1	130	597	1	130	597	1	130	597	1	130	597	1	159	667	1	187	754
16. OTHER STATE AGENCIES	6	43	41	6	43	41	6	43	41	6	31	48	6	62	57	6	84	79
SUB-TOTAL	10	1466	1119	10	1466	1119	10	1466	1119	10	1474	1126	10	1664	1295	10	2096	1511
17. ALL OTHER (Incl. Federal)	1	1	6	1	1	6	1	1	6	1	1	6	1	10	15	1	15	20
GRAND TOTAL	308	6383	6086	151	4,897	5041	71	3,104	3897	76	3,284	4,000	241	6,756	7,486	254	7409	7924

TERRE HAUTE-BLOOMINGTON AREA (10 COUNTIES)

TYPE OF AGENCY	TOTAL # OF ELIGIBLE AGENCIES	EST. # OF RADIOS ELIGIBLE AGENCIES MOBILES	EST. # OF RADIOS ELIGIBLE AGENCIES PORTABLES	TOTAL # OF RETURNS (AGENCIES)	# OF RADIOS FROM RETURNS MOBILES	# OF RADIOS FROM RETURNS PORTABLES	TOTAL # INTERESTED RESPONDANTS	# OF RADIOS MOBILES	# OF RADIOS PORTABLES	1990 # PROJECTED USERS	1990 # MOBILES	1990 # PORTABLES	1995 # PROJECTED USERS	1995 # MOBILES	1995 # PORTABLES	2005 # OF PROJECTED USERS	2005 # MOBILES	2005 # PORTABLES
1. SHERIFFS	10	153	151	10	153	151	6	103	108	6	103	108	10	180	176	10	181	178
2. POLICE/LCPD	5	146	220	5	146	220	3	136	205	3	136	205	5	150	223	5	151	225
3. MARSHALLS/SCPD	34	96	140	5	14	46	3	10	35	17	52	90	33	95	137	34	99	143
4. CITY FIRE	5	106	138	2	60	80	1	50	70	2	74	94	5	118	150	5	119	151
5. VOL. FIRE	98	579	541	25	174	158	5	35	33	5	35	24	36	247	251	43	282	295
6. CIVIL DEFENSE	10	138	176	1	0	0	0	0	0	0	0	0	8	124	143	10	155	180
SUB-TOTAL	162	1218	1366	48	547	655	18	334	451	33	400	521	97	914	1080	107	987	1172
7. EMS	16	59	67	2	17	25	1	10	20	3	21	29	12	53	69	12	53	70
8. COUNTY HIGHWAY	10	234	29	6	148	13	0	0	0	0	0	0	9	202	28	9	203	28
9. CITY STREET DEPTS.	5	97	21	1	39	9	0	0	0	0	0	0	5	97	21	5	98	21
10. CITY PARK	5	108	30	1	80	20	0	0	0	0	0	0	5	118	40	5	118	40
11. CITY OTHER	4	2	2	0	0	0	0	0	0	0	0	0	3	2	2	3	2	2
SUB-TOTAL	40	500	149	10	284	67	1	10	20	3	21	29	34	472	160	34	474	161
12. STATE POLICE	1	106	96	1	106	96	1	106	96	1	106	96	1	126	108	1	146	126
13. STATE HIGHWAYS	1	180	14	1	180	14	1	180	14	1	180	14	1	238	51	1	310	67
14. STATE DNR	1	287	166	1	287	166	1	287	166	1	287	166	1	314	195	1	350	217
15. CORRECTIONS DP	1	26	48	1	26	48	1	26	48	1	26	48	1	30	52	1	37	60
16. OTHER STATE AGENCIES	6	13	11	6	13	11	6	13	11	6	15	13	6	18	15	6	28	22
SUB-TOTAL	10	612	335	10	612	335	10	612	335	10	614	337	10	726	421	10	871	492
17. ALL OTHER (Incl. Federal)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	212	2330	1850	68	1,443	1057	29	956	806	46	1,035	887	141	2,112	1,661	151	2,332	1,825

FREQUENCY PLANNING AREA (FPA) 3
EVANSVILLE-VINCENNES-PATOKA AREA (13 COUNTIES)

800 MHz USE PROJECTION, PUBLIC SAFETY AND RELATED AGENCIES, INDIANA REGION, 1990-2005

TYPE OF AGENCY	TOTAL # OF ELIGIBLE AGENCIES	EST. # OF RADIOS ELIGIBLE AGENCIES MOBILES	EST. # OF RADIOS ELIGIBLE AGENCIES PORTABLES	TOTAL # OF RETURNS (AGENCIES)	# OF RADIOS FROM RETURNS MOBILES	# OF RADIOS FROM RETURNS PORTABLES	TOTAL # INTERESTED RESPONDANTS	# OF RADIOS MOBILES	# OF RADIOS PORTABLES	1990 # PROJECTED USERS	1990 # MOBILES	1990 # PORTABLES	1995 # PROJECTED USERS	1995 # MOBILES	1995 # PORTABLES	2005 # OF PROJECTED USERS	2005 # MOBILES	2005 # PORTABLES
1. SHERIFFS	13	189	209	11	154	179	4	29	32	5	104	132	13	247	297	13	250	301
2. POLICE/LCPD	9	180	170	5	141	131	3	113	89	4	123	99	8	176	169	8	179	173
3. MARSHALLS/SCPD	42	126	184	7	23	58	4	14	43	12	47	69	38	120	172	42	138	196
4. CITY FIRE	9	153	125	4	84	56	3	79	52	4	91	64	8	148	131	8	152	134
5. VOL. FIRE	103	555	684	24	227	224	6	58	18	5	56	13	57	353	406	66	396	450
6. CIVIL DEFENSE	13	271	281	2	52	62	0	0	0	1	18	18	12	249	257	13	267	275
SUB-TOTAL	189	1474	1653	63	681	710	20	293	234	31	439	395	136	1293	1432	150	1382	1529
7. EMS	23	88	114	8	36	57	1	8	2	2	13	9	22	95	128	22	97	130
8. COUNTY HIGHWAY	13	281	51	3	89	3	0	0	0	0	0	0	12	255	51	12	260	53
9. CITY STREET DEPTS.	9	131	23	1	13	3	0	0	0	0	0	0	8	115	23	8	117	23
10. CITY PARK	9	70	18	0	0	0	0	0	0	0	0	0	8	61	17	8	62	17
11. CITY OTHER	4	8	6	0	0	0	0	0	0	0	0	0	4	12	10	4	12	10
SUB-TOTAL	58	578	212	12	138	63	1	8	2	2	13	9	54	538	229	54	548	233
12. STATE POLICE	1	119	106	1	119	106	1	119	106	1	119	106	1	145	124	1	171	146
13. STATE HIGHWAYS	1	280	15	1	280	15	1	280	15	1	280	15	1	369	46	1	482	61
14. STATE DNR	1	144	116	1	144	116	1	144	116	1	144	116	1	157	139	1	177	160
15. CORRECTIONS DP	1	25	90	1	25	90	1	25	90	1	25	90	1	32	112	1	38	128
16. OTHER STATE AGENCIES	6	9	8	6	9	8	6	9	8	6	10	9	6	14	12	6	21	18
SUB-TOTAL	10	577	335	10	577	335	10	577	335	10	578	336	10	717	433	10	889	513
17. ALL OTHER (Incl. Federal)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	257	2629	2200	85	1,396	1108	31	878	571	43	1,030	740	200	2,548	2,094	214	2819	2275

NEW ALBANY-JEFFERSONVILLE-COLUMBUS AREA (9 COUNTIES)

TYPE OF AGENCY	TOTAL # OF ELIGIBLE AGENCIES	EST. # OF RADIOS AGENCIES MOBILES	EST. # OF RADIOS AGENCIES PORTABLES	TOTAL # OF RETURNS (AGENCIES)	# OF RADIOS FROM RETURNS MOBILES	# OF RADIOS FROM RETURNS PORTABLES	TOTAL # INTERESTED RESPONDANTS	# OF RADIOS MOBILES	# OF RADIOS PORTABLES	1990 # PROJECTED USERS	1990 # MOBILES	1990 # PORTABLES	1995 # PROJECTED USERS	1995 # MOBILES	1995 # PORTABLES	2005 # OF PROJECTED USERS	2005 # MOBILES	2005 # PORTABLES
1. SHERIFFS	9	195	144	6	152	116	4	142	90	7	174	128	9	235	193	9	239	196
2. * POLICE/LCPD	11	285	320	7	235	280	7	235	280	7	235	280	11	328	385	11	343	390
3. ** MARSHALLS/SCPD	20	57	57	6	14	13	4	11	8	12	30	32	19	54	60	20	59	66
4. CITY FIRE	11	117	150	3	49	92	2	34	42	5	79	112	9	132	167	9	134	169
5. VOL. FIRE	92	694	677	21	185	153	8	76	63	9	90	83	45	398	389	52	424	423
6. CIVIL DEFENSE	9	122	124	3	26	16	1	25	10	2	25	15	9	122	125	9	124	128
SUB-TOTAL	152	1470	1482	46	671	670	26	523	493	42	633	650	102	1279	1319	110	1323	1372
7. EMS	14	93	68	4	58	31	0	0	0	1	3	3	14	122	124	14	124	126
8. COUNTY HIGHWAY	9	197	64	3	61	7	0	0	0	1	6	1	9	237	73	9	241	74
9. DEPTS. CITY STREET	11	145	31	1	30	8	0	0	0	0	0	0	11	155	38	11	157	39
10. CITY PARK	11	65	20	1	8	2	0	0	0	0	0	0	11	69	23	11	70	23
11. CITY OTHER	1	4	2	0	0	0	0	0	0	0	0	0	1	4	2	1	4	2
SUB-TOTAL	46	504	185	9	157	48	0	0	0	2	9	4	46	587	260	46	596	264
12. STATE POLICE	1	111	102	1	111	102	1	111	102	1	111	102	1	129	112	1	147	130
13. STATE HIGHWAYS	1	220	9	1	220	9	1	220	9	1	220	9	1	289	48	1	377	63
14. STATE DNR	1	170	115	1	170	115	1	170	115	1	170	115	1	187	137	1	208	156
15. CORRECTIONS DP	1	5	14	1	5	14	1	5	14	1	7	14	1	10	20	1	14	25
16. OTHER STATE AGENCIES	6	16	13	6	16	13	6	16	13	6	19	16	6	21	17	6	31	22
SUB-TOTAL	10	522	253	10	522	253	10	522	253	10	527	256	10	636	334	10	777	396
17. ALL OTHER (Incl. Federal)	1	75	24	1	75	24	1	75	24	1	75	24	1	75	24	1	75	24
GRAND TOTAL	209	2571	1944	66	1,425	995	37	1,120	770	55	1,244	934	159	2,577	1,937	167	2771	2056

FREQUENCY PLANNING AREA (FPA) 5

MUNCIE-RICHMOND-LAWRENCEBURG AREA (15 COUNTIES)

800 MHz USE PROJECTION, PUBLIC SAFETY AND RELATED AGENCIES, INDIANA REGION, 1990-2005

TYPE OF AGENCY	TOTAL # OF ELIGIBLE AGENCIES	EST. # OF RADIOS AGENCIES MOBILES	EST. # OF RADIOS AGENCIES PORTABLES	TOTAL # OF RETURNS (AGENCIES)	# OF RADIOS FROM RETURNS MOBILES	# OF RADIOS FROM RETURNS PORTABLES	TOTAL # INTERESTED RESPONDANTS	# OF RADIOS MOBILES	# OF RADIOS PORTABLES	1990 # PROJECTED USERS	1990 # MOBILES	1990 # PORTABLES	1995 # PROJECTED USERS	1995 # MOBILES	1995 # PORTABLES	2005 # OF PROJECTED USERS	2005 # MOBILES	2005 # PORTABLES
1. SHERIFFS	16	197	250	12	118	154	2	10	15	3	14	21	16	228	286	16	230	289
2. * POLICE-LCPD	10	297	444	8	267	424	2	110	240	2	110	240	9	370	512	9	371	515
3. ** MARSHALLS/SCPD	64	176	263	18	58	85	6	17	18	5	14	16	52	176	233	56	193	251
4. CITY FIRE	10	211	193	4	63	53	2	34	30	2	34	30	9	203	185	9	204	186
5. VOL. FIRE	127	775	763	48	288	320	13	63	58	9	39	35	115	731	730	117	755	760
6. CIVIL DEFENSE	16	382	322	1	100	40	1	100	40	2	104	44	16	382	322	16	388	326
SUB-TOTAL	243	2058	2235	91	894	1076	26	334	401	23	315	386	217	2090	2268	223	2141	2327
7. EMS	47	165	167	12	56	69	2	11	14	2	8	6	40	172	183	40	174	185
8. COUNTY HIGHWAY	16	373	30	10	299	19	0	0	0	1	4	2	15	355	35	15	360	36
9. DEPTS. CITY STREET	10	168	29	1	18	1	0	0	0	0	0	0	10	170	29	10	170	29
10. CITY PARK	10	86	22	1	8	1	0	0	0	0	0	0	10	86	22	10	86	22
11. CITY OTHER	4	14	14	0	0	0	0	0	0	0	0	0	4	14	14	4	14	14
SUB-TOTAL	87	806	262	24	381	90	2	11	14	3	12	8	79	797	283	79	804	286
12. STATE POLICE	1	164	149	1	164	149	1	164	149	1	164	149	1	191	174	1	220	192
13. STATE HIGHWAYS	1	285	18	1	285	18	1	285	18	1	285	18	1	374	69	1	488	91
14. STATE DNR	1	91	76	1	91	76	1	91	76	1	91	76	1	97	85	1	105	102
15. CORRECTIONS DP	1	2	8	1	2	8	1	2	8	1	3	9	1	6	12	1	8	19
16. OTHER STATE AGENCIES	6	24	21	6	24	21	6	24	21	6	27	24	6	31	25	6	41	31
SUB-TOTAL	10	566	272	10	566	272	10	566	272	10	570	276	10	699	365	10	862	435
17. ALL OTHER (Incl. Federal)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	340	3430	2769	125	1,841	1438	38	911	687	36	897	670	306	3,586	2,916	312	3807	3048

FREQUENCY PLANNING AREA (FPA) 6
FORT WAYNE AREA (9 COUNTIES

800 MHz USE PROJECTION, PUBLIC SAFETY AND RELATED AGENCIES, INDIANA REGION, 1990-2005

TYPE OF AGENCY	TOTAL # OF ELIGIBLE AGENCIES	EST. # OF RADIOS ELIGIBLE AGENCIES MOBILES	EST. # OF RADIOS ELIGIBLE AGENCIES PORTABLES	TOTAL # OF RETURNS (AGENCIES)	# OF RADIOS FROM RETURNS MOBILES	# OF RADIOS FROM RETURNS PORTABLES	TOTAL # INTERESTED RESPONDANTS	# OF RADIOS MOBILES	# OF RADIOS PORTABLES	# PROJECTED USERS	1990 # MOBILES	1990 # PORTABLES	# PROJECTED USERS	1995 # MOBILES	1995 # PORTABLES	# OF PROJECTED USERS	2005 # MOBILES	2005 # PORTABLES
1. SHERIFFS	9	249	279	7	215	248	4	160	190	4	160	190	9	295	316	9	304	325
2. POLICE (CPD)	9	479	624	9	479	624	1	4	13	1	4	13	8	669	819	8	680	833
3. MARSHALLS/SCPD	30	135	181	10	25	70	0	0	0	7	18	18	28	108	169	28	112	174
4. CITY FIRE	9	137	188	5	45	44	0	0	0	1	10	10	8	121	171	8	124	175
5. VOL. FIRE	75	592	461	27	231	176	3	41	31	3	41	31	56	424	345	61	458	386
6. CIVIL DEFENSE	9	164	166	1	1	3	0	0	0	0	0	0	9	164	166	9	170	172
SUB-TOTAL	141	1719	1899	59	989	1165	8	205	234	16	233	262	118	1781	1986	123	1848	2063
7. EMS	14	60	71	5	24	36	3	16	28	3	16	28	14	64	93	14	66	97
8. COUNTY HIGHWAY	9	229	49	4	110	9	0	0	0	0	0	0	9	242	53	9	250	56
9. CITY STREET DEPTS.	9	107	44	1	7	3	0	0	0	0	0	0	8	97	39	8	99	40
10. CITY PARK	9	66	20	2	29	6	0	0	0	0	0	0	8	62	18	8	63	19
11. CITY OTHER	2	10	10	0	0	0	0	0	0	0	0	0	2	10	10	2	10	10
SUB-TOTAL	43	472	194	12	170	54	3	16	28	3	16	28	41	475	213	41	488	222
12. STATE POLICE	1	109	100	1	109	100	1	109	100	1	109	100	1	127	117	1	145	127
13. STATE HIGHWAYS	1	197	11	1	197	11	1	197	11	1	197	11	1	259	34	1	338	45
14. STATE DNR	1	102	86	1	102	86	1	102	86	1	102	86	1	113	103	1	125	113
15. CORRECTIONS DP	1	13	16	1	13	16	1	13	16	1	13	16	1	16	19	1	19	22
16. OTHER STATE AGENCIES	5	14	13	6	14	13	6	14	13	6	15	14	6	17	15	6	20	17
SUB-TOTAL	10	435	226	10	435	226	10	435	226	10	436	227	10	532	288	10	647	324
17. ALL OTHER (Incl. Federal)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	194	2626	2319	81	1,594	1445	21	656	488	29	685	517	169	2,788	2,487	174	2983	2610

KOKOMO-PERU-WARSAW AREA (7 COUNTIES)

TYPE OF AGENCY	TOTAL # OF ELIGIBLE AGENCIES	EST. # OF RADIOS ELIGIBLE AGENCIES MOBILES	EST. # OF RADIOS ELIGIBLE AGENCIES PORTABLES	TOTAL # OF RETURNS (AGENCIES)	# OF RADIOS FROM RETURNS MOBILES	# OF RADIOS FROM RETURNS PORTABLES	TOTAL # INTERESTED RESPONDANTS	# OF RADIOS MOBILES	# OF RADIOS PORTABLES	1990 # PROJECTED USERS	1990 # MOBILES	1990 # PORTABLES	1995 # PROJECTED USERS	1995 # MOBILES	1995 # PORTABLES	2005 # OF PROJECTED USERS	2005 # MOBILES	2005 # PORTABLES
1. SHERIFFS	7	104	126	6	74	96	4	57	66	4	38	57	6	84	112	6	86	114
2. POLICE/LCPD	7	310	237	4	272	178	1	228	100	1	228	100	7	332	287	7	334	291
3. MARSHALLS/SCPD	26	90	112	6	17	26	2	6	11	11	32	50	17	59	76	18	62	80
4. CITY FIRE	7	118	89	3	33	27	1	14	9	2	59	39	7	119	95	7	121	96
5. VOL. FIRE	54	309	250	17	90	82	5	27	26	12	56	98	41	272	234	45	291	249
6. CIVIL DEFENSE	7	136	144	2	32	40	1	20	20	1	20	20	7	144	149	7	146	151
SUB-TOTAL	108	1067	958	38	518	449	14	352	232	31	433	364	85	1010	953	90	1040	981
7. EMS	20	70	178	4	9	68	1	0	25	1	0	25	17	65	138	18	66	141
8. COUNTY HIGHWAY	7	193	17	4	118	7	0	0	0	0	0	0	7	197	17	7	200	17
9. CITY STREET DEPTS.	7	86	12	2	19	1	0	0	0	1	24	4	7	86	12	7	87	12
10. CITY PARK	7	47	11	1	9	2	1	9	2	2	21	16	7	50	12	7	51	12
11. CITY OTHER	1	2	2	0	0	0	0	0	0	1	2	2	1	2	2	1	2	2
SUB-TOTAL	42	398	220	11	155	78	2	9	27	5	47	47	39	400	181	40	406	184
12. STATE POLICE	1	70	63	1	70	63	1	70	63	1	70	63	1	84	77	1	98	86
13. STATE HIGHWAYS	1	125	7	1	125	7	1	125	7	1	125	7	1	165	35	1	215	46
14. STATE DNR	1	92	69	1	92	69	1	92	69	1	92	69	1	101	82	1	111	94
15. CORRECTIONS DP	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0
16. OTHER STATE AGENCIES	6	12	10	6	12	10	6	12	10	6	14	12	6	16	12	6	23	17
SUB-TOTAL	10	299	149	10	299	149	10	299	149	10	301	151	10	366	206	10	447	243
17. ALL OTHER (Incl. Federal)	1	14	9	1	14	9	0	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	161	1778	1336	60	986	685	26	660	408	46	781	562	134	1,776	1,340	140	1893	1408

A Profile of Eligible Users and Interested Respondents

The numerous questions asked on the Radio User Questionnaire and the appreciable rate of return permits the preparation of useful profiles of public agency interest in 800 MHz frequencies and systems in the Indiana Plan Region.

The **TOTAL COUNTS** of answers to principal questions on the Radio User survey instrument by responding agencies are as follows:

SECTION I

1. Total (approximate) number of eligible user agencies in Indiana Region #14: 1,790

2. Total number of eligible agencies which returned questionnaires: 633

3. Number of Returns by Type of Service, as follows:

TYPE OF SERVICE	# OF ELIGIBLES	# OF RETURNS	% OF RETURNS OF TOTAL ELIGIBLE
Law Enforcement:	464	216	46.6%
Sheriffs Depts.:	82	67	81.7%
Large City Police Depts.:	75	59	78.7%
Small City Police Depts./Town Marshals:	306	88	28.8%
State Police	1	1	100.0%
Fire Fighting:	782	274	35.0%
Large Fire Depts.	75	33	44.0%
Vol. Fire Depts.	707	241	34.1%
Emergency Services:	272	71	26.1%
Local EMS Services	187	50	26.7%
State EMS Commission	1	1	100.0%
County Civil Defense	82	18	22.0%
State Civil Defense	1	1	100.0%
State Envir. Mgmt./HAZMAT	1	1	100.0%
Roads and Parks:	234	63	26.9%
State Highway Dept.	1	1	100.0%
County Highway Depts.	82	40	48.8%
City Street Depts.	75	12	16.0%
State Dept. Natural Resources	1	1	100.0%
City Park Depts.	75	9	12.0%
Miscellaneous:	38	9	23.7%
TOTALS:	1,790	633	35.4%

SECTION II

1. Number of Agencies that provide

   service statewide: 10

2. Number of Responding Agencies by

   Type of Service Area:

Urban: 204	Rural: 173	Both: 256

3. Projected Population Figures,

   by Frequency Planning Area: See Table 3 below.

SECTION III

1. Number of Agencies indicating Present Radio System "Not Adequate":

Today (1989):	203	(32.1%)
In 1995:	392	(61.9%)
In 2005	462	(73.0%)

2. Number of Agencies, by level of experience of "WAIT TIME" to access "voice" channel from the field:

Never:	176	(27.8%)
Seldom:	146	(23.1%)
Sometimes:	108	(17.0%)

Often:	191	(30.2%)
No Indication:	12	(1.9%)

3. Agencies currently licensed on 800 MHz channels: 9

   Agency names are listed in Chart 1, below.

4. Agencies having application for 800 MHz channels approved

   through APCO Coordinator, or pending: 6

   Agency names are listed in Chart 1, below:

5. Choice of Additional Channels:

In 800 MHz spectrum:	215
In current spectrum:	354
Did not indicate:	64

(Left question blank)

6. Number of Agencies anticipating funding for new system:

In 12 Months:	32	In 48 Months:	42
In 24 Months:	19	In 60 Months:	71
In 36 Months:	28		

Chart 1 follows.

CHART 1

CURRENT 800 MHz LICENSEES

AGENCY	CITY/TOWN
MARION COUNTY EMERGENCY COMMUNICATIONS AGENCY	INDIANAPOLIS
JOHNSON COUNTY SHERIFF DEPARTMENT	FRANKLIN
ALLEN COUNTY SHERIFF DEPARTMENT	FT. WAYNE
HOWARD COUNTY SHERIFF DEPARTMENT	KOKOMO
MISHAWAKA POLICE DEPARTMENT	MISHAWAKA
SPEEDWAY FIRE DEPARTMENT	SPEEDWAY
LOGANSPORT POLICE DEPARTMENT	LOGANSPORT
EAST CHICAGO POLICE DEPARTMENT	EAST CHICAGO
WAYNE TOWNSHIP FIRE DEPARTMENT	INDIANAPOLIS

LICENSES APPROVED THROUGH APCO COORDINATOR OR PENDING

TIPPECANOE COUNTY SHERIFF	LAFAYETTE
JEFFERSONVILLE POLICE DEPARTMENT	JEFFERSONVILLE
HAMILTON COUNTY SHERIFF DEPARTMENT	NOBLESVILLE
CITY OF EVANSVILLE/VANDERBURGH COUNTY GOVERNMENT	EVANSVILLE
CITY OF INDIANAPOLIS, DEPARTMENT OF TRANSPORTATION	INDIANAPOLIS
INDIANA STATE GOVERNMENT	LAFAYETTE AREA

PLANS INCOMPLETE/COPY TO BE FORWARDED

CITY OF CARMEL	CARMEL

PREFER ADDITIONAL 800 MHz OVER CURRENT SPECTRUM

COUNTY	AGENCY	CITY
ALLEN	SOUTHWEST ALLEN CO. FIRE DEPT.	FT. WAYNE
ALLEN	EMERGENCY 45	NEW HAVEN
ALLEN	ALLEN CO. SHERIFF'S DEPT.	FORT WAYNE
BARTHOLOMEW	BARTHOLOMEW CO. SHERIFF'S DEPT.	COLUMBUS
BARTHOLOMEW	COLUMBUS POLICE DEPT.	COLUMBUS
BENTON	OTTERBEIN AREA VOL. FIRE DEPT.	OTTERBEIN
BENTON	BOSWELL-GRANT TWP. VOL. FIRE DEPT.	BOSWELL
BENTON	FOWLER POLICE DEPT	FOWLER
BLACKFORD	MONTPELIER POLICE DEPT.	MONTPELIER
BLACKFORD	BLACKFORD CO. SHERIFF'S DEPT.	HARTFORD CITY
BOONE	WORTH TWP. VOL. FIRE DEPT.	WHITESTOWN
BOONE	BOONE CO. EMER./WITHAM HOSPITAL	LEBANON
BOONE	LEBANON POLICE DEPT.	LEBANON
CARROLL	DELPHI CITY POLICE DEPT.	DELPHI
CARROLL	CARROLL CO. SHERIFF'S DEPT.	DELPHI
CASS	GALVESTON VOL. FIRE DEPT.	GALVESTON
CASS	GALVESTON POLICE DEPT.	GALVESTON
CASS	CASS CO. SHERIFF'S DEPT.	LOGANSPORT
CLARK	UNDERWOOD VOL. FIRE DEPT.	UNDERWOOD
CLARK	CLARK CO. SHERIFF'S DEPT.	JEFFERSONVILLE
CLARK	JEFFERSONVILLE POLICE DEPT.	JEFFERSONVILLE
CLARK	CHARLESTOWN CITY POLICE	CHARLESTOWN
CLAY	CLAY CO. SHERIFF'S DEPT.	BRAZIL
CLINTON	FRANKFORT-CLINTON CO. CD	FRANKFORT
DEARBORN	DILLSBORO POLICE DEPT.	DILLSBORO
DEARBORN	GREENDALE FIRE DEPT.	GREENDALE
DEARBORN	CITY OF LAWRENCEBURG	LAWRENCEBURG
DELAWARE	DALEVILLE POLICE DEPT.	DALEVILLE
DELAWARE	MUNCIE POLICE DEPT.	MUNCIE
DELAWARE	DELAWARE CO. AIRPORT FIRE DEPT.	MUNCIE
DUBOIS	ST. ANTHONY VOL. FIRE DEPT.	ST. ANTHONY
DUBOIS	HUNTINGBURG POLICE DEPT.	HUNTINGBURG
DUBOIS	FERDINAND FIRE DEPT.	FERDINAND
FAYETTE	GLENWOOD VOL. FIRE DEPT.	GLENWOOD
FAYETTE	FAYETTE COUNTY SHERIFF'S DEPT.	CONNERSVILLE
FLOYD	GEORGETOWN TWP. FIRE DEPT.	GEORGETOWN
FLOYD	GREENVILLE TWP. FIRE DEPT.	GREENVILLE
FLOYD	FLOYD CO. CIVIL DEFENSE	NEW ALBANY
FLOYD	NEW ALBANY POLICE	NEW ALBANY
FLOYD	NEW ALBANY FIRE DEPT.	NEW ALBANY
GIBSON	TOWN OF FRANCISCO	FRANCISCO

COUNTY	AGENCY	CITY
GIBSON	FT. BRANCH POLICE DEPT.	FT. BRANCH
GREENE	LEWIS TWP. FIRE DEPT.	COALMONT
HAMILTON	CICERO POLICE DEPARTMENT	CICERO
HAMILTON	WAYNE TWP. FIRE DEPT.	NOBLESVILLE
HAMILTON	SHERIDAN VOL. FIRE DEPT.	SHERIDAN
HAMILTON	FISHERS POLICE DEPT.	FISHERS
HAMILTON	WESTFIELD MARSHAL'S DEPT.	WESTFIELD
HAMILTON	FISHERS FIRE DEPT. & FALL CK. TWP. EMS	FISHERS
HAMILTON	WESTFIELD FIRE DEPT.	WESTFIELD
HAMILTON	CICERO FIRE DEPT.	CICERO
HANCOCK	WILKINSON VOL. FIRE DEPT.	WILKINSON
HANCOCK	FOUNTAINTOWN COMM. VOL. FIRE DEPT.	FOUNTAINTOWN
HANCOCK	BUCK CREEK TWP. FIRE DEPT.	GREENFIELD
HANCOCK	SUGAR CREEK TWP. FIRE DEPT. 2	GREENFIELD
HANCOCK	WILKINSON POLICE DEPT.	WILSINSON
HANCOCK	GREENFIELD POLICE DEPT.	GREENFIELD
HARRISON	CORYDON POLICE DEPT.	CORYDON
HARRISON	HARRISON CO. SHERIFF'S DEPT.	CORYDON
HENDRICKS	PLAINFIELD FIRE DEPT.	PLAINFIELD
HENRY	GREENSBORO VOL. FIRE DEPT.	GREENSBORO
HENRY	SPICELAND VOL. FIRE DEPT.	SPICELAND
HENRY	KNIGHTSTOWN VOL. FIRE DEPT.	KNIGHTSTOWN
HENRY	KNIGHTSTOWN POLICE DEPT.	KNIGHTSTOWN
HENRY	NEW CASTLE FIRE DEPT.	NEW CASTLE
HOWARD	GREENTOWN VOL. FIRE DEPT.	GREENTOWN
HOWARD	HOWARD CO. CIVIL DEFENSE	KOKOMO
HOWARD	KOKOMO POLICE DEPT.	KOKOMO
HUNTINGTON	MT. ETNA VOL. FIRE DEPT.	HUNTINGTON
HUNTINGTON	ANDREWS POLICE DEPT.	ANDREWS
HUNTINGTON	MARKLE POLICE DEPT.	MARKLE
JACKSON	BROWNSTOWN VOL. FIRE DEPT., INC.	BROWNSTOWN
JACKSON	CROTHERSVILLE POLICE DEPT.	CROTHERSVILLE
JACKSON	SEYMOUR POLICE DEPT.	SEYMOUR
JAY	PENNVILLE FIRE DEPT.	PENNVILLE
JAY	DUNKIRK FIRE DEPT.	DUNKIRK
JEFFERSON	US ARMY JEFFERSON PROVING GROUND	MADISON
JEFFERSON	MADISON POLICE DEPT.	MADISON
JENNINGS	GENEVA TWP. VOL. FIRE DEPT.	SCIPIO
JOHNSON	EDINBURGH POLICE DEPT.	EDINBURGH
JOHNSON	NEW WHITELAND POLICE DEPT.	NEW WHITELAND
JOHNSON	WHTELAND POLICE DEPT.	WHITELAND
JOHNSON	JOHNSON CO. SHERIFF'S DEPT.	FRANKLIN
JOHNSON	FRANKLIN POLICE DEPT.	FRANKLIN
KNOX	MCCLURE FUNERAL SERVICE, INC.	BICKNELL
KNOX	VINCENNES POLICE DEPT.	VINCENNES

COUNTY	AGENCY	CITY
KNOX	VINCENNES CITY FIRE DEPT.	VINCENNES
KOSCIUSKO	SILVER LAKE FIRE DEPT.	SILVER LAKE
KOSCIUSKO	MILFORD EMERGENCY SERVICES, INC.	MILFORD
KOSCIUSKO	WARSAW PARK AND RECREATION DEPT.	WARSAW
LAGRANGE	LAGRANGE CO. EMER. MEDICAL SERVICE	LAGRANGE
LAGRANGE	LAGRANGE CO. SHERIFF'S DEPT.	LAGRANGE
LAWRENCE	MITCHELL POLICE DEPT.	MITCHELL
LAWRENCE	LAWRENCE CO. SHERIFF'S DEPT.	BEDFORD
LAWRENCE	BEDFORD POLICE DEPT.	BEDFORD
MADISON	EAGLEWOOD VOL. FIRE DEPT.	ANDERSON
MADISON	MARKLEVILLE MARSHAL'S DEPT.	MARKLEVILLE
MADISON	ELWOOD POLICE DEPT.	ELWOOD
MADISON	ALEXANDRIA POLICE DEPT.	ALEXANDRIA
MADISON	ALEXANDRIA FIRE DEPT.	ALEXANDRIA
MARION	CLERMONT POLICE DEPT.	INDIANAPOLIS
MARION	SOUTHPORT POLICE DEPT.	SOUTHPORT
MARION	MERIDIAN HILLS POLICE DEPT.	INDIANAPOLIS
MARION	INDIANA UNIV. POLICE-INDPLS. DIVISION	INDIANAPOLIS
MARION	WILLIAMS CREEK POLICE DEPT.	INDIANAPOLIS
MARION	EMERGENCY MANAGEMENT DIVISION	INDIANAPOLIS
MARION	WISHARD HOSPITAL AMBULANCE SERVICE	INDIANAPOLIS
MARION	DEVINE AMBULANCE SERVICE, INC.	MARION
MARION	BEECH GROVE FIRE DEPT.	BEECH GROVE
MARION	CASTLETON POLICE DEPT./NORTHEAST SEC	CASTLETON
MARION	DECATUR TWP. VOL. FIRE DEPT.	WEST NEWTON
MARION	FRANKLIN TWP. VOL. FIRE DEPT. CO#2	ACTON
MARION	LAWRENCE TWP. FIRE DEPT.	INDIANAPOLIS
MARION	PERRY TWP. FIRE	INDIANAPOLIS
MARION	VOLUNTEER FIRE DEPT. PERRY TWP., INC.	INDIANAPOLIS
MARION	PIKE TWP. FIRE DEPT.	INDIANAPOLIS
MARION	WASHINGTON TWP. FIRE DEPT.	INDIANAPOLIS
MARION	TOWN OF WARSAW PARK POLICE DEPT.	INDIANAPOLIS
MARION	INDIANAPOLIS DEPT. OF TRANSPORTATION	INDIANAPOLIS
MARION	IUPUI FIRE PROTECTION SERVICES	INDIANAPOLIS
MARION	MARION CO. SHERIFF'S DEPT.	INDIANAPOLIS
MARION	INDIANAPOLIS POLICE DEPT.	INDIANAPOLIS
MARION	SPEEDWAY POLICE AND FIRE DEPT.	SPEEDWAY
MARION	INDIANAPOLIS FIRE DEPT.	INDIANAPOLIS
MARION	LAWRENCE FIRE DEPT.	LAWRENCE
MARION	LAWRENCE POLICE DEPT.	LAWRENCE
MARTIN	LOOGOOTEE VOL. FIRE DEPT.	LOOGOOTEE
MARTIN	LOOGOOTEE POLICE DEPT.	LOOGOOTEE
MIAMI	PIPE CREEK TWP. VOL. FIRE DEPT.	BUNKER HILL
MONROE	ELLETTSVILLE POLICE DEPT.	ELLETTSVILLE
MONROE	BLOOMINGTON HOSP. AMBULANCE SERV.	BLOOINGTON

COUNTY	AGENCY	CITY
MONROE	MONROE CO. SHERIFF'S DEPT.	BLOOMINGTON
MONROE	BLOOMINGTON POLICE DEPT.	BLOOMINGTON
MONTGOMERY	DARLINGTON VOL. FIRE DEPT.	DARLINGTON
MONTGOMERY	DARLINGTON POLICE DEPT.	DARLINGTON
MONTGOMERY	MONTGOMERY COUNTY POLICE	CRAWFORDSVILLE
MONTGOMERY	CRAWFORDSVILLE POLICE DEPT.	CRAWFORDSVILLE
MONTGOMERY	CRAWFORDSVILLE FIRE DEPT.	CRAWFORDSVILLE
MORGAN	HARRISON TWP. FIRE DEPT.	MARTINSVILLE
MORGAN	MARTINSVILLE POLICE DEPT.	MARTINSVILLE
PARKE	MARSHALL VOL. FIRE DEPT.	MARSHALL
PERRY	PERRY COUNTY SHERIFF'S DEPT.	CANNELTON
PIKE	PETERSBURG POLICE DEPT.	PETERSBURG
PIKE	PIKE CO. SHERIFF'S DEPT.	PETERSBURG
POSEY	POSEYVILLE VOL. FIRE DEPT.	POSEYVILLE
POSEY	POSEY CO. SHERIFF'S DEPT.	MT. VERNON
PUTNAM	FILLMORE VOL. FIRE DEPT.	FILLMORE
PUTNAM	BAINBRIDGE POLICE DEPT.	BAINBRIDGE
RANDOLPH	PARKER CITY POLICE DEPT.	PARKER CITY
RIPLEY	BATESVILLE VOL. FIRE DEPT., INC.	BATESVILLE
RIPLEY	SOUTHERN RIPLEY CO. EMER. LIFE SQUAD	VERSAILLES
RIPLEY	RIPLEY COUNTY CIVIL DEFENSE	VERSAILLES
RIPLEY	SUNMAN RURAL FIRE DEPARMENT INC.	SUNMAN
RUSH	RUSHVILE TWP. VOL. FIRE DEPT.	RUSHVILLE
SHELBY	SHELBYVILLE/SHELBY CO. EMER. AMBUL.	SHELBYVILLE
SHELBY	SHELBYVILLE POLICE DEPT.	SHELBYVILLE
SPENCER	SANTA CLAUS VOL. FIRE DEPT.	SANTA CLAUS
SPENCER	DALE VOL. FIRE DEPT., INC.	DALE
SPENCER	SPENCER CO. SHERIFF'S DEPT.	ROCKPORT
STEUBEN	STEUBEN CO. SHERIFF'S DEPT.	ANGOLA
SULLIVAN	SULLIVAN CO. SHERIFF'S DEPT.	SULLIVAN
TIPPECANOE	CLARKS HILL VOL. FIRE DEPT.	CLARKS HILL
TIPPECANOE	TIPPECANOE TWP. VOL. FIRE DEPT.	BATTLE GROUND
TIPPECANOE	BATTLE GROUND POLICE DEPT.	BATTLE GROUND
TIPPECANOE	TIPPECANOE EMER. AMBULANCE SERVICE	LAFAYETTE
TIPPECANOE	TIPPECANOE CO. SHERIFF'S DEPT.	TIPPECANOE
TIPPECANOE	LAFAYETTE POLICE DEPT.	LAFAYETTE
TIPPECANOE	WEST LAFAYETTE POLICE DEPT.	WEST LAFAYETTE
TIPPECANOE	LAFAYETTE FIRE DEPT.	LAFAYETTE
TIPPECANOE	MOTOR VEHICLE HWY. DEPT.	LAFAYETTE
TIPTON	WINDFALL POLICE DEPT.	WINDFALL
TIPTON	TIPTON CO. SHERIFF'S DEPT.	TIPTON
TIPTON	TIPTON FIRE DEPT.	TIPTON
VANDERBURGH	EVANSVILLE POLICE DEPT.	EVANSVILLE
VANDERBURGH	EVANSVILLE FIRE DEPT.	EVANSVILLE
VERMILLION	CAYUGA VOL. FIRE DEPT.	CAYUGA

COUNTY	AGENCY	CITY
VERMILLION	UNIVERSAL POLICE DEPT.	UNIVERSAL
VERMILLION	VERMILLION CO. SHERIFF'S DEPT.	NEWPORT
VIGO	SEELYVILLE VOL. FIRE DEPT.	SEELYVILLE
VIGO	RILEY FIRE DEPT.	RILEY
VIGO	VIGO CO. SHERIFF'S DEPT.	TERRE HAUTE
VIGO	TERRE HAUTE POLICE DEPT.	TERRE HAUTE
VIGO	TERRE HAUTE CITY FIRE DEPT.	TERRE HAUTE
WABASH	WABASH TWP. FIRE DEPT.	WEST LAFAYETTE
WARRICK	BOONVILLE FIRE DEPT.	BOONVILLE
WASHINGTON	SALEM POLICE DEPT.	SALEM
WAYNE	DUBLIN POLICE DEPT.	DUBLIN
WAYNE	MILTON-WASHINGTON TWP. VOL. FIRE DEPT	MILTON
WAYNE	CENTERVILLE VOL. FIRE DEPT.	CENTERVILLE
WAYNE	HAGERSTOWN POLICE DEPT.	HAGERSTOWN
WAYNE	HOWARD AMBULANCE	CAMBRIDGE CITY
WAYNE	RICHMOND POLICE DEPT.	RICHMOND
WAYNE	RICHMOND FIRE DEPT.	RICHMOND
WHITE	WOLCOTT POLICE DEPT.	WOLCOTT
WHITLEY	LARWILL-RICHLAND TWP. VOL. FIRE DEPT.	LARWILL
WHITLEY	WHITLEY CO. EMERGENCY MEDICAL SERV.	COLUMBIA CITY
WHITLEY	WHITLEY CO. SHERIFF'S DEPT.	COLUMBIA CITY
WHITLEY	COLUMBIA CITY POLICE DEPT.	COLUMBIA CITY

TABLE 3 **INDIANA 800 MHz FREQUENCY PLANNING AREAS (FPA'S) COUNTY POPULATION ESTIMATES**

COUNTIES:	CURRENT:	1995:	2005:
FPA 1-A (LAFAYETTE AREA)			
BENTON	9,800	10,120	9,860
CARROLL	19,300	18,500	17,720
CLINTON	31,400	30,850	30,600
FOUNTAIN	18,400	18,700	18,210
MONTGOMERY	35,800	36,690	37,450
TIPPECANOE	124,800	131,280	135,450
WARREN	8,300	7,870	7,300
WHITE	23,600	22,880	22,410
SUB-TOTAL FPA 1-A	271,400	276,890	279,000
FPA 1-B (INDIANAPOLIS AREA)			
BOONE	38,600	41,350	43,970
HAMILTON	98,100	108,470	121,170
HANCOCK	45,000	46,610	48,050
HENDRICKS	76,100	80,490	85,340
JOHNSON	86,100	93,150	101,080
MADISON	132,800	130,680	128,120
MARION	790,100	809,500	821,040
MORGAN	54,300	62,160	65,300
PUTNAM	30,300	30,870	31,320
SHELBY	40,500	41,260	42,470
SUB-TOTAL FPA 1-B	1,391,900	1,444,540	1,487,920
FPA 2 (VIGO-MONROE AREA)			
BROWN	13,100	13,190	13,280
CLAY	24,800	24,170	23,510
GREENE	30,700	29,980	29,400
LAWRENCE	42,900	42,500	42,220
MONROE	103,600	105,620	108,890
OWEN	17,400	17,870	18,320
PARKE	15,900	15,860	15,530
SULLIVAN	20,300	19,770	19,080
VERMILLION	17,500	17,490	17,200
VIGO	107,600	106,880	106,540
SUB-TOTAL FPA 2	393,800	393,330	393,970

Source: Indiana State Board of Health, Indiana County Population Projections, 1985-2020 (1988); U.S. Census Bureau, Current Population Reports, 1987.

TABLE 3 (CONTINUED)

FPA 3 (SOUTHWEST)			
CRAWFORD	10,300	10,290	10,330
DAVIESS	28,800	30,490	31,690
DUBOIS	36,300	37,760	39,010
GIBSON	33,200	33,090	32,580
KNOX	40,900	42,000	42,510
MARTIN	11,300	10,990	10,880
ORANGE	19,100	19,210	19,270
PERRY	18,800	18,610	18,160
PIKE	12,900	12,950	12,300
POSEY	25,800	27,310	27,740
SPENCER	19,900	21,300	21,840
WARRICK	46,300	52,920	58,150
VANDERBURGH	166,700	169,170	168,450
SUB-TOTAL FPA 3	470,300	486,090	492,910
FPA 4 (COLUMBUS-NEW ALBANY)			
BARTHOLOMEW	65,000	66,090	66,780
CLARK	89,500	91,850	93,160
FLOYD	64,000	65,050	65,870
HARRISON	28,800	30,810	32,160
JACKSON	37,300	38,800	39,740
JEFFERSON	29,400	29,440	29,760
JENNINGS	23,000	23,390	23,620
SCOTT	21,100	21,390	21,840
WASHINGTON	23,100	23,750	24,520
SUB-TOTAL FPA 4	381,200	390,570	397,450
FPA 5 (EAST CENTRAL)			
BLACKFORD	14,600	15,020	14,590
DEARBORN	37,900	39,700	41,690
DECATUR	23,900	23,400	23,270
DELAWARE	120,500	120,620	122,700
FAYETTE	27,400	27,660	27,470
FRANKLIN	20,000	21,490	22,460
GRANT	76,600	75,030	75,230
HENRY	49,600	45,980	43,130
JAY	21,900	20,560	19,520
OHIO	5,400	6,080	6,340
RANDOLPH	27,800	27,820	27,040

TABLE 3 (CONTINUED)

RIPLEY	25,300	26,180	27,110
RUSH	18,400	18,720	18,350
SWITZERLAND	7,500	7,440	7,540
UNION	6,900	7,050	7,030
WAYNE	72,300	69,790	67,400
SUB-TOTAL FPA 5	556,000	552,540	550,870
FPA-6 (FT. WAYNE AREA)			
ADAMS	30,900	32,170	34,070
ALLEN	302,000	300,250	304,850
DEKALB	34,800	34,440	35,060
HUNTINGTON	35,900	36,240	36,560
LAGRANGE	28,900	31,310	34,460
NOBLE	38,300	39,470	41,280
STEUBEN	27,400	27,130	27,650
WELLS	26,100	24,130	24,480
WHITLEY	27,600	28,180	28,990
SUB-TOTAL FPA 6	551,900	553,320	567,400
FPA-7 (KOKOMO-PERU AREA)			
CASS	40,200	38,800	37,440
FULTON	18,600	18,270	17,740
HOWARD	84,400	85,520	85,670
KOSCIUSKO	64,200	65,590	67,780
MIAMI	38,400	38,220	39,090
TIPTON	16,500	15,730	15,130
WABASH	35,500	36,410	37,630
SUB-TOTAL FPA 7	297,800	298,540	300,480
SUB-TOTAL (FPA 1-A thru 7) (82 COUNTIES)	4,314,300	4,395,820	4,470,000

TABLE 3 (CONTINUED)

FPA 8
(GARY-ELKHART AREA)

ELKHART	149,700	154,450	160,460
JASPER	26,200	27,420	27,800
LAKE	481,200	481,920	466,720
LAPORTE	140,600	101,970	97,610
MARSHALL	41,200	43,110	44,530
NEWTON	13,800	13,880	13,440
PORTER	123,100	131,210	135,840
PULASKI	13,300	14,410	14,980
ST. JOSEPH	242,400	240,930	243,760
STARKE	21,700	21,320	21,190
SUB-TOTAL FPA 8	1,217,200	1,230,620	1,226,330
STATE TOTAL (INDIANA) (92 COUNTIES)	5,531,500	5,626,440	5,696,330

APPENDIX

H

APPENDIX H

APPLICATION EVALUATION CRITERIA

CATEGORY WEIGHTS

1. SERVICE: 0 to 100 points

Eligible services have been grouped into the following three Priority Levels. Each Level has a pre-determined maximum number of points associated with it. In the case of a "multiple-service" system being proposed, the application must state the number of mobiles assigned to each service. The percentages resulting from these totals will determine the total number of points awarded.

PRIORITY LEVEL I: Maximum of 100 points

Public Safety Radio Service and Special Emergency Licensees providing protection of life and property.

PRIORITY LEVEL II: Maximum of 65 points

Public Safety Radio Service Licensees providing protection of property only.

PRIORITY LEVEL III: Maximum of 35 points

Special Emergency Radio Service Licensees.

2. SYSTEM TYPE: 0 to 50 points

From 0 to 50 points can be earned in this category, based on the degree of spectrum efficiency demonstrated for the system. The more spectrum efficient a proposed system is, the more points the application will earn. A higher standard will be used to evaluate applications from agencies located within a Primary Zone.

Information relating to the system's technology such as trunked or conventional operation, and voice or data transmission (or voice/data combination) must be provided. The narrative should also discuss how utilization of these features will result in an efficient use of the spectrum. Furthermore, details regarding any other enhancements to the system must be provided. The application must also state whether the system is being proposed as a single agency-single service, multiple agency-single service, or multiple agency-multiple service operation.

3. INTERSYSTEM INTEROPERABILITY: 0 to 100 points

An application will be awarded from 0 to 50 points in this category based on its description of how the 800 MHz mobile radios will maintain, and/or increase, mutual aid capabilities. Since they are mandated by the National Plan, inclusion of the five Common Channels in mobile equipment is not rated. However, an applicant may earn up to 50 additional points (for the maximum of 100) in this category, on the initial and all subsequent applications, for providing fixed equipment necessary for the operation of common channels in a specific area(s) of the Region.

4. CHANNEL LOADING FACTORS: 10 to 50 points

Applications will receive between 10 to 50 points for proposing a number of mobile units that meet the Channel Loading requirements mandated by this Plan. Consideration will take into account the feasibility of operating the number of mobiles per channel being proposed.

5. COVERAGE AREA: 10 to 50 points

Scoring in this category will be based on two factors: (1) Compliance with the parameters described on pages 19, 20 and 24 of this Plan, as evidenced by the submission of a map of the service area depicting jurisdictional boundaries, proposed transmitter sites, and minimum coverage areas of those transmitter sites; and (2) Channel reuse potential.

6. VACATED FREQUENCIES RETURNED: 0 to 100 points

The application will earn from 0 to 100 points in this category depending on the number of vacated frequencies being proposed for return, in relation to the total number of frequencies used by the agency (including those being applied for); and, the availability of the returned frequencies for use by other agencies in the region.

7. IMPLEMENTATION SCHEDULE: 0 to 50 points

The degree of budgetary commitment to the system being proposed, and the specificity of implementation dates will be the basis for scoring an application in this category. The more explicit an application is with respect to these topics, the more points it will earn in this category.

APPENDIX

J

APPENDIX J

FREQUENCY ASSIGNMENT METHODOLOGY

INTRODUCTION

The purpose of the computer program which assigns frequencies to specific eligibles and to pools for future assignment is two-fold.

1) The assignments must be done in a manner which results in a high degree of spectrum efficiency, and

2) The assignments must be done in a manner which results in a low probability of co-channel and adjacent channel interference.

Since the desired output is a geographic sorting of frequencies, a method of defining geography, must be part of the input.

A list of the number of channels to be assigned in each geographic area is also required, along with the name of the eligible or pool.

Acceptable interference probabilities are determined for the region. Frequency assignments are then made using a computer program which satisfies the goals of spectrum efficiency and interference protection.

Where are Channels to be Allocated?

For the purpose of this frequency sort, a geographic area is to be defined as one or more circles of equal radius. To the degree practical, this circle or circles should include the entire area of the eligible's geopolitical boundary, but not exceed the boundary by more than three miles.

Therefore, the procedure is to gather maps of sufficient detail, outline the areas to be defined, determine the co-ordinates and radius of the circles which define each area, and tabulate the data.

Define the Environment

The environment of each system is defined according to the following criteria:

1) **Urban** is a built-up city crowded with large buildings or closely interspersed with houses and thickly-grown trees. This would include the downtown area of a major city.

2) **Suburban** is a city or highway scattered with trees, houses, and buildings. This would include the non-downtown area of a major city.

3) **Open** is an area where there are no obstacles such as tall trees or buildings in the propagation path or a plot of land which is cleared of anything for 300-400 meters ahead. This would include farmland, open fields, etc.

4) **Quasi-open** is an area between suburban and open areas. This includes areas outside of city limits that have few buildings and houses.

Blocked Channels

In the region there are the five national mutual aid channels which must be blocked out to prevent the computer from making assignments on these channels. (Since the mutual aid channels are spaced at 0.5 MHz intervals, other region-wide systems are spaced at 0.5 MHz and placed adjacent to the mutual aid channels. This procedure reduces the impact of blocked adjacent channels by virtue of the fact that the channel plan already has protection spacing on each side of the mutual aid channels.)

These region-wide blocked channels are identified by FCC channel number, tabulated and become input to the computer program.

Consideration is given to channels known to be assigned in adjacent regions to ensure compatibility at the interface.

May or may not apply.

Transmitter Combining

The computer program is designed to provide a minimum frequency separation between any two channels assigned to the same eligible at the same site.

This separation is provided in order to enable more efficient combining of multiple transmitters to a single antenna.

These separated blocks of frequencies also have a maximum size. That is to say, if the eligible has more frequencies than the maximum size of the combining block, then a new compatible block is created.

Each of these parameters is adjustable in the program on a global basis. The parameters chosen are 0.25 MHz minimum spacing and five channel blocks.

* **Special Considerations**

There are existing licensees in the 806-821/851-866 MHz spectrum who plan to expand existing systems into the 821-824/866-869 MHz band.

Existing radio units are unable to operate on 12.5 KHz separated carrier frequencies.

The result is that these radios can only operate on “even” FCC numbered channels in the 821-824/866-869 MHz band. The computer program is able to take this into account when making assignments.

*** May or may not apply.**

Protection Ratios

There are two interference protection ratios built into the computer program.

One is for the co-channel case, and the other is for the adjacent channel case.

The ratios provide 35db Desired/Undesired signal ratio for co-channel assignments, and 15db Desired/Undesired ratio for the adjacent channel case. The ratios provide an acceptable probability of interference for Public Safety Services.

What the Program Does

1. Input data for the Region

   Name

   Co-ordinates

   Range

   Environment

   Blocked/Protected Channels

   Even/odd channel requirements

2. Select Parameters

   Combiner spacing

   Maximum spectrum to be used

   Number of iterations allowed

   Protection Ratios for co-channel and adjacent channels

3. Computer determines an ERP/Ant. Height combination which places the 40 dbu point at the range specified, in the environment specified for each system.

4. Computer calculates distances between all possible combinations of single site and multiple site systems.

5. The computer uses its input tables to determine compatible assignments such that the signal strength at a co-channel assignee's boundary is < + 5 dbu, and the signal strength at an adjacent channel assignee's boundary is < + 25 dbu.

6. If the maximum spectrum allowed is filled before all systems are assigned channels, then the list is re-ordered according to the difficulty of assignments, and another iteration is made.

7. If the maximum number of iterations is reached before all assignments are satisfied, the maximum spectrum allowed is increased and the process begins again. The maximum spectrum allowed is initially set at a value which will fail to find a solution. By incrementing its value on successive attempts, the first

successful run should be the most spectrum efficient solution this program will ever find, for this case.

APPENDIX

K

APPENDIX

L

GLOSSARY

(Definitions of terms, abbreviations, and acronyms as they are used in this document.)

ADJACENT CHANNELS	Channels which are separated by 12.5 KHz 821-824 band
AGL	Above Ground Level; altitude
APCO	Associated Public-Safety Communications Officers, Incorporated
AVL	Automatic Vehicle Locator; a data transmission device used to determine where a field unit is
CALLING CHANNEL	FCC Channel 601; use of this channel is restricted to establishing contact among individual agencies for mutual aid purposes
CHANNEL	An assigned band of frequencies of sufficient width to permit its use for radio communication
CHANNEL LOADING	The number of mobile transmitters authorized to operate on a particular channel within the same service area
CO-CHANNEL	Utilization of the same channel by two or more licensees
CONVENOR	The individual charged with organizing a Planning Region's initial meeting
THE COMMISSION	The Federal Communications Commission; also, the FCC
THE COMMITTEE	The Indiana 800 MHz Regional Planning Committee
COMMITTEE OF THE WHOLE	All members present at a monthly regional planning meeting
COMMON CHANNELS	The five (5) channels specified in the National Plan which are reserved for mutual inter-agency communication; a Calling Channel and four Tactical Channels

CONVENTIONAL OPERATION	A method of operation in which one or more radio frequency channels are assigned to mobile and base stations but are not employed as a trunked group
CROSS SYSTEM PATCH	A means of linking disparate radio systems
FREQUENCY ADVISORY COMMITTEE CHAIRMAN	An APCO designated (FCC approved) individual charged with managing spectrum usage within a State
INTEROPERABILITY	Communication between, or among, radio units of different agencies
MDT	Mobile Data Terminal; a field communications device used to transmit and receive data impulses over radio frequencies
MOBILE RELAY STATION	A base station in the mobile service authorized to retransmit automatically on a mobile service frequency communications which originate on the transmitting frequency of the mobile station
MUTUAL AID INCIDENT	A situation posing a threat to the public safety which requires the services of agencies from differing jurisdictions or services
NPSPAC	National Public Safety Planning Advisory Committee
THE PLAN	The Public Safety Communications plan for Region 14 the Indiana Planning Region (82 counties)
PRIMARY DISPATCH CENTER	A Public Safety Communications Center designated as a controller of the Common Channels
PRIMARY ZONE	Counties in the Region which have high population density and a large number of public safety entities
RCRC	The Regional Conformance Review Committee; a standing body of individuals charged with administering the Plan within the Region
THE REGION	The Indiana 800 MHz Planning Region, consisting of eighty-two counties. (The other ten Indiana counties are in the Southern Lake Michigan Planning Region.)

REPEAT DISABLE	The means of inhibiting Mobile Relay
SECONDARY ZONE	All counties of the Region not designated as a Primary Zone
TACTICAL CHANNELS	The four Common Channels on which inter-agency communications will be conducted during a mutual aid incident
TRUNKED OPERATION	A method of operation in which a number of radio frequency channel pairs are assigned to mobile and base stations in the system for use as a trunk group
VACATED FREQUENCIES	Those frequencies returned for re-allocation