800 MHz Regional Planning Committee Region 35 Oregon

DATE: December 1st, 2017

SUBJECT: Summary--Region 35 800 NPSPAC plan amendment.

Dear John Evanoff FCC

Enclosed please find attached the Region 35, NPSPAC Plan Amendment. The reason for this amendment is to address digital emissions, TDMA technologies, and use the latest version TSB-88 methodology for interference analysis.

List of plan amendments:

- 1. Page 3, Section 1.1. Second paragraph, first sentence: Change **2000** to 2020.
- 2. Page 18, Section 7.1.2, amended to read:
 - 7.1.2. Calculations of Service Area

The 40 dBu boundary shall be based on using computer based programs such as Comstudy or Spectrum-E to calculate the 40 dBu service contour. The contour used will be a Carey R-6602 (50:50) curve. Refer to Appendix for an example. In this case 40 dBu is actually 40 dBuV/m and 40 dBuV/m is equal to -94 dBm at 856 MHz. Appendix 1 provides examples of using 40 dBu curves. A step-by-step procedure is provided in Appendix 2.

- 3. Page 18, Section 7.1.4, amended to read:
 - 7.1.4 Proposed Service Area Exhibit

An agency shall provide, along with its request for frequencies, an exhibit showing the calculated service area and the agency's jurisdictional boundaries. The boundaries must be drawn using computer based programs such as Comstudy or Spectrum-E with a title block including the name of the requesting agency, height above average terrain, effective radiated power, latitude, longitude, ground elevation, of the transmitting site, and the distance to the service area boundary in miles, as calculated.

4. Page 19, Section 7.4.2, amended to read:

7.4.2 Adjacent Channel Design

Proposed systems must also be designed to "interference-free operations" with adjacent channel licensees. The method of determination is identical to that of co-channel design as detailed in "7.4.1 Co-channel Design" with the exception of the existing to proposed signal margin criteria. In the case of adjacent channel systems, the signal level will not exceed as follows:

- a) For analog emissions such as 16K0F1D, 16K0F3E, or similar, a 25 dBu R6602 (50:50) interference contour will used.
- b) For digital emissions such as 8K10F1D, 8K70D1W, 9K80D7W, or similar a 60 dBu R6602 (50:50) interference contour will be used.
- c) If an interference contour extends into an adjacent region, the contour analysis shall follow that adjacent region's plan.

It shall be noted that the FCC has adopted technical standards for transmitters which will reduce adjacent channel interference and permit closer geographical channel assignment. However, the commission has not adopted improved receiver technical standards. It is the position of the Commission that receivers do not cause interference, nor do they threaten effective operation of the public safety network, as would substandard transmitters. Because of the demand for limited spectrum, it is the intent of this plan to provide efficient spectrum utilization within current technological capabilities. Agencies are encouraged to carefully consider the receiver selectivity and adjacent channel rejection specifications of any equipment to be purchased for use in the 806-809/ 851-854 MHz band.

5. Page 21, Section 7.7.1, amended to read:

7.7.1. Traffic Loading Study

Justification for adding frequencies, or retaining existing frequencies in the 806-809/851-854 MHz band, can be provided by a traffic loading study in lieu of loading by number of transmitters per channel. It will be the responsibility of the requesting agency to provide a verifiable study showing sufficient airtime usage to merit additional frequencies. A showing of airtime usage, excluding telephone interconnect air time, during peak busy hour greater than 70 percent per channel on three consecutive days will be required to justify additional or retain existing frequencies.

The use of the CAPRAD Channel Loading Calculator (http://www.nrpc.us) is highly recommended to take into account modern digital system channel loading parameters, such as 2-slot TDMA (Time Division Multiple Access), ISSI (Inter-RF Subsystem Interface), enhanced data channels, location services, etc. that will require additional frequencies.

- 6. Page 22, Section 7.8.2, amended to read:
 - 7.8.2. Average Elevation Exhibit

Computer based programs such as Comstudy or Spectrum-E will be used to calculate the average height of terrain.

7. Appendix 1, amended to read:

Appendix 1: Carey Propagation Curves.

In order to address modern digital technologies this appendix was completely re-written.

8. Appendix 2: Procedures for Determining Service Area Contour.

In order to address modern digital technologies this appendix was completely re-written.

9. Appendix 3: Co-Channel Interference Procedure.

In order to address modern digital technologies this appendix was completely re-written.

10. Appendix 4: System Engineering Exhibit.

No changes, except converted to workable excel spreadsheet

11. Appendix 5: FCC Channel Assignments.

No changes, except converted PDF file to excel spread sheet.

- 12. Appendix's 6 through 9: no changes.
- 13. Added appendix 10 to contain the 2017 concurrence letters.

REGION 35 800MHZ PUBLIC SAFETY PLAN

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APPPENDIXES:

Appendix 2: Procedure for Determining Service Area Contour.

Appendix 3: Co-Channel Interference Procedure.

Appendix 4: System Engineering Exhibit.

Appendix 5: FCC Channel Assignments, CET Packing Plan

Appendix 6: Public Notice and Meeting Attendance

Appendix 7: Region 35 Planning Committee

Appendix 8: Other Participants and Contracted Agencies

Appendix 9: Notification of Region 35 and the Adjacent Regions.

Appendix 10: Region 35 2017 concurrence letters.

1. SCOPE OF PLAN

1.1. INTRODUCTION

This plan has been developed by a representative group of the Public Safety Radio Service and Special Emergency Radio Services that are eligible for licensing in the 6 MHz (megahertz) of spectrum at 806-809/851-854 MHz allocated for such use by the Federal Communications Commission (FCC). Eligible members of these two radio services are described in the FCC Rule and regulations Part 90, Subparts B and C.

The plan's intent is to define current and projected needs of his spectrum to and beyond the year 2020. It focuses primarily on the assignment and use of the 800 MHz spectrum within the boundaries of Region 35, which is the state of Oregon.

1.2. BACKGROUND

In December 1983, the United States Congress directed the FCC to establish a plan to ensure that the communication needs of state and local public safety authorities would be met. The Commission set into motion a process which intimately resulted in their Report and Order, Docket 87-112, which directed the conditional release of 6 MHz of additional 800 MHz spectrum for Region 35 (Oregon), that condition being the acceptance by the FCC of a Regional Communications Plan.

Lieutenant James DeRosier at the Oregon State Police was appointed Convener by the FCC with the responsibility to form a committee for the purpose of developing this regional plan. To this end, a meeting was held on October 11, 1988 at which representatives of Public Safety Radio Services and Special Emergency Radio Service users formed the Oregon Regional Planning Committee (RPC). (See Appendix 6 through Appendix 8)

At a subsequent meeting a new chairman was elected

Robert E. O'Brien
Bureau of General Services
1130 SW 17th Ave.
Portland, Oregon, 97205
Telephone – (503) 823-4183
FAX – (503) 823 4185

1.3. PURPOSE OF REGION 35 PLAN

Public Safety Radio Service spectrum users within Region 35 realized that radio spectrum is a highly valued and limited resource which requires an orderly and efficient development of its use. Within Region 35 there are numerous entities, especially in urban areas, which need new and/or added communication capabilities in order to maintain satisfactory public services for their citizens

The purpose of this regional plan is to define, under the auspices of the Nation Plan, specific users and their spectrum requirements, technical and frequency reuse requirements, and other requirements applicable to Region 35

The plan has been designed to meet the following requirements:

- 1) Meet the Nation Public Safety Planning Advisory Committee (NPSPAC) guidelines.
- 2) Obtain plan approval by the Federal Communications Commission.
- 3) Provide guidance to the Regional Review Committee/ Frequency Advisory Committee in future dealing with the 6 MHz of spectrum provided by Docket 8712.
- 4) Provide direction to future applicants when applying for this spectrum.
- 5) Provide for inter-regional coordination for spectrum assignment.

This Regional Plan is in conformity with the Nation Plan. If there is a conflict between the two plans, the National plan will govern. By officially sanctioning the Plan, the FCC agrees to its conformity to the Nation Plan. Nothing in the Plan is to interfere with the proper function and duties of the organizations appointed by the FCC for frequency coordination in the Private Land Mobile Service, but rather it provides procedures that are the consensus of the Public Safety Radio Service and Special Emergency Radio Service user agencies in the Region. If there is a perceived conflict, the judgment of the FCC will prevail.

1.4. REGIONAL PROFILE

1.4.1. Topography

Region 35 is the State of Oregon. The total area is 97,073 square miles, the state is divided into three major areas: the sparsely populated and narrow coastal area between the Pacific Ocean and the Coast Range; the heavily populated Willamette Valley Between the Coast Range and Cascades; and the sparsely populated, relatively flat eastern two-thirds of the state which ranges from large desert areas to the peaks of the Wallowa Range in the northeast. Elevations in the region vary from sea level along the Pacific Ocean to the peaks of the various mountain ranges, with Mount Hood reaching over 10,000 feet.

1.4.2. Demography

Oregon's population in 1990 is 2,884,000, projected to grow to 3,304,300 by the year 2000. Over one-half of the population is concentrated in the northern half of the Willamette Valley, with the greater portion in the Portland Metropolitan Area. In the context of this plan, it is clear that almost all activity regarding 800 MHz Public Safety systems within the foreseeable future will occur within this area.

2. REGIONAL PLANNING METHODOLOGY

2.1. Regional Planning Committee (RPC)

Authority for the Regional Planning Committee (RPC) to carry out its assigned tasks was derived from the FCC Report and Order, Docket 87-112. Participants in the formation of the RRC represent interested personnel from public safety and special emergency radio services. This section will cover the method used to create the Plan, the composition of committees, and the intended method of administering the Plan.

2.2. The Planning Process

At the Regional Planning Committee's first meeting on October 11, 1988, Lt. James DeRosier was elected Chairman of the Regional Planning Committee (RPC). To facilitate development of the plan, a

working group was appointed under the auspices of the Oregon APCO Engineering and Research Committee, which was expanded to include eligible non-APCO participants. This as hoc committee was assigned the task of generating a draft plan.

Considerable effort was made over the next several months to give adequate notification to all interested parties in the state of Oregon and to obtain their participation in the planning process. Committee meetings were held bimonthly at the call of the Chairman at which the various portions of the planning process, participation and plan requirements were discussed and determined.

From the beginning, it was the intention of the committee to develop a plan which would be ideally suited for the geographic and demographic characteristics which make Oregon unique, while staying within the general guidelines set forth in Docket #87-112 and the National Plan. The committee attempted at all times to build an element of flexibility into the Regional Plan to allow for future adjustments.

As an initial step in the planning process, the committee performed a survey of all currently licensed users of Public Safety and Special Emergency radio spectrum. The information requested included: current use, expectations of present or future needs for the new 800 MHz spectrum, and return of frequencies for reuse. From this survey it became clear that, with the exception of the densely populated Portland area, there was minimal interest in this spectrum. There were many questions about the availability of additional frequencies in the lower frequency spectrum which tended to emphasize the need for the return of these frequencies for reassignment.

2.3. PARTICIPATION

In addition to eligible spectrum users, participation and input has been sought form vendors, SMR providers, and Amateur Disaster Radio groups, and included in the final draft. In all, in addition to public safety agencies, a total of 17 other agencies have been invited to participate of otherwise make their views known to the committee. (See Appendix 6 and 8)

2.4. APPROVAL

2.4.1. Region 35 Review and Approval

The committee gave every agency affected by this Plan, whether eligible for the specific frequencies or not, and opportunity for input to and approval of the final draft.

All eligible agencies and all parties who had previously participated or otherwise expressed interest in the Plan were notified. The notification was published in two newspapers that have statewide circulations. Also letters were sent to nearly all Part 90 users in the state of Oregon. The notification advised interested parties how to obtain a copy for review and comment. The list is in Appendix 9.

A thirty-day period was provided for responses with the provision that failure to respond indicated approval. The responses received were considered by the Committee and, were appropriate, incorporated into the final Plan.

2.4.2. Adjacent Regions Review and Approval

In conjunction with the Region 35 review and approval process, the plan was distributed to adjacent regions:

Region 6 - Northern California Region 12 - Idaho Region 27 - Nevada Region 43 - Washington

The letters and the responses are in Appendix 9.

It will be necessary to coordinate inter-regionally due to potential impact of systems that will be implemented at or near region borders. This will be particularly true in the relationship between Region 35 and Region 43 because of the Region 43's Canadian coordination requirements.

2.4.3. FCC Approval

Upon acceptance of this plan by the FCC frequencies in the range of 806-809 MHz and 851-854 MHz will be available for licensing to Region 35 users.

3. REGIONAL REVIEW COMMITTEE

3.1. Responsibility and Structure

Upon approval of the Region 35 plan by the FCC the Regional Planning Committee will become the Regional Review Committee (RRC). This committee will be established for the purpose of reviewing new applications, conducting and annual system implementation review, making action recommendations to the FCC, resolving inter-regional problems, reviewing and recommending modifications and amendments to the plan, and to exercise general oversight of the plan. The RRC will establish, at its first meeting, its own operating procedures and by-laws.

For the purpose of establishing a basis for membership in the Region 35 RRC, the State of Oregon has been divided into 5 zones.

These zones consist of the following counties:

Zone I	Multnomah, Washington, Clackamas, Columbia, Clatsop, Tillamook and Hood River.
Zone II	Yamhill, Polk, Marion. Lincoln, Benton, Linn, Lane, Douglas and Coos
Zone III	Curry, Josephine, Jackson, Klamath, Lake, Harney and Malheur.
Zone IV	Wasco, Sherman, Gilliam, Jefferson, Wheeler, Deschutes and Crook.
Zone V Baker	Morrow, Umatilla, Wallowa, Union, Grant and

At a minimum, the voting membership of the RRC shall include the designated Public Safety Frequency Advisor(s), 3 members from Zone I, which encompasses the largest population in the region, and one member from each of the other 4 zones in Region 35. Any public safety or public service user may become a member of the RRC. Agencies will be limited to one voting member of the RRC at any given time. A simple majority of the RPC will constitute a quorum. To make changes in the region 35 plan will require a two thirds vote or the quorum.

Membership in the committee must be renewed at the beginning of each calendar year, Committee membership is open to any representative from an eligible Public Safety Radio Service or Special Emergency Radio Service agency; no distinction is make regarding federal, state, county or municipal levels of government. However, membership must have been in force 30 days prior to that member exercising his/her voting privileges. Attendance and participation in discussion of issues is necessary to establish and informed consensus, proxy voting will not be permitted.

The RRC will annually elect a chairperson from its membership. It will meet as often as is deemed necessary to conduct it business. Members will be notified by the chairperson or his/her designee via U.S. Mail, 10 days in advance of a meeting 30-day notice will be required in cases where changes in the Region 35 Plan are to be discussed.

The agenda will be set by the chairperson. Issues of importance may be added to the agenda by a majority vote of the attending members.

All interested parties will be encouraged to attend meetings held by the RRC. The meeting will be conducted in accordance with Roberts Rules of Order.

It is vital to the interest of the Region 35 public safety agencies that the RRC be maintained as a standing committee for the duration of the Region 35 NPSPAC plan.

- 3.2. Frequency Advisory Committee
- 3.3. Between meetings of the Regional Review Committee, the Oregon APCO Frequency Advisory Committee shall have authority to act on its behalf in considering routing applications and reviewing implementation process which are in accord with the Plan. Non-routine or disputed matters shall be referred to the RRC.

4. FREQUENCY DISTRIBUTION POLICIES

4.1. General Policy

The Regional Planning Committee has established the following frequency distribution policy. This policy will be used as a guide by future applicants and the Regional Review Committee. Public Safety frequencies involved include 800 MHz frequencies, as well as surrendering 150 MHz and 450 MHz frequencies.

This policy is divided into four sections which are defined below:

- a) Frequency Allocation the distribution of 800 MHz frequencies.
- b) Frequency Reuse the use of the same 800 MHz frequency by two of more agencies which have sufficient geographical separation such that the agencies do not interfere with each other.
- c) Frequency Give-Back the return of vacated 150 MHz and 450 MHz frequencies to the FCC for re-licensing after agencies have implemented 800 MHz systems.
- d) Frequency Recall a reclamation (initiated by a recommendation of the Regional Review Committee to the FCC) of 800 MHz frequencies from agencies which have failed to make sufficient progress toward the implementation of their proposed 800 MHz system.

4.2. Frequency Allocation

4.2.1. Allocation Criteria

One criterion used to evaluate a give county's frequency allocation will be that county's population. One channel will be assigned for every 25,000 population or fraction thereof in the county. In sparsely populated area, agencies may, however, submit justified requests for more frequencies that the number determined by the population-to-channel ratio. Additionally, to ensure accommodation of future needs in these areas, a minimum of four channels shall be set aside for each county, one each for police, fire, medical and Local Government use.

The application should include, in addition to the information specifically requested, any special or unusual circumstances which the applicant wants the committee to consider.

4.2.2. Allocation priorities

In the event that prioritization becomes necessary as implementation progresses, the RRC will use the following criteria to establish a system of prioritization. Each item is shown with its maximum allowable point value

- 6 Immediate need to protect life and property
- 5 Channel Loading
- 4 Effective system design
- 3 Consolidation or use of a channel(s) by more that one agency
- 2 Implementation Schedule
- 1 Number and usability of vacated channels

The applicant with the highest score will be assigned the highest priority for the available channels. The RRC will be responsible for resolving and conflicts arising from this prioritization.

4.2.3. Channel Assignments

Subject to approval of the Plan by the FCC the newly allocated 800MHz channels included in the Plan will be assigned and used in accordance with the agreed upon allocation table, Appendix 5, contained in this document, or as it may be modified in the future.

4.2.4. Frequency Reuse

It is the responsibility of the RRC to maximize the usefulness of the available frequencies. The committees may therefore require any number of modifications to the applicant's proposed system in order to increase the amount of frequency reuse possible. These modifications include such system design elements as antenna design, transmitter power, transmitter locations, and actual frequencies assigned to the applicant.

4.2.5. Frequency Give-Back

It is anticipated that in all but the most unusual cases, frequencies presently used by a license will be turned back for reassignment. This give-back should occur within thirty days

following installation, acceptance and full operation of the 800 MHz system.

The RRC will be responsible for recommending reassignment of the channels to other agencies awaiting channels in the lower frequency bands. Normal coordination procedures will be followed with these "give-back" using the priority criteria in this plan where appropriate.

It is not consistent with the goals and objectives of this Committee to permit the direct reassignment of radio frequencies between agencies. All frequencies are to be returned to their respective pools to be assigned for the most beneficial public use. Similarly, an agency does not have the option to "farm down" frequencies to other services with in their political structure simply to take advantage of surplus equipment.

4.2.6. Frequency Recall

The Committee recognizes that many entities will require a multi-year period in which to accomplish planning, approval, funding, purchase and the construction of communication systems. Therefore, this Plan is designed to accommodate "show growth" requirements.

System implementation will be monitored by the RRC to determine if sufficient progress is being made. If no progress is shown in one year after the license is issued, the licensee will be advised of the consequences of their lack of progress. The next milestone will be two years after the licensee is issued. If at the end of three years, the licensee has not shown acceptable progress the RRC may recommend to the FCC revocation of the applicant's license for those unused frequencies.

The notified licensee can appeal this action or can allow the license to be withdrawn. If the assigned frequencies are withdrawn, they will be returned to the appropriate frequency pool and become available for coordination.

4.2.7. Appeal Process

Throughout the frequency coordination process applicants will be given opportunities to appeal decisions, additional requirements

and rejection. This appeal will be at two levels. The first level is the RRC and the second is the FCC. An applicant who decides to appeal a rejection should initiate the appeal immediately upon notification from the RRC. In the event that an appeal reaches the second level, the RRC's decision will be final and binding upon all parties.

5. APPLICATION PROCEDURES

All requests for frequencies to be used for Public Safety Communications must be submitted to the Frequency Advisor(s) for approval. Eligible applicants include Public Safety agencies and Special Emergency Radio Service agencies. The Frequency Advisor(s) shall review the application to determine its compliance with the Regional Plan as indicated below. Upon application, an objective evaluation procedure shall be instituted. The Evaluation Criteria is discussed in the FREQUENCY DISTRIBUTION POLICIES section of the plan. If the request for frequencies in not approved by the Frequency Advisor(s), the request will be returned to the applicant for revision and correction.

5.1. Content of Applications

The request shall contain information to justify the frequencies requested and shall demonstrate compliance with the Regional Plan. As a minimum, this request shall consist of the following.

- 5.1.1. Name, address and phone number of the applicant agency (ies) involved, including the name of the person that the Committee may contact regarding technical details of the application.
- 5.1.2. Appropriate FCC and APCO coordination forms.
- 5.1.3. Funding statement of resolution from the appropriate governing Council, Agency or Executive indication that sufficient funds will be available to meet the Proposed Implementation Schedule (5.1.4 below)
- 5.1.4. Proposed implementation Schedule; a timetable indication the anticipated start and completion date, as well as intermediate dates/milestones.

- 5.1.5. List the frequencies currently assigned to the applicant and those frequencies that will be released for assignment to other users.
- 5.1.6. System design information, listing all relevant technical information. See Section 7.0 TECHNICAL DESIGN REQUIREMENTS.
- 6. MUTUAL AID CHANNELS

NATIONAL COMMON CHANNELS

001	806/851.0125	National Calling
039	806/851.5125	Tactical
077	807/852.0125	Tactical
115	807/852.5125	Tactical
153	808/853.0125	Tactical

REGION 35 COMMON CHANNELS

025	806/851.3250	Tactical, Fire/EMS
030	806/851.3875	Tactical, Law Enforcement
057	806/851.7500	Tactical, Local Government
059	806/851.7750	Tactical, Fire/EMS
061	806/851.8000	Tactical, Law Enforcement

The following rules will apply to the Region 35 Common Channels as well as the National Common Channels, except where noted.

6.1. REGIONAL INTEROPERABILITY FOR COMMON CHANNELS

In accordance with the National Plan for 806-809/851-854 MHz, Interoperability among federal, state, and local governments during both routine and disaster operations will take place primarily on the five Common Channels as identified in the National Plan. Additionally, though the use of S-160 or equivalent agreements, a licensee may permit federal use of a non-federal communications system. Such use, other that the five Common Channels, is to be in full compliance with the Commission's requirements for government use of non-government frequencies (Title 47 CFR, Sec 2.103).

Licensees are allowed to count as additional loading a factor of two percent for federal interoperability agreements.

6.2. COMMMON CHANNEL IMPLEMENTATION

The implementation of the common channels designated by the National Plan will be separated into two categories of users: primary and secondary.

6.2.1. Prime user

A Primary user is an agency that operates on five or more channels. The Primary User will be required to have the capability of operating on the National Calling Channel. The Calling Channel will be implemented as a full mobile relay. Primary users will maintain a watch on this channel.

All licensees are encouraged to operate additional stations on any or all of the remaining National Common and Region 35 Common Channels. Agencies within a geographical area are especially encouraged to jointly or individually install and operate a full mobile relay on at least one tactical channel

6.2.2. Secondary User

A secondary user is an agency that will operate on four channels or fewer. Secondary users are strongly encouraged to operate a base station for continuous monitoring of the National Calling Channel in areas where no primary user is doing so.

6.2.3. Use by Other Entities

Primary and Secondary Users include federal, state and local disaster management agencies, police, fire and medical providers. Other eligible, such as school buses, volunteer emergency corps, Red Cross, Radio Amateur Civil Emergency Service (RACES), Amateur Radio Emergency Services (ARES), Salvation Army, C.A.P., etc., under the National Plan may also participate on a secondary basis in support of the preservation of life and property during an emergency. These eligible may use Common Channels when specifically enrolled in a documented emergency plan of a recognized emergency management agency.

6.3. CALLING CHANNEL

The calling channel shall be used to contact other users in the Region for the purpose of requesting incident related information and assistance. This channel shall not be used as an ongoing working channel. Once contact has been established a tactical channel will be selected for use during the incident

There will be no Calling Channel in the Region 35 Common Channels.

6.4. NATIONAL COMMON TACKTICAL CHANNELS AND REGION 35 COMMON CHANNELS

These channels are reserved for use by those agencies in need of conducting interagency communications. Incidents requiring multiagency participation will be coordinated over these channels by the agency controlling the incident. Individual tactical channels may be designated for use by various services on an incident basis by the controlling agency. In the event of multiple incidents requiring the use of these channels, channels shall be designated by mutual agreement between controlling agencies. In no case shall control of these channels remain with any single agency beyond the termination of a declared emergency.

6.5. COMMON CHANNEL USE

Plain language will be used on all Common Channels at all times. The use of unfamiliar terms, Phrases or codes will be kept to a minimum unless deemed necessary for security purposes.

The use of these channels for inter-system normal dispatch and routine agency operations is strictly prohibited. Normally, the Common Channels are to be used only for activities requiring communications between agencies not sharing any other compatible communications system. Under emergency situations, one or more tactical channels may be assigned by the controlling agency at the time of the incident.

The use of automatic or operator-assisted connection of these Common Channels to the switched telephone network is prohibited without a specific waiver form the Regional Review Committee.

Voice Privacy, Paging, Alerting, or Signaling on the COMMON CHANNELS is prohibited.

PRIORITY FOR USE

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

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

PRIORITY 3: Special event control activities, generally as a prplanned nature, and involving joint participation of two or more agencies.

PRIORITY 3A: Drills, tests and exercises of a civil defense or disaster nature.

PRIORITY 4: Single agency secondary communications.

6.6. CTCSS TONE REQUIREMENT

All mobile and portable radios, and mobile relay base stations, operating in the 806-809/851-854 MHz band shall be equipped to operate on the Common Channels using CTCSS tone squelch of 156.7 Hz. All mobile relay base stations shall be equipped to operate as a mobile relay station on demand, but shall normally operate in the repeat disable mode.

7. TECHNICAL DESIGN REQUIREMENTS.

7.1. COVERAGE LIMITATIONS

The purpose of this section is to define the technical requirements necessary to assure the maximum utilization of the spectrum addressed in this plan. System coverage or service areas will be limited to the smallest geographical areal necessary to provide sufficient coverage of the geo-political area of the licensee.

Agencies requesting channels under the plan will have their proposed system design evaluated by the Regional Review Committee.

Agencies with service areas outside their political boundaries may request extended system coverage. Such requests for extended coverage must be accompanied by written justification.

7.1.1. Definition of Service Area

"System Coverage" or "Service Area" is defined as the boundary where received signal strength falls to 40dBu (decibels above 1 microvolt per meter approximately 4.6 microvolts of signal across 50 ohms at 850 MHz).

7.1.2. Calculations of Service Area

The 40 dBu boundary shall be based on using computer based programs such as Comstudy or Spectrum-E to calculate the 40 dBu service contour. The contour used will be a Carey R-6602 (50:50) curve. Refer to Appendix for an example. In this case 40 dBu is actually 40 dBuV/m and 40 dBuV/m is equal to -94 dBm at 856 MHz. Appendix 1 provides examples of using 40 dBu curves. A step-by-step procedure is provided in Appendix 2.

7.1.3. Responsibility for Calculations

It will be the responsibility of the requesting agency to calculate the proposed service area and to validate the accuracy of the calculations. (See Appendix 1 through 4).

7.1.4. Proposed Service Area Exhibit

An agency shall provide, along with its request for frequencies, an exhibit showing the calculated service area and the agency's jurisdictional boundaries. The boundaries must be drawn using computer based programs such as Comstudy or Spectrum-E with a title block including the name of the requesting agency, height above average terrain, effective radiated power, latitude, longitude, ground elevation, of the transmitting site, and the distance to the service area boundary in miles, as calculated.

7.2. CONTROL STATION

Control stations will be limited to an effective radiated power of no more than 6 dB above that of a mobile unit associated with the system. A list of controls station locations, including latitude, longitude, effective radiated power, and height of antenna above ground level shall be provided with the request for frequencies.

7.3. MAXIMUM EFFECTIVE RADIATED POWER

The maximum effective radiated power (ERP) of all transmitters shall be limited to the minimum amount necessary to provide coverage of the agencies geo-political boundaries. Transmitters installed in aircraft will be limited to a maximum ERP of 1 watt.

7.4. FREQUENCY REUSE

7.4.1. Co-channel Design

Careful adherence to the system technical design requirements of this plan will allow for maximum co-channel usage within the region.

Agencies requesting frequencies that have been previously licensed within this region or an adjacent region must show that their proposed system will operate on an interference-free basis with any existing co-channel system. Requesting agencies must demonstrate that the proposed system signal level will not exceed 5 dBu at any point within the service area of the existing system.

The signal strength of the proposed system is to be calculated by the same method as outlined in "Calculation of Service Area," elsewhere in this plan. After the distance from the proposed transmitter site to the existing service area contour is determined, the received signal strength of the proposed system must be modified to meet the protection criteria. A step-by-step procedure for performing the series of interference calculation is included in Appendix 3.

7.4.2. Adjacent Channel Design

Proposed systems must also be designed to "interference-free operations" with adjacent channel licensees. The method of determination is identical to that of co-channel design as detailed in "7.4.1 Co-channel Design" with the exception of the existing to proposed signal margin criteria. In the case of adjacent channel systems, the signal level will not exceed as follows:

- a) For analog emissions such as 16K0F1D, 16K0F3E, or similar, a 25 dBu R6602 (50:50) interference contour will used.
- b) For digital emissions such as 8K10F1D, 8K70D1W, 9K80D7W, or similar a 60 dBu R6602 (50:50) interference contour will be used.
- c) If an interference contour extends into an adjacent region, the contour analysis shall follow that adjacent region's plan.

It shall be noted that the FCC has adopted technical standards for transmitters which will reduce adjacent channel interference and permit closer geographical channel assignment. However, the commission has not adopted improved receiver technical standards. It is the position of the Commission that receivers do not cause interference, nor do they threaten effective operation of the public safety network, as would substandard transmitters. Because of the demand for limited spectrum, it is the intent of this plan to provide efficient spectrum utilization within current technological capabilities. Agencies are encouraged to carefully consider the receiver selectivity and adjacent channel specifications of any equipment to be purchased for use in the 806-809/851-854 MHz band.

7.4.3. Absolute Mileage Separation

In any case where the service areas of adjacent channel systems are separated by at least 50 miles, the interference studies as set forth in this plan are unnecessary because of free space and terrain losses.

7.5. TRUNKING REQUIREMENTS

As referenced in the national plan, trunking is mandated for any new system with more than four channels in the 800MHz band when located at a single transmitting site. Request for exceptions

will be considered by the regional Review Committee for mobile data use, encryption, and telemetry stations. Other requests for waiver of the trunking requirement will be considered after presentation of evidence by the requesting agency. Approval to waive the trunking requirement will be based on the individual merits of the presentation.

7.6. CODED SQUELCH

The use of CTCSS (Continuous Tone-Coded Squelch Systems) or CDCSS (Continuous Digital-Coded Squelch Systems) in required. Systems not incorporating some form of coded squelch will not will not be protected from receiving interference.

System designers shall coordinate the coded squelch to enhance system discrimination between desired and undesired signals.

7.7. SYSTEM LOADING AND IMPLEMENTATION REQUIREMENT

Agencies utilizing frequencies in the 806-809/851-854 MHz band shall comply with loading requirements as called for in Part 90.631 of the FCC Rules and Regulations for trunked radio system, and Part 90.633 for conventional system. As references in 90.631 and 90.629 shall also apply.

7.7.1. Traffic Loading Study

Justification for adding frequencies, or retaining existing frequencies in the 806-809/851-854 MHz band, can be provided by a traffic loading study in lieu of loading by number of transmitters per channel. It will be the responsibility of the requesting agency to provide a verifiable study showing sufficient airtime usage to merit additional frequencies. A showing of airtime usage, excluding telephone interconnect air time, during peak busy hour greater than 70 percent per channel on three consecutive days will be required to justify additional or retain existing frequencies.

The use of the CAPRAD Channel Loading Calculator (http://www.nrpc.us) is highly recommended to take into account modern digital system channel loading parameters, such as 2-slot TDMA (Time Division Multiple Access), ISSI (Inter-RF)

Subsystem Interface), enhanced data channels, location services, etc. that will require additional frequencies.

7.8. SYSTEM ENGINEERING REQUIREMENTS

7.8.1. System engineering exhibit

All requests to the Regional Review Committee for additional frequencies must include sufficient data for the committee to be able to determine proposed system operation parameters.

The system engineering exhibit must show:

- 1. Transmit output power and frequency.
- 2. Type of cavities (duplexers and combiners) and associated losses.
- 3. Type of transmission line and associated loss.
- 4. Antenna manufacture, model, gain, amount of down-tilt and directivity.
- 5. Ground elevation above mean sea level
- 6. Antenna centerline above ground level.
- 7. Height above average terrain of antenna centerline.
- 8. Effective Radiated power as determined by items 1 through 4.
- 9. Polar plot of item 8.
- 10.CTCSS/CDCSS.

A proposed format for this exhibit is Appendix 4.

7.8.2. Average Elevation Exhibit

Computer based programs such as Comstudy or Spectrum-E will be used to calculate the (HAAT) average height of terrain.

7.9. CELLULAR TELEPHONE USE

The uses of a car radio telephone via interconnect through an 800 MHz trunked radio system or other two-way radio communications system will normally require a significant amount of air time. Therefore, telephone interconnect is discouraged. The uses of a defeat able interconnect for radio telephone use is allowed for system implementation under this Regional Plan. The use of cellular telephone, where available, for

automatic interconnect to the Public Switched Telephone Network is expected.

8. ADJACENT REGION COORDINATION

Except for the Portland Metropolitan Area and the effect assignment of 800 MHz frequencies has on the adjoining area within Washington State, the areas of Region 35 that adjoin other regions will have very little demand for the frequencies allocated in the plan. This is based on the fact that no existing 800 MHz public safety radio systems are currently operating in these areas and low population levels are unlikely to require the assignment of more than a very few channels within the foreseeable future.

Based on this it will be very easy to modify and/or adjust the frequency allotments for Region 35 border areas should the need arise due to adjacent region conflicts. However, to avoid any conflict along the borders with California and Nevada, which have already had their plans approved, those channels assigned by them to statewide or adjoining county use have been excluded in those Oregon Counties Abutting them. This will provide an approximate seventy-mile buffer.

Close coordination has been maintained with Region 43, The State of Washington, in order to accommodate the future 800 MHz requirements of both Portland (Multnomah County) and adjoining Clark County, Washington. A four-county group including Clark, Multnomah, Washington and Clackamas counties has been formed to jointly plan for 800 MHz channel use. Designations of frequencies within this plan have been made so as to accomplish this end.

It is recognized that the State of Washington has special restrictions in its Canadian border areas which limit flexibility in channel assignments. This may have an effect on Washington- Oregon border areas both in initial and future channel assignments. Therefore, the actual assignment of channels within this Plan may require alterations in the future. This will be accomplished through close cooperation between Region 35 and Region 43.

9. CHANNEL ASSIGNMENTS

Appendix 5 contains the actual channel allotments per county within Region 35 as determined by using the APCO/CET packing program.

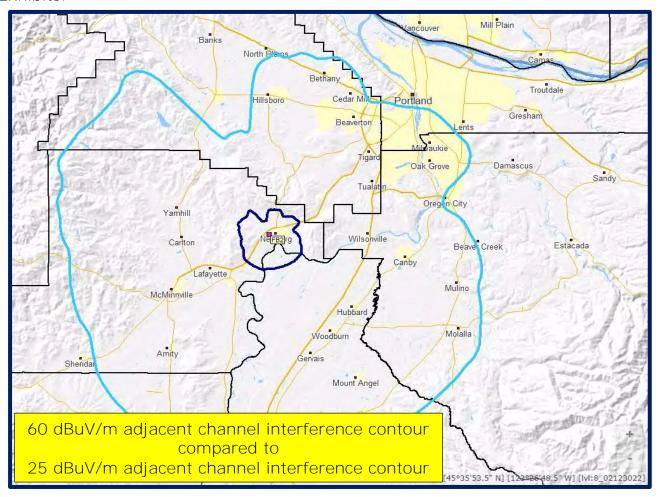
10. End of section 1
10.1. End of section 1.1
10.1.1. End of section 1.1.1

APPENDIX 1

Carey Propagation Curves

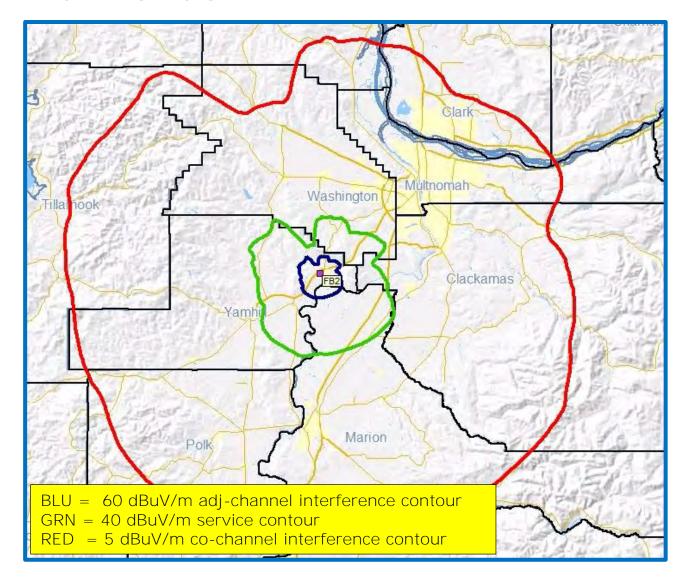
This appendix is intended to provide reference material to enable applicants to present their applications in a consistent format to meet the recommended Region 35 standards.

Several Propagation Curve Examples are provided to serve as a visual reference to aid applicants in presenting the necessary System Engineering Exhibits.



- ➤ The inner 60 dBuV/m adjacent channel interference dark blue contour is used for digital emissions.
- ➤ The outer 25 dBuV/m adjacent channel interference light blue contour is used for analog emissions.
- ➤ Both contours are Carey R6602 (50:50) contours.
- ➤ The 60 dBuV/m contour is ~10 miles in diameter.
- ➤ The 25 dBuV/m contour is ~44 miles in diameter.

Example Carey Propagation Curves



- The inner 60 dBuV/m adjacent channel interference dark blue contour is used for digital emissions.
- > The middle 40 dBuV/m green service contour is used for both analog and digital emissions.
- > The outer 5 dBuV/m co- channel interference red contour is used for both analog and digital emissions.
- ➤ All contours are Carey R6602 (50:50) contours.
- ➤ The 60 dBuV/m contour is ~10 miles in diameter.
- ➤ The 40 dBuV/m contour is ~21 miles in diameter.
- ➤ The 5 dBuV/m contour is ~78 miles in diameter.

700/800 MHz Coordination Parameters recommended by Region 35.

CONTOURS COLORS:

SERVICE = **GREEN**CO-CHANNEL = **RED**ADJ CHANNEL = **BLUE**

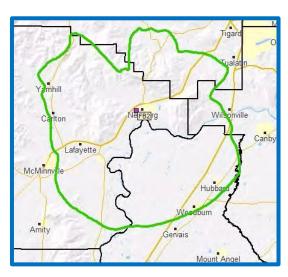
	SERVICE CONTOUR		CO-CHANNEL INTERFERENCE CONTOUR		ADJACENT CHANNEL INTERFERENCE CONTOUR			
	dBuV/m	dBm	dBuV/m	dBm	dBuV/m	dBm	dBuV/m	dBm
700 MHz (Test Frequency 772 MHz)	40	-93	5	-128	25	-108	60	-73
800 MHz (Test Frequency 856 MHz)	40	-94	5	-129	25	-109	60	-74

APPENDIX 2

Procedure for Determining Service Area Contour

Before the 40 dBuV/m Service Area Contour can be calculated the following technical information is required:

- ➤ Latitude (DD-MM-SS.S)
- ➤ Longitude (DD-MM-SS.S)
- ➤ Use NAD83
- ➤ Ground Elevation of Site (AMSL: Above Mean Sea Level)
- > Antenna Name
- > Antenna Parameters:
 - o Height in meters (AGL: Above Ground level)
 - o Azimuth in degrees (360 degrees for OMNI)
 - o Beam Width in degrees (360 degrees for OMNI)
 - Polarization Vertical or Horizontal
 - o Gain in dB
 - o Tilt in degrees
- ➤ ERP (Effective Radiated Power) in Watts
 - o Refer to Appendix 4 to calculate ERP
- > Frequency(ies) in MHz
- Emission Designator(s)
- > Area of Operation in km
- Station Class
- ➤ HAAT (Height above average terrain) in meters
 - o Either use Comstudy or Spectrum or similar to calculate HAAT



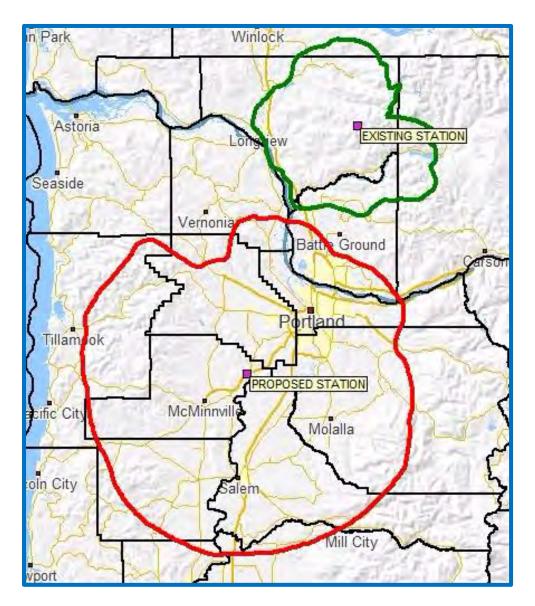
Once this information is entered into the appropriate computer based programs such as Comstudy, Spectrum-E, or similar program that is approved by Region 35, and then setting the program to generate a 40 dBuV/m Carey R6602 (50:50) the program will produce the Service Area Contour on the map.

To the left is an example of 40 dBuV/m Service Area Contour.

APPENDIX 3

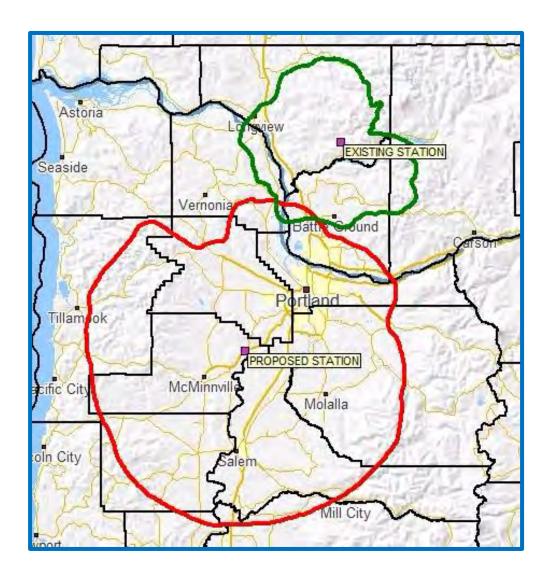
Co-Channel Interference Procedure

Before the 5 dBuV/m Co-Channel Interference Contour can be calculated the technical information listed in Appendix 2 is needed for the existing station. This information is can be downloaded from the FCC.



In this case proposed station **would pass** Region 35 frequency coordination requirements. This is because the 5 dBuV/m co-channel interference contour of the proposed station does not intersect the 40 dBuV/m service contour of the existing station.

RED = 5 dBuV/m co-channel interference contour compared to GREEN = 40 dBuV/m service contour

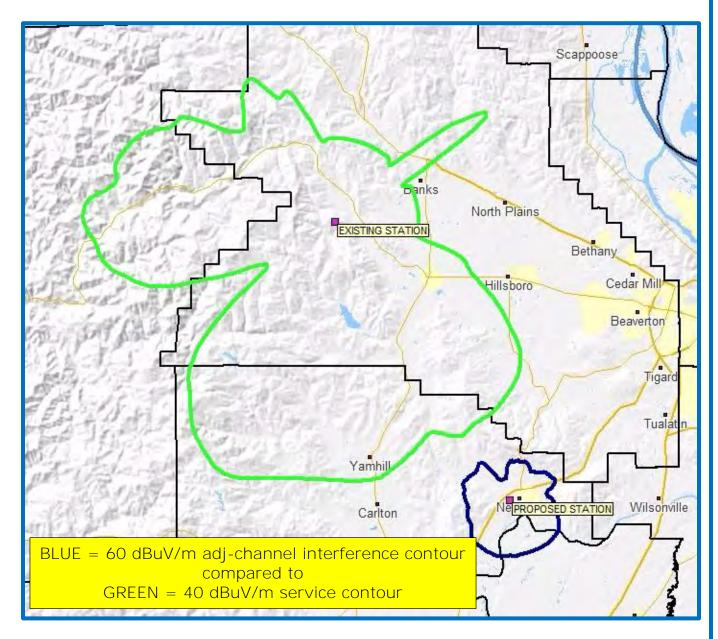


In this case proposed station **would fail** Region 35 frequency coordination requirements. This is because the 5 dBuV/m co-channel interference contour of the proposed station does intersect the 40 dBuV/m service contour of the existing station.

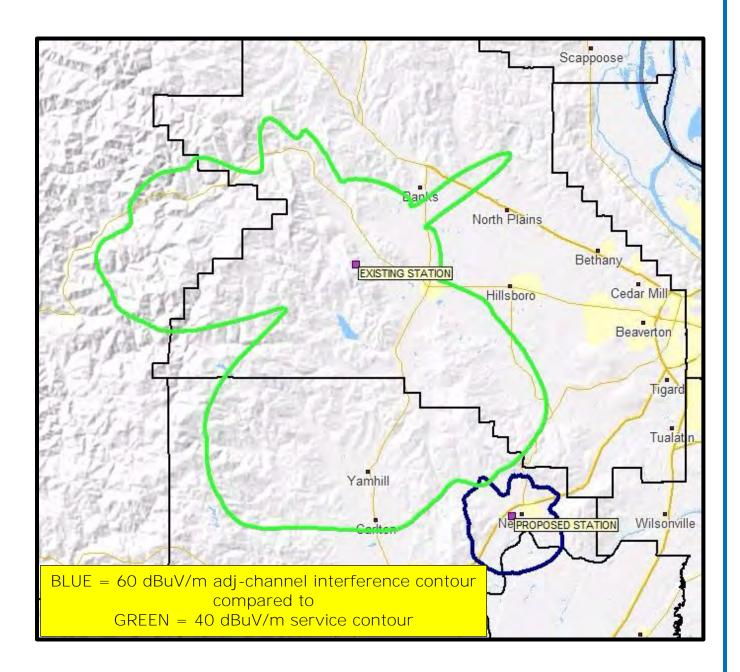
RED = 5 dBuV/m co-channel interference contour compared to GREEN = 40 dBuV/m service contour

Adjacent Channel Interference Procedure APP. 3 cont.

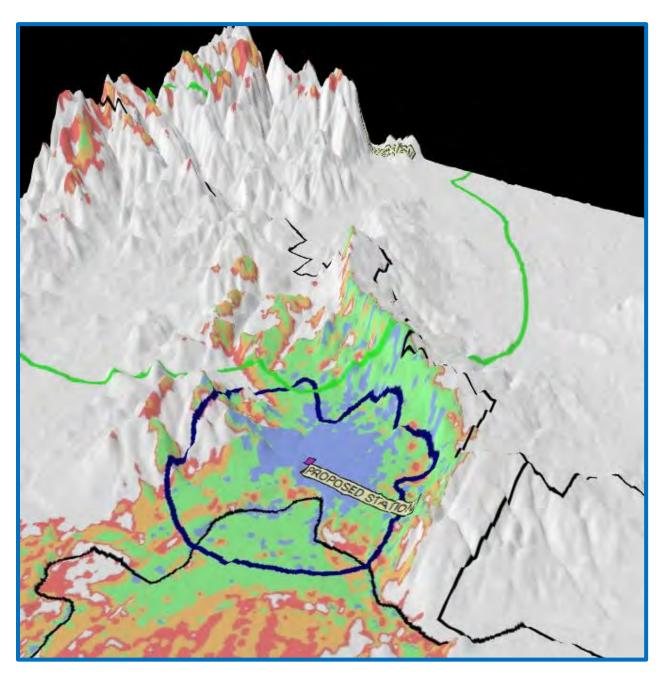
The adjacent channel procedure is identical to the co-channel procedure except for one item. Now the 60 dBuV/m adjacent channel contour is used.



In this case proposed station **would pass** Region 35 frequency coordination requirements. This is because the 60 dBuV/m adjacent-channel interference contour of the proposed station does not intersect the 40 dBuV/m service contour of the existing station.

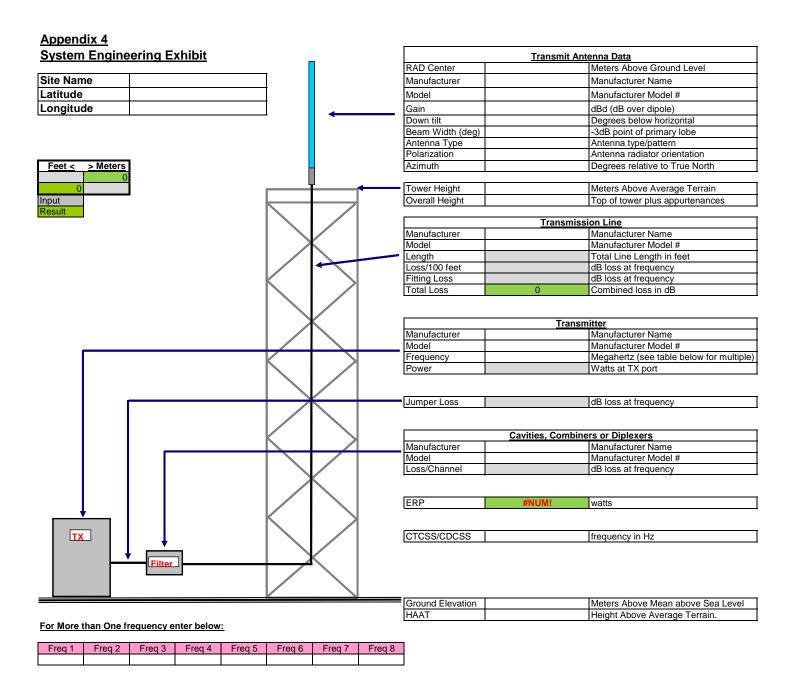


In this case proposed station **would fail** Region 35 frequency coordination requirements. This is because the 60 dBuV/m adjacent-channel interference contour of the proposed station **does** intersect the 40 dBuV/m service contour of the existing station.



In special cases where the proposed station **would fail** Region 35 frequency coordination requirements **further engineering can be done using a tile based TSB88 study to determine pass or fail status.**

This particular case it could be shown that even though the contours intersect there be no or minimal impact on the existing station service area. The terrain blockage would provide shielding to the existing service area.



VDDEVIDIA 2	FCC	CHANNEL	ASSIGNMENT	RV COLINITY
ALLENDIA O		CHAININEL	ASSIGNATION	

NO	Channel #	Mobile TX Frequency (MHz)	Base TX Frequency (MHz)	Region 35 Oregon Original Assigments	Adjacent Region Conflicts
1	2	806.0375	851.0375	BAKER	
2	33	806.4250	851.4250	BAKER]
3	191	808.5000	853.5000	BAKER]
4	218	808.8375	853.8375	BAKER]
5	2	806.0375	851.0375	BENTON]
6	22	806.2875	851.2875	BENTON]
7	199	808.6000	853.6000	BENTON]
8	224	808.9125	853.9125	BENTON]
9	18	806.2375	851.2375	CLACKAMAS]
10	23	806.3000	851.3000	CLACKAMAS]
11	38	806.4875	851.4875	CLACKAMAS]
12	65	806.8500	851.8500	CLACKAMAS]
13	67	806.8750	851.8750	CLACKAMAS	_
14	88	807.1625	852.1625	CLACKAMAS	_
15	90	807.1875	852.1875	CLACKAMAS]
16	110	807.4375	852.4375	CLACKAMAS	_
17	142	807.8625	852.8625	CLACKAMAS	_
18	144	807.8875	852.8875	CLACKAMAS	_
19	172	808.2625	853.2625	CLACKAMAS]
20	192	808.5125	853.5125	CLACKAMAS	_
21	210	808.7375	853.7375	CLACKAMAS	_
22	212	808.7625	853.7625	CLACKAMAS	_
23	28	806.3625	851.3625	CLATSOP	_
24	68	806.8875	851.8875	CLATSOP	_
25	147	807.9250	852.9250	CLATSOP]
26	224	808.9125	853.9125	CLATSOP]
27	66	806.8625	851.8625	COLUMBIA]
28	105	807.3750	852.3750	COLUMBIA]
29	139	807.8250	852.8250	COLUMBIA]
30	211	808.7500	853.7500	COLUMBIA	1

31	4	806.0625	851.0625	COOS
32	27	806.3500	851.3500	COOS
33	197	808.5750	853.5750	COOS
34	223	808.9000	853.9000	COOS
35	7	806.1000	851.1000	CROOK
36	32	806.4125	851.4125	CROOK
37	190	808.4875	853.4875	CROOK
38	223	808.9000	853.9000	CROOK
39	2	806.0375	851.0375	CURRY
40	23	806.3000	851.3000	CURRY
41	199	808.6000	853.6000	CURRY
42	225	808.9250	853.9250	CURRY
43	10	806.1375	851.1375	DESCHUTS
44	34	806.4375	851.4375	DESCHUTES
45	55	806.7250	851.7250	DESCHUTES
46	194	808.5375	853.5375	DESCHUTES
47	214	808.7875	853.7875	DESCHUTES
48	14	806.1875	851.1875	DOUGLAS
49	38	806.4875	851.4875	DOUGLAS
50	169	808.2250	853.2250	DOUGLAS
51	189	808.4750	853.4750	DOUGLAS
52	209	808.7250	853.7250	DOUGLAS
53	194	808.5375	853.5375	GILLIAM
54	33	806.4250	851.4250	GILLIAM
55	54	806.7125	851.7125	GILLIAM
56	214	808.7875	853.7875	GILLIAM
57	9	806.1250	851.1250	GRANT
58	35	806.4500	851.4500	GRANT
59	188	808.4625	853.4625	GRANT
60	210	808.7375	853.7375	GRANT
61	13	806.1750	851.1750	HARNEY
62	43	806.5750	851.5750	HARNEY
63	172	808.2625	853.2625	HARNEY
64	208	808.7125	853.7125	HARNEY
65	71	806.8250	851.8250	HOOD RIVER

66	128	807.6875	852.6875	HOOD RIVER
67	195	808.5500	853.5500	HOOD RIVER
68	225	808.9250	853.9250	HOOD RIVER
69	3	806.0500	851.0500	JACKSON
70	5	806.0750	851.0750	JACKSON
71	34	806.4375	851.4375	JACKSON
72	173	808.2750	853.2750	JACKSON
73	193	808.5250	853.5250	JACKSON
74	214	808.7875	853.7875	JACKSON
75	224	808.9125	853.9125	JACKSON
76	2	806.0375	851.0375	JEFFERSON
77	27	806.3500	851.3500	JEFFERSON
78	196	808.5625	853.5625	JEFFERSON
79	218	808.8375	853.8375	JEFFERSON
80	7	806.1000	851.1000	JOSEPHINE
81	32	806.4125	851.4125	JOSEPHINE
82	195	808.5500	853.5500	JOSEPHINE
83	219	808.8500	853.8500	JOSEPHINE
84	8	806.1125	851.1125	KLAMATH
85	36	806.4625	851.4625	KLAMATH
86	191	808.5000	853.5000	KLAMATH
87	211	808.7500	853.7500	KLAMATH
88	4	806.0625	851.0625	LAKE
89	41	806.5500	851.5500	LAKE
90	199	808.6000	853.6000	LAKE
91	225	808.9250	853.9250	LAKE
92	12	806.1625	851.1625	LANE
93	17	806.2250	851.2250	LANE
94	19	806.2500	851.2500	LANE
95	40	806.5375	851.5375	LANE
96	45	806.6000	851.6000	LANE
97	47	806.6250	851.6250	LANE
98	66	806.8625	851.8625	LANE
99	137	807.8000	852.8000	LANE
100	151	807.9750	852.9750	LANE

101	154	808.0375	853.0375	LANE
102	158	808.0875	853.0875	LANE
103	171	808.2500	853.2500	LANE
104	174	808.2875	853.2875	LANE
105	179	808.3500	853.3500	LANE
106	7	806.1000	851.1000	LINCOLN
107	32	806.4125	851.4125	LINCOLN
108	193	808.5250	853.5250	LINCOLN
109	213	808.7750	853.7750	LINCOLN
110	15	806.2000	851.2000	LINN
111	43	806.5750	851.5750	LINN
112	164	808.1625	853.1625	LINN
113	188	808.4625	853.4625	LINN
114	208	808.7125	853.7125	LINN
115	11	806.1500	851.1500	MALHEUR
116	37	806.4750	851.4750	MALHEUR
117	193	808.5250	853.5250	MALHEUR
118	213	808.7750	853.7750	MALHEUR
119	9	806.1250	851.1250	MARION
120	11	806.1500	851.1500	MARION
121	13	806.1750	851.1750	MARION
122	33	806.4250	851.4250	MARION
123	35	806.4500	851.4500	MARION
124	53	806.7000	851.7000	MARION
125	117	807.5500	852.5500	MARION
126	138	807.8125	852.8125	MARION
127	140	807.8375	852.8375	MARION
128	159	808.1000	853.1000	MARION
129	161	808.1250	853.1250	MARION
130	23	806.3000	851.3000	MORROW
131	50	806.6625	851.6625	MORROW
132	199	808.6000	853.6000	MORROW
133	225	808.9250	853.9250	MORROW
134	21	806.2750	851.2750	MULTNOMAH
135	27	806.3500	851.3500	MULTNOMAH

136	36	806.4625	851.4625	MULTNOMAH	
137	52	806.6875	851.6875	MULTNOMAH	
138	54	806.7125	851.7125	MULTNOMAH	
139	69	806.9000	851.9000	MULTNOMAH	
140	76	806.9875	851.9875	MULTNOMAH	
141	133	807.7500	852.7500	MULTNOMAH	
142	135	807.7750	852.7750	MULTNOMAH	
143	137	807.8000	852.8000	MULTNOMAH	
144	146	807.9125	852.9125	MULTNOMAH	
145	164	808.1625	853.1625	MULTNOMAH	
146	179	808.3500	853.3500	MULTNOMAH	
147	188	808.4625	853.4625	MULTNOMAH	
148	197	808.5750	853.5750	MULTNOMAH	
149	199	808.6000	853.6000	MULTNOMAH	
150	208	808.7125	853.7125	MULTNOMAH	
151	219	808.8500	853.8500	MULTNOMAH	
152	223	808.9000	853.9000	MULTNOMAH	
153	1	806.0125	851.0125	8CALL90/D	
154	39	806.5125	851.5125	8TAC91/D	
155	77	807.0125	852.0125	8TAC92/D	
156	115	807.5125	852.5125	8TAC93/D	
157	153	808.0125	853.0125	8TAC94/D	
158	5	806.0750	851.0750	POLK	
159	28	806.3625	851.3625	POLK	
160	196	808.5625	853.5625	POLK	
161	218	808.8375	853.8375	POLK	
162	15	806.2000	851.2000	SHERMAN	
163	35	806.4500	851.4500	SHHRMAN	
164	198	808.5875	853.5875	SHERMAN	REGION WINE WA
165	224	808.9125	853.9125	SHERMAN	GEM CO, ID
166	6	806.0875	851.0875	STATEWIDE	ADA CO ID, REGIC
167	16	806.2125	851.2125	STATEWIDE	ADA CO ID
168	20	806.2625	851.2625	STATEWIDE	
169	26	806.3375	851.3375	STATEWIDE	NO CA FIRE MUTL
170	29	806.3750	851.3750	STATEWIDE	CLARK CO WA, BE

171	31	806.4000	851.4000	STATEWIDE	REGIONWIDE WA
172	42	806.5625	851.5625	STATEWIDE	
173	44	806.5875	851.5875	STATEWIDE	ADA CO ID, REGIC
174	46	806.6125	851.6125	STATEWIDE	MODOC CO CA, AI
175	48	806.6375	851.6375	STATEWIDE	REGIONWIDE WA
176	49	806.6500	851.6500	STATEWIDE	
177	56	806.7375	851.7375	STATEWIDE	
178	58	806.7625	851.7625	STATEWIDE	
179	60	806.7875	851.7875	STATEWIDE	
180	63	806.8250	851.8250	STATEWIDE	
181	70	806.9125	851.9125	STATEWIDE	
182	74	806.9625	851.9625	STATEWIDE	
183	75	806.9750	851.9750	STATEWIDE	
184	78	807.0375	852.0375	STATEWIDE	
185	79	807.0500	852.0500	STATEWIDE	
186	80	807.0625	852.0625	STATEWIDE	
187	81	807.0750	852.0750	STATEWIDE	
188	82	807.0875	852.0875	STATEWIDE	
189	83	807.1000	852.1000	STATEWIDE	
190	84	807.1125	852.1125	STATEWIDE	
191	85	807.1250	852.1250	STATEWIDE	
192	86	807.1375	852.1375	STATEWIDE	WA CO ID, REGIO
193	87	807.1500	852.1500	STATEWIDE	
194	89	307.1750	352.1750	STATEWIDE	
195	91	807.2000	852.2000	STATEWIDE	CLARK CO WA
196	92	807.2125	852.2125	STATEWIDE	
197	93	807.2250	852.2250	STATEWIDE	BENTON CO WA, (
198	94	807.2375	852.2375	STATEWIDE	RESERVED FOR EN
199	95	807.2500	852.2500	STATEWIDE	
200	96	807.2625	852.2625	STATEWIDE	ADA CO ID
201	97	807.2750	852.2750	STATEWIDE	DEL NORTE CO C/
202	98	807.2875	852.2875	STATEWIDE	ADA CO ID
203	99	807.3000	852.3000	STATEWIDE	BOISE CO ID
204	100	807.3125	852.3125	STATEWIDE	
205	102	807.3375	852.3375	STATEWIDE	

206	103	807.3500	852.3500	STATEWIDE	
207	104	807.3625	852.3625	STATEWIDE	SKAMANIA CO WA
208	106	807.3875	852.3875	STATEWIDE	GARFIELD CO WA
209	107	807.4000	852.4000	STATEWIDE	KLICKITAT CO WA
210	109	807.4250	852.4250	STATEWIDE	CLARK CO WA, CC
211	111	807.4500	852.4500	STATEWIDE	ASOTIN CO WA, B
212	112	807.4625	852.4625	STATEWIDE	WA MUTUAL AID,
213	113	807.4750	852.4750	STATEWIDE	WA MUTUAL AID,
214	114	807.4875	852.4875	STATEWIDE	WA MUTUAL AID
215	116	807.5375	852.5375	STATEWIDE	BOISE CO ID, OW
216	118	807.5625	852.5625	STATEWIDE	
217	119	807.5750	852.5750	STATEWIDE	
218	120	807.5875	852.5875	STATEWIDE	
219	121	807.6000	852.6000	STATEWIDE	
220	122	807.6125	852.6125	STATEWIDE	
221	123	807.6250	852.6250	STATEWIDE	
222	124	807.6375	852.6375	STATEWIDE	
223	125	807.6500	852.6500	STATEWIDE	
224	126	807.6625	852.6625	STATEWIDE	
225	127	807.6750	852.6750	STATEWIDE	
226	130	807.7125	852.7125	STATEWIDE	
227	132	807.7375	852.7375	STATEWIDE	
228	134	807.7625	852.7625	STATEWIDE	
229	136	807.7875	852.7875	STATEWIDE	ADA CO ID, NO CA
230	141	807.8500	852.8500	STATEWIDE	CANYON CO ID
231	143	807.8750	852.8750	STATEWIDE	OWYHEE CO ID
232	149	807.9500	852.9500	STATEWIDE	
233	155	808.0500	853.0500	STATEWIDE	
234	156	808.0625	853.0625	STATEWIDE	ADA CO ID, BENT(
235	157	808.0750	853.0750	STATEWIDE	
236	160	808.1125	853.1125	STATEWIDE	SKAMANIA CO WA
237	162	808.1375	853.1375	STATEWIDE	WA CO ID, REGIO
238	165	808.1750	853.1750	STATEWIDE	SISKIYOU CO CA
239	166	808.1875	853.1875	STATEWIDE	LASSEN CO CA
240	167	808.2000	853.2000	STATEWIDE	

0.44	17/	000 0105	050 0405	CTATEIAUDE ADA COUR USAN	,
241	176	808.3125	853.3125	STATEWIDE ADA CO ID, IDAH	(
242	177	808.3250	853.3250	STATEWIDE NO COAST CA	
243	178	808.3375	853.3375	STATEWIDE CANYON CO ID	
244	180	808.3625	853.3625	STATEWID.E GEM CO ID	
245	181	808.3750	853.3750	STATEWIDE	
246	182	808.3875	853.3875	STATEWIDE STATE OF CA CM/	Δ
247	184	808.4125	853.4125	STATEWIDE	
248	185	808.4250	853.4250	STATEWIDE	
249	186	808.4375	853.4375	STATEWIDE	
250	187	808.4500	853.4500	STATEWIDE	
251	200	808.6125	853.6125	STATEWIDE	
252	201	808.6250	853.6250	STATEWIDE VALLEY CO ID	
253	202	808.6375	853.6375	STATEWIDE	
254	203	808.6500	853.6500	STATEWIDE	
255	204	808.6625	853.6625	STATEWIDE	
256	205	808.6750	853.6750	STATEWIDE	
257	206	808.6875	853.6875	STATEWIDE	
258	215	808.8000	853.8000	STATEWIDE	
259	216	808.8125	853.8125	STATEWIDE	
260	217	808.8250	853.8250	STATEWIDE	
261	220	808.8625	853.8625	STATEWIDE	
262	221	808.8750	853.8750	STATEWIDE	
263	222	808.8875	853.8875	STATEWIDE	
264	226	808.9375	853.9375	STATEWIDE	
265	228	808.9625	853.9625	STATEWIDE	
266	229	808.9750	853.9750	STATEWIDE	
267	230	808.9875	853.9875	STATEWIDE	
268	25	806.3250	851.3250	OROPS1	
269	30	806.3875	851.3875	OROPS2	
270	57	806.7500	851.7500	OROPS3	
271	59	806.7750	851.7750	OROPS4	
272	61	806.8000	851.8000	OROPS5	
273	24	806.3125	851.3125	STATEWIDE PORTABLE TRUNKING SYSTEM	IS
274	62	806.8125	851.8125	STATEWIDE PORTABLE TRUNKING SYSTEM	IS
275	64	806.8375	851.8375	STATEWIDE PORTABLE TRUNKING SYSTEM	1S

276	101	807.3250	852.3250	STATEWIDE PORTABLE TRUNKING SYSTEMS
277	145	807.9000	852.9000	STATEWIDE PORTABLE TRUNKING SYSTEMS
278	183	808.4000	853.4000	STATEWIDE PORTABLE TRUNKING SYSTEMS
279	207	808.7000	853.7000	STATEWIDE PORTABLE TRUNKING SYSTEMS
280	227	808.9500	853.9500	STATEWIDE PORTABLE TRUNKING SYSTEMS
281	3	806.0500	851.0500	TILLAMOCK
282	41	806.5500	851.5500	TILLAMOCK
283	163	808.1500	853.1500	TILLAMOCK
284	209	808.7250	853.7250	TILLAMOCK
285	32	806.4125	851.4125	UMATILLA
286	53	806.7000	851.7000	UMATILLA
287	196	808.5625	853.5625	UMATILLA
288	219	808.8500	853.8500	UMATILLA
289	27	806.3500	851.3500	UNION
290	51	806.6750	851.6750	UNION
291	198	808.5875	853.5875	UNION
292	224	808.9125	853.9125	UNION
293	23	806.3000	851.3000	WALLOWS
294	55	806.7250	851.7250	WALLOWS
295	194	808.5375	853.5375	WALLOWS
296	214	808.7875	853.7875	WALLOWS
297	51	806.6750	851.6750	WASCO
298	73	806.9500	851.9500	WASCO
299	152	807.9875	852.9875	WASCO
300	175	808.3000	853.3000	WASCO
301	72	806.9375	851.9375	WASHINGTON
302	129	807.7000	852.7000	WASHINGTON
303	131	807.7250	852.7250	WASHINGTON
304	150	807.9625	852.9625	WASHINGTON
305	152	807.9875	852.9875	WASHINGTON
306	170	808.2375	853.2375	WASHINGTON
307	174	808.2875	853.2875	WASHINGTON
308	190	808.4875	853.4875	WASHINGTON
309	194	808.5375	853.5375	WASHINGTON
310	214	808.7875	853.7875	WASHINGTON

311	5	806.0750	851.0750	WHEELER
312	37	806.4750	851.4750	WHEELER
313	192	808.5125	853.5125	WHEELER
314	212	808.7625	853.7625	WHEELER
315	108	807.4125	852.4125	YAMHILL
316	148	807.9375	852.9375	YAMHILL
317	168	808.2125	853.2125	YAMHILL
318	225	808.9250	853.9250	YAMHILL

	A	PPENDIX 5: FCC C	HANNEL ASSIGNM	IENT BY FREQUENCY	
NO	Channel #	Mobile TX Frequency (MHz)	Base TX Frequency (MHz)	Region 35 Oregon Original Assigments	Adjacent Region Conflicts
1	1	806.0125	851.0125	8CALL90/D	
2	2	806.0375	851.0375	BAKER	
3	2	806.0375	851.0375	BENTON	
4	2	806.0375	851.0375	CURRY	
5	2	806.0375	851.0375	JEFFERSON	
6	3	806.0500	851.0500	JACKSON	
7	3	806.0500	851.0500	TILLAMOCK	
8	4	806.0625	851.0625	COOS	
9	4	806.0625	851.0625	LAKE	
10	5	806.0750	851.0750	JACKSON	
11	5	806.0750	851.0750	POLK	
12	5	806.0750	851.0750	WHEELER	
13	6	806.0875	851.0875	STATEWIDE	ADA CO ID, F
14	7	806.1000	851.1000	CROOK	
15	7	806.1000	851.1000	JOSEPHINE	
16	7	806.1000	851.1000	LINCOLN	
17	8	806.1125	851.1125	KLAMATH	
18	9	806.1250	851.1250	GRANT	
19	9	806.1250	851.1250	MARION	
20	10	806.1375	851.1375	DESCHUTS	
21	11	806.1500	851.1500	MALHEUR	
22	11	806.1500	851.1500	MARION	
23	12	806.1625	851.1625	LANE	
24	13	806.1750	851.1750	HARNEY	
25	13	806.1750	851.1750	MARION	
26	14	806.1875	851.1875	DOUGLAS	
27	15	806.2000	851.2000	LINN	
28	15	806.2000	851.2000	SHERMAN	
29	16	806.2125	851.2125	STATEWIDE	ADA CO ID
30	17	806.2250	851.2250	LANE	
31	18	806.2375	851.2375	CLACKAMAS	
32	19	806.2500	851.2500	LANE	

33	20	806.2625	851.2625	STATEWIDE	7
34	21	806.2750	851.2750	MULTNOMAH	†
35	22	806.2875	851.2875	BENTON	7
36	23	806.3000	851.3000	CLACKAMAS	
37	23	806.3000	851.3000	CURRY	7
38	23	806.3000	851.3000	MORROW	7
39	23	806.3000	851.3000	WALLOWS	7
40	24	806.3125	851.3125	STATEWIDE PORTABLE	— TRUNKING SYSTEMS
41	25	806.3250	851.3250	OROPS1	
42	26	806.3375	851.3375	STATEWIDE	NO CA FIRE N
43	27	806.3500	851.3500	COOS	1
44	27	806.3500	851.3500	JEFFERSON	1
45	27	806.3500	851.3500	MULTNOMAH	
46	27	806.3500	851.3500	UNION	
47	28	806.3625	851.3625	CLATSOP	
48	28	806.3625	851.3625	POLK	
49	29	806.3750	851.3750	STATEWIDE	CLARK CO W,
50	30	806.3875	851.3875	OROPS2	
51	31	806.4000	851.4000	STATEWIDE	REGIONWIDE
52	32	806.4125	851.4125	CROOK	
53	32	806.4125	851.4125	JOSEPHINE	
54	32	806.4125	851.4125	LINCOLN	
55	32	806.4125	851.4125	UMATILLA	
56	33	806.4250	851.4250	BAKER	
57	33	806.4250	851.4250	GILLIAM	
58	33	806.4250	851.4250	MARION	
59	34	806.4375	851.4375	DESCHUTES	
60	34	806.4375	851.4375	JACKSON	
61	35	806.4500	851.4500	GRANT	
62	35	806.4500	851.4500	MARION	
63	35	806.4500	851.4500	SHHRMAN	
64	36	806.4625	851.4625	KLAMATH	
65	36	806.4625	851.4625	MULTNOMAH	
66	37	806.4750	851.4750	MALHEUR	
67	37	806.4750	851.4750	WHEELER	
68	38	806.4875	851.4875	CLACKAMAS	_
69	38	806.4875	851.4875	DOUGLAS	

70	39	806.5125	851.5125	8TAC91/D	
71	40	806.5375	851.5375	LANE	+
71	41	806.5500	851.5500	LAKE	+
73	41	806.5500	851.5500	TILLAMOCK	
74	42	806.5625	851.5625	STATEWIDE	-
75	43	806.5750	851.5750	HARNEY	
76	43	806.5750	851.5750	LINN	-
77	44	806.5875	851.5875	STATEWIDE	ADA CO ID, F
78	45	806.6000	851.6000	LANE	7,67,00 15,1
79	46	806.6125	851.6125	STATEWIDE	MODOC CO C
80	47	806.6250	851.6250	LANE	WODOO CO C
81	48	806.6375	851.6375	STATEWIDE	REGIONWIDE
82	49	806.6500	851.6500	STATEWIDE	- INCOTONIVIBE
83	50	806.6625	851.6625	MORROW	-
84	51	806.6750	851.6750	UNION	-
85	51	806.6750	851.6750	WASCO	+
86	52	806.6875	851.6875	MULTNOMAH	
87	53	806.7000	851.7000	MARION	+
88	53	806.7000	851.7000	UMATILLA	
89	54	806.7125	851.7125	GILLIAM	
90	54	806.7125	851.7125	MULTNOMAH	
91	55	806.7250	851.7250	DESCHUTES	1
92	55	806.7250	851.7250	WALLOWS	†
93	56	806.7375	851.7375	STATEWIDE	†
94	57	806.7500	851.7500	OROPS3	7
95	58	806.7625	851.7625	STATEWIDE	
96	59	806.7750	851.7750	OROPS4	†
97	60	806.7875	851.7875	STATEWIDE	7
98	61	806.8000	851.8000	OROPS5	7
99	62	806.8125	851.8125	STATEWIDE PORTABLE	TRUNKING SYSTEMS
100	63	806.8250	851.8250	STATEWIDE	
101	64	806.8375	851.8375	STATEWIDE PORTABLE	TRUNKING SYSTEMS
102	65	806.8500	851.8500	CLACKAMAS	
103	66	806.8625	851.8625	COLUMBIA	7
104	66	806.8625	851.8625	LANE	
105	67	806.8750	851.8750	CLACKAMAS	7
106	68	806.8875	851.8875	CLATSOP	7

107	69	806.9000	851.9000	MULTNOMAH	
108	70	806.9125	851.9125	STATEWIDE	
109	71	806.8250	851.8250	HOOD RIVER	
110	72	806.9375	851.9375	WASHINGTON	
111	73	806.9500	851.9500	WASCO	
112	74	806.9625	851.9625	STATEWIDE	
113	75	806.9750	851.9750	STATEWIDE	
114	76	806.9875	851.9875	MULTNOMAH	
115	77	807.0125	852.0125	8TAC92/D	
116	78	807.0375	852.0375	STATEWIDE	
117	79	807.0500	852.0500	STATEWIDE	
118	80	807.0625	852.0625	STATEWIDE	
119	81	807.0750	852.0750	STATEWIDE	
120	82	807.0875	852.0875	STATEWIDE	
121	83	807.1000	852.1000	STATEWIDE	
122	84	807.1125	852.1125	STATEWIDE	
123	85	807.1250	852.1250	STATEWIDE	
124	86	807.1375	852.1375	STATEWIDE	WA CO ID, RI
125	87	807.1500	852.1500	STATEWIDE	
126	88	807.1625	852.1625	CLACKAMAS	
127	89	307.1750	352.1750	STATEWIDE	
128	90	807.1875	852.1875	CLACKAMAS	
129	91	807.2000	852.2000	STATEWIDE	CLARK CO W.
130	92	807.2125	852.2125	STATEWIDE	
131	93	807.2250	852.2250	STATEWIDE	BENTON CO '
132	94	807.2375	852.2375	STATEWIDE	RESERVED F(
133	95	807.2500	852.2500	STATEWIDE	
134	96	807.2625	852.2625	STATEWIDE	ADA CO ID
135	97	807.2750	852.2750	STATEWIDE	DEL NORTE (
136	98	807.2875	852.2875	STATEWIDE	ADA CO ID
137	99	807.3000	852.3000	STATEWIDE	BOISE CO ID
138	100	807.3125	852.3125	STATEWIDE	
139	101	807.3250	852.3250	STATEWIDE PORTA	BLE TRUNKING SYSTEMS
140	102	807.3375	852.3375	STATEWIDE	
141	103	807.3500	852.3500	STATEWIDE	
142	104	807.3625	852.3625	STATEWIDE	SKAMANIA C(
143	105	807.3750	852.3750	COLUMBIA	

144	106	807.3875	852.3875	STATEWIDE	GARFIELD CC
145	107	807.4000	852.4000	STATEWIDE	KLICKITAT CO
146	108	807.4125	852.4125	YAMHILL	
147	109	807.4250	852.4250	STATEWIDE	CLARK CO W
148	110	807.4375	852.4375	CLACKAMAS	
149	111	807.4500	852.4500	STATEWIDE	ASOTIN CO V
150	112	807.4625	852.4625	STATEWIDE	WA MUTUAL
151	113	807.4750	852.4750	STATEWIDE	WA MUTUAL
152	114	807.4875	852.4875	STATEWIDE	WA MUTUAL
153	115	807.5125	852.5125	8TAC93/D	
154	116	807.5375	852.5375	STATEWIDE	BOISE CO ID
155	117	807.5500	852.5500	MARION	
156	118	807.5625	852.5625	STATEWIDE	
157	119	807.5750	852.5750	STATEWIDE	
158	120	807.5875	852.5875	STATEWIDE	
159	121	807.6000	852.6000	STATEWIDE	
160	122	807.6125	852.6125	STATEWIDE	
161	123	807.6250	852.6250	STATEWIDE	
162	124	807.6375	852.6375	STATEWIDE	
163	125	807.6500	852.6500	STATEWIDE	
164	126	807.6625	852.6625	STATEWIDE	
165	127	807.6750	852.6750	STATEWIDE	
166	128	807.6875	852.6875	HOOD RIVER	
167	129	807.7000	852.7000	WASHINGTON	
168	130	807.7125	852.7125	STATEWIDE	
169	131	807.7250	852.7250	WASHINGTON	
170	132	807.7375	852.7375	STATEWIDE	
171	133	807.7500	852.7500	MULTNOMAH	
172	134	807.7625	852.7625	STATEWIDE	
173	135	807.7750	852.7750	MULTNOMAH	
174	136	807.7875	852.7875	STATEWIDE	ADA CO ID, N
175	137	807.8000	852.8000	LANE	
176	137	807.8000	852.8000	MULTNOMAH	
177	138	807.8125	852.8125	MARION	
178	139	807.8250	852.8250	COLUMBIA	
179	140	807.8375	852.8375	MARION	
180	141	807.8500	852.8500	STATEWIDE	CANYON CO

ı					
181	142	807.8625	852.8625	CLACKAMAS	
182	143	807.8750	852.8750	STATEWIDE	OWYHEE CO
183	144	807.8875	852.8875	CLACKAMAS	
184	145	807.9000	852.9000	STATEWIDE PORTAB	LE TRUNKING SYSTEMS
185	146	807.9125	852.9125	MULTNOMAH	
186	147	807.9250	852.9250	CLATSOP	
187	148	807.9375	852.9375	YAMHILL	
188	149	807.9500	852.9500	STATEWIDE	
189	150	807.9625	852.9625	WASHINGTON	
190	151	807.9750	852.9750	LANE	
191	152	807.9875	852.9875	WASCO	
192	152	807.9875	852.9875	WASHINGTON	
193	153	808.0125	853.0125	8TAC94/D	
194	154	808.0375	853.0375	LANE	
195	155	808.0500	853.0500	STATEWIDE	
196	156	808.0625	853.0625	STATEWIDE	ADA CO ID, E
197	157	808.0750	853.0750	STATEWIDE	
198	158	808.0875	853.0875	LANE	
199	159	808.1000	853.1000	MARION	
200	160	808.1125	853.1125	STATEWIDE	SKAMANIA CO
201	161	808.1250	853.1250	MARION	
202	162	808.1375	853.1375	STATEWIDE	WA CO ID, RI
203	163	808.1500	853.1500	TILLAMOCK	
204	164	808.1625	853.1625	LINN	
205	164	808.1625	853.1625	MULTNOMAH	
206	165	808.1750	853.1750	STATEWIDE	SISKIYOU CC
207	166	808.1875	853.1875	STATEWIDE	LASSEN CO C
208	167	808.2000	853.2000	STATEWIDE	
209	168	808.2125	853.2125	YAMHILL	
210	169	808.2250	853.2250	DOUGLAS	
211	170	808.2375	853.2375	WASHINGTON	
212	171	808.2500	853.2500	LANE	
213	172	808.2625	853.2625	CLACKAMAS	
214	172	808.2625	853.2625	HARNEY	
215	173	808.2750	853.2750	JACKSON	
216	174	808.2875	853.2875	LANE	
217	174	808.2875	853.2875	WASHINGTON	
	-				

218	175	808.3000	853.3000	WASCO	
219	176	808.3125	853.3125	STATEWIDE	ADA CO ID, I
220	177	808.3250	853.3250	STATEWIDE	NO COAST C/
221	178	808.3375	853.3375	STATEWIDE	CANYON CO
222	179	808.3500	853.3500	LANE	
223	179	808.3500	853.3500	MULTNOMAH	
224	180	808.3625	853.3625	STATEWID.E	GEM CO ID
225	181	808.3750	853.3750	STATEWIDE	
226	182	808.3875	853.3875	STATEWIDE	STATE OF CA
227	183	808.4000	853.4000	STATEWIDE PORTABLE	TRUNKING SYSTEMS
228	184	808.4125	853.4125	STATEWIDE	
229	185	808.4250	853.4250	STATEWIDE	
230	186	808.4375	853.4375	STATEWIDE	
231	187	808.4500	853.4500	STATEWIDE	
232	188	808.4625	853.4625	GRANT	
233	188	808.4625	853.4625	LINN	
234	188	808.4625	853.4625	MULTNOMAH	
235	189	808.4750	853.4750	DOUGLAS	
236	190	808.4875	853.4875	CROOK	
237	190	808.4875	853.4875	WASHINGTON	
238	191	808.5000	853.5000	BAKER	
239	191	808.5000	853.5000	KLAMATH	
240	192	808.5125	853.5125	CLACKAMAS	
241	192	808.5125	853.5125	WHEELER	
242	193	808.5250	853.5250	JACKSON	
243	193	808.5250	853.5250	LINCOLN	
244	193	808.5250	853.5250	MALHEUR	
245	194	808.5375	853.5375	DESCHUTES	
246	194	808.5375	853.5375	GILLIAM	
247	194	808.5375	853.5375	WALLOWS	
248	194	808.5375	853.5375	WASHINGTON	
249	195	808.5500	853.5500	HOOD RIVER	
250	195	808.5500	853.5500	JOSEPHINE	
251	196	808.5625	853.5625	JEFFERSON	
252	196	808.5625	853.5625	POLK	
253	196	808.5625	853.5625	UMATILLA	
254	197	808.5750	853.5750	COOS	

255	197	808.5750	853.5750	MULTNOMAH	
256	198	808.5875	853.5875	SHERMAN	REGION WINI
257	198	808.5875	853.5875	UNION	
258	199	808.6000	853.6000	BENTON	
259	199	808.6000	853.6000	CURRY	
260	199	808.6000	853.6000	LAKE	
261	199	808.6000	853.6000	MORROW	
262	199	808.6000	853.6000	MULTNOMAH	
263	200	808.6125	853.6125	STATEWIDE	
264	201	808.6250	853.6250	STATEWIDE	VALLEY CO II
265	202	808.6375	853.6375	STATEWIDE	
266	203	808.6500	853.6500	STATEWIDE	
267	204	808.6625	853.6625	STATEWIDE	
268	205	808.6750	853.6750	STATEWIDE	
269	206	808.6875	853.6875	STATEWIDE	
270	207	808.7000	853.7000	STATEWIDE PORTABLI	E TRUNKING SYSTEMS
271	208	808.7125	853.7125	HARNEY	
272	208	808.7125	853.7125	LINN	
273	208	808.7125	853.7125	MULTNOMAH	
274	209	808.7250	853.7250	DOUGLAS	
275	209	808.7250	853.7250	TILLAMOCK	
276	210	808.7375	853.7375	CLACKAMAS	
277	210	808.7375	853.7375	GRANT	
278	211	808.7500	853.7500	COLUMBIA	
279	211	808.7500	853.7500	KLAMATH	
280	212	808.7625	853.7625	CLACKAMAS	
281	212	808.7625	853.7625	WHEELER	
282	213	808.7750	853.7750	LINCOLN	
283	213	808.7750	853.7750	MALHEUR	
284	214	808.7875	853.7875	DESCHUTES	
285	214	808.7875	853.7875	GILLIAM	
286	214	808.7875	853.7875	JACKSON	
287	214	808.7875	853.7875	WALLOWS	
288	214	808.7875	853.7875	WASHINGTON	
289	215	808.8000	853.8000	STATEWIDE	
290	216	808.8125	853.8125	STATEWIDE	
291	217	808.8250	853.8250	STATEWIDE	

292	218	808.8375	853.8375	DAKED]
		+		BAKER	
293	218	808.8375	853.8375	JEFFERSON	
294	218	808.8375	853.8375	POLK	
295	219	808.8500	853.8500	JOSEPHINE	
296	219	808.8500	853.8500	MULTNOMAH	
297	219	808.8500	853.8500	UMATILLA	
298	220	808.8625	853.8625	STATEWIDE	
299	221	808.8750	853.8750	STATEWIDE	
300	222	808.8875	853.8875	STATEWIDE	
301	223	808.9000	853.9000	COOS	
302	223	808.9000	853.9000	CROOK	
303	223	808.9000	853.9000	MULTNOMAH	
304	224	808.9125	853.9125	BENTON	
305	224	808.9125	853.9125	CLATSOP	
306	224	808.9125	853.9125	JACKSON	
307	224	808.9125	853.9125	SHERMAN	GEM CO, ID
308	224	808.9125	853.9125	UNION	
309	225	808.9250	853.9250	CURRY	
310	225	808.9250	853.9250	HOOD RIVER	
311	225	808.9250	853.9250	LAKE	
312	225	808.9250	853.9250	MORROW	
313	225	808.9250	853.9250	YAMHILL	
314	226	808.9375	853.9375	STATEWIDE	
315	227	808.9500	853.9500	STATEWIDE PORTABLE T	RUNKING SYSTEMS
316	228	808.9625	853.9625	STATEWIDE	
317	229	808.9750	853.9750	STATEWIDE	
318	230	808.9875	853.9875	STATEWIDE	
	•	•	•	•	•

PUBLIC NOTICE

Having been duly certified to the Federal Communications Commission (FCC) by the Associated Public-Safety Communications Officers, Inc., (APCO) as the Convenor of an initial meeting of representatives of parties eligible for radio licensing in the FCC's Public Safety and Special Emergency Radio Services to establish a Regional Planning Committee in the State of Oregon (in Region 35), hereby give Public Notice that such an initial meeting will be held on October 11, 1988, at Chumaree Hotel, 3658 Market Street N.E., Salem, Oregon, beginning at 9:00 a.m. This Region is one of 48 established by the FCC, throughout the United States.

The responsibility of the Regional Planning Committee will be to develop a Plan for use of frequencies in the 821 - 824 and 866 - 869 megahertz bands allocated by the FCC for use by such licensees. Parties interested in participating in the regional planning process should contact me.

This Public Notice is in accordance with the FCC's Report and Order in Gen. Docket No. 87-112, adopted by the FCC on November 24, 1987.

The Report and Order was based in large part on the Final Report of the National Public Safety Planning Advisory Committee, which was submitted to the FCC on September 9, 1987.

Copies of both the Report and Order and the Final Report are available from the FCC's duplication contractor, International Transcription Services, Inc., Suite 140, 2100 M Street, N.W., Washington, D.C. 20037. Phone (202)857-3800.

James R. DeRosier Regional, National Plan Oregon State Police 107 Public Service Building Salem, Oregon 97310

Convenor

8-11- f

Date

- F

APPENDIX 6 (CONT)

800 MEGAHERTZ MEETING October 11, 1988 Attendees

NAME	AGENCY	ADDRESS	PHONE#
Cliff Howson	Consolidated Fire & Rescue	PO Box 127 Tualatin, OR 97062	682-2601
Diane Brandt	Washington Co Consolidated Comm Agency	14490 SW Jenkens Rd Beaverton, OR 97005	643-8480
Larry L. Hatch	Washington Co Consolidated Com Agency	14490 SW Jenkens Rd Beaverton, OR 97005	643-8480
Dick J. Slinger	Linn Co. SO	PO Box 100 Albany, OR	967-3913
Gerry Wiese	Santiam Canyon Com Center	PO Box 607 Stayton, OR	769-7189
Phil Sample	Lake Oswego FD	PO Box 369 Lake Oswego, OR 97034	635-0275
Mick Brady	Lake Oswego PD	PO Box 369 Lake Oswego, OR 97034	635-0275
Jim Mitchell	City of Corvallis	PO Box 1083 Corvallis, OR 97339	757-6916
Deborah Dineen	Corvallis PD	PO Box 1083 Corvallis, OR 97339	757-6913
Al Hayes	Corvallis PD	PO Box 1083 Corvallis, OR 97339	757-6924
Rick Hannan	State Corrections	2575 Center St. Salem, OR 97310	378-1105
Dallar Koluison	osci	Salem, OR 97303	373-0102
Peter R. Doyle	General Electric	6600 SW 92nd #37 Portland, OR 97223	245-3086
Ed Rector	Milwaukie 911	2566 SE Harrison Milwaukie, OR 97222	659-2345
Dave Graham	County of Clackamas	2200 Kaen Rd. Oregon City, OR 97045	655-8377
Thera Bradshaw	County of Clackamas 911	2200 Kaen Rd. Oregon City, OR 97045	655-8370

APPENDIX 6 (CONT)

800 Megahertz Meeting October 11, 1988 Attendees - Page 2

NAME	AGENCY	ADDRESS	PHONE#
Clare Wren	Oregon Dept. of Forestry	2600 State Street Salem, OR 97310	378-2503
Ron Smith	Proctor Sales & Marketing	PO Box 495 Cottage Grove, OR 97424	942-4973
Neil McKie	Tillamook Co	503 Marolf Loop Rd. Tillamook, OR 97141	842-3448
Chuck Jones	Consolidated Fire & Rescue	PO Box 127 Tualatin, OR 97062	682-2601
John O. Vallery	Washington Co	150 N 1st Hillsboro, OR 97124	648-8666
Gary Self	Washington Co	150 N 1st Hillsboro, OR 97124	648-8821
Gary Lewis	Lane Co SO	125 E 8th Eugene, OR 97401	687-4160
Bill Gottlieb	EMD	43 Capitol Bldg. Salem, OR 97310	378-4124
Jim Hawley	Lincoln Co DOES	Courthouse Newport, OR	265-8420
Rose M. Purkhiser	Klamath Co. Em	ergency Services	883-5145
Richard Suber	Klamath Co. Eme	ergency Services	883-5125
Charlie Johnson	State Highway	Division	378-2650
Duane A. Chaves	State Highway !	Division	378-2650
Bob O'Brien	City of Portla	nd	796-6842
Patty Cooper	Silverton Dispa	atch	873-5327
Walter Sanford	Oregon Public	Broadcasting	293-1906
Rod Davis	Canby Police		266-1104
Charles Hibbets	Military Depar	tment - ORARNG	378-3918
Jim Thacker	Multnomah Co.	Sheriff's Office	255-3600

REGION 35 PLANNING COMMITTEE

<u>Name</u>	<u>Organization</u>	<u>Address</u>
Anderson, Dale	Multnomah County	1620 SE 190th Ave. Portland, Oregon.
Brandt, Diane	Washington County Communications Center	14490 SW Jenkins Rd. Beaverton, OR, 97005
Cameron, Art	Frequency Advisor	16305 NW Rock Creek Road. Portland, OR, 97231
Chaves, Duane	Oregon Department of Transportation	2960 State St. Bld 5 Salem, OR, 97310
Graham, Dave	Clackamas County	2200 Kaen Rd. Oregon City,OR,97045
Heim, Ward	Salem Police Dept.	555 Liberty St. SE Salem, OR, 97301
Johnson, C. L.	Oregon Department of Transportation	2960 State St. Bld 5 Salem, OR, 97310
Lewis, Gary	Lane County Sheriff's Office	125 E 8th St Eugene, OR, 97401
Bob O'Brien	City of Portland	1130 SW 17th Ave Portland, OR, 97205
Self, Gary	Washington County Sheriff's Office	150 N 1st St Hillsboro, OR, 97124
Shipley, Dick	Washington County	14490 SW Jenkins Rd Beaverton, OR, 97005
Thacker, Jim	Multnomah County Sheriff's Office	12240 NE Glisan St Portland, OR,
Wiese, Gerry	Santiam Canyon Communications Center	PO Box 603 Stayton, OR, 97383
Worden, Tom	State Emergency Management Division	603 Chemeketa St NE Salem, OR, 97310
Wren, Clare	State Department of Forestry	2600 State St Salem, OR, 97310

OTHER PARTICIPANTS AND CONTACTED AGENCIES

Oregon Association of Hospitals

Oregon Department of Education - Transportation

Oregon Higher Education Institutions - Safety and Security

Oregon Search and Rescue

Oregon Governor's Representative

Oregon Emergency Management Division

Oregon Health Science University

Oregon Ambulance Association

Oregon Poison Control

Oregon Veterinary Association

Oregon APCO Frequency Coordinator

American Red Cross

Salvation Army

Motorola Corporation

Ericsson General Electric

Amateur Radio Operators

REACT

SMR Business Representative

NOTIFICATION OF REGION 35 AND THE ADJACENT REGIONS.

Agency	Contact	Mailing Address		
City of Mosier	Mayor	P. O. Box 456	Mosier,	OR 97040
A.A. Ambulance Service	A.A. Ambulance	P. O. Box 14546	Portland,	OR 97214
A.C. Valley Ambulance	A.C. Valley Ambulance	P. O. Box 1713	Cave Junction,	OR 97523
Adair Village	Mayor James Ableman	182 N.E. Azalea Dr.	Corvallis,	OR 97330
City of Idanha	Mayor Albert Adams	P. O. Box 374	Idanha,	OR 97350
City of Culver	Mayor Anzonetta Adams	P. O. Box 144	Culver,	OR 97734
Weiser RFPD (Annex Rural)	Chief Darwin Adams	31 E. Main	Weiser,	ID 83672
Irrigon RFPD	Chief Donald Adams	P. O. Box 647	Irrigon,	OR 97844
Dregon Mountain Rescue Council	Jeremy Adolf, President	2658 "J" Street	Springfield,	OR 97477
Air Life of Oregon	Air Life of Oregon	2500 N.E. Neff Road	Bend,	OR 97701
Albany Fire Dept. Ambulance	Albany F. Dept. Ambulance	110 E. 6th Street	Albany,	OR 97321
Monroe RFPD	Chief Douglas Albin	P. O. Box 1	Monroe,	OR 97456
Lewis & Clark RFPD	Chief Jerry Alderman	Rt. 3, Box 161	Astori a ,	OR 97103
City of Lakeview	Mayor Donald R. "Bob" Alger	P. O. Box 8	Lakeview,	OR 97630
Alpine Med/Amb Services, Inc.	Alpine Ambulance Serv.	P. O. Box 14280	Portland,	OR 97214-0
City of Stanfield	Mayor Frank Alvarez	P. O. Box 364	Stanfield,	OR 97875
Multnomah County Sheriff's Office	Captain Harold T. Amidon	12240 N.E. Glisan Street	Portland,	OR 97230
Gold Beach Police Department	Chief Alan C. Anderson	510 S. Ellensburg	Gold Beach,	OR 97444
City of Brownsville	Mayor Bob Anderson	P. O. Box 93	Brownsville,	OR 97327

Agency	Contact	Mailing Address		
Radio Shop	Mr. Dale Anderson	1620 S.E. 190th	Portland,	OR 97233
Aumsville Police Department	Chief Robert Angle, Jr.	P. O. Box 103	Aumsville,	OR 97325
Jackson Cty. RFPD #3	Chief William Anson	8333 Agate Road	White City,	OR 97503
Bakridge Fire Department	Chief James Archer	48324 E. 1st	Oakridge,	OR 97463
Arlington, City of	Arlington VFD Ambulance	Arlington VFD Ambulance	Arlington,	OR 97812
Josephine County Sheriff's Office	Sheriff W E. Arnado	500 N. W. 6th Street/Courthouse	Grants Pass,	OR 97526
City of Muntington	Mayor Bill G. Arnold	P. O. Box 374	Huntington,	OR 97907
ebanon Fire Department	Chief Larry Arnold	1050 W. Oak Street	Lebanon,	OR 97355
lillsboro Fire Department	Chief Dayton Arruda	148 S.E. Washington Street	Hillsboro,	OR 97123
Cornelius Fire Department	Chief Chris Asanovic	P. O. Box 607	Cornelius,	OR 97113
Pleasant Hill RFPD	Chief Richard Ash	36024 Highway 58	Pleasant Hill,	OR 97455
Ashland Fire Dept. Amb.	Ashland FD Ambulance	455 Siskiyou Blvd.	Ashland,	OR 97520
Ashland Life Support, Ltd.	Ashland Life Support, Ltd	287 Maple St.	Ashland,	OR 97520
Nimrod RFPD	Chief Rudy Asman	49243 McKenzie Highway	Vida,	OR 97488
Port of Portland Police Dept.	Chief Richard Auborn	7000 N.E. Airport Way	Port of Portland,	OR 97218
Colestin RFPD	Chief Steve Avgeris	1701 Colestin Road	Ashland,	OR 97520
Cannon Beach RFPD	Mr. Alfred A. Aya, Vice President	P. O. Box 24	Cannon Beach,	OR 97110
Antelope Fire Department	Chief Joe Baker	P. O. Box 138	Antelope,	OR 97001
Baker Fire Dept. Ambulance	Baker FD Ambulance	1616 - 2nd Street	Baker City,	OR 97814
Santiam Memorial Hospital	Genny Baldwin, D.N.S.	1401 N. Tenth Ave.	Stayton	OR 97383

December 2017

Concurrence Letters for Region 35 800MHz plan amendment

Region 6 Northern California Region 7 Nevada Region 12 Idaho Region 35 Oregon Region 43 Washington

Public Safety Region 6, Northern California NPSPAC Regional Planning Committee

November 27, 2017

Federal Communications Commission 1270 Fairfield Road Gettysburg, PA 17325-7245

Re: Letter of Concurrence for Region 35 800 MHz NPSPAC RPC Plan Amendment

To whom it may concern:

The Region 6 NPSPAC Regional Planning Committee has reviewed the Region 35 800 NPSPAC Regional Plan Amendment dated November 1, 2017. The primary purpose of the amendment is to address digital emissions, TDMA technologies, and use the latest version TSB-88 methodology for interference analysis.

The Region 6 Regional Planning Committee concurs with the amended Region 35 NPSPAC Plan.

Sincerely

John Lemmon, Chair

Region 6, NPSPAC Regional Planning Committee

% State of California

Governor's Office of Emergency Services, Public Safety Communications

601 Sequoia Pacific Blvd.

Sacramento, CA. 95811-0231

John Lemman



Date: November 9, 2017

To: Joe Kuran, Chairman 800 MHz Region 35

From: David L. Goss, Chairman 800 MHz Region 27

Subject: Concurrence of Region 35 NPSPAC Plan Amendment.

Mr. Kuran: Region 27 grants concurrence on the Amended Region 35 NPSPAC Plan.

If you have any questions, please do not hesitate to call.

Thank you,

David L. Goss

Chairman

Region 27 800 MHz

REGION 12

Region 12, Idaho, 800 MHz Regional Planning Committee

Karl Rudorf, Chairperson Ada County Sheriff's Office 7200 Barrister Dr. Boise, ID 83704

Phone: (208) 577-3618 Email: krudorf@adaweb.net Web Site: www.700region12.org

Dear Mr. Kuran:

Region 12 received a revised Plan Amendment from Region 35 on November 6, 2017. According to the documents provided, Region 35 is amending their 800 MHz Plan to incorporate the latest digital emission technologies and improve upon interference analysis procedures. The Plan documents were distributed to our Executive Committee members who reviewed the proposed Plan changes. Based on our review, Region 12 hereby approves of this Plan Amendment and supports it's submittal to the FCC.

Please contact me if you require any further assistance.

Thank you,

Region Chairman

Region 12

Dated: 1 Dec 2017

800 MHz Regional Planning Committee Region 35 Oregon

DATE: November 1st, 2017

TO: John Evanoff FCC

SUBJECT: Region 35 800 MHz NPSPAC Regional Planning Committee (RPC) approval of the Region 35 800 MHz NPSPAC plan amendment.

The reason for this amendment is to address digital emissions, TDMA technologies, and use of the latest version TSB-88 tile based methodology for interference analysis.

OVERVIEW OF CHANGES:

Page 3: Section 1.1 Introduction:

Second paragraph, first sentence, change 2000 to 2020

Page 18: Section 7.1.2 Calculation of Service Area:

> This paragraph was completely revised.

Page 19: Section 7.4.2 Adjacent Channel Design:

- > First paragraph was completely revised
- > No change to second paragraph

Page 21: Section 7.7.1 Traffic Loading Study:

- No change to first paragraph
- Added second new paragraph
- No change to second paragraph

Page 21: Section 7.8.2:

> First and only paragraph was completely revised

Appendix 1: Modified Title from: Tabulated Data from Carey Propagation Curves to Carey Propagation Curves.

Appendix 1 through 3 were completely were completely rewritten in order to address modern digital technologies

Appendix 4: The engineering diagram was upgraded to workable excel spread sheet.

Appendix 5: The frequency list PDF file was converted to excel spread sheet.

No changes to Appendix 6 through 9.

This letter shall serve as Region 35 800 MHz NPSPAC RPC approval for the Region 35 800 MHz NPSPAC plan amendment.

Joe Kuran

Óregon Region 35 800 MHz NPSPAC Regional Planning Committee Chairperson Washington County Consolidated Communications Agency

17911 NW Evergreen Parkway

Beaverton, OR 97006 (503) 690-4911 ext. 210

503-690-4911 ext 210

jkuran@wccca.com



NPSPAC Region 43 Regional Planning Committee

Debra L. Davis, Chair NPSPAC Region 43 800 MHz Regional Planning Committee c/o Port of Seattle Radio Communications Seattle-Tacoma International Airport PO Box 68727

> Seattle, WA 98168-0727 Phone: 206-787-5193

Email: Davis.D@portseattle.org Web Site: www.region43.org

DATE: November 30, 2017

TO: Joe Kuran

Chair - Region 35 800 MHz NPSPAC Regional Planning Committee

SUBJECT: Region 35 800 MHz NPSPAC Regional Planning Committee is requesting concurrence

with Region 43 to the Region 35 800 MHz Plan's amendments

This letter confirms the Region 43 800 MHz NPSPAC RPC's concurrence with the updates to Region 35's 800 MHz Plan with the condition the following be added to their Page 20, Section 7.4.2:

"c) If an interference contour extends into an adjacent region, the contour analysis shall follow that adjacent region's plan."

With the understanding the above language is added to the Region 35 800 MHz Plan, Region 43 concurs with Region 35's proposed amendments.

Regards,

Debra L. Davis

Chair - Region 43 800 MHz NPSPAC Regional Planning Committee