Region 34 700 MHz PLAN UPDATE

State of Oklahoma



Submitted by Regional Plan Review Committee December 09, 2020

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700 MHz Regional Plan for Regional Planning Committee 34

This document is the 769-775 and 799-805 MHz Plan for Regional Planning Committee 34 (Oklahoma) describing how the General Use frequencies as defined in 47 CFR §90.531(b)(6) will be allocated and implemented in the Region. This section is provided in compliance with 47 CFR §90.527 (a)(1). Unless stated otherwise, any reference to "700 MHz" in this Plan means the 769-775 and 799-805 MHz frequencies established for public safety general use in 47 CFR 90.531(b)(6) and other subparts for which Regional Planning Committees have responsibility.

Regional Chair and Officers

The Regional Chair of Region 34 is:

Scott Walsh City of Midwest City 100 North Midwest Blvd Midwest City, OK 7311 PH: 405.739.1372 swalsh@midwestcityok.org

The Vice-Chair of Region 34 is:

Michael Wright City of Tulsa 3411 North Columbia Ave Tulsa, Oklahoma 74014 PH: 918.591.4146 mwright@cityoftulsa.org

The Secretary of Region 34 is:

Vacant

The Regulatory Committee Chair is:

Mark Ketchum Communications System Manager Broken Arrow, OK Office: 918-259-2400 ext. 5362

Office. 918-239-2400 ext. .

Fax: 918-251-6642

mketchum@brokenarrowok.gov

The Technical Committee Chair is:

Martin T Vinson 10609 Turnberry Lane Oklahoma City, OK 73170 PH: 870.577.7757 ocso370@gmail.com

RPC Membership

Membership in the Region 34 Regional Planning Committee is open to any interested party. Committee Officer Offices, voting procedures, and membership attendance requirements are listed in the Region 34 Planning Committee bylaws. The Region's membership information is contained in the Appendices to the Plan. Voting and operating procedures are described in the bylaws of this plan. Prior to the first meeting of the 700 MHz Committee, thirty day notice was provided to all interested parties and all sessions have been open to the public.

Plan Development and Regional Participation

Region 34 developed the 700 MHz Plan through extensive intra-regional participation as well as through coordination through its regional neighbors that had convened and made substantive progress in the development of their plans. To construct the Plan, the Regional Chair convened a Task Force composed primarily of the Technical Committee and its members as well as himself and the Region's Secretary.

The group responsible for Plan development conducted a series of meetings in which defined progress was made relative to specific sections of the Plan. Progress reports were assessed through conference calls and in-person meetings. The work of the group culminated with adoption of the initial Region 34 Plan in September 2009.

Composition and Role of Committees

A. Regional Plan Review Committee

The Regional Chair and Officers constitute the Regional Plan Review Committee and is charged with the responsibility to:

- Conduct annual reviews of the regulatory issues promulgated by the Commission and propose compliance revisions of the Region 34 Plan for 700 MHz
- 2. File notices or comments with the Commission as required by the Region's Bylaws.
- 3. Develop responses to any notices issued by the FCC impacting Regional Planning Committee 34.

B. Technical Committee

The Technical Committee is charged with the responsibility to:

- 1. Conduct annual reviews of the technical matters impacting the Region 34 Plan for 700 MHz.
- 2. Review and take action on applications from within Region 34 for 769-775 and 799-805 MHz channels.
- 3. Review and take action on 700 MHz applications from adjacent Regional Planning Committees.

Major Elements of the Plan – from 47 CFR §90.527 (a)(2)

The major elements of the Plan are those required to conform to the requirements of the Commission as contained in 47 CFR §90 Subpart R. Each of the elements as contained in the rules of the Commission is specifically notated in this Plan to facilitate regulatory review. Internally, compliance with the Commission's requirements was assessed utilizing the documentation provided by NPSTC as well as the former National Coordinating Committee formed following the 4th NPRM from Docket WT 96-86

Opportunities for Participation in the Plan's Development - from 47 CFR §90.527 (a)(2)

Region 34 encouraged the participation of all Part 90 licensees and others with an interest in the development of a Plan for 700 MHz.

The Region first convened during a meeting on November 19, 2003. Active work on the Region 34 Plan was initiated following a meeting held on July 14, 2009. In this meeting, information on the strategies used in other regions was presented as well as a PowerPoint presentation documenting the Commission's requirements for Plan development as provided in 47 CFR §90.527. Subsequently, specific Plan development tasks were assigned to members for review and action. The subcommittees held additional meetings to further refine the provisions of the plan.

In addition to the meetings in November 2003 and July 2009, various Webinars and conference calls were held by specific Committees to resolve issues relative to the Plan. A draft of the Plan was provided to the membership for review thirty (30) days before a region-wide meeting permitting all members to digest the Plan and bring relevant comments and suggestions to the meeting in which it was adopted. The Regional Plan was finalized by the Region on September 17, 2009. The Plan was reviewed by the Technical Committee and revised to ensure compliance with actions of the Commission.

Region 34 Description

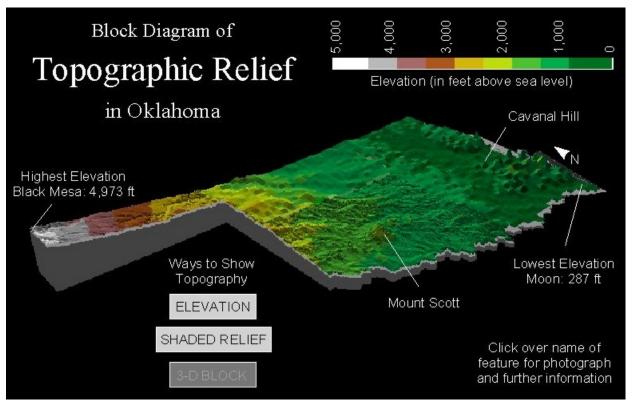
Region 34 is defined by the Federal Communications Commission as the State of Oklahoma in its entirety.

The State of Oklahoma is home to 3.9 million people and is comprised of 77 counties. Oklahoma is the 18th largest state in the nation and contains over 69,919 square miles. Oklahoma is mostly made up of rural communities, but contains four metropolitan cities that make up the majority of the state's population.

Oklahoma is home to numerous Native American tribes, more than any other state in the nation. Thirty-five of these tribes maintain tribal councils within the State of Oklahoma and 22 maintain certified tribal law enforcement agencies. These same tribes continue to expand to include other public services such as emergency management and emergency medical services (EMS).

According to the Oklahoma Almanac, Oklahoma is the most diverse terrain mile per mile and is one of only three states in the nation that has more than 11 official eco-regions recognized by the Environmental Protection Agency.

The central terrain is mostly plains, varying from nearly flat in the west to rolling hills in the central and east southeast. The plains are broken by scattered hilly areas where most points are 600 feet or less above the adjacent countryside. These hilly areas include the Wichita Mountains in the southwest and the Arbuckle Mountains in the south central. The Ouachita Mountains dominate much of the southeast. Extreme northeast counties are part of the Ozark Plateau, which is marked by steep, rocky, river valleys between large areas of hills and rolling plains. The western tip of the panhandle features part of the Black Mesa complex.



Oklahoma Topographical Map

Three major interstates that crisscross the nation intersect in Oklahoma, Interstate 40, Interstate 35 and Interstate 44, which intersects with the other two interstates and runs through St. Louis and connects into the I-55 corridor in Chicago. See Figure 2-1 Oklahoma Major Highways. Oklahoma lies centrally in the United States and is, in essence, the central section of Interstate 40 which is a major east –west freeway, spanning eight states on its cross-country voyage. Starting in California, I-40 enters Oklahoma in the west near Sayre, Oklahoma and Amarillo, Texas and exits Oklahoma on the east at Sallisaw, just outside of Ft. Smith, Arkansas; spanning over 300 miles through central Oklahoma and finally ending in North Carolina. In Oklahoma City, I-40 connects with I-35. I-35 runs north and south through Oklahoma connecting Mexico to Canada. It enters Oklahoma at the Texas border and exits at the Oklahoma / Kansas border. I-35 covers 235 miles in central Oklahoma and runs through much of the Oklahoma City metropolitan area, including the cities or Norman, Moore, and Edmond. Another major interstate is I-44. This interstate covers 329 miles in Oklahoma with portions being parallel to the historic Route 66 and continues through Oklahoma to the Missouri state line. U.S Highway 69 is another major transportation thoroughfare that begins in southern Texas, as Highway 87, and extends north throughout the entire state of Oklahoma ending in Minnesota.



Waterways, like roadways, make up a considerable amount of Oklahoma. See Figure 2-3 Waterway Map of Oklahoma. Oklahoma has 34 major reservoirs and has more man-made lakes (200) than any other state; totaling over one million, surface-acres of water and 2,000 more miles of shoreline than the Atlantic and Gulf coasts combined. Along with the reservoirs, Oklahoma has many crucial

rivers. The Red River begins in the Texas panhandle and flows east becoming the southern border of Oklahoma. The river makes its way east and empties into the Atchafalaya and Mississippi rivers. The Red River is dammed in Oklahoma to form Lake Texoma. Lake Texoma is one of the largest reservoirs in the country. Its surface spans over 89,000 acres crossing the Oklahoma and Texas borders. Because of its size, Lake Texoma is one of the most visited lakes in the country. The Canadian River is another important waterway in Oklahoma. The Canadian River, which is the largest branch of the Arkansas River, is approximately 760 miles long running through most of Oklahoma. The Canadian River passes just south of Oklahoma City and is dammed in Eufaula, Oklahoma, forming Lake Eufaula which provides recreation to thousands of visitors each year.

Waterway Map of

Oklahoma Cimaron R Optima Beaver R Optima Crambia Charles R Optima Cha

Though considered by many to be a "land locked state", Oklahoma instead has a very active and vulnerable waterway in the eastern part of the state. The McClellan-Kerr Arkansas River Navigation System (MKARNS) is a 440-mile waterway that is home to the Ports of Catoosa, Muskogee and Port 33. The Army Corps of Engineers began building the MKARNS in 1952 and the waterway became operational in 1970. Millions of tons of cargo – including sand, rock, fertilizer, wheat, steel, and petroleum products are transported to and from the Oklahoma ports every year. The nation's most inland waterway system links Oklahoma with domestic and foreign ports via the Ports of New Orleans and Houston along the Arkansas and Mississippi Rivers. Recently, the ports of New Orleans and Catoosa joined ranks to promote the Arkansas and Mississippi Rivers as an all water route for cargo.

Commercial railways across the nation are critical and yet remain vulnerable and Oklahoma is no exception. Commercial railways cover over 3,770 miles across the state carrying coal, lumber, agricultural products, hazardous materials, and other assets to other parts of the United States. While Oklahoma remains small in regards to passenger railways, Oklahoma currently has over 100

50 KM 50 Miles

Red River

miles of passenger rail that connects Oklahoma City to Texas.

In regards to air transportation, Oklahoma has two international airports, Will Rogers World Airport and Tulsa International Airport. Will Rogers World Airport is located in southwestern Oklahoma City (OKC) and is the principal commercial airport of the OKC metropolitan area. In 2019, over 4.4 million passengers passed through Will Rogers World Airport, making it the busiest airport in the state in terms of passenger traffic. Will Rogers World Airport is also home to a technical aviation career center, is usually the site of the annual Aerospace America air show, and is used by military flights of the Oklahoma Air National Guard. Tulsa International Airport is a public airport located five miles northeast of the city of Tulsa. Tulsa International is the global maintenance headquarters for American Airlines and was an important testing and production facility for McDonnell Douglas.

The Federal Aviation Administration (FAA), located on the Will Rogers World Airport grounds, has major facilities, including the headquarters for the Air Route Traffic Control and Training Academy. One major facility is the Mike Monroney Aeronautical Center, which is home to the largest concentration of Department of Transportation personnel outside of Washington D.C. There are six major facilities located at the Aeronautical Center and they include:

- Civil Aerospace Medical Institute
- FAA Academy
- Civil Aviation Registry
- FAA Logistics Center
- Transportation Safety Institute
- Transportation Security Administration (TSA) Security Enforcement Training Academy

The Customs and Border Protection (CBP) Facility is another agency located on airport grounds. The National Air Training Center-Oklahoma City consists of flight training and maintenance operations

Oklahoma is home to several military installations, Ft. Sill in Lawton, which is the field artillery training location for all military, Altus Air Force Base in Altus, Oklahoma; Vance Air Force Base in Enid, Oklahoma; and Oklahoma's largest military base, Tinker Air Force Base, near Oklahoma City. Tinker Air Force Base is home to seven major Department of Defense, Air Force, and Navy activities with critical national defense missions. Tinker Air Force Base is also home to the Oklahoma City Air Logistics Center which is the largest Air Logistics Center in the Air Force Materiel Command; and provides depot maintenance, management expertise, services and supply chain management as well as installation, services and information support for 31 weapon systems, 10 commands, 93 Air Force bases and 46 foreign nations. The 72nd Air Base Wing is the host organization for Tinker Air Force Base. The wing provides base installation and support services

for the Oklahoma City Air Logistics Center and more than 45 associate units assigned to six major commands, including the largest flying associate wing in Air Combat Command, the Navy's Strategic Communications Wing ONE and several Defense agencies. Along these same lines, Oklahoma is also home to the McAlester Army Ammunition Plant located in southeast Oklahoma. The McAlester Army Ammunition Plant is an active Army ammunition manufacture, storage, disposal and training installation and has been in operation for more than 60 years, providing service to this nation and continues a role today in the fight against terrorism.

Notification Process

Because of the Region's close coordination with the adjacent Regional Planning Committees, all of the adjacent Chairs were familiar with the work of Region 34 to develop the 700 MHz Plan. The Chair of Region 34 has continued to keep the Chairs of the adjoining convener regions up-to-date with progress relative to the development of the 700 MHz Plan.

All meetings were published in the Commission's Daily Digest as well as Regional email lists from the 800 MHz planning process. A comprehensive contact list was developed specifically for 700 MHz planning based on contact information listed on Part 90 public safety licenses located in the VHF, UHF, and 800 MHz frequency bands.

Future Meetings

During the period following the Commission's approval of the Region 34 Plan, meetings are held with greater frequency as initial actions are taken relative to actions on applications for channel assignments.

There were no less than thirty (30) days of notice provided prior to a meeting with the sufficiency of notice measured by the posting of the meeting's information in the Daily Digest of the Commission.

Meetings may be in-person at a host location and/or virtual at the direction of the Committee Chair or any Sub-Committee Chairperson. Virtual meetings will utilize generally available conferencing software where there is no cost to the participant other than Internet or PSTN (Public Switched Telephone Network) access.

Operations of the Region

Region 34 employs Robert's Rules of Order to conduct meetings. Voting member

considerations are listed in the Region 34 By-Laws. The meetings are open to all interested persons and public input time can be provided for anyone to express a viewpoint or to have input to the Regional Planning process.

A minimum of one (1) full committee meeting will be held every twelve months. The Region 34 Chair has the authority to call an additional meeting at a time when he/she deems necessary or when he/she deems it in the best interest of the Region to convene. For the convenience of Region 34 members, attempts will be made to coordinate 700 MHz meetings with Region 34 800 MHz meetings.

As provided in the bylaws, the Chair shall call a meeting of the Regional Planning Committee to elect a Chair, Vice Chair and Secretary.

Overview of public safety entities within the Region (state agencies, federal agencies, etc.)

Region 34 supports a wide variety of federal, state, and local first responders and related governmental and non-governmental resources. Included within the Region are a wide variety of state law enforcement agencies requiring statewide radio system support. These systems may also provide interoperability for federal or local government law enforcement agencies.

The Region also supports local law enforcement agencies that may range in size from small police and sheriff's departments to large county or city police departments. There are also many local law enforcement entities within the Region providing support for authorities, higher education, and other specialized areas of criminal justice and public safety.

One will also find a wide variety of fire and emergency medical resources within the Region ranging from municipal fire departments to volunteer fire and rescue organizations.

Emergency medical services may be provided by municipal or volunteer fire departments as well as volunteer rescue squads and commercial ambulance services.

Solicitation of Comments and Process Used to Consider Plan Comments

Input from affected public safety communications' professionals has been an important part of Plan development. The process began by convening the Region and soliciting comments from throughout the membership. The process continued by continually placing "inprogress" drafts of the Plan on the Region 34 CAPRAD web site with a request for comments followed by discussion of comments from within the Plan development process.

As progress drafts of the Regional Plan were developed, updated versions were also uploaded to CAPRAD for review by others.

Following adoption of the Plan by the membership of Region 34, drafts were shared with all of the adjoining convened Regional Planning Committees with a request for comments and concurrence. To the extent that comments were received from any source, appropriate changes were made in the Plan prior to submission to the Commission.

Regional Plan Administration and Frequency Coordination

General Description of Spectrum Allocation – from 47 CFR §90.527 (a)(3)

A. Region 34 believes that it has two principle responsibilities to the members and adjacent regions. First, the Regional Plan is predicated upon an attempt to provide as much spectrum to an applicant as the facts and circumstances of the application support. To this end, the Region will consider in totality the current spectral resources of the applicant as well as other potential requirements of other licensees within the applicant's area of operation.

The review will also consider the issue of spectrum (in any band) to be returned by the applicant, if any, and the funding available to implement a system. All of these steps are under-taken to ensure that the Region carefully manages and becomes a good steward of the spectrum for which it is responsible. To the greatest extent possible, the Region desires to demonstrate to both applicants and potential applicants the highest levels of reasonableness in the management of spectral resources for which it is responsible.

To ensure that channels have been allocated appropriately with respect to geographical areas within Region 34, the CAPRAD table of assignments will be utilized as the initial baseline from which assignments are initiated. If necessary, the Region may augment the CAPRAD assignments provided that any changes in assignment(s) conform fully to the technical requirements of the Commission, fulfill coordination requirements with adjoining Regions, and serve the public interest.

As part of its review of an applicant's request, in addition to considering the potential impact upon other eligible users within a geographic area, the Technical Committee will also review the application to ensure that, if approved, the document does not negatively impact other eligible applicants within or adjacent to the Region.

However, since the Region 34 Plan has been approved for a period in excess of three years, no active application will be rejected solely due to interference that may be caused to

geographic allocations in areas where there was no active intent to pursue licensing in the 700 MHz band. Secondly, the Region must protect adjacent and co-channel users in other regions from harmful interference as defined in the applicable rules of the Commission.

After FCC approval of this Plan, Region 34 announced to the region that the initial window of 700 MHz public safety spectrum was available in the Region and that channels will be initially assigned on a geographical basis within phases, also known as "windows". All available methods were used to notify public safety entities of channel availability in the Region.

For the initial allocation of channels, Region 34 proposed a modified set of National Coordination Committee (NCC) Pre-Assignment Rules and Recommendations to the extent appropriate. However and when in the public interest, the Region may modify the means of channel allocation in order to provide eligible licensees with the number of channels required to implement land mobile radio systems in the frequencies for which this Plan is responsible.

The Region 34 Plan provided that the county pool frequencies were valid only for Window One and then only for a period of three (3) years. At this time the Region 34 Plan is updated to remove all county distribution of spectrum.

- B. Notwithstanding the provisions of paragraph A, when in the opinion of any officer of Region 34 that it is in the public interest, applications for channels will be received and processed in compliance with the other provisions of this Plan.
- C. Applications for channels in Region 34 shall be submitted to the Region through the CAPRAD filing system. The Technical Committee Chair shall be responsible to comply with the provisions of 47 CFR §90.176 (c)–(h) relative to the notification of the adjacent region of applications for channels as well as compliance with the provisions of 47 CFR §90 Subpart R.

Application Requirements

Each application package must contain enough information that evaluators can determine the strength of the application relative to its competing peer applications, as well as its technical validity. The RPC supports the (former) NCC pre-assignment rules and recommendations. Applicants should review these recommendations prior to preparing applications for submission.

Application Content Summary

A complete application package must include the following items:

- 1. Completed FCC 601 form(s)
- 2. Completed supplemental application requirements including:
 - a. Manufacturer and model of transmitting antenna
 - b. Degrees of electrical downtilt
 - c. Orientation of the antenna, if other than omnidirectional
 - d. Degrees of Mechanical downtilt applied to the antenna mounting
 - e. Description of applicant's service area
 - f. A map depicting the requested service area
 - g. A written description of the service area
 - h. Justification of any extension of the service area beyond the jurisdictional limits of the applicant
 - i. Project implementation plan/schedule
 - j. Signed Letter of Intent agreeing to implement system as proposed; conditioned on relinquishing any FCC license upon default of system construction.

Coverage and interference-prediction contours that are calculated by methods described in TIA TSB-88C (or a subsequent later version), using Okumura-Hata-Davidson propagation modeling, relative to a suburban environment. The modeling is to be based on a 1 arc second (30 meter resolution) terrain data. However, the diffraction portion of the modeling, where it can serve to artificially limit the size of the contour, must be disabled. The Region 34 Committee will provide reference propagation plot based upon specific listed technical parameters. Applicants will replicate this reference propagation with their specific analysis software to illustrate that generally equivalent results are obtained.

Application Submission Format

All material provided as part of the application package including FCC form 601 must be submitted electronically through the CAPRAD filing system. The Technical Committee Chair reserves the right to also request hardcopies of the application package.

Grounds for Dismissal of Application

At the discretion of the Technical Committee, applicants may be afforded the opportunity to provide any essential missing application information so applications can continue to undergo the evaluation process. The Chair of the Technical Committee shall notify the

applicant via written or electronic mail if the application package does not meet the requirements stated in this Plan. Applications may be dismissed and returned to the applicant if the required information is not provided. The applicant will then have the option to complete and resubmit the application.

Appeal of Dismissal

Normally the actions of the Technical Committee, with respect to the dismissal of an application for channels, shall be considered final in accordance with Section 3.2.3 of this Plan. However, upon action of the applicant or at the request of any officer of the Regional Planning Committee, the Chair, or Vice-Chair, acting in the absence of the Chair, may intervene and consider the merits of such application *de novo*. If in the opinion of the Chair, or the Vice-Chair acting in the absence of the Chair, that such condition exists as to merit a processing of the application, the Technical Committee shall continue to process the application provided that the applicant brings forward any documentation required, as may be necessary, to conduct an appropriate evaluation of the application.

Application Scoring Matrix

When, in the opinion of the Chair, applications are received that exceed the available spectrum and are mutually exclusive in geography the Region may implement an evaluation matrix enabling assigning each application a score that is the total number of the points awarded in seven categories. A maximum total score of 1000 points can be awarded, based on the Application Review Flowchart replicated in Figures 1 through 8. This flowchart details the sequence of events followed to determine an applicant's score and is discussed in the paragraphs that follow.

First, the allocation is placed in the frequency pool (Block #1 in Figure 1). If frequencies are available in the pool (a second iteration of the evaluation matrix could occur if all frequencies are not allocated in the first iteration), a window-opening announcement is made (Block #2 in Figure 1). The window period will be thirty days (Block #3). Next, the Region 34 Technical Subcommittee reviews the received applications for completeness (Block #4). After the thirty (30) days have passed, the window closes (Block #5). Late or incomplete applications are rejected (Block #6). Applications received during the open-window period are reviewed (Block #7) by the Region 34 Technical Subcommittee.

The Technical Subcommittee will consult with State communications-planning administrators, if any such positions are staffed and the State requests this action, to determine if the application complies with State plans (Block #8). An application that does not comply with an existing State plan may be rejected at this point (Block #9) and returned

to the applicant, along with an explanation of the reason(s) for rejection.

Prior to allocating points for the seven categories, the evaluators conduct a needs assessment review (Block #10) of the statement of needs for the requested frequencies provided by the applicant. This statement of need serves as an overview of the proposed system. When an application has passed the plan compliance, the Technical Subcommittee will apply the evaluation matrix (as shown in Block #11).

The seven categories of point awards are addressed in the seven subsections that follow.

Service (Category I, Block #12) - 350-point Maximum

Each of the eligible services has a predetermined point value as seen in Table 1, which follows Figures 1 and 2. The point value assigned in this category is a factor of the number of subscriber units per service category, operating in a multi- agency system. An applicant with multiple services will be scored on a basis of the percentage that each service comprises of its total system. For example, a system that is 50% police and 50% local government (school administration) would be awarded the total of 50% of the point value for police plus 50% of the point value for school administration. Please refer to Table 1 - Evaluation Matrix Point Values for Service.

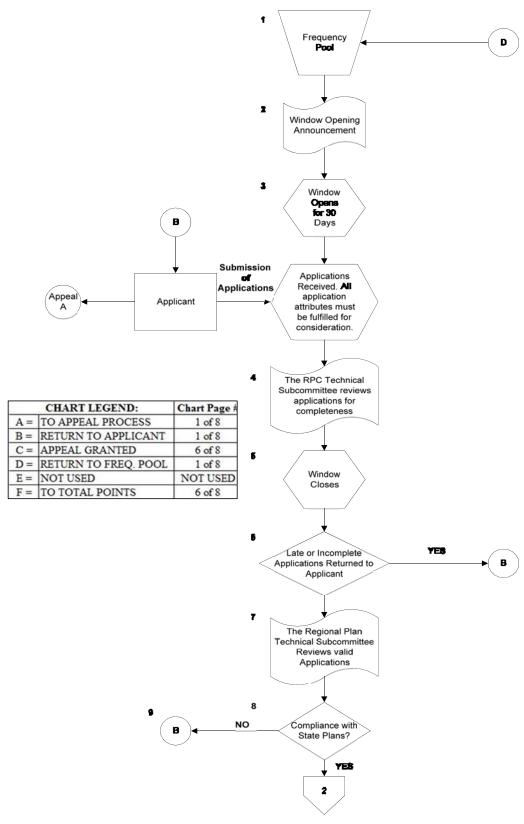


Figure 1 - Application Review Flowchart - Page 1 of 8

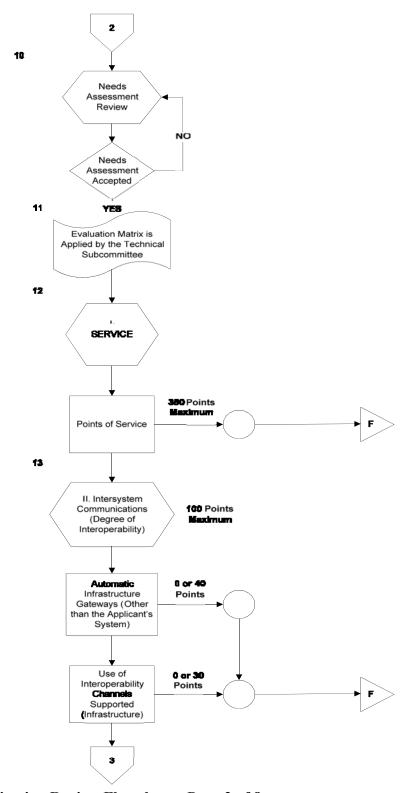


Figure 2 - Application Review Flowchart - Page 2 of 8

Table 1 - Evaluation Matrix Point Values for Service

Tier	Service Categories	Maximum Point Value
1	Fire	350
	Police	350
	EMS	350
	Rescue	350
2	Emergency Management	250
	Corrections	250
	Courts	250
	High-Volume Transit Systems (Serving > 500,000 passengers per day)	250
3	Beach Patrol (Special Emergency)	225
	Hospital (SE)	225
	Forest Fire (Special Emergency)	225
4	Transit Systems (Serving \leq 500,000 passengers per day - exclusive of police, fire, and EMS)	175
5	Highway	150
6	Communications Standby Facilities (Special Emergency, SE)	125
	Maintenance & Utility Boards - Government (Special Emergency - i.e., water, sewer, gas, electric)	125
	Other Government Agencies (e.g., building inspectors, elderly services)	125
	Disaster Relief Organizations (Special Emergency)	125
	Auxiliary Police (Special Emergency)	125
7	Security Patrol - Government (Special Emergency)	100
	Schools - Government, Districts - (Special Emergency - i.e., school buses)	100
	Veterinarians - Government (Special Emergency)	100
8	Partial Coach - Government (Special Emergency - transit systems)	75
	Physicians - Government (Special Emergency)	75
	Communications System Repair (Special Emergency)	75
0	Parks and Conservation – Government (exclusive of police, forest fire)	50
9	Physically Disabled - Government (Special Emergency - i.e., personal alarm services)	50
10	Other (TBD)	25

Intersystem Communications (Category II, Block #13) - 100-point Maximum

The application (Block 13 in Figure 2) is scored — with a range of points from 0 to 100 — based on the degree of interoperability that is demonstrated. This category rates the application on the interoperability capabilities of the proposed system, the inclusion of the common interoperability channels, and the ability to communicate with different levels of government and services during times of emergency. Points are awarded based on the criteria weights in Table 2.

Table 2 Intersystem Communications Criteria and Weights

Interoperability Demonstrated	Point Value
Provides automatic infrastructure gateways (other than	
the applicant's system)	40
Use of interoperability channels is supported	
(infrastructure)	30
Provides console patches to other systems (other than	
the applicant's system)	10
Communicates with other systems with which the	
Agency holds mutual-aid agreements	10
All subscriber units have the tactical interoperability	
channels programmed within them	10
No interoperability or intersystem criteria information	
is provided	0

Loading (Category III, Block #14) - 150-point Maximum

As shown with Block #14 in Figure 3, applicants are scored on the number of subscriber units that will operate on each radio channel (the loading). The applicant shall receive a maximum score of 150 points in this category. For example, a proposed system that 1) has loading greater than or equal to 125 subscriber units, and 2) is an expansion of an existing 700 MHz and/or an 800 MHz system shall be awarded 150 points (sum of first and third lines in Table 3). Table 3 - Loading Criteria and Weights

Loading and Expansion Factors	Point Value
System loading is ≥ 125 subscriber units per radio channel	100
System loading is ≥ 100 subscriber units per radio channel	50
Expansion of an existing 700 MHz and/or 800 MHz radio system	50
System loading is ≥ 50 subscriber units per radio channel	10

Spectrum Efficient Technology (Category IV, Block #15) - 100- point Maximum

Category IV (Block #15 in Figure 4) scores the applicant on the degree of spectrum-efficient technology the system demonstrates. A point-value range of 0 to 150 points can be awarded for this category. A trunked system, an integrated voice and data system, and a system utilizing 6.25-kHz spectral efficiency are all considered to utilize spectrum-efficient technologies. The spectral efficiency for a voice or data channel is based on the throughput divided by the channel bandwidth. Applicants shall be awarded a maximum of 100 points in this scoring category as per Table 4.

Table 4 - Voice and Narrowband Data Technology Criteria and Weights

Technology Utilized	Point Value
Trunked system design	50
6.25-kHz effective spectral efficiency	50

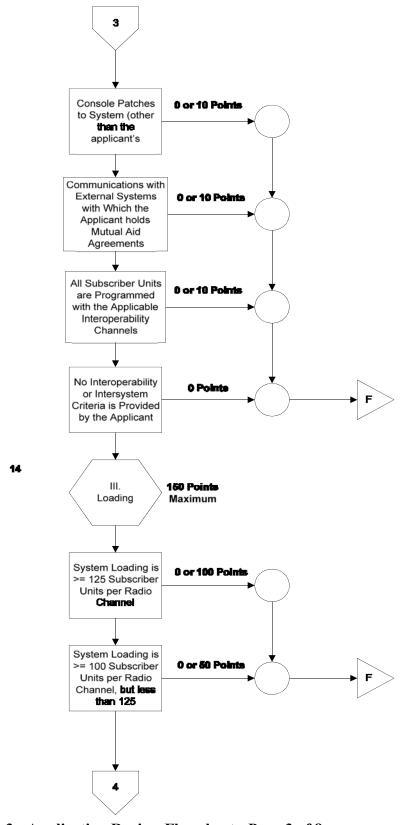


Figure 3 - Application Review Flowchart - Page 3 of 8

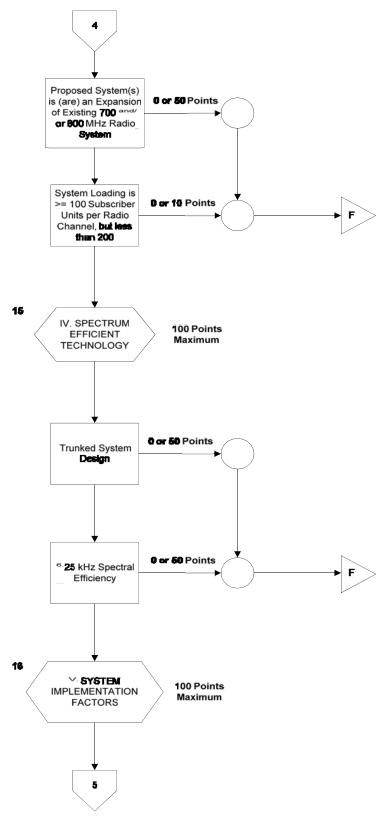


Figure 4 - Application Review Flowchart - Page 4 of 8

Systems Implementation Factors (Category V, Block #16) - 100- point Maximum

Category V (Block #16, Figure 4) scores the applicant on two factors — budgetary commitment and planning completeness. The degree of budgetary commitment is scored on a range of 0 to 50 points (first line in Table 5). An applicant that demonstrates a high degree of commitment in funding the proposed system will receive a higher score. Each applicant will also be scored on the degree of planning completeness, with a scoring range of from 0 to 50 points (second line in Table 6). Applicants are required to submit evidence of financial and budgetary commitment and a timetable for implementing the communications system or systems.

Table 5 - Planning for Implementation Criteria and Weights

Implementation Status	Point Value
Degree of budgetary commitment	50
Degree of planning completeness	50

Geographical Efficiency (Category VI, Block #17) - 100-point Maximum

Category VI (Block #17 in Figure 5) scores applicants on the level of geographic efficiency. Scoring in this category is based upon two subcategories: the ratio of subscriber units to area covered, and the channel reuse factor. The ratio of subscriber units to area covered measures the level of efficient coverage that a system demonstrates. The higher the ratio (subscriber units divided by square miles of coverage), the more efficient the use of the frequencies. For each application filing window, the ratio of the number of subscriber units to jurisdictional area covered shall be normalized to a maximum of fifty (50) points (as per the first line in Table 6). This will be done by applying the Normalization Equation that follows Table 6.

The channel reuse factor is defined as the number of times a channel is reused divided by the jurisdictional area covered. For each application filing window, as per the second line in Table 6, the channel reuse shall also be normalized to fifty (50) points. This will be done by applying the Normalization Equation that follows Table 6.

Table 6 - Geographic Efficiency Criteria and Weights

Geographic Efficiency	Point Value
Ratio of subscriber units to the jurisdictional area covered	50
Level of channel reuse throughout the jurisdictional area covered	50

Normalization Equation

A = Minimum point score = 0; B = Maximum point score = 50; x = Raw score; Max(x) = Maximum raw score in the application filing window

Min(x) = Minimum raw score in the application filing window Normalized

score (x) = A + [(B-A)/(Max(x)-Min(x))]. [x-Min(x)] Equation for normalization = 0 + [(50-0)/(Max(x)-Min(x))]. [x-Min(x)]

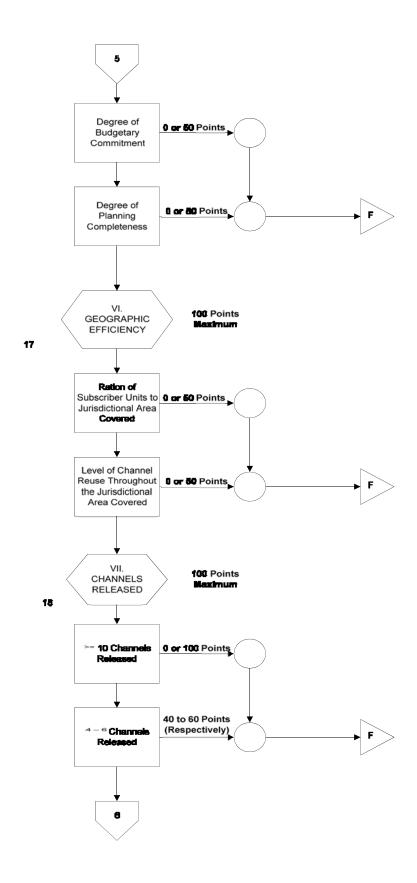


Figure 5 - Application Review Flowchart - Page 5 of 8

Channels Released (Block #18) - 100-point Maximum

Category VII (Block #18 in Figure 5) evaluates the applicant on the number of radio channels released if the 700 MHz application is granted to it. As demonstrated in Table 8, the greater the number of channels released, the higher the score that applicant shall be awarded.

The usability of the released radio channels will also be considered in the form of a multiplier ranging from 0.0 to 1.0. Radio channels with greater usability potential will earn the applicant higher points. The FCC-certified frequency coordinators or their representatives shall be responsible for evaluating the usability of any channel(s) released.

Number and UsabilityPoint ValueTen (10) or more channels given back100Four (4) to six (6) channels given back40-60One (1) to three (3) channels given back10-30Usability of the channels by others (i.e., levels of interference, intermodulation, etc.)0 - 1 (multiplier)

Table 7 - Channel Criteria and Weights

Final Processing Steps

As shown in Block #19 in Figure 6, points are totaled for each application. Next, as per Block #20, the applicant's current frequency holdings (if any) are reviewed by the Committee. Then, as per Block #21, the approved application scores are reviewed by the Committee to determine the proper application prioritization order.

Next, the frequency pool is allotted (Block #22 in Figure 7), and interregional concurrence occurs as necessary (Block #23, also in Figure 7). The Plan is then sent to the FCC for review and approval (Block #24). Upon acceptance by the FCC (Block #25), the RPC notifies (Block #26) the applicant of its channel allotment(s). The applicant shall file the station license(s) with its preferred frequency coordinator (Block #27), who coordinates with the FCC (Block #34).

Simultaneously, the applicant shall send a copy of its application to the RPC. Upon confirming that the application for license matches the application for channel allotment, the RPC shall submit a Regional Plan Control Number to the coordinator, and the Regional Plan, RPC, and CAPRAD databases are updated. Finally, the FCC grants the license(s) to the successful applicant (Block #29 in Figure 7).

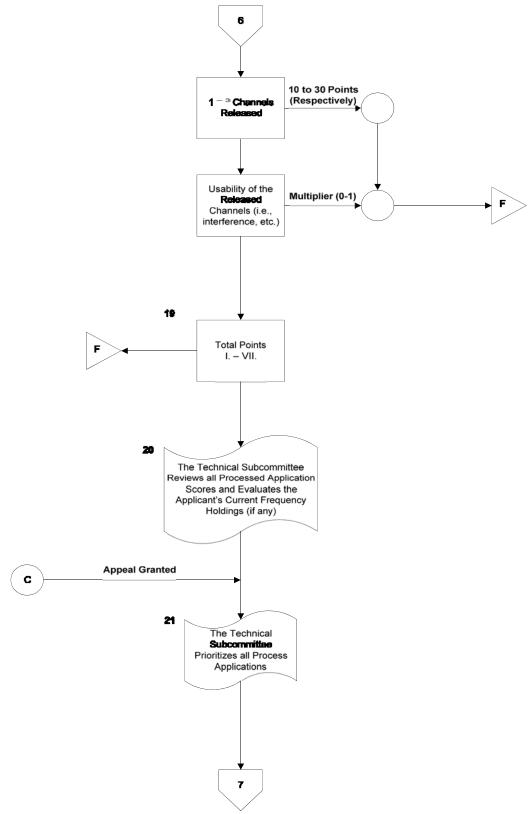


Figure 6 - Application Review Flowchart - Page 6 of 8

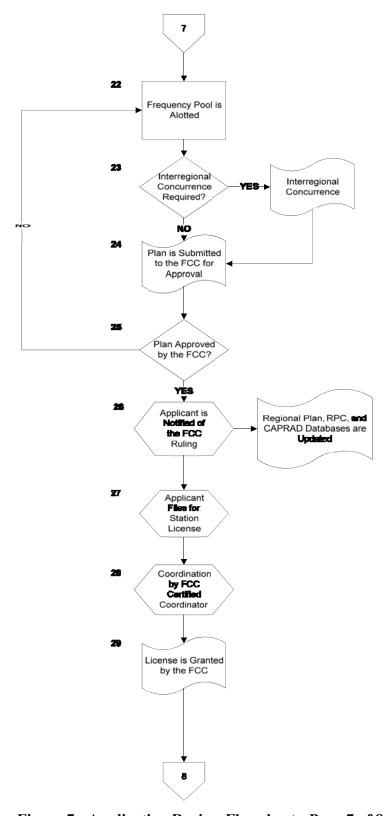


Figure 7 - Application Review Flowchart - Page 7 of 8

Follow-up after Initial Approval

The FCC allows the applicant/licensee up to five (5) years to implement the system. Should system implementation not begin (by, at minimum, an award of contract) within a two-year period, or if the projected channel loading is not attained in accordance with the slow-growth plan; and the FCC has not approved a revised implementation plan, the Region will petition the FCC to have the channels be returned for reallocation.

System implementation is monitored by the Region 34 Technical Subcommittee to determine if progress is being made (see Block #30 in Figure 8). Monitoring of system implementation by the Region 34 Technical Subcommittee will take place at a minimum of six-month intervals until implementation is complete. If progress is being made, the system is ultimately implemented (Block #32). If progress is not made, the applicant/licensee is warned of the potential consequences of its lack of progress (Block #31).

The Region 34 Technical Subcommittee continues to monitor progress on the implementation of the system. If monitoring indicates that progress is still not being made, the applicant/licensee is notified (Block #33) of pending action to withdraw the channel allotment(s). The notified applicant/licensee can request an extension (Block #34) of time from the RPC to complete its slow-growth plan or can allow the application to be cancelled (Block #35). If the applicant/licensee requests an extension, and the RPC agrees, a concurrence letter acknowledging the applicant's request will be produced by the RPC and sent to the FCC.

If the FCC grants an extension to the applicant/licensee, the system implementation monitoring process will continue and the activities in blocks #30 - #33 will reoccur. If the FCC in consultation with the RPC does not grant an extension, the applicant/licensee and FCC will be notified (Block #36). The notified applicant/licensee can appeal this action or allow the license to be withdrawn (Block #37). If the allotted frequencies are withdrawn, they are added back into the frequency pool (Block #38) and the process begins a second iteration, starting back at Block #1.

If the applicant/licensee appeals the RPC's decision, the FCC appeal process will ensue (Block #39). If the FCC denies the appeal, the RPC and applicant/licensee will be notified (Block #40). If the FCC grants the appeal with channel-allotment changes, the process reverts to Block #22 (frequency pool is allotted). If there is no channel-allotment change, the process reverts to Block #30 (system implementation is monitored by the RPC).

	CHART LEGEND:	Chart Page #
A =	TO APPEAL PROCESS	1 of 8
B =	RETURN TO APPLICANT	1 of 8
C =	APPEAL GRANTED	6 of 8
D=	RETURN TO FREQ. POOL	1 of 8
E =	NOT USED	NOT USED
F =	TO TOTAL POINTS	6 of 8

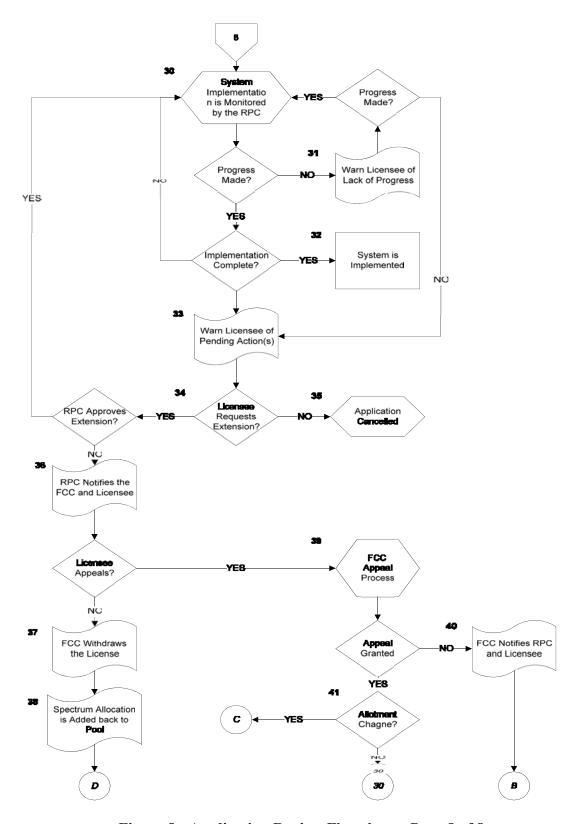


Figure 8 - Application Review Flowchart - Page 8 of 8

Technical Evaluation of Applications

Complete application packages shall undergo a technical review according to the procedures described in this section.

In order for an application to pass the technical evaluation process, it must:

- A. Contain the required technical parameters
- B. Protect licensed assignments and unlicensed allotments under past filing windows

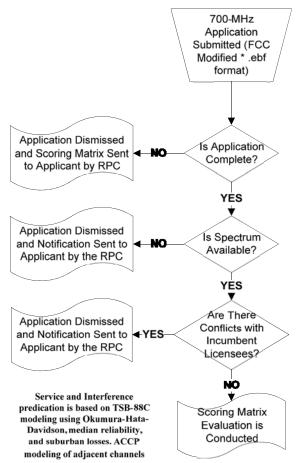


Figure 9 – Overview of Technical Review Process

Coordination with Adjacent Regions – from 47 CFR §90.527 (a)(5)

Each application will be checked by the RPC 34 Technical Subcommittee to ensure that its acceptance would not cause harmful interference to existing licensed systems and allotments.

Any application packages that do not provide the appropriate existing license protection as required will be returned to the applicant, with information regarding other impacting applications. The applicant will be allowed thirty (30) days to respond.

Use of the CAPRAD Pre-Assignment Table

As a principle, the Region will utilize CAPRAD as the fundamental basis to make initial channel assignments in Window One to an eligible user within a geographic area.

If an eligible user in Region 34 requires more channels than are available within the CAPRAD pre-assignment and the facts and circumstances of the user's request justify the channels, the Region will endeavor to meet the applicant's requirements provided that the applicant provides documentation to support the need for additional channels. The documentation shall be provided at the expense of the applicant and may include "Grade of Service" studies, proposed channel loading data, fleet maps, and other documents demonstrating the need for additional channels.

The Region is currently in a Window Two application process. Window Two is a continuous application window beyond the original 3 year time period when the CAPRAD Pre-Assignment was valid. As such, the Region will entertain applications on a first-come first-served basis and these will not be Pre-Assignment pools.

State Use Spectrum

State of Oklahoma has relinquished the "State Use" license and the state channels are now part of the General Access Pool. The Region however still identifies the state channels as being available to the State of Oklahoma through the Regional application process and through the use of site specific FCC licenses. The "State Use" channels will remain reserved for the State of Oklahoma until December 31, 2022; or until all other General Access channel have been allotted to other licensees, whichever may come later.

Allocation Disputes

CAPRAD geographic area allocations will only be considered protected for a period of three years from the date the FCC approved the Region 34 Plan, after which time only FCC licensed allocations receive protection. Protests will only be considered if the

allocation does not conform to the Region 34 Plan or the objecting agency or the Chair can show harmful interference is likely based on the information submitted by the agency requesting the new allocation. If an agency with pre- licensed/Region approved co-channel or adjacent channel allocations objects to a proposed allocation due to concerns about potential interference, the objecting agency may request field tests be done to confirm or refute interference potential. The completion of these field tests will be required for Regional application approval. Coverage area service/interference contours of the proposed system(s) should meet values designated in Section 6.1 of this document. Any costs associated with field tests or any other requirement to obtain Region 34 plan approval is the responsibility of the agency submitting the application to Region 34.

The parties involved must resolve the allocation dispute pursuant to the Plan and notify the Region Chair of such resolution within 30 calendar days. If the parties involved cannot resolve the allocation dispute within that timeframe, then a special full Committee meeting will be scheduled to consider and vote on the protest. If approved, the application will be submitted through the CAPRAD database to the applicant's chosen FCC-certified frequency coordinator for processing. The full Committee meeting may be in person or virtual. The notice requirement for a special full meeting in this situation is reduced to 10 calendar days.

Lower Power "Campus Eligible" General Use Channels

With the implementation of 700 MHz public safety spectrum throughout Region 34, there may be opportunities for increased channel reuse when developing radio systems for "campus" type operations. Examples of those who may capitalize on this opportunity include hospitals, stadiums, malls, or other places of public gathering, universities, transit systems, and ports. While these channels have been designated in jurisdictional pool allotments with proper designations, they do not enjoy the benefits of wide area channels in that they are not cleared for usage over a wide area. In many instances, facilities require a smaller or more specific geographical coverage area than assumed in the initial channel packing plan and may be able to be reused more efficiently. These "campus" type systems also, in many cases, require in-building or confined space/tunnel radio coverage or communications along a linear pathway, such as a maintenance or right of way. Public safety channels can be allotted to this type of operation in a region and can lead to effective system development, along with increased spectral efficiency, if power levels and Area of Protection (AOP) of the area are taken into account in system planning. These parameters must be established appropriate to the area of coverage. In order to facilitate this effective method of system implementation, channels have been identified in certain areas of Region 34 that may be utilized in a smaller service area. These channels may not be eligible to be utilized throughout the jurisdiction to which they are allotted and the following criteria must be adhered to when requesting channels from Region 34 for operations of this type:

- a. The 40dBu F(50,50) service contour of the proposed system must not exceed an area more than 2 miles from the proposed transmitter site. When this 2-mile distance extends to an adjacent region, the applicant must obtain concurrence from the adjacent region. Reduced external antenna height, along with reduced effective radiated power (ERP), directional antennae, distributed antenna systems, and radiating "leaky coax," are all tools that should be utilized in the development of these type systems.
- b. Region 34 will ensure that the development of these types of systems will in no way interfere with co-channel or adjacent channel users within Region 34 or Region 34's adjacent neighbors. The Chair of the Region or its Technical subcommittee, or a majority of the members of the region, has the authority to request and require engineering studies from the applicant that indicates no harmful interference will be introduced to any co-channel or adjacent channel existing user prior to application approval.
- c. For 12.5 kHz co-channel assignments, the 40dBu F(50,50) service contour of the proposed stations will be allowed to extend beyond the transmitter site for a distance no greater than 2 miles. An adjacent/alternate 12.5 kHz channel shall be allowed to have its 60 dBµ F(50,10) contour touch, but not overlap the 40 dBµ service F(50,50) contour of an adjacent/alternate system being protected. Evaluations should be made in both directions to ensure compliance. The approval of systems utilizing jurisdictional allotment channels labeled "Campus" is subject to approval of the Region 34 700 MHz regional planning committee. They are the final authority on parameters associated with "campus" type operations.

If Region 34 receives an application for low power fixed use and the proposed service contour encroaches onto an adjacent region prior to the channel allotted to the region being implemented in a specific system, the application must be modified. Through the modifications, the service contour shall not encroach into the adjacent region unless the applicant provides the Region 34 Planning Committee with written concurrence from the adjacent region permitting the original design.

Management of Channel Assignments

All channels approved by Region 34 for licensees under its jurisdiction should be placed into operation pursuant to the provisions of 47 CFR §90.551. The Region 34 Plan requires that prior to request for approval to use channels, the licensee must be actively preparing for the development of a 700 MHz radio system. Attributes of the licensee's intent to use the

channels includes but is not limited to:

- A. Completion of a Needs Assessment study documenting the need for channels in the 700 MHz band and/or
- B. Development and/or issuance of a Request for Proposals (RFP) or other procurement document designed to acquire a 700 MHz land mobile radio system and/or
- C. Approval of funding for the radio project
- D. A specific timetable for the system resulting in a target date for placing the system on the air

Pursuant to 47 CFR § 90.551 (Construction requirements), each station authorized to operate in the 769-775 MHz and 799-805 MHz frequency bands must be constructed and placed into operation within 12 months from the date of grant of the authorization. However, licensees may request a longer construction period, up to but not exceeding 5 years, pursuant to § 90.155(b).

In the event that a licensee has not taken substantial steps to implement the 700 MHz radio system in accordance with the provisions of this section of the Plan, Region 34 reserves the right to support the return of the channels to the general pool for reassignment to other licensees.

Notwithstanding the provisions above, the recommendation of channel use shall not be rescinded until the licensee has been notified of such intent to withdraw Regional support for use of channels ninety (90) days prior to such action. The licensee shall be afforded an opportunity to request in writing an extension of time to maintain Regional support related to use of the channels. Such request shall detail the justifications for maintaining the channels and indicate when such channels shall be placed on the air for the purposes of testing or operations.

Once notified by the Region of its intent to rescind support for use of the channels, the burden is placed upon the licensee to request in writing an extension of time. If the licensee does not file such an extension within ninety (90) days of notice issuance or if the request of the licensee is determined by the Region to be without merit, the Region will support return of channels to the general pool at the end of the ninety (90) day notice period.

The Region will recognize an extension of time to construct beyond the original Extended Implementation Schedule upon the FCC approval of a revised schedule.

How Region 34 Maximized Spectrum – from 47 CFR §90.527 (a)(6)

The Region is very cognizant of the need to utilize spectrum efficiently. Of equal importance, the Region believes that the assignment of spectrum should be "technology neutral" and tailored to the requirements of the applicant. The Region takes note of the fact that the United States Department of Homeland Security has adopted the Project 25 (P25) standard as the preferred technological standard for public safety radio systems. The Region appreciates and supports the need for public safety interoperability that is manifested in the P25 standard.

P25 FDMA systems utilize 12.5 KHz channels. A TDMA 12.5 kHz system employ two 6.25 KHz equivalent talk paths yield 6.25 KHz equivalency. To arbitrarily assign 25 KHz blocks of channels to applicants developing P25 Frequency Division Multiple Access (FDMA) or TDMA compliant systems potentially results in a waste of spectrum and the creation of orphan channels. To avoid the creation of orphan channels and equally, to maximize the spectrum available to Region 34 users, the Plan calls upon the Technical Committee to assign channels based upon the applicant's proposed technology reflecting the vendor neutral philosophy of the Region.

Low Power Channels

The Plan provides guidelines relative to the use of the low power 700 MHz channels under the authority of the Regional Planning Committee (RPC) as defined by 47 CFR §90.531(b)(3).

Eligibility

The following entities are eligible to use low-power channels under the control of the Regional Planning Committee pursuant to 47 CFR §90.523(a) and (b).

(a) State or local government entities.

Any territory, possession, state, city, county, town, or similar State or local governmental entity is eligible to hold authorizations in the 769–775 MHz and 799–805 MHz frequency bands.

(b) Nongovernmental organizations.

A nongovernmental organization (NGO) that provides services, the sole or principal purpose of which is to protect the safety of life, health, or property, is eligible to hold an authorization for a system operating in the 769–775 MHz and 799–805 MHz frequency bands for transmission or reception of communications essential to providing such services if (and only for so long as) the NGO applicant/licensee:

- (1) Has the ongoing support (to operate such system) of a state or local governmental entity whose mission is the oversight of or provision of services, the sole or principal purpose of which is to protect the safety of life, health, or property;
- (2) Operates such authorized system solely for transmission of communication essential to providing services the sole or principal purpose of which is to protect the safety of life, health, or property; and
- (3) All applications submitted by NGOs must be accompanied by a new, written certification of support (for the NGO applicant to operate the applied for system) by the state or local governmental entity referenced in paragraph (b)(1) of this section.

Low-power 700 MHz Channel Use

Frequencies will be used in a simplex (Direct) or repeater mode as specified within this provision of the Region's Plan for 700 MHz. The Plan will combine two channels as contained in 47 CFR §90.531(b)(3) to yield a 12.5 KHz simplex operating frequency. In the repeater mode, four 700 MHz channels shall be combined to yield a 12.5 KHz transmit and 12.5 KHz receive frequency.

Use within the Region

Low-power 700 MHz frequencies are limited to transmissions with the effective radiated power (ERP) allowed per FCC Part 90.531. These frequencies can be used at the broad discretion of eligible users in one of two methodologies, direct radio-to-radio or simplex operation and as an Incident Area Network (IAN) or other low power technology providing a repeater capability. The use of these frequencies for official public safety or public service communications is permitted by a single public safety agency or prior to the actual invocation of interoperable communications between two or more public safety agencies. Communications of a personal non-official purpose are prohibited.

Assignment of Frequencies

First responders have broad discretion in the use of these channels. However, if an incident is of sufficient scale to invoke the National Incident Management System (NIMS), the Incident Commander shall determine which low-power channels shall be used for first responders as well as the use of simplex and/or IAN repeater technology.

Modulation

Pursuant to 47 CFR §90.535, All transmitters in the 769-775 MHz and 799-805 MHz frequency bands must use digital modulation. Mobile and portable transmitters may have analog modulation capability only as a secondary mode in addition to its primary digital mode. Mobile and portable transmitters that operate exclusively on the low-power narrowband channels are exempt from the digital modulation requirement.

Programming of Frequencies

Eligible licensees are encouraged to program related frequencies into 700 MHz capable mobile and portable radios as may be practical pursuant to the Service Assignment tables on the following pages. This programming is not mandatory as some licensees may have insufficient capacity in subscriber devices to accommodate these frequencies.

Service Assignments

A table of repeater and direct or simplex assignments is found below and on the following pages. These assignments notate specific frequencies reserved for EMS, fire, and law enforcement users. For all other users, Generic Public Safety/Public Service frequencies exist that can be used by any eligible licensee as defined in 47 CFR §90.523.

Repeater/Incident Area Network Operation

From the Department of Homeland Security SAFECOM Statement of Requirements, An incident area network (IAN) is a network created for a specific incident. This network is temporary in nature. For the IAN or other repeater operation, the Region will follow the national deployment model; the lower frequency shall be used for the Repeater transmitter frequency while the upper frequency is employed for mobile/portable transmissions.

Dispute Resolution - Intra-Regional

In the event an agency disputes the implementation of this plan or the Federal Communications Commission approval of this plan or parts of this plan, the disputing agency representative must notify the Chair of the Region in writing. This section does not apply to protests over new spectrum allocations. The Chair will attempt to resolve the dispute on an informal basis. If Chair is not successful in resolving the dispute, he/she will apply the methodology as outlined in Appendix H.

Coordination with Adjacent Regions

The Regions adjacent to Region 34 are listed below:

- o Region 4: Arkansas
- o Region 7: Colorado
- o Region 16: Kansas
- o Region 18: Louisiana
- o Region 24: Missouri
- o Region 29: New Mexico
- o Region 40: Texas (Dallas)
- o Region 50: Texas (El Paso)
- o Region 52: Texas (Lubbock)

Interference Protection

Applicants are expected to design their systems for maximum signal levels within their coverage area and minimum levels in the coverage area of other co-channel users. Quality system engineering, the use of directional antennae, and the advocacy of multiagency/multi-discipline systems that promote interoperability should be employed by applicants to accomplish this goal. An applicant's coverage area is normally the geographical boundaries of the applicant's service areas plus a three to five mile area beyond.

The Region notes the extensive use of mutual aid agreements by jurisdictions within Region 34 and will accommodate the requests of applicants for wider coverage areas when appropriate provided that any extension does not result in harmful co-channel or adjacent channel interference. When required, the Region will coordinate with an adjacent Region to ensure that an interstate or intrastate mutual aid requirement is met.

In extraordinary circumstances impacted by the need to provide wider areas of coverage to meet the potential of national, regional emergencies, or mutual aid agreements, the Region may also permit the coverage area to extend beyond the normal limits reflected in the paragraphs above provided that such extension does not cause harmful co-channel or adjacent channel interference to any licensee or potential licensee employing a channel in an identified geographical assignment within the Region 34 Plan. The Region will not permit such a level of extraordinary coverage into an adjacent region without the expressed and written approval of the adjacent region.

Coverage Area vs Protected Service Area

System coverage should be designed as Interference Limited with minimum signal strength of 40 dB μ F(50,50) in the system coverage area while minimizing signal power out of the coverage area. This may require patterned antennas and extra sites compared to a design that assumes Noise Limited coverage. The methodologies included within TIA TSB88C (most recent version) will be used to determine harmful interference utilizing a coverage area defined as a 40 dB μ F(50,50) signal. Protection of existing systems will be such that the 40 dB μ (F50,50) protected service area is not degraded by the co- channel 5 dB μ F(50,10) signal or the adjacent channel 60 dB μ F(50,10). See Appendix C for details.

(ie: Degradation over water will not be considered unless the body of water was defined in the existing system coverage area). Region 34 will comply with National Coordination Committee recommendations of the Regional Planning Committee Guidelines.

To maximize spectrum utilization, prudent engineering practices and receivers of the highest quality should be used in all systems. Given a choice of radios to choose from in a given technology family, agencies should use the units with the best specifications. This plan will not protect agencies from interference if their systems are under-constructed (i.e. areas with the established coverage area having minimum signal strength below 50 dB μ , or the systems utilize low quality receivers. The applicant's implementation of prudent engineering practices will be encouraged by Region 34 at all times.

Spectrum Efficiency Standards

Initial allotments will be made on the basis of the 12.5 kHz channel blocks incorporated in CAPRAD and then modified as consistent with this Plan to provide 12.5 blocks of channels.

In conformance with FCC Report and Order 14-172, the requirement for attaining one voice path in a 6.25 kHz channel bandwidth is removed.

Region 34 still encourages licensees to utilize spectrally efficient technologies in the implementation of the 700 MHz channels.

In situations where a licensee builds to an efficiency standard permitting one talk path in

12.5 kHz of spectrum, and the Region 34 Committee allots a specific number of channels based upon loading in the 12.5 kHz efficiency standard, should the Commission required 6.25 kHz talk path efficiency standard in the future, the licensee must justify continued license for the amount of spectrum originally allotted. The Region 34 Committee may consider a take back of spectrum if the licensee cannot justify loading of the system with a 6.25 kHz efficiency standard.

For narrowband mobile data requests, one mobile data channel will consist of one (1) 12.5 KHz channel. Narrowband 12.5 KHz channels can be aggregated for data use to a maximum bandwidth of 25 KHz.

In compliance with 47 CFR §90.527 (a)(6), Region 34 encourages small agencies to partner with other agencies in multi-agency or regional systems as they promote spectrum efficiency and both small and large agency capacity needs can be met. Loading criteria can also be achieved in multi-agency systems that will allow greater throughput for all agencies involved than that which could be achieved individually.

The Region 34 Committee will utilize a loading factor of 100 units per voice path for the first 10 voice paths, and 150 units per channel for any additional voice paths, to determine the maximum number of channels allotted to a system. Data usage of narrowband channels will require 19,200 kbps per 25 kHz of spectrum.

Adjacent Channels

The narrowband pool allotments within Region 34 will have a channel bandwidth of 12.5 as required by the applicant. These 12.5 kHz allotments have been characterized as "technology neutral" and flexible enough to accommodate multiple technologies utilizing multiple bandwidths.

An adjacent 12.5 kHz channel may be combined for use in a 4 slot TDMA system or for data purposes, provided that it meets co-channel and adjacent channel protection (ACP) interference criteria in 47 CFR §90.543.

Interoperability Channels

There are many public safety and homeland security agencies, full-time and volunteer, operating throughout Region 34. The Region adjoins other Regions containing many first responder agencies. The need for interoperability is critical and Region 34 encourages support for Interoperability Calling and Tactical Channels in all relevant frequency bands.

Selection of Radios and Programming of Interoperability Channels

As required by 47 CFR § 90.547 (Narrowband Interoperability channel capability requirement) except as noted in Subpart R, mobile and portable transmitters operating on narrowband channels in the 769-775 MHz and 799-805 MHz frequency bands must be capable of operating on all of the designated nationwide narrowband Interoperability channels pursuant to the standards specified in 47 CFR§ 90.548 and detailed as follows for the appropriate service use.

Interoperability Channel Usage

Background

Communications between agencies in a disaster or communication system failure is critical to the success of the responses. This section will define the use of these frequencies for use in Region 34 the State of Oklahoma.

Protocol Procedure

The use of these frequencies will be guided by the most current version of the National Interoperability Field Operations Guide (NIFOG), the State of Oklahoma Statewide Communications Interoperability Plan (SCIP) and local Tactical Interoperability Communications Plans (TICP). Channel Names shall be programmed as listed in the current edition of the NIFOG and APCO/NPSTC 1.104.2-2017 Standard Channel Nomenclature for the Public Safety Interoperability Channels.

The following channels defined by the NIFOG as 700 MHz Nationwide Interoperability Channels are available for local use.

Primary Use	Channel Name	FB2/MO TX (MHz)	Mobile TX (MHz)	Channel Number
Calling Channel	7CALL50	769.24375	799.24375	39-40 / 999-1000
Calling Channel	7CALL50D	769.24375	769.24375	39-40 / 39-40
Calling Channel	7CALL70	773.25625	803.25625	681-682 / 1641-1642
Calling Channel	7CALL70D	773.25625	773.25625	681-682 / 681-682
Fire	7FIRE63	769.89375	799.89375	143-144 / 1103-1104
Fire	7FIRE63D	769.89375	769.89375	143-144 / 143-144
Fire	7FIRE64	769.99375	799.99375	159-160 / 1119-1120
Fire	7FIRE64D	769.99375	769.99375	159-160 / 159-160
Fire	7FIRE83	773.50625	803.50625	721-722 / 1681-1682
Fire	7FIRE83D	773.50625	773.50625	721-722 / 721-722
Fire	7FIRE84	773.85625	803.85625	777-778 / 1737-1738
Fire	7FIRE84D	773.85625	773.85625	777-778 / 777-778
Other Public Service	7GTAC57	770.99375	800.99375	319-320 / 1279-1280

Other Public Service	7GTAC57D	770.99375	770.99375	319-320 / 319-320
Other Public Service	7GTAC77	774.85625	804.85625	937-938 / 1897-1898
Other Public Service	7GTAC77D	774.85625	774.85625	937-938 / 937-938
Law Enforcement	7LAW61	774.83025	800.39375	223-224 / 1183-1184
Law Enforcement	7LAW61D	770.39375	770.39375	223-224 / 223-224
				239-240 / 1199-1200
Law Enforcement	7LAW62	770.49375	800.49375	
Law Enforcement	7LAW62D	770.49375	770.49375	239-240 / 239-240
Law Enforcement	7LAW81	774.00625	804.00625	801-802 / 1761-1762
Law Enforcement	7LAW81D	774.00625	774.00625	801-802 / 801-802
Law Enforcement	7LAW82	774.35625	804.35625	857-858 / 1817-1818
Law Enforcement	7LAW82D	774.35625	774.35625	857-858 / 857-858
EMS	7MED65	769.39375	799.39375	63-64 / 1023-1024
EMS	7MED65D	769.39375	769.39375	63-64 / 63-64
EMS	7MED66	769.49375	799.49375	79-80 / 1039-1040
EMS	7MED66D	769.49375	769.49375	79-80 /79-80
EMS	7MED86	773.00625	803.00625	641-642 / 1601-1602
EMS	7MED86D	773.00625	773.00625	641-642 / 641-642
EMS	7MED87	773.35625	803.35625	697-698 / 1657-1658
EMS	7MED87D	773.35625	773.35625	697-698 / 697-698
General Public Safety	7TAC51	769.14375	799.14375	23-24 / 983-984
General Public Safety	7TAC51D	769.14375	769.14375	23-24 / 23-24
General Public Safety	7TAC52	769.64375	799.64375	103-104 / 1063-1064
General Public Safety	7TAC52D	769.64375	769.64375	103-104 / 103-104
General Public Safety	7TAC53	770.14375	800.14375	183-184 / 1143-1144
General Public Safety	7TAC53D	770.14375	770.14375	183-184 / 183-184
General Public Safety	7TAC54	770.64375	800.64375	263-264 / 1223-1224
General Public Safety	7TAC54D	770.64375	770.64375	263-264 / 263-264
General Public Safety	7TAC55	769.74375	799.74375	119-120 / 1079-1080
General Public Safety	7TAC55D	769.74375	769.74375	119-120 / 119-120
General Public Safety	7TAC56	770.24375	800.24375	199-200 / 1159-1160
General Public Safety	7TAC56D	770.24375	770.24375	199-200 / 199-200
General Public Safety	7TAC71	773.10625	803.10625	657-658 / 1617-1618
General Public Safety	7TAC71D	773.10625	773.10625	657-658 / 657-658
General Public Safety	7TAC72	773.60625	803.60625	737-738 / 1697-1698
General Public Safety	7TAC72D	773.60625	773.60625	737-738 / 737-738
General Public Safety	7TAC73	774.10625	804.10625	817-818 / 1777-1778
General Public Safety	7TAC73D	774.10625	774.10625	817-818 / 817-818
General Public Safety	7TAC74	774.60625	804.60625	897-898 / 1857-1858
General Public Safety	7TAC74D	774.60625	774.60625	897-898 / 897-898
General Public Safety	7TAC75	773.75625	803.75625	761-762 / 1721-1722
General Public Safety	7TAC75D	773.75625	773.75625	761-762 / 761-762

General Public Safety	7TAC76	774.25625	804.25625	841-842 / 1801-1802
General Public Safety	7TAC76D	774.25625	774.25625	841-842 / 841-842

Tactical Channels

At this time, Region 34 will not set aside additional channels for interoperability use within the region other than as stated in the Plan. It is anticipated the FCC designated interoperability channels will be sufficient to provide interoperability (voice and data) within Region 34.

All mobile and portable units operating under this Plan and utilizing 700 MHz channels must be programmed with the minimum number of channels called for either in NCC guidelines or as the relevant Statewide Interoperability Executive Committee specifies. The channel display in these radios will be in accordance with the NCC guidelines that have common alphanumeric nomenclature to avoid any misinterpretation of use within Region 34. The Oklahoma SIGB (Statewide Interoperability Governance Board) is the final authority on the interpretation of the distribution of the 700 MHz interoperability channels.

Deployable Systems

In this Plan, Region 34 supports use of deployable systems, both conventional and trunked. Deployable systems are prepackaged systems that can deploy by ground or air to an incident to provide additional coverage and capacity on designated 700 MHz interoperability channels and/or agency specific General Use Channels. This will minimize the expense of installing extensive fixed infrastructure in areas while still providing mission critical functionalities as the Region recognizes the difficulty of providing complete coverage in all areas due to financial, demographic, and geographical constraints.

Agencies should have conventional deployable systems capable of being operated on any of the FCC designated/NCC recommended interoperability tactical channels. The agencies that are part of a multi-agency trunked system and commonly provide mutual aid to each other are encouraged to have trunked deployable systems that operate on the tactical channels designated by the FCC for this use. The Oklahoma SIGB will develop the operational details for deploying these systems.

It is expected that the tactical channels set aside for trunked operation will be heavily used by deployable systems. Therefore, the tactical channels cannot be assigned to augment general use trunked systems.

Monitoring of Interoperability 700 MHz Calling and Tactical Channels

Region 34 believes that it is appropriate for any new licensees using 700 MHz frequencies to monitor and have access to the current channels identification by the National Public Safety Planning Advisory Committee (NPSPAC) in the 800 MHz band.

Accordingly, until amended by the Region or superseded by order of the Commission, Region 34 may require applicants to install fixed network transceivers capable of monitoring at a minimum the NPSPAC 800 MHz calling channel and the primary 700 MHz calling channel (7CALL50). Applicants may utilize a central agency to monitor the NPSPAC and 700 MHz calling channel on their behalf.

Notwithstanding the other provisions of this section of the Plan, Region 34 may supplement the four (4) traditional NPSPAC tactical channels in 800 MHz with additional tactical channels in the 700 MHz band as provided by the Commission or the Oklahoma SIGB.

Interoperability with Federal Government

First responders within Region 34 may also interoperate with first responders and Homeland Security officials during a disaster or related event.

Future Planning – from 47 CFR §90.531 (a)(7)

The initial process of assignments was known as Window One. In this window, the CAPRAD pre-coordination database was employed as the initial basis of channel allotments for geographical areas within Region 34, including the independent cities using criteria such as current population, 2000 Census data, height above average terrain (HAAT), and public safety use curves generated by the Public Safety Wireless Advisory Committee (PSWAC) to provide spectrally efficient frequency allotments.

In Window One, all channels identified in this Plan were available to applicants operating in the geographical areas. In addition, channels may be provided to an applicant pursuant to the provisions of this Plan

Applications for channels were submitted to the Technical Committee and reviewed by the Regional Committee for vote at the next scheduled meeting.

The initial window was opened from time of Commission approval of the Plan and further from that date, for a period of three (3) years. Three (3) years after the approval of the Plan by the Commission, Window One will close.

Windows of Future Channel Assignments

In the future, Region 34 will issue channels in 700 MHz under a continual process in which there will be a second filing window for applicants. This window for applications will be known as Window Two and will become effective upon the expiration of Window One.

Window Two is a continuous process where any channel in any geographical area not assigned to a licensee becomes open and available to any other applicant provided that no harmful co-channel and/or adjacent channel user is created through a reassignment of the channel, subject to overall regional planning committee review.

Review of the Plan's Effectiveness

As a standing agenda item for every meeting of Region 34, the Chair of the Technical Committee shall provide a report to the membership detailing the use of the spectrum and any administrative or operational issues arising from this Plan. In addition, the Meeting Chair shall invite comments from members and any other persons in attendance at meetings relative to the effectiveness of the Plan.

At any time in which the Region Chair or the Chair of the Technical Committee has reason to believe that a provision of the Plan is adversely affecting public safety communications within Region 34, the Chair or Vice Chair operating in their absence has an affirmative responsibility to report the issues to the appropriate Committee for immediate attention.

Upon review of the reported conflict no later than sixty (60) days after the initial allegation; the appropriate Chair shall report the Committee's findings to the Region 34 Chair. The Region 34 Chair shall review the findings of the Committee reviewing the allegation. Depending upon the findings of the Chair of Region 34, one of three possible outcomes will be initiated.

- A. <u>Allegation Unfounded No Further Action is Required</u>. The person reporting the alleged issue shall be informed of the Region's decision.
- B. <u>Allegation Founded Immediate Action Not Required</u>. When there is an affirmative finding of a problem with the Region's Plan and the matter can be appropriately deferred until placed on the agenda of the next meeting, the deferral of action is

appropriate.

C. <u>Allegation Founded – Immediate Action Required</u>. When the Chair of Region 34 finds that a provision of the Plan is causing or may cause adverse impact to an applicant or potential applicant, the Chair may take executive action and grant relief by temporarily suspending a provision of this Plan until a Regional Meeting can be called. In the event that executive action is taken and a provision of this Plan is suspended, the effective period of suspension shall not extend beyond sixty (60) days unless ratified by the Region at a meeting called in response to the Chair's findings and executive action.

Inter-Regional Dispute Resolution Process

In the event that a dispute arises between Region 34 and an adjacent Region or Regions regarding spectrum allocations or implementation that cannot be resolved within 60 days, the parties to the dispute will request a hearing by the National Regional Planning Oversight Committee.

Modifications to the Plan – from 47 CFR §90.527 (b)

In recognition that there will be amendments made to the Plan, the bylaws of the Region 34 700 MHz Planning Committee incorporate provisions permitting the amendments as may be necessary.

The Region 34 Plan will be modified by the Regional Plan Review Committee when required by submitting a written request, signed by the Region 34 Chair, to the Public Safety and Homeland Security Bureau. The request will contain the full text of the modification, and certify that successful coordination of the modification with all adjacent regions has occurred and that all such regions concur with the modification.

APPENDICES

Appendix A – Bylaws of Region 34

THE BYLAWS OF REGION 34 700 MHz REGIONAL PLANNING COMMITTEE Adopted – July 14, 2009

ARTICLE 1 NAME & PURPOSE

1.1 Name and purpose: The name of this Region shall be Region 34 and the Committee shall be known as "*The Region 34 – 700 MHz Regional Planning Committee*". Its primary purpose is to foster cooperation, planning, development of regional plans and the implementation of these plans in the 700 MHz Public Safety Band.

ARTICLE II MEMBERS

For purposes of this Article, the term "member," unless otherwise specified, refers to both voting and non-voting members.

- Number, Election and Qualification: The Regional Committee shall have two classes of members, "voting members" and "non-voting members." New members may be added at annual, special, or regular meetings.
 - A. Voting Members: Voting members shall consist of one representative from any single agency engaged in public safety within Region 34, eligible to hold a license under 47 CFR 90.20, or 47 CFR 90.523. All State Agencies and all Political Subdivisions shall be allowed no more than one vote. In voting on any issue the individual must identify themselves and the State Agency or Political Subdivisions which they represent. Voting members may not vote on issues involving their entity.
 - B. **Non-Voting Members:** Non-voting members are all others interested in furthering the goals of public safety communications.
- **Tenure:** In general, each member shall hold MEMBERSHIP from the date of acceptance until resignation or removal.
- **Powers and Rights:** In addition to such powers and rights as are vested in them by law, or these bylaws, the members shall have such other powers and rights as the membership may determine.
- 24 Suspension and Removal: A Member may be suspended or removed with cause by vote of

a majority of members after reasonable notice and opportunity to be heard. Failure to attend 50% of meetings held in a calendar year shall be a specific cause for removal from the membership.

- **Resignation:** A member may resign by delivering written resignation to the Chair, vice-Chair, secretary/treasurer of the Regional Committee or to a meeting of the members.
- Annual Meetings: The annual meeting of the members shall be held at a location to be determined, each year after the adoption date of this document, within one month of the anniversary date. If an annual meeting is not held as herein provided, a special meeting of the members may be held in place thereof with the same force and effect as the annual meeting, and in such case all references in these bylaws, except in this Section 2.6, to the annual meeting of the members shall be deemed to refer to such special meeting. Any such special meeting shall be called and notice shall be given as provided in Section 2.7 and 2.8.
- **Special Meetings:** Special meetings of the members may be held at any time and at any place within the Regional Committee area. Special meetings of the members may be called by the Chair or by the vice-Chair, or in case of death, absence, incapacity, by any other officer or, upon written application of two or more members.

28 Call and Notice

- A Annual meetings: Reasonable notice of the time and place of all meetings shall be given to each member. Such notice need not specify the purposes of a meeting, unless otherwise required by law or these bylaws or unless there is to be considered at the meeting (i) amendments to these bylaws, (ii) an increase or decrease in the number of members, or (iii) removal or suspension of a member who is an officer.
- B. Reasonable and sufficient notice: Except as otherwise expressly provided, it shall be reasonable and sufficient notice to a member to send notice by mail at least ten business days or by e-mail/facsimile at least ten business days before the meeting, addressed to such member at his or her usual or last known business address, or, to give notice to such member in person or by telephone at least ten business days before the meeting.
- **Quorum:** A majority of the regional planning committee officers shall constitute a quorum at any meeting of the members provided the Chair or Vice Chair is one of those present. Any meeting may be adjourned to such date or dates not more than ninety days after the first session of the meeting by a majority of the votes cast upon the question, whether or not a quorum is present, and the meeting may be held as adjourned without further notice.

- **Action by Vote:** Each voting member, representing a particular agency (one vote per agency) shall have one vote; non-voting members have no right to vote. When a quorum is present at any meeting, a majority of the votes properly cast by voting members present shall decide any question, including election to any office, unless otherwise provided by law or these bylaws.
- Action by Writing: Any action required or permitted to be taken at any meeting of the members may be taken without a meeting if all members entitled to vote on the matter consent to the action in writing and the written consents are filed with the records of the meetings of the members. Such consents shall be treated for all purposes as a vote at a meeting.
- **Proxies:** Voting members may vote either in person or by written proxy dated not more than one month before the meeting named therein, which proxies shall be filed before being noted with the secretary or other person responsible for recording the proceedings of the meeting. Unless otherwise specifically limited by their terms, such proxies shall entitle the holders thereof to vote at any adjournment of the meeting by the proxy shall terminate after the final adjournment of such meeting.
- **Voting on One's Own Application:** At no time shall a voting member vote on his/her application.
- **Special Interest Voting:** A voting member cannot have a commercial interest in any of his/her region and/or adjacent regions application(s) on which he/she is reviewing, approving and/or voting.

ARTICLE III OFFICERS AND AGENTS

- Number and Qualification: The officers of the Regional Committee shall be a Chair, Vice-Chair, Secretary/Treasurer, Technical Committee Chair (Collectively known as the Regional Plan Review Committee), and such other officers, if any, as the voting members may determine. All officers must be voting members of the Regional Committee.
- **Election:** The officers shall be elected by the voting members at their first meeting and, thereafter, at the annual meeting of the members.
- **Tenure:** The officers shall each hold office until the annual meeting of the members held within one year from the adoption of these bylaws, or until their successor, if any, is chosen, or in each case until he or she sooner dies, resigns, is removed or becomes disqualified.

- **Chair and Vice Chair:** The Chair shall be the chief executive officer of the Regional Committee and, subject to the control of the voting members, shall have general charge and supervision of the affairs of the Regional Committee. The Chair shall preside at all meetings of the Regional Committee.
 - The Vice Chair shall have such duties and powers, as the voting members shall determine. The Vice-Chair shall have and may exercise all the powers and duties of the Chair during the absence of the Chair or in the event of his or her inability to act.
- Secretary/Treasurer: The Secretary/Treasurer shall be the chief financial officer and the chief accounting officer of the Regional Committee. The Secretary/Treasurer shall be in charge of its financial affairs, funds, and valuable papers and shall keep full and accurate records thereof. The Secretary/Treasurer shall record and maintain records of all proceedings of the members in a file or series of files kept for that purpose, which file or files shall be kept within the Region and shall be open at all reasonable times to the inspection of any member. Such file or files shall also contain records of all meetings and the original, or attested copies, of bylaws and names of all members and the address (including e-mail address, if available) of each. If the Secretary/Treasurer is absent from any meeting of the members, a temporary Secretary/Treasurer chosen at the meeting shall exercise the duties of the secretary at the meeting.
- **Suspension or Removal:** An officer may be suspended with cause by vote of a majority of the voting members.
- **Committees:** Sub-Committees shall be appointed by the Chair. They shall consist of the Technical Committee, and the Regulatory Committee. Other Committees may be added at the discretion of the Chair. All Committee Chairs will sit as voting members of the Executive Committee.
- **Resignation:** An officer may resign by delivering his or her written resignation to the Chair, Vice-Chair, or Secretary/Treasurer of the Regional Committee. Such resignation shall be effective upon receipt (unless specified to be effective at some other time), and acceptance thereof shall not be necessary to make it effective unless it so states.
- **Vacancies:** If the position of any officer becomes vacant, the voting members may elect a successor. Each such successor shall hold office for the remainder terms and in the case of the Chair, Vice Chair, and Secretary/Treasurer until his or her successor is elected and qualified, or in each case until he or she sooner dies, resigns, is removed or become disqualified.

ARTICLE IV AMENDMENTS

4.1 The voting members present may by a two-thirds vote, alter, amend, or repeal any bylaws adopted by the Regional Committee members or otherwise adopt, alter, amend or repeal any provision which FCC regulation or these bylaws requires action by the voting members.

ARTICLE V DISSOLUTION

5.1 This Regional Committee may be dissolved by the consent of two-thirds plus one of the members in good standing at a special meeting called for such purpose. The FCC shall be notified.

ARTICLE VI RULES OF PROCEDURES

6.1 The Conduct of Regional Meetings including without limitation, debate, voting and any other issue not covered by the Bylaws, shall be governed by Robert's Rules of Order, newly revised 1990 edition, ninth edition, Sarah Corbin Robert, Henry M. Robert III, and William J. Evans.

Appendix B – Common Air Interface

Project 25 Common Air Interface Interoperability Channel Parameters

Certain common P25 parameters need to be defined to ensure digital radios operating on the 700 MHz Interoperability Channels can communicate. This is analogous to defining the common CTCSS tone used on NPSPAC analog Interoperability channels.

Network Access Code

In the Project 25 Common Air Interface definition, the Network Access Code (NAC) is analogous to the use of CTCSS and CDCSS signals in analog radio systems. It is a code transmitted in the preamble of the P25 signal and repeated periodically throughout the transmission. Its purpose is to provide selective access to and maintain access to a receiver. It is also used to block nuisance and other co-channel signals. There are up to 4096 of these NAC codes. For ease of migration in other frequency bands, a NAC code table was developed which shows a mapping of CTCSS and CDCSS signals into corresponding NAC codes. Document TIA/EIA TSB102.BAAC contains NAC code table and other Project 25 Common Air Interface Reserve Values.

Use of corresponding NAC code \$293 is required for the 700 MHz Interoperability Channel NAC code.

Talk group ID

In the Project 25 Common Air Interface definition, the Talk group ID on conventional channels is analogous to the use of talk groups in trunking. In order to ensure that all users can communicate, all units should use a common Talk group ID.

Recommendation: Use P25 default value for Talk group ID = \$0001

Manufacturer's ID

The Project 25 Common Air Interface allows the ability to define manufacturer specific functions. In order to ensure that all users can communicate, all units should not use a specific Manufacturer's ID, but should use the default value of \$00.

Message ID

The Project 25 Common Air Interface allows the ability to define specific message functions. In order to ensure that all users can communicate, all units should use the default Message ID for

Encryption Algorithm ID and Key ID

The Project 25 Common Air Interface allows the ability to define specific encryption algorithms and encryption keys. In order to ensure that all users can communicate, encryption shall not be used on the Interoperability Calling Channels. All units should use the default Algorithm ID for unencrypted messages of \$80 and default Key ID for unencrypted messages 0000. These same defaults may be used for the other Interoperability channels when encryption is not used.

Use of encryption is only allowed on the other Interoperability channels when using the latest encryption key and algorithm specified by the Oklahoma State Interoperability Governance Board (SIGB). The use of other encryption is not allowed.

Appendix C – Spectrum Compatibility Rules

1. Introduction

This section describes a process for coordinating the 700 MHz channels. Channel allocations in Window Two will be based upon actual technical parameters and jurisdictional coverage requirements of the specific licensees.

2. Overview

Assignments will be based on a defined service area for each applicant. This will normally be an area defined by geographical or political boundaries such as city, county or by a data file consisting of line segments creating a polygon that encloses the defined area. The service contour is normally allowed to extend slightly beyond the geo/political boundaries such that systems can be designed for maximum signal levels within the boundaries, or coverage area. Systems must also be designed to minimize signal levels outside their geo/political boundaries to avoid interference into the coverage area of other co-channel users.

Definition: Service area is the actual geographic area serviced by the licensee. This includes the jurisdictional area and any extension of the jurisdictional area required to support primary communications requirements as justified to the Region 34 Committee.

Definition: Coverage area is the service area plus a general 3-5 mile buffer, known as the extended service area

The signal level permitted at the edge of the coverage area is no more than 40 dB μ . Protection of an existing system is based upon signal strength at the edge of the coverage area of 40 dB μ .

For co-channel assignments, the $40~dB\mu$ coverage contour will be allowed to extend beyond the defined service area by 3 to 5 miles, depending on the type of environment: urban, suburban or rural. The co-channel 5 dB μ interfering contour will be allowed to overlap the $40~dB\mu$ coverage contour of the system being evaluated only if the overlap of the coverage contour does not reduce the 35 dB desired ratio and does not overlap into the jurisdictional service area.

For adjacent and alternate channels, the $60 \text{ dB}\mu$ interfering contour will not be allowed to overlap the $40 \text{ dB}\mu$ coverage contour of the system being evaluated. The service contour reliability is defined at F(50,50), while the interference contours are defined at F(50,10)

3. Discussion

Based upon the ERP/HAAT limitations referenced in 47CFR ¶ 90.541(a), the maximum field strength will be limited to 40 dB relative to $1\mu V/m$ (customarily denoted as 40 dB μ). It is assumed that this limitation will be applied similar to the way it is applied in the 821-824/866-869 MHz band. That is, a 40 dB μ field strength can be deployed up to a defined distance (coverage area) beyond the edge of the service area, based on the size of the service area or type of applicant, i.e. city, county or statewide system. The value of 40 dB μ in the 700 MHz band corresponds to a signal of -92.7 dBm, received by a half-wavelength dipole antenna.

Two primary concerns are addressed by the Region 34 Committee:

- Public safety systems must provide reliable ubiquitous coverage within the service area
- Public safety systems must be cost effective and not prohibitive to construct and operate

The Committee has chosen to define the coverage area to the public safety standard $40~dB\mu$ at 50% faded reliability to an extended service area 3-5 miles outside of the licensee jurisdictional area. This provides a proper balance between the need to conserve and reuse spectrum, and the necessity to provide reliable service coverage at an affordable infrastructure cost.

4. Portable In-Building Coverage

Most Public Safety communications systems today are designed for portable in building coverage and the requirement for a typical coverage reliability of 95%. Buildings of 20 dB or greater penetration loss can be located at any point within the jurisdictional polygon of the licensee. The permitting of the coverage contour to extend 3-5 miles beyond the jurisdictional polygon at 40 dB μ faded 50% reliability will improve the ability to communicate into buildings located at the jurisdictional line. However, the Committee understands that this extended service area alone may not address the in-building requirements of all licensees, particularly when a very high loss building is located at or very close to such boundaries. In these cases the licensee will need to specifically address the particular building with unique and innovative approaches.

5. Service Contour Extension Recommendation

The resulting recommendation for extending the 40 dBµ coverage contour beyond the

service area boundary is:

Urban (20 dB Buildings): 5 miles Suburban (15 dB Buildings): 4 miles Rural (10 dB Buildings): 3 miles

The Region 34 Committee may waive these limits upon demonstration by the licensee that the urbanization classification does not properly address the licensee's situation; however the maximum distance of the service area extension is 5 miles in all situations.

6. Interfering Contour

The coverage and protected areas of an existing system are plotted at different signal strengths. The coverage signal strength is permitted at 40 dB μ , while the system will be protected from co-channel and adjacent channel system, both within and outside of Region 34, by the nationally accepted value of 5 dB μ .

Signal levels are calculated using methods described in TIA TSB-88C (or a subsequent later version), by using Okumura-Hata-Davidson propagation modeling, median reliability and relative to a suburban environment. The modeling is to be based on at least 1 arc second (30 meter resolution) terrain data.

The diffraction portion of the modeling, where it can serve to artificially limit the size of the plot, must be disabled¹⁷.

7. Co-Channel Interfering Contour Recommendation

The Committee will allow the constructed 40 dB μ F(50,50) coverage contour to extend beyond the edge of the defined service area by the distance indicated in paragraph 5. A cochannel shall be allowed to have its 5 dB μ (50,10) interfering contour overlap the 40 dB μ coverage contour of the system being evaluated only if the overlap of the coverage contour does not reduce the 35 dB desired ratio and does not overlap into the jurisdictional service area.

8. Adjacent Channel Considerations

Adjacent channels are treated as being on channel signals reduced by the value of Adjacent Channel Coupled Power (ACCP). This assumes that the primary mechanism for interference results from transmitter sideband noise appearing as an on- channel signal within the receiver bandwidth. Using the 47 CFR § 90.543 values of ACCP can facilitate the coordination of adjacent and alternate channels.

Based on 47 CFR§ 90.543 and the P25 requirement for an ACCP 65 dB into a 6.0 KHz channel bandwidth and leaving room for a migration from Phase 1 to Phase 2, allows for making the simplifying assumption that 65 dB ACCP is available for both adjacent 12.5 KHz spectrum blocks. For spectrum blocks spaced farther away, it must be assumed that transmitter filtering, in addition to transmitter performance improvements due to greater frequency separation, will further reduce the ACCPR. Therefore it is recommended that a consistent value of 65 dB ACCPR be used for the initial coordination of adjacent 12.5 KHz channel blocks. Rounding to be conservative due to the possibility of multiple sources allows the Adjacent Channel Interfering Contour to be approximately 20 dB above the 40 dBμ service contour, at 60 dBμ.

9. Adjacent Channel Interfering Contour Recommendation

An adjacent (12.5 KHz) channel shall not be allowed to have its 60 dBµ (50,10) interfering contour overlap the 40 dBµ coverage contour of the system being evaluated.

10. Final Detailed Coordination

The coordination for frequencies prior to system procurement does not address the specific and unique circumstances of the particular system and is only adequate for presorting large blocks of spectrum to potential entities. A more detailed analysis should be included in the actual design phase to take all the issues into consideration. A detailed report to the Region 34 Committee is to be submitted by each license detailing the "As Built" system once it is completed for the purposes of subsequent channel assignment. This information is available to other potential licensees to assist with licensing and coordinating those new systems to avoid interference.

Additional factors that should be considered include:

- Degree of Service Area Overlap
- Different size of Service Areas
- Different ERPs and HAATs
- Actual Terrain and Land Usage
- Differing User Reliability Requirements
- Migration from 12.5 kHz to 6.25 kHz efficiency standard, as required
- Site Separation
- Actual ACCP
- Balanced Systems
- Mobiles vs. Portables
- Use of voting

- Use of simulcast
- Radio specifications
- Simplex Operation

Special attention needs to be paid to the use of simplex operation. In this case, an interferer can be on an offset adjacent channel and in extremely close proximity to the victim receiver. This is especially critical in public safety where simplex operations are frequently used at a fire scene or during police operation. Simplex operations, other than those on the low power or interoperable channels, are generally not offered protection from interference.

11. Carrier to Interference Requirements

There are two different ways that Interference is considered.

- Co Channel
- Adjacent Channels

Co-channel C/I is defined as by the 40 and 5 dB μ contours for a difference of 35 dB. The co-channel contours are permitted to overlap only in the coverage area that extends 3-5 miles and only if the overlap of the coverage contour does not reduce the 35 dB desired ratio and does not overlap into the jurisdictional service area.

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Adjacent channel C/I is defined by the 40 and 60 dBμ contours for a difference of -20 dB. The adjacent and alternate channel contours are not permitted to overlap the coverage area

Appendix D – Channel Assignment Table

The FCC has cancelled State of Oklahoma license WPTZ803 for failure to construct. The "State Use" channels are now part of the General Access Pool. The Region however still identifies the state channels as being available to the State of Oklahoma through the Regional application process and through the use of site specific FCC licenses. The "State Use" channels will remain reserved for the State of Oklahoma until December 31, 2022; or until all other General Access channel have been allotted to other licensees, whichever may come later.

The following table of channels includes the former RESERVE channels which were re allotted to Air-to-Ground and the General Access Pool.

Air to Ground Channels

In conformance with FCC R&O 14-172, the following channels are removed from "RESERVE" and added to the allocation list as Air-to-Ground channels for use with a maximum aeronautical ERP of 2 watts and an elevation under 1500 feet (457 meters) above ground.

Base channel is listed and includes the corresponding mobile channel. The channels may be used as simplex. Responsibility for coordination of the channels is vested with each state.

Base/mobile	Mobile
21-22	981-982
101-102	1061-1062
181-182	1141-1142
261-262	1221-1222
659-660	1619-1620
739-740	1699-1700
819-820	1779-1780
899-900	1859-1860

New General Use Channels

In conformance with FCC R&O 14-172, the following channels are removed from "RESERVE" and added to the allocation list as General Use Channels.

Base/mobile	Mobile	Base/mobile	Mobile
37-38	997-998	61-62	1021-1022
77-87	1037-1038	117-118	1077-1078
141-142	1101-1102	157-158	1117-1118
197-198	1157-1158	221-222	1181-1182
237-238	1197-1198	277-278	1237-1238
301-302	1261-1262	317-318	1277-1278
643-644	1603-1604	683-684	1642-1643
699-700	1659-1660	723-724	1683-1684
763-764	1723-1724	779-780	1739-1740
803-804	1763-1764	843-844	1803-1804
859-860	1819-1820	883-884	1843-1844
923-924	1883-1884	939-940	1899-1900

Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
769.00625	799.00625	Low Power (Regional)	1-2 / 961-962
769.01875	799.01875	Low Power (Regional)	3-4 / 963-964
769.03125	799.03125	Low Power (Regional)	5-6 / 965-966
769.04375	799.04375	Low Power (Regional)	7-8 / 967-968
769.05625	799.05625	Low Power (Nationwide Itinerant)	9-10 / 969-970
769.06875	799.06875	Low Power (Nationwide Itinerant)	11-12 / 971-972
769.08125	799.08125	General Use	13-14 / 973-974
769.09375	799.09375	General Use	15-16 / 975-976
769.10625	799.10625	General Use	17-18 / 977-978
769.11875	799.11875	General Use	19-20 / 979-980
769.13125	799.13125	Air-Ground 7AG58	21-22 / 981-982
769.14375	799.14375	Interoperability 7TAC51	23-24 / 983-984
769.15625	799.15625	State License	25-26 / 985-986
769.16875	799.16875	State License	27-28 / 987-988

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
769.18125	799.18125	State License	29-30 / 989-990
769.19375	799.19375	State License	31-32 / 991-992
769.20625	799.20625	State License	33-34 / 993-994
769.21875	799.21875	State License	35-36 / 995-996
769.23125	799.23125	Deployable Trunked Systems	37-38 / 997-998
769.24375	799.24375	Interoperability 7CALL50	39-40 / 999-1000
769.25625	799.25625	General Use	41-42 / 1001-1002
769.26875	799.26875	General Use	43-44 / 1003-1004
769.28125	799.28125	General Use	45-46 / 1005-1006
769.29375	799.29375	General Use	47-48 / 1007-1008
769.30625	799.30625	General Use	49-50 / 1009-1010
769.31875	799.31875	General Use	51-52 / 1011-1012
769.33125	799.33125	General Use	53-54 / 1013-1014
769.34375	799.34375	General Use	55-56 / 1015-1016
769.35625	799.35625	General Use	57-58 / 1017-1018

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
769.36875	799.36875	General Use	59-60 / 1019-1020
769.38125	799.38125	Deployable Trunked Systems	61-62 / 1021-1022
769.39375	799.39375	Interoperability 7MED65	63-64 / 1023-1024
769.40625	799.40625	State License	65-66 / 1025-1026
769.41875	799.41875	State License	67-68 / 1027-1028
769.43125	799.43125	State License	69-70 / 1029-1030
769.44375	799.44375	State License	71-72 / 1031-1032
769.45625	799.45625	State License	73-74 / 1033-1034
769.46875	799.46875	State License	75-76 / 1035-1036
769.48125	799.48125	General Use	77-78 / 1037-1038
769.49375	799.49375	Interoperability 7MED66	79-80 / 1039-1040
769.50625	799.50625	General Use	81-82 / 1041-1042
769.51875	799.51875	General Use	83-84 / 1043-1044
769.53125	799.53125	General Use	85-86 / 1045-1046
769.54375	799.54375	General Use	87-88 / 1047-1048

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
769.55625	799.55625	General Use	89-90 / 1049-1050
769.56875	799.56875	General Use	91-92 / 1051-1052
769.58125	799.58125	General Use	93-94 / 1053-1054
769.59375	799.59375	General Use	95-96 / 1055-1056
769.60625	799.60625	General Use	97-98 / 1057-1058
769.61875	799.61875	General Use	99-100 / 1059-1060
769.63125	799.63125	Air-Ground 7AG60	101-102 / 1061-1062
769.64375	799.64375	Interoperability 7TAC52	103-104 / 1063-1064
769.65625	799.65625	State License	105-106 / 1065-1066
769.66875	799.66875	State License	107-108 / 1067-1068
769.68125	799.68125	State License	109-110 / 1069-1070
769.69375	799.69375	State License	111-112 / 1071-1072
769.70625	799.70625	State License	113-114 / 1073-1074
769.71875	799.71875	State License	115-116 / 1075-1076
769.73125	799.73125	Deployable Trunked Systems	117-118 / 1077-1078

700 MHz Public Safety	Aggregated	12.5 kHz Channels

Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
769.74375	799.74375	Interoperability 7TAC55	119-120 / 1079-1080
769.75625	799.75625	General Use	121-122 / 1081-1082
769.76875	799.76875	General Use	123-124 / 1083-1084
769.78125	799.78125	General Use	125-126 / 1085-1086
769.79375	799.79375	General Use	127-128 / 1087-1088
769.80625	799.80625	General Use	129-130 / 1089-1090
769.81875	799.81875	General Use	131-132 / 1091-1092
769.83125	799.83125	General Use	133-134 / 1093-1094
769.84375	799.84375	General Use	135-136 / 1095-1096
769.85625	799.85625	General Use	137-138 / 1097-1098
769.86875	799.86875	General Use	139-140 / 1099-1100
769.88125	799.88125	Deployable Trunked Systems	141-142 / 1101-1102
769.89375	799.89375	Interoperability 7FIRE63	143-144 / 1103-1104
769.90625	799.90625	State License	145-146 / 1105-1106
769.91875	799.91875	State License	147-148 / 1107-1108

Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
769.93125	799.93125	State License	149-150 / 1109-1110
769.94375	799.94375	State License	151-152 / 1111-1112
769.95625	799.95625	State License	153-154 / 1113-1114
769.96875	799.96875	State License	155-156 / 1115-1116
769.98125	799.98125	General Use	157-158 / 1117-1118
769.99375	799.99375	Interoperability 7FIRE64	159-160 / 1119-1120
770.00625	800.00625	General Use	161-162 / 1121-1122
770.01875	800.01875	General Use	163-164 / 1123-1124
770.03125	800.03125	General Use	165-166 / 1125-1126
770.04375	800.04375	General Use	167-168 / 1127-1128
770.05625	800.05625	General Use	169-170 / 1129-1130
770.06875	800.06875	General Use	171-172 / 1131-1132
770.08125	800.08125	General Use	173-174 / 1133-1134
770.09375	800.09375	General Use	175-176 / 1135-1136
770.10625	800.10625	General Use	177-178 / 1137-1138

Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
770.11875	800.11875	General Use	179-180 / 1139-1140
770.13125	800.13125	Air-Ground 7AG67	181-182 / 1141-1142
770.14375	800.14375	Interoperability 7TAC53	183-184 / 1143-1144
770.15625	800.15625	State License	185-186 / 1145-1146
770.16875	800.16875	State License	187-188 / 1147-1148
770.18125	800.18125	State License	189-190 / 1149-1150
770.19375	800.19375	State License	191-192 / 1151-1152
770.20625	800.20625	State License	193-194 / 1153-1154
770.21875	800.21875	State License	195-196 / 1155-1156
770.23125	800.23125	General Use	197-198 / 1157-1158
770.24375	800.24375	Interoperability 7TAC56	199-200 / 1159-1160
770.25625	800.25625	General Use	201-202 / 1161-1162
770.26875	800.26875	General Use	203-204 / 1163-1164
770.28125	800.28125	General Use	205-206 / 1165-1166
770.29375	800.29375	General Use	207-208 / 1167-1168

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
770.30625	800.30625	General Use	209-210 / 1169-1170
770.31875	800.31875	General Use	211-212 / 1171-1172
770.33125	800.33125	General Use	213-214 / 1173-1174
770.34375	800.34375	General Use	215-216 / 1175-1176
770.35625	800.35625	General Use	217-218 / 1177-1178
770.36875	800.36875	General Use	219-220 / 1179-1180
770.38125	800.38125	General Use	221-222 / 1181-1182
770.39375	800.39375	Interoperability 7LAW61	223-224 / 1183-1184
770.40625	800.40625	State License	225-226 / 1185-1186
770.41875	800.41875	State License	227-228 / 1187-1188
770.43125	800.43125	State License	229-230 / 1189-1190
770.44375	800.44375	State License	231-232 / 1191-1192

State License

State License

General Use

800.45625

800.46875

800.48125

770.45625

770.46875

770.48125

233-234 / 1193-1194

235-236 / 1195-1196

237-238 / 1197-1198

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
770.49375	800.49375	Interoperability 7LAW62	239-240 / 1199-1200
770.50625	800.50625	General Use	241-242 / 1201-1202
770.51875	800.51875	General Use	243-244 / 1203-1204
770.53125	800.53125	General Use	245-246 / 1205-1206
770.54375	800.54375	General Use	247-248 / 1207-1208
770.55625	800.55625	General Use	249-250 / 1209-1210
770.56875	800.56875	General Use	251-252 / 1211-1212
770.58125	800.58125	General Use	253-254 / 1213-1214
770.59375	800.59375	General Use	255-256 / 1215-1216
770.60625	800.60625	General Use	257-258 / 1217-1218
770.61875	800.61875	General Use	259-260 / 1219-1220
770.63125	800.63125	Air-Ground 7AG68	261-262 / 1221-1222

Interoperability 7TAC54

State License

State License

800.64375

800.65625

800.66875

770.64375

770.65625

770.66875

263-264 / 1223-1224

265-266 / 1225-1226

267-268 / 1227-1228

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
770.68125	800.68125	State License	269-270 / 1229-1230
770.69375	800.69375	State License	271-272 / 1231-1232
770.70625	800.70625	State License	273-274 / 1233-1234
770.71875	800.71875	State License	275-276 / 1235-1236
770.73125	800.73125	General Use	277-278 / 1237-1238
770.74375	800.74375	Interoperability 7DATA69	279-280 / 1239-1240
770.75625	800.75625	General Use	281-282 / 1241-1242
770.76875	800.76875	General Use	283-284 / 1243-1244
770.78125	800.78125	General Use	285-286 / 1245-1246
770.79375	800.79375	General Use	287-288 / 1247-1248
770.80625	800.80625	General Use	289-290 / 1249-1250
770.81875	800.81875	General Use	291-292 / 1251-1252
770.83125	800.83125	General Use	293-294 / 1253-1254
770.84375	800.84375	General Use	295-296 / 1255-1256

800.85625

770.85625

297-298 / 1257-1258

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
770.86875	800.86875	General Use	299-300 / 1259-1260
770.88125	800.88125	General Use	301-302 / 1261-1262
770.89375	800.89375	Interoperability 7MOB59	303-304 / 1263-1264
770.90625	800.90625	State License	305-306 / 1265-1266
770.91875	800.91875	State License	307-308 / 1267-1268
770.93125	800.93125	State License	309-310 / 1269-1270
770.94375	800.94375	State License	311-312 / 1271-1272
770.95625	800.95625	State License	313-314 / 1273-1274
770.96875	800.96875	State License	315-316 / 1275-1276

General Use

General Use

General Use

General Use

Interoperability 7GTAC57

770.98125

770.99375

771.00625

771.01875

771.03125

771.04375

800.98125

800.99375

801.00625

801.01875

801.03125

801.04375

317-318 / 1277-1278

319-320 / 1279-1280

321-322 / 1281-1282

323-324 / 1283-1284

325-326 / 1285-1286

327-328 / 1287-1288

700 MHz Public Safety	Aggregated 12.5	kHz Channels
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Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
771.05625	801.05625	General Use	329-330 / 1289-1290
771.06875	801.06875	General Use	331-332 / 1291-1292
771.08125	801.08125	General Use	333-334 / 1293-1294
771.09375	801.09375	General Use	335-336 / 1295-1296
771.10625	801.10625	General Use	337-338 / 1297-1298
771.11875	801.11875	General Use	339-340 / 1299-1300
771.13125	801.13125	General Use	341-342 / 1301-1302
771.14375	801.14375	General Use	343-344 / 1303-1304
771.15625	801.15625	General Use	345-346 / 1305-1306
771.16875	801.16875	General Use	347-348 / 1307-1308
771.18125	801.18125	General Use	349-350 / 1309-1310
771.19375	801.19375	General Use	351-352 / 1311-1312
771.20625	801.20625	General Use	353-354 / 1313-1314
771.21875	801.21875	General Use	355-356 / 1315-1316
771.23125	801.23125	General Use	357-358 / 1317-1318

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
771.24375	801.24375	General Use	359-360 / 1319-1320
771.25625	801.25625	General Use	361-362 / 1321-1322
771.26875	801.26875	General Use	363-364 / 1323-1324
771.28125	801.28125	General Use	365-366 / 1325-1326
771.29375	801.29375	General Use	367-368 / 1327-1328
771.30625	801.30625	General Use	369-370 / 1329-1330
771.31875	801.31875	General Use	371-372 / 1331-1332
771.33125	801.33125	General Use	373-374 / 1333-1334
771.34375	801.34375	General Use	375-376 / 1335-1336
771.35625	801.35625	General Use	377-378 / 1337-1338
771.36875	801.36875	General Use	379-380 / 1339-1340

General Use

General Use

General Use

801.38125

801.39375

801.40625

801.41875

771.38125

771.39375

771.40625

771.41875

381-382 / 1341-1342

383-384 / 1343-1344

385-386 / 1345-1346

387-388 / 1347-1348

700 MHz Public Safety Aggregated 1	2.5 kHz Channels
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Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
771.43125	801.43125	General Use	389-390 / 1349-1350
771.44375	801.44375	General Use	391-392 / 1351-1352
771.45625	801.45625	General Use	393-394 / 1353-1354
771.46875	801.46875	General Use	395-396 / 1355-1356
771.48125	801.48125	General Use	397-398 / 1357-1358
771.49375	801.49375	General Use	399-400 / 1359-1360
771.50625	801.50625	General Use	401-402 / 1361-1362
771.51875	801.51875	General Use	403-404 / 1363-1364
771.53125	801.53125	General Use	405-406 / 1365-1366
771.54375	801.54375	General Use	407-408 / 1367-1368
771.55625	801.55625	General Use	409-410 / 1369-1370
771.56875	801.56875	General Use	411-412 / 1371-1372
771.58125	801.58125	General Use	413-414 / 1373-1374
771.59375	801.59375	General Use	415-416 / 1375-1376
771.60625	801.60625	General Use	417-418 / 1377-1378

700 MHz Public Safety Aggregated 12.5 kHz Channels				
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.	
771.61875	801.61875	General Use	419-420 / 1379-1380	
771.63125	801.63125	General Use	421-422 / 1381-1382	
771.64375	801.64375	General Use	423-424 / 1383-1384	
771.65625	801.65625	General Use	425-426 / 1385-1386	
771.66875	801.66875	General Use	427-428 / 1387-1388	
771.68125	801.68125	General Use	429-430 / 1389-1390	
771.69375	801.69375	General Use	431-432 / 1391-1392	
771.70625	801.70625	General Use	433-434 / 1393-1394	

General Use

General Use

General Use

General Use

General Use

General Use

771.71875

771.73125

771.74375

771.75625

771.76875

771.78125

771.79375

801.71875

801.73125

801.74375

801.75625

801.76875

801.78125

801.79375

435-436 / 1395-1396

437-438 / 1397-1398

439-440 / 1399-1400

441-442 / 1401-1402

443-444 / 1403-1404

445-446 / 1405-1406

447-448 / 1407-1408

700 MHz Public Safety	Aggregated 12.5	kHz Channels
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Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
771.80625	801.80625	General Use	449-450 / 1409-1410
771.81875	801.81875	General Use	451-452 / 1411-1412
771.83125	801.83125	General Use	453-454 / 1413-1414
771.84375	801.84375	General Use	455-456 / 1415-1416
771.85625	801.85625	General Use	457-458 / 1417-1418
771.86875	801.86875	General Use	459-460 / 1419-1420
771.88125	801.88125	General Use	461-462 / 1421-1422
771.89375	801.89375	General Use	463-464 / 1423-1424
771.90625	801.90625	General Use	465-466 / 1425-1426
771.91875	801.91875	General Use	467-468 / 1427-1428
771.93125	801.93125	General Use	469-470 / 1429-1430
771.94375	801.94375	General Use	471-472 / 1431-1432
771.95625	801.95625	General Use	473-474 / 1433-1434
771.96875	801.96875	General Use	475-476 / 1435-1436
771.98125	801.98125	General Use	477-478 / 1437-1438

Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
771.99375	801.99375	General Use	479-480 / 1439-1440
772.00625	802.00625	General Use	481-482 / 1441-1442
772.01875	802.01875	General Use	483-484 / 1443-1444
772.03125	802.03125	General Use	485-486 / 1445-1446
772.04375	802.04375	General Use	487-488 / 1447-1448
772.05625	802.05625	General Use	489-490 / 1449-1450
772.06875	802.06875	General Use	491-492 / 1451-1452
772.08125	802.08125	General Use	493-494 / 1453-1454
772.09375	802.09375	General Use	495-496 / 1455-1456
772.10625	802.10625	General Use	497-498 / 1457-1458
772.11875	802.11875	General Use	499-500 / 1459-1460
772.13125	802.13125	General Use	501-502 / 1461-1462
772.14375	802.14375	General Use	503-504 / 1463-1464
772.15625	802.15625	General Use	505-506 / 1465-1466
772.16875	802.16875	General Use	507-508 / 1467-1468

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
772.18125	802.18125	General Use	509-510 / 1469-1470
772.19375	802.19375	General Use	511-512 / 1471-1472
772.20625	802.20625	General Use	513-514 / 1473-1474
772.21875	802.21875	General Use	515-516 / 1475-1476
772.23125	802.23125	General Use	517-518 / 1477-1478
772.24375	802.24375	General Use	519-520 / 1479-1480
772.25625	802.25625	General Use	521-522 / 1481-1482
772.26875	802.26875	General Use	523-524 / 1483-1484
772.28125	802.28125	General Use	525-526 / 1485-1486
772.29375	802.29375	General Use	527-528 / 1487-1488
772.30625	802.30625	General Use	529-530 / 1489-1490
772.31875	802.31875	General Use	531-532 / 1491-1492
772.33125	802.33125	General Use	533-534 / 1493-1494
772.34375	802.34375	General Use	535-536 / 1495-1496
772.35625	802.35625	General Use	537-538 / 1497-1498

Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
772.36875	802.36875	General Use	539-540 / 1499-1500
772.38125	802.38125	General Use	541-542 / 1501-1502
772.39375	802.39375	General Use	543-544 / 1503-1504
772.40625	802.40625	General Use	545-546 / 1505-1506
772.41875	802.41875	General Use	547-548 / 1507-1508
772.43125	802.43125	General Use	549-550 / 1509-1510
772.44375	802.44375	General Use	551-552 / 1511-1512
772.45625	802.45625	General Use	553-554 / 1513-1514
772.46875	802.46875	General Use	555-556 / 1515-1516
772.48125	802.48125	General Use	557-558 / 1517-1518
772.49375	802.49375	General Use	559-560 / 1519-1520
772.50625	802.50625	General Use	561-562 / 1521-1522
772.51875	802.51875	General Use	563-564 / 1523-1524
772.53125	802.53125	General Use	565-566 / 1525-1526
772.54375	802.54375	General Use	567-568 / 1527-1528

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
772.55625	802.55625	General Use	569-570 / 1529-1530
772.56875	802.56875	General Use	571-572 / 1531-1532
772.58125	802.58125	General Use	573-574 / 1533-1534
772.59375	802.59375	General Use	575-576 / 1535-1536
772.60625	802.60625	General Use	577-578 / 1537-1538
772.61875	802.61875	General Use	579-580 / 1539-1540
772.63125	802.63125	General Use	581-582 / 1541-1542
772.64375	802.64375	General Use	583-584 / 1543-1544
772.65625	802.65625	General Use	585-586 / 1545-1546
772.66875	802.66875	General Use	587-588 / 1547-1548
772.68125	802.68125	General Use	589-590 / 1549-1550
772.69375	802.69375	General Use	591-592 / 1551-1552
772.70625	802.70625	General Use	593-594 / 1553-1554

General Use

802.71875

802.73125

772.71875

772.73125

595-596 / 1555-1556

597-598 / 1557-1558

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
772.74375	802.74375	General Use	599-600 / 1559-1560
772.75625	802.75625	General Use	601-602 / 1561-1562
772.76875	802.76875	General Use	603-604 / 1563-1564
772.78125	802.78125	General Use	605-606 / 1565-1566
772.79375	802.79375	General Use	607-608 / 1567-1568
772.80625	802.80625	General Use	609-610 / 1569-1570
772.81875	802.81875	General Use	611-612 / 1571-1572
772.83125	802.83125	General Use	613-614 / 1573-1574
772.84375	802.84375	General Use	615-616 / 1575-1576
772.85625	802.85625	General Use	617-618 / 1577-1578

General Use

General Use

General Use

General Use

772.86875

772.88125

772.89375

772.90625

772.91875

802.86875

802.88125

802.89375

802.90625

802.91875

619-620 / 1579-1580

621-622 / 1581-1582

623-624 / 1583-1584

625-626 / 1585-1586

627-628 / 1587-1588

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
772.93125	802.93125	General Use	629-630 / 1589-1590
772.94375	802.94375	General Use	631-632 / 1591-1592
772.95625	802.95625	General Use	633-634 / 1593-1594
772.96875	802.96875	General Use	635-636 / 1595-1596
772.98125	802.98125	General Use	637-638 / 1597-1598
772.99375	802.99375	General Use	639-640 / 1599-1600
773.00625	803.00625	Interoperability 7MED86	641-642 / 1601-1602
773.01875	803.01875	General Use	643-644 / 1603-1604
773.03125	803.03125	State License	645-646 / 1605-1606
773.04375	803.04375	State License	647-648 / 1607-1608
773.05625	803.05625	State License	649-650 / 1609-1610
773.06875	803.06875	State License	651-652 / 1611-1612
773.08125	803.08125	State License	653-654 / 1613-1614
773.09375	803.09375	State License	655-656 / 1615-1616
773.10625	803.10625	Interoperability 7TAC71	657-658 / 1617-1618

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
773.11875	803.11875	Air-Ground 7AG78	659-660 / 1619-1620
773.13125	803.13125	General Use	661-662 / 1621-1622
773.14375	803.14375	General Use	663-664 / 1623-1624
773.15625	803.15625	General Use	665-666 / 1625-1626
773.16875	803.16875	General Use	667-668 / 1627-1628
773.18125	803.18125	General Use	669-670 / 1629-1630
773.19375	803.19375	General Use	671-672 / 1631-1632
773.20625	803.20625	General Use	673-674 / 1633-1634
773.21875	803.21875	General Use	675-676 / 1635-1636
773.23125	803.23125	General Use	677-678 / 1637-1638
773.24375	803.24375	General Use	679-680 / 1639-1640
773.25625	803.25625	Interoperability 7CALL70	681-682 / 1641-1642
773.26875	803.26875	General Use	683-684 / 1643-1644
773.28125	803.28125	State License	685-686 / 1645-1646

State License

803.29375

773.29375

687-688 / 1647-1648

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
773.30625	803.30625	State License	689-690 / 1649-1650
773.31875	803.31875	State License	691-692 / 1651-1652
773.33125	803.33125	State License	693-694 / 1653-1654
773.34375	803.34375	State License	695-696 / 1655-1656
773.35625	803.35625	Interoperability 7MED87	697-698 / 1657-1658
773.36875	803.36875	General Use	699-700 / 1659-1660
773.38125	803.38125	General Use	701-702 / 1661-1662
773.39375	803.39375	General Use	703-704 / 1663-1664
773.40625	803.40625	General Use	705-706 / 1665-1666
773.41875	803.41875	General Use	707-708 / 1667-1668
773.43125	803.43125	General Use	709-710 / 1669-1670
773.44375	803.44375	General Use	711-712 / 1671-1672
773.45625	803.45625	General Use	713-714 / 1673-1674
773.46875	803.46875	General Use	715-716 / 1675-1676

803.48125

773.48125

717-718 / 1677-1678

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
773.49375	803.49375	General Use	719-720 / 1679-1680
773.50625	803.50625	Interoperability 7FIRE83	721-722 / 1681-1682
773.51875	803.51875	General Use	723-724 / 1683-1684
773.53125	803.53125	State License	725-726 / 1685-1686
773.54375	803.54375	State License	727-728 / 1687-1688
773.55625	803.55625	State License	729-730 / 1689-1690
773.56875	803.56875	State License	731-732 / 1691-1692
773.58125	803.58125	State License	733-734 / 1693-1694
773.59375	803.59375	State License	735-736 / 1695-1696
773.60625	803.60625	Interoperability 7TAC72	737-738 / 1697-1698
773.61875	803.61875	Air-Ground 7AG80	739-740 / 1699-1700

General Use

General Use

General Use

773.63125

773.64375

773.65625

773.66875

803.63125

803.64375

803.65625

803.66875

741-742 / 1701-1702

743-744 / 1703-1704

745-746 / 1705-1706

747-748 / 1707-1708

700 MHz Public Safety Aggregated 12.5 kHz Channels				
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.	
773.68125	803.68125	General Use	749-750 / 1709-1710	
773.69375	803.69375	General Use	751-752 / 1711-1712	
773.70625	803.70625	General Use	753-754 / 1713-1714	
773.71875	803.71875	General Use	755-756 / 1715-1716	
773.73125	803.73125	General Use	757-758 / 1717-1718	
773.74375	803.74375	General Use	759-760 / 1719-1720	
773.75625	803.75625	Interoperability 7TAC75	761-762 / 1721-1722	
773.76875	803.76875	General Use	763-764 / 1723-1724	
773.78125	803.78125	State License	765-766 / 1725-1726	
773.79375	803.79375	State License	767-768 / 1727-1728	
773.80625	803.80625	State License	769-770 / 1729-1730	
773.81875	803.81875	State License	771-772 / 1731-1732	
773.83125	803.83125	State License	773-774 / 1733-1734	
773.84375	803.84375	State License	775-776 / 1735-1736	

Interoperability 7FIRE84

803.85625

773.85625

777-778 / 1737-1738

Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
773.86875	803.86875	General Use	779-780 / 1739-1740
773.88125	803.88125	General Use	781-782 / 1741-1742
773.89375	803.89375	General Use	783-784 / 1743-1744
773.90625	803.90625	General Use	785-786 / 1745-1746
773.91875	803.91875	General Use	787-788 / 1747-1748
773.93125	803.93125	General Use	789-790 / 1749-1750
773.94375	803.94375	General Use	791-792 / 1751-1752
773.95625	803.95625	General Use	793-794 / 1753-1754
773.96875	803.96875	General Use	795-796 / 1755-1756
773.98125	803.98125	General Use	797-798 / 1757-1758
773.99375	803.99375	General Use	799-800 / 1759-1760
774.00625	804.00625	Interoperability 7LAW81	801-802 / 1761-1762
774.01875	804.01875	General Use	803-804 / 1763-1764
774.03125	804.03125	State License	805-806 / 1765-1766
774.04375	804.04375	State License	807-808 / 1767-1768

700 MH	z Public Safe	ty Aggregated	12.5 kHz Cha	nnels

Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
774.05625	804.05625	State License	809-810 / 1769-1770
774.06875	804.06875	State License	811-812 / 1771-1772
774.08125	804.08125	State License	813-814 / 1773-1774
774.09375	804.09375	State License	815-816 / 1775-1776
774.10625	804.10625	Interoperability 7TAC73	817-818 / 1777-1778
774.11875	804.11875	Air-Ground 7AG85	819-820 / 1779-1780
774.13125	804.13125	General Use	821-822 / 1781-1782
774.14375	804.14375	General Use	823-824 / 1783-1784
774.15625	804.15625	General Use	825-826 / 1785-1786
774.16875	804.16875	General Use	827-828 / 1787-1788
774.18125	804.18125	General Use	829-830 / 1789-1790
774.19375	804.19375	General Use	831-832 / 1791-1792
774.20625	804.20625	General Use	833-834 / 1793-1794
774.21875	804.21875	General Use	835-836 / 1795-1796
774.23125	804.23125	General Use	837-838 / 1797-1798

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
774.24375	804.24375	General Use	839-840 / 1799-1800
774.25625	804.25625	Interoperability 7TAC76	841-842 / 1801-1802
774.26875	804.26875	General Use	843-844 / 1803-1804
774.28125	804.28125	State License	845-846 / 1805-1806
774.29375	804.29375	State License	847-848 / 1807-1808
774.30625	804.30625	State License	849-850 / 1809-1810
774.31875	804.31875	State License	851-852 / 1811-1812
774.33125	804.33125	State License	853-854 / 1813-1814
774.34375	804.34375	State License	855-856 / 1815-1816
774.35625	804.35625	Interoperability 7LAW82	857-858 / 1817-1818
774.36875	804.36875	General Use	859-860 / 1819-1820
774.38125	804.38125	General Use	861-862 / 1821-1822

General Use

General Use

804.39375

804.40625

804.41875

774.39375

774.40625

774.41875

863-864 / 1823-1824

865-866 / 1825-1826

867-868 / 1827-1828

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
774.43125	804.43125	General Use	869-870 / 1829-1830
774.44375	804.44375	General Use	871-872 / 1831-1832
774.45625	804.45625	General Use	873-874 / 1833-1834
774.46875	804.46875	General Use	875-876 / 1835-1836
774.48125	804.48125	General Use	877-878 / 1837-1838
774.49375	804.49375	General Use	879-880 / 1839-1840
774.50625	804.50625	Interoperability 7MOB79	881-882 / 1841-1842
774.51875	804.51875	Deployable Trunked Systems	883-884 / 1843-1844
774.53125	804.53125	State License	885-886 / 1845-1846
774.54375	804.54375	State License	887-888 / 1847-1848
774.55625	804.55625	State License	889-890 / 1849-1850
774.56875	804.56875	State License	891-892 / 1851-1852
774.58125	804.58125	State License	893-894 / 1853-1854
774.59375	804.59375	State License	895-896 / 1855-1856
774.60625	804.60625	Interoperability 7TAC74	897-898 / 1857-1858

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
774.61875	804.61875	Air-Ground 7AG88	899-900 / 1859-1860
774.63125	804.63125	General Use	901-902 / 1861-1862
774.64375	804.64375	General Use	903-904 / 1863-1864
774.65625	804.65625	General Use	905-906 / 1865-1866
774.66875	804.66875	General Use	907-908 / 1867-1868
774.68125	804.68125	General Use	909-910 / 1869-1870
774.69375	804.69375	General Use	911-912 / 1871-1872
774.70625	804.70625	General Use	913-914 / 1873-1874
774.71875	804.71875	General Use	915-916 / 1875-1876
774.73125	804.73125	General Use	917-918 / 1877-1878
774.74375	804.74375	General Use	919-920 / 1879-1880
774.75625	804.75625	Interoperability 7DATA89	921-922 / 1881-1882
774.76875	804.76875	General Use	923-924 / 1883-1884
774.78125	804.78125	State License	925-926 / 1885-1886

State License

804.79375

774.79375

927-928 / 1887-1888

700 MHz Public Safety Aggregated 12.5 kHz Channels			
Base TX MHz	Mobile TX MHz	Designated Use	FCC Channel No.
774.80625	804.80625	State License	929-930 / 1889-1890
774.81875	804.81875	State License	931-932 / 1891-1892
774.83125	804.83125	State License	933-934 / 1893-1894
774.84375	804.84375	State License	935-936 / 1895-1896
774.85625	804.85625	Interoperability 7GTAC77	937-938 / 1897-1898
774.86875	804.86875	Deployable Trunked Systems	939-940 / 1899-1900
774.88125	804.88125	General Use	941-942 / 1901-1902
774.89375	804.89375	General Use	943-944 / 1903-1904
774.90625	804.90625	General Use	945-946 / 1905-1906
774.91875	804.91875	General Use	947-948 / 1907-1908
774.93125	804.93125	Low Power (Regional)	949-950 / 1909-1910
774.94375	804.94375	Low Power (Regional)	951-952 / 1911-1912
774.95625	804.95625	Low Power (Regional)	953-954 / 1913-1914
774.96875	804.96875	Low Power (Regional)	955-956 / 1915-1916
774.98125	804.98125	Low Power (Regional)	957-958 / 1917-1918

700 MHz Public Safety Aggregated 12.5 kHz Channels					
Base TX MHz	Designated Use FCC Channel N				
774.99375	804.99375	Low Power (Nationwide Itinerant)	959-960 / 1919-1920		

Channels identified with 6.25 kHz spacing are not generally utilized in the public safety service, particularly due to the non-compatibility with interoperability channels and with mutual aid operations. These channels have been removed from the general allocation table. However, should an applicant request channels at a 6.25 kHz center frequency, the Region will process those applications consistent with the Interoperability requirements of FCC 90.548 and spectral compatibility rules of Appendix C using ACCP values defined in 47 CFR§ 90.543

Appendix E – Dispute Resolution

INTRODUCTION

The Regional Committee is established under 47 CFR §90.527 of the FCC's rules and regulations which came into effect on June 22, 2001. It is an independent Committee apart from the Federal Communications Commission with authority to evaluate application for public safety uses of the spectrum allocated under FCC Docket 96-86. In addition, appeals from decisions made with respect to a variety of matters regulated by the Regional Committee will be heard. The formal requirements of the appeal process are set out below.

In order to ensure that the appeal process is open and understandable to the public, the Regional Committee has developed this procedure. Those involved in the appeal process can expect the Committee and its members to follow the procedures (as may be amended from time to time). Where any matter arises during the course of an appeal that is not dealt with in this document, the Committee will do whatever is necessary to enable it to adjudicate fairly, effectively and completely on the appeal. In addition, the Committee may dispense with compliance with any part or all of a particular procedure where it is appropriate in the circumstances. As the Committee gains experience, it will refine and, if necessary, change its policies. Any changes made to the procedure will require a modification to the Regional Plan and will be made available to the public.

The Regional Committee will make every effort to process appeals in a timely fashion and issue decisions expeditiously.

Appeals Committee Members

The Regional Chair may organize the Committee into Sub-Committees, each comprised of one or more members, the Appeals Sub-Committee is one of those Sub-Committees.

Where an appeal is scheduled to be heard by this Sub-Committee the chair is determined as follows:

- (a) If the chair of the Committee is on the Sub-Committee, he/she will be the chair;
- (b) If the chair of the Committee is not on the Sub-Committee but the vice-chair is, the vice-chair will be the chair; and
- (c) If neither the chair nor the vice-chair is on the Sub-Committee, the Regional Committee will designate one of the members to be the chair.

Withdrawal or Disqualification of a Committee Member on the Grounds of Bias

Where the chair or a Committee member becomes aware of any facts that would lead an informed person, viewing the matter reasonably and practically, to conclude that a member, whether consciously or unconsciously, would not decide a matter fairly, the member will be prohibited from conducting the appeal unless consent is obtained from all parties to continue. In addition, any party

to an appeal may challenge a member on the basis of real or a reasonable apprehension of bias.

Correspondence (Communicating) with the Committee

To ensure the appeal process is kept open and fair to the participants, any correspondence to the Regional Committee must be sent to the Chair and be copied to all other Committee members and other parties to the appeal, if applicable.

Committee members will not contact a party on any matter relevant to the merits of the appeal, unless that member puts all other parties on notice and gives them an opportunity to participate. The appeal process is public in nature and all meetings regarding the appeal will be open to the public.

The Appeal Process

Filing an Appeal

What can be Appealed

The Committee hears appeals from a determination or allocation and shall include the following: i.e. number of channels assigned, ranking in the assignment matrix, interference, or any other criteria that the region shall establish.

Who can Appeal

An official of the entity who filed the original application to the Regional Committee must be the person who files the appeal on behalf of the entity.

How to Appeal

A notice of appeal must be served upon the Regional Committee. The notice of appeal may be "delivered" by mail, courier, or hand delivered to the office of the Chair and Members of the Committee as listed in the Official Membership List. The Committee will also accept a notice of appeal by facsimile to the Chair and Secretary with the original copy of the notice of appeal served as indicated above.

Certain things must be included in a notice of appeal for it to be accepted. The notice of appeal **must** include:

- 1. The name of the person, if any, making the request for an appeal on behalf of the appellant;
- 2. The address for service of the appellant;
- 3. The grounds for appeal (a detailed explanation of the appellant's objections to the determination describe errors in the decision);
- 4. A description of the relief requested (What do you want the Committee to order at the end of the appeal?);

5. The signature of the appellant or the appellant's representative.

Time Limit for Filing the Appeal

To appeal a determination or allocation the entity that is subject to the determination must deliver a notice of appeal within three weeks after receiving the decision. If a notice of appeal is not delivered within the time required, the right to an appeal is lost. However, the Committee is allowed to extend the deadline, either before or after its expiration based upon a majority plus one vote of the Committee.

Extension of Time to Appeal

The Committee has the discretion to extend the time to appeal either before or after the three week deadline. A request for an extension should be made to the Committee, in writing, and include the reasons for the delay in filing the notice of appeal and any other reasons which the requester believes support the granting of an extension of time to file the appeal. A request for an extension should accompany the notice of appeal.

In deciding whether to grant an extension, the Committee will consider whether fairness requires an extension. The Committee will take into account the length of the delay, the adequacy of the reasons for the delay, the prejudice to those affected by the delay and any impacts that may result from an extension. Other factors not identified could be relevant depending on the circumstances of the particular case.

Rejection of a Notice of Appeal

The Committee may reject a notice of appeal if:

- (a) it is determined that the appellant does not have standing to appeal; or
- (b) the Committee does not have jurisdiction over the subject matter or the remedy sought.

Before a notice of appeal is rejected, the Committee will inform the appellant of this in writing, with reasons, and give the appellant a three-week opportunity to make submissions and any potential parties with an opportunity to respond.

Adding Parties to the Appeal

In addition to the parties mentioned above, the Committee has the discretion to add any other person who may be "affected" by the appeal as a party to the appeal. Anyone wanting to obtain party status should make a written request to the Committee as early as possible. The written request should contain the following information:

- d. The name, address, telephone and fax number, if any, of the person submitting the request;
- e. A detailed description of how the person is "affected" by the notice of appeal and
- f. The reasons why the person should be included in the appeal; and

g. The signature of the person submitting the request.

Intervener Status

The Committee may also invite or permit someone to participate in a hearing as an intervener. Interveners are generally individuals or groups that do not meet the criteria to become a party (i.e. "may be affected by the appeal") but have sufficient interest in, or some relevant expertise or view in relation to the subject matter of the appeal.

Someone wanting to take part in an appeal as an intervener should send a written request to the Committee.

Prior to inviting or permitting a person to participate in a proceeding as an intervener, or deciding on the extent of that participation, the Committee will provide all parties with an opportunity to make representations if they wish to do so.

Type of Appeal (written or oral) Hearing

An appeal may be conducted by way of written submissions, oral hearing or a combination of both. The Committee will determine the appropriate type of appeal after a complete notice of appeal has been received.

The Committee will normally conduct an oral hearing although it may order that a hearing proceed by way of written submissions in certain cases. Where a hearing by written submissions is being considered by the Committee, the Committee may request input from the parties.

Burden of Proof

The general rule is that the burden or responsibility for proving a fact is on the person who asserts it.

Notification of Expert Evidence

The Committee requires any party that intends to present expert evidence at a hearing to provide the Committee, and all other parties to the appeal, with reasonable advance notice that an expert will be called to give an opinion. The notice should include a brief statement of the expert's qualifications and areas of expertise.

If a party intends to produce, at a hearing, a written statement or report prepared by an expert, a copy of the statement or report should be provided to the Committee and all parties to the appeal within a reasonable time before the statement or report is given in evidence. Unless there are compelling reasons for later admission, expert reports should be distributed 30 days prior to the hearing date.

Documents

If a party will be referring to a document that was not provided to the Committee and all parties prior to the hearing, sufficient copies of the document must be brought to the hearing for the Committee and all other parties.

Appealing the Appeals Subcommittee's Decision

If a party is not satisfied with the decision of the Region's Appeals Subcommittee's Decision, he or she can appeal that decision to the 700 MHz National Planning Oversight Committee or to the Federal Communications Commission.

Appendix F - Region 34 Standard Propagation Model

Region 34 understand that there are many differing computer modeling software products that an applicant can utilize to perform the required coverage area restriction calculations, as well as service and interference calculations to other systems. In order not to limit the applicant in the selection of a propagation software product, while still maintaining a quality control on the documents submitted to the Region, we have established a standard propagation model.

The applicant must define the propagation software that is utilized in the application process. This software must be commercially available and have received peer review and be a generally accepted propagation modeling tool. Utilizing the following technical parameters the application will submit a calibration propagation which shows general agreements to the following plot.

Coordinates: 35-29-17 N / 97-30-28 W

Site elevation: 379 m Antenna radiation center: 30 m

Antenna type: Omni-directional (DB806D or equivalent)

Effective Radiated Power: 150 watts

Prop Model: Okumura-Hata- Davidson

Reliability: median F(50,50) service; F(50,10) interference

Environmental: Suburban no diffraction

Frequency:

770 MHz

Local Conservation Cons

Appendix G – Inter-Regional Dispute Procedures

Inter-Regional Coordination Procedures and Procedures for Resolution of Disputes That May Arise Under FCC Approved Plans

I. INTRODUCTION - COORDINATION PROCEDURES

This is a mutually agreed upon Inter-Regional Coordination Procedures Agreement (Agreement) by and between the following 700 MHz Regional Planning Committees, Regions: 4, 7, 16, 18, 24, 29, 40, 50, 52, and 34, hereinafter known as the "Regions". Region 34 subscribes to the terms and conditions of this agreement.

II. INTER-REGIONAL COORDINATION AGREEMENT

The following is the specific procedure for inter-regional coordination which has been agreed upon by the Regions, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees.

- A. An application filing window is opened or the Region announces that it is prepared to begin accepting applications on a first-come/first-served basis.
- B. Applications by eligible entities are accepted.
- C. An application filing window (if this procedure is being used) is closed after appropriate time interval.
- D. Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.
- E. After intra-regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of proposed service area, shall then be forwarded to the adjacent Region(s) for review. This information will be sent to the adjacent Regional chairperson(s) using the CAPRAD database.

¹ If an applicant's proposed service area extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service area shall normally be defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Other definitions of service area shall be justified with an accompanying *Memorandum of Understanding (MOU)* or other application documentation between agencies, i.e. mutual aid agreements.

F. The adjacent Region reviews the application. If the application is approved, a letter of concurrence shall be sent, via the CAPRAD database, to the initiating Regional chairperson within thirty (30) calendar days.

III. Dispute Resolution

If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within 10 (Ten) calendar days via email. If the applying Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons email (CAPRAD database). Findings may include, but not be limited to:

- Unconditional concurrence;
- B. Conditional concurrence contingent upon modification of applicant's technical parameters; or
- C. Partial or total denial of proposed frequencies due to inability to meet cochannel/adjacent channel interference free protection to existing licensees within the adjacent Region.

If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Plan Oversight Committee (NPOC)², of the National Regional Planning Council (NRPC).

Each Region involved in the dispute shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant.

The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NPOC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.

Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.

² The Regional Plan Oversight Committee (RPOC) is a committee within the National Regional Planning Council (NRPC) established to arbitrate disputes between 700 MHz Regions that cannot be resolved by the impacted Regions.