PUBLIC SAFETY 700 MHz
RADIO COMMUNICATIONS PLAN

Region # 52
Date of Plan Approval:
Amendment Dates
Website Link: www.theprpc.org

Chair Name: John Kiehl
Address: PO Box 9257; Amarillo, TX 79105
Phone Number(s): (806) 372-3381

1.0 Scope

1.1 Introduction

The Region 52 plan is one of the last regional 700 MHz plans in the Nation to be submitted to the Federal Communications Commission (FCC) for consideration of approval. Untimely changes in Regional Planning Committee (RPC) leadership and the limited use of the 700 MHz frequencies by agencies in the region left many unaware that such a plan had to be developed. Nevertheless, as the need for interoperable communications has become greater and more complex; public safety agencies and public service users in Region 52 will continue to seek better solutions to meeting their interoperable communications needs. Those solutions may ultimately involve the use of 700 frequencies. So as to pave the way for that potential; it is imperative this plan be completed and approved sooner rather than later.

In 1998, the Federal Communications Commission (FCC) established a structure to allow RPCs optimal flexibility to meet state and local needs, encourage innovative use of the NPSPAC spectrum (the contiguous block of frequencies reserved for Public Safety) and accommodate new and unanticipated developments in technology and equipment.

The FCC also established a Federal Advisory Committee called the National Coordination Committee (NCC). The NCC was created to address interoperability, technology, and implementation issues to be considered for the 700 MHz spectrum. The FCC required that a Regional Plan outlining the use of public safety radio frequencies be completed and approved of by the FCC before any agency within a region would receive channels from this NPSPAC allocation or alternately referred to as the General Use spectrum.

Nationwide, there are fifty-five RPCs and each committee was required to submit its plan for the General Use spectrum. The FCC's role in relation to the RPCs was limited to (1) defining the regional boundaries; (2) requiring fair and open procedures [i.e., requiring notice, opportunity for comment, and reasonable consideration]; (3) specifying the elements that all regional plans must include; and (4) reviewing and accepting proposed plans (or amendments to approved plans) or rejecting them with an explanation.

Then in 2007, the FCC adopted a Second Report and Order revising the rules governing wireless licenses in the 700 MHz band and adopting a plan for the 700 MHz band to establish a nationwide, interoperable public safety broadband communications network for the benefit of state and local public safety users. The lower half of the 700 MHz was designated for public safety band for broadband communications (763-768/793-798 MHz) and the existing narrowband allocations in the upper half of the public safety 700 MHz band (769-775/799-805 MHz) were consolidated. The FCC required RPCs with approved plans or plans on file to submit amended plans consistent with the decisions adopted in the Second Report and Order.

The submission of this Region 52 plan to the FCC accomplished two key objectives. First, it met the agency's original 1998 requirement for the development of a regional plan.

Second, this document was also written to include the additional information required by the FCC's Report and Order (14-172). The Region 52 Plan was developed in accordance with the NCC planning guidelines and the Region 52 RPC represents a cross-section of public safety and public service stakeholders; a membership list is provided in Appendix B of this document.

1.2 Purpose

Public safety communications has, for many years, been inadequate throughout the United States. This is as true for Region 52 as it is for any other region in the Nation. Many, if not all, public safety radio users are constantly bombarded with outside interference, noise, and overcrowding. This plan was developed with these problems and issues in mind that.

One of the key objectives of this regional plan is to assure all levels of public safety/ public service agencies that 700 MHz radio communications, both in the near and distant future, will not suffer from the problems of the past. The allocation of frequencies was done in as equitable a way as was possible. The goal was to supply a pool of frequencies for each county and a pool for state agency use; with adequate reserve allocations for future needs in all areas and a method to appeal the initial allocations based on need.

The National Plan, as developed by NPSPAC, was followed closely in all considerations for frequency allocation, re-use, turn-back, regional interoperability, spectrum requirements and adjacent region operations. This plan should provide the flexibility to accommodate the growth and changes which are apt to occur in public safety and public service communications operations long into the future.

The overall purpose of the Regional Plan is to insure that maximum public benefit is derived from use of the 700 MHz spectrum by eligible agencies. Further, the plan was developed to guide eligible entities through the application process and provide an equitable means of settling disputes concerning frequency allocations should they arise.

1.3 Regional Plan Summary

First, Region 52 is more or less defined as the area of Texas that encompasses the State Planning Regions, designated by the Office of the Governor as being Planning Region 1 (PRPC); Planning Region 2 (SPAG) and Planning Region 3 (Nortex). These State Planning Regions are also referred to as Council of Governments or COG regions. More information about each of these COG regions is found in Section 5.0 Regional Profile below.

The broad classifications of entities deemed eligible to apply for spectrum are defined in accordance with NCC definitions and 47 CFR Parts 2 and 90. These include:

(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 764-776 MHz and 794-806 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 764-776 MHz and 794-806 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 written, 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; and

(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.

In order to promote widespread participation and collaboration, attempts were made to inform all eligible agencies in the Region 52 area of the planning process. In the early years of the process, before the use of electronic technology became prevalent, face-to-face meetings were conducted between the Region 52 stakeholders; with the first held in Amarillo, Texas on July 30, 2003. Bob Sanders, original convener and first Chairman of the Region 52 RPC called the meetings. Notices were posted in the Amarillo, Lubbock and Wichita Falls newspapers and sent via regular mail to eligible agency officials across the Region 52 area.

In more recent years, given the size of Region 52 and due to the time and expense involved with travel; meetings were conducted by WebEx. Because Region 52 fully encompasses three distinct state planning regions or COG regions; email contact lists for the eligible agencies within the region were developed cooperatively by the staff of the three COGs. Invitations were emailed to agency points of contact and meeting notices were published in the Texas Register and posted at each of the three COG offices.

The Region 52 RPC derives its authority to carry out its assigned tasks from the FCC's Report and Order, Docket 96-86 (Adopted: August 6, 1998).

Region 52 RPC accepts the Computer Assisted Pre-Coordination Resource and Database (CAPRAD) database initial allocation based on population density and call volume by county. It has been noted by the committee that this allocation closely matches the description of Designated Statistical Areas by the US Department of Management and Budget Bulletin. The Committee will use the CAPRAD database when allocating frequency resources in Region 52.

Interoperability guidelines and usage must be in accordance with the requirements of the Texas State Interoperability Executive Committee (TSIEC). Any conflict between the interoperability rules for National Calling and Tactical channels in this plan and SIEC guidelines, the SIEC guidelines will prevail.

The provisions in this plan, including, but not limited to, annual meetings, annual review of channel allotments, procedures for modification of allotments, and procedures for modification of the plan itself, constitute the provisions for future planning in Region 52. This plan should provide the flexibility to accommodate the growth and changes which are bound to occur in public safety and public service communications operations long into the future.

2.0 Regional Planning Committee Leadership

At the time of transmittal of this Plan to the FCC, the following individuals serve in leadership roles in the Region 52 RPC:

The acting Regional Chairman of Region 52 is John Kiehl. His contact information is below:

John Kiehl, Regional Services Director
Panhandle Regional Planning Commission
415 SW 8th Ave.
Amarillo, TX 79101-2215
Phone: 806-372-3381
Fax: 806-373-3268
Email: jkiehl@theprpc.org

Employed by the PRPC Council of Governments (COG) and as such, works on behalf of all public safety agencies located within the COG's planning area.

The acting Regional Vice-Chairman of Region 52 is Mike Bland. His contact information is below:

Mike Bland, Director of Homeland Security
Nortex Regional Planning Commission
P.O. Box 5144
Wichita Falls, TX 76302
Phone: 940-322-5281
Email: mbland@nortexrpc.org

Employed by the Nortex Council of Governments (COG) and as such, works on behalf of all public safety agencies located within the COG's planning area.

The acting Secretary/Treasurer of Region 52 is Shane Brown. His contact information is below:

Shane Brown, Regional Emergency Communications Program Manager
Panhandle Regional Planning Commission
415 SW 8th Ave.
Amarillo, TX 79101-2215
Phone: 806-372-3381
Fax: 806-373-3268
Email: sbrown@theprpc.org

Employed by the PRPC Council of Governments (COG) and as such, works on behalf of all public safety agencies located within the COG's planning area.

3.0 Regional Planning Committee Membership

Membership on the Region 52 RPC is open to any interested party. Individuals or agencies interested in participating on the committee should email their contact information to one of the three acting officers listed under Section 2.0 so they can be included in all future meeting notices. Voting and operating procedures are described in the following section.

4.0 Membership, Meetings and Voting procedures

2.1 The Region 52 RPC shall have two classes of members: 'voting' and 'non-voting.' New members may be added at annual, special, or regular meetings.

Voting Members. Voting members shall consist of one representative from any single agency engaged in public safety eligible to hold a license under 47 CFR 90.20, 47 CFR 90.523 or 47 CFR 2.103. Except that a single agency shall be allowed no more than one vote for each distinct eligibility category (e.g. police, fire, EMS, highway) within the agency's organization or political jurisdiction. In voting on any issue the individual must identify himself/herself and the agency and eligibility category which he or she represents. Voting members may not vote on issues involving their entity.

Non-Voting Members. Non-voting members are all others interested in furthering the goals of public safety communications.

2.2 Tenure. In general, each member shall hold membership from the date of acceptance until resignation or removal.

2.3 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.

2.4 Suspension and Removal. A representative 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.

2.5 Resignation. A member may resign by delivering written resignation to the chairman, vice-chairman, treasurer or secretary of the Regional Committee or to a meeting of the members.

2.6 Annual Meetings. The annual meeting of the members shall be held as called by the Regional Chair with 21-days' notice to the membership.

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.

2.7 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 chairman or by the vice-chairman, or in case of death, absence, incapacity, by any other officer or, upon written application of two or more members.

2.8 Call and Notice.

A. Annual meetings. Reasonable notice of the time and place of special meetings of the members 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 twenty one days or by e-mail/facsimile at least fourteen days before the meeting, addressed to such member at this or her usual or last known business address, or, to give notice to such member in person or by telephone at least three days before the meeting. (State notification requirements may differ.)

2.9 Quorum. At any meeting of the members, a majority of the officers and {either a minimum number of members or a minimum percentage of members} of the voting members shall constitute a quorum. 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.

2.10 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.

2.11 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.

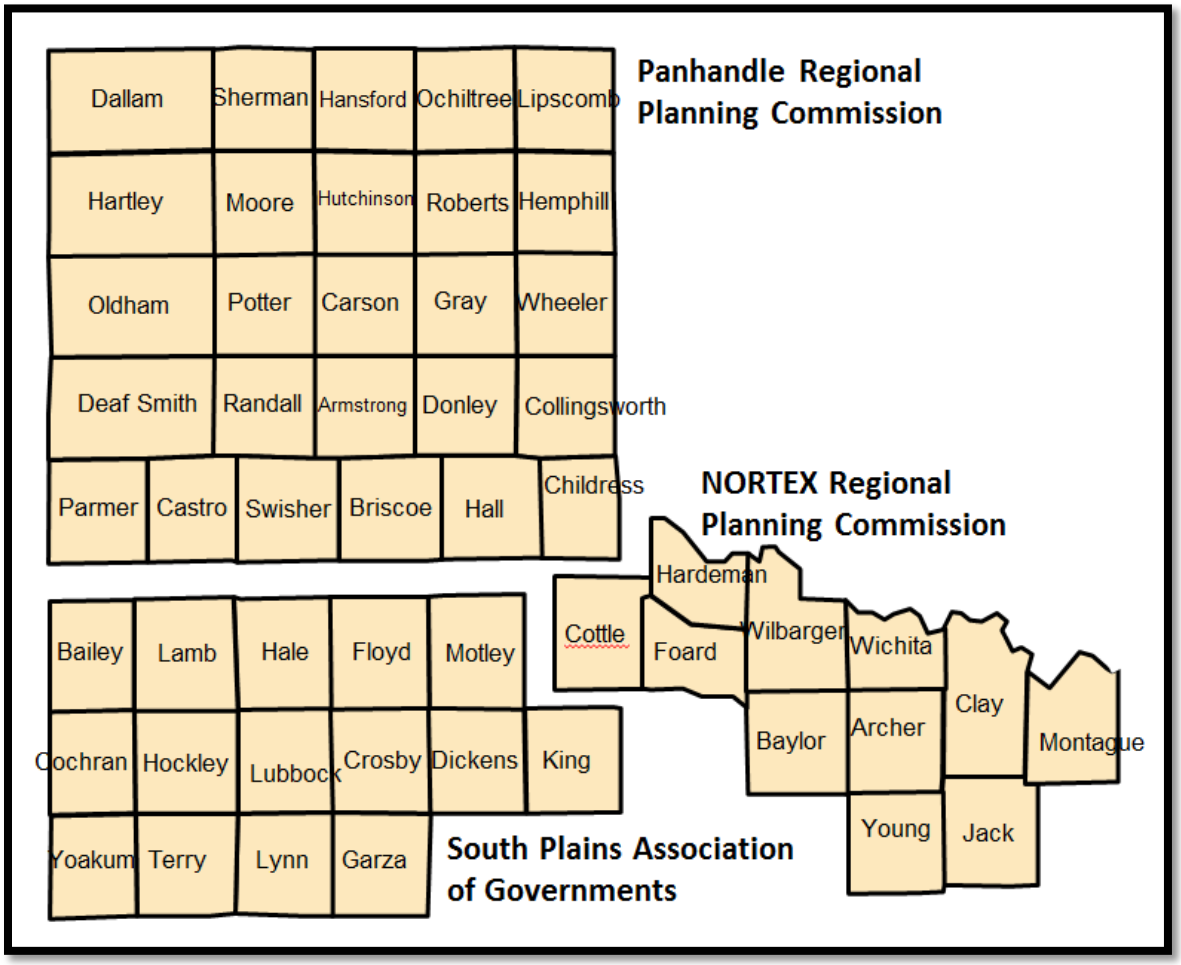
2.12 Proxies. Voting members may vote either in person or by written proxy dated not more than one month before the meeting named therein, which proxies shall be filed before being noted with the secretary or other person responsible for recording the proceedings of the meeting. Unless otherwise specifically 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.

2.13 Voting on One's Own Application. At no time can a voting member vote on his/her application.

2.14 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.

The full text of the Region 52 RPC's Bylaws is found in Appendix A.

5.0 Regional Profile



Region 52 is comprised of three sub-regional planning areas or Council of Government (COG) regions, identified in Texas as being the Nortex Regional Planning Commission region, the South Plains Association of Governments or SPAG region and the Panhandle Regional Planning Commission or PRPC region. The map above depicts the three separate COG regions that make up Region 52. Together these three COG sub-regions encompass the 52 Texas counties that comprise Region 52 (those listed below):

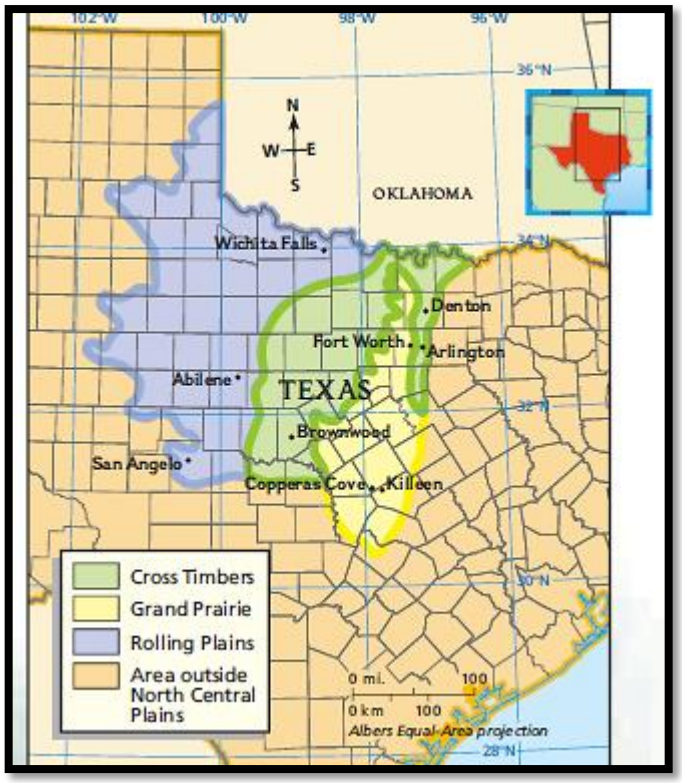
Dallam, Sherman, Hansford, Ochiltree, Lipscomb, Hartley, Moore, Hutchinson, Roberts, Hemphill, Oldham, Potter, Carson, Gray, Wheeler, Deaf Smith, Randall, Armstrong, Donley, Collingsworth, Parmer, Castro, Swisher, Briscoe, Hall, Childress, Bailey, Lamb, Hale, Floyd, Motley, Cottle, Hardeman, Foard, Wilbarger, Wichita, Clay, Montague, Jack, Young, Archer, Baylor, King, Dickens, Crosby, Lubbock, Hockley, Cochran, Yoakum, Terry, Lynn, and Garza. An alphabetical list of these counties, by COG region, is found listed in Appendix C.

Geographically, Region 52 covers a 49,198 square mile area; or roughly 20% of the State of Texas. According to the 2010 US Census, there are a total of 1,087,446 residents living in Region 52 (Nortex - 222,820; South Plains - 436,699; Panhandle - 427,927). Each of these regions is somewhat similar to the others. Demographically, each is considered to be rural with relatively low population densities but each contains one principle city (or MSA area) of 150,000 or more which serves as the major center of commerce for the region. These are:

- Nortex – Wichita Falls 151,306 (MSA includes Archer, Clay & Wichita counties)
- South Plains – Lubbock 284,890 (MSA includes Crosby, Lubbock & Lynn counties)
- Panhandle – Amarillo 249,881 (MSA includes Armstrong, Carson, Potter & Randall counties

Below is a summary description of the three sub-regions that comprise Region 52.

Nortex region:



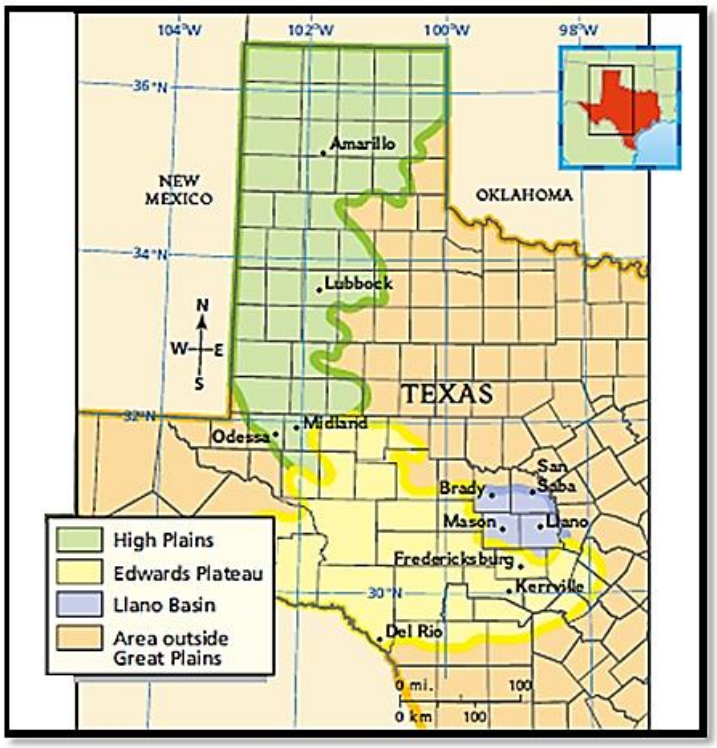
Most of the Nortex region is the located in the ecological region of the Rolling Plains. This feature stretches approximately 300 miles from north to south and is 200 miles across at its widest point. Most of the landscape is slightly rolling; specked in places with mesas, buttes or small flat-topped hills. It is a semi-arid area. The west side of the Plains; which is drier than the eastern side, is often used for grazing animals like sheep and goats that can survive on sparse vegetation. The eastern side is more suitable for crop production. Elevations range from 900 feet in the northeast corner to 4,000 feet in the upper northwest arm of the Rolling Plains. The majority of the Rolling Plains is between 1,000 and 3,000 feet above sea-level.

Wichita Falls, the largest community in the region is home to Sheppard Air Force Base and Midwestern State University.

The economy of the Nortex region is heavily reliant on agriculture and the oil and gas industry but it is also home to a number of national and international manufacturing companies; most of which are located in the Wichita Falls area. These companies vary in employment size with 4.9% employing between 100-499 persons; 10.8% employing 50 to 99; 33.7% employing 20 to 49 and 50.1% employing 10 to 19. The top ten manufacturers include: Air Tractor, Inc., Alcoa Howmet, Georgia-Pacific Gypsum, Pratt & Whitney, Sealed Air Corp., Tower Extrusions Ltd., Tranter Inc., Tyson Foods Inc., and Wichita Tank Mfg. Inc.

Distribution and marketing activities are also important to the Wichita Falls economy. Due its proximity to the Oklahoma border; the City is a commerce and retail center for people from Texas and from Oklahoma.

South Plains region:



The South Plains occupies the southern half of the High Plains of Texas. One of the most distinct geographic features in the region is the Llano Estacado plateau; often referred to as the Staked Plains. This geographic area stretches about 250 miles north to south, and 150 miles east to west, covering a total area of some 37,500 square miles and encompasses all or parts of 33 Texas counties and four New Mexico counties. The elevation rises from around 3,000 feet in the southeastern corner of the Llano and slopes to the northwest, almost uniformly, at a rate of about 10 feet per mile.

While prominent in the area of petroleum production, the South Plains is mainly an agricultural region, producing a great percentage of the nation's cotton and possessing numerous large cattle ranches. Cotton is the most common crop grown in South Plains region. The region itself covers 15 counties. However, if the cotton production of the region's surrounding counties was taken to account, the South Plains would be considered the world's largest cotton-producing region in the world. Software publishing, industrial/ construction machinery manufacture, food processing are some of the other contributors to the region's economy.

The South Plains is home to several colleges and universities, the largest being Texas Tech University in Lubbock. Lubbock, the largest city in the South Plains, serves as the commercial and cultural center for the region. In 2015, the region has a civilian labor force of over 205,000 and an unemployment rate of 3.8%.

Panhandle region:

The Texas Panhandle is a rectangular area bordered by New Mexico to the west and Oklahoma to the north and east. Most of the region is located in the High Plains ecological zone. The flat north and west regions of the Panhandle are referred to as the Llano Estacado. This plain is one of the largest and most completely flat areas of its size in the world. This region is characterized with mostly flat, mostly treeless, grassland or plains and it is the southern extension of the Great Plains of the Central US. The eastern part of the Panhandle is not quite as flat. It is lower in elevation and called the Rolling Plains. The Canadian River Breaks divide this region into southern and northern sections. Elevation ranges from 3,000 to 4,500 feet, sloping gently toward the southeast.

The Panhandle's economy relies chiefly on agriculture and the energy industry. The region and its surrounding counties supplies nearly 1/3 of the Nation's fed-beef supply. Swine, dairy and wheat production are also major contributors to the agricultural economy of the region. The Panhandle sits atop one of the largest natural gas reserves in the world and also lays in one of the highest quality wind zones in the country; the wind power industry is quickly expanding across the Panhandle.

The Panhandle is also home to a number of large production facilities including the world's largest inland petro-chemical complex, large refineries, military and aeronautics assembly facilities and the nation's sole nuclear weapons assembly and disassembly plant.

Amarillo, the region's largest community, sits astride Interstate I-40 and US 287. It is a major marketing and distribution hub and serves as commercial, cultural, medical and financial center for the region (which includes parts of eastern New Mexico and western Oklahoma). The Panhandle's major university, West Texas A&M University is located in the City of Canyon; approximately 18 miles south of Amarillo.

These three sub-regional planning areas share many common characteristics. One other commonality of note pertinent to this particular plan is that for the most part, the public safety radio systems in each region rely primarily on VHF narrowband; with one exception. The largest city in each region has or will soon be migrating to an 800 MHz system while the rest of the region remains on their current narrowband frequencies. As of the date of this plan submission; none of the eligible local government entities has plans to utilize the 700 MHz band now or in the foreseeable future.

Region 52, located in the north of Texas, has 7 adjacent regions. They are as follows:

- Region 07; Colorado
- Region 16; Kansas
- Region 29; New Mexico
- Region 34; Oklahoma
- Region 40; North Central Texas
- Region 50; West Texas

In previous NPSPAC 821 MHz frequency allotments, spectrum amounts disproportionate to population densities were allocated due to differing methodologies used in adjacent NPSPAC Regions and the timing of adjacent regions plan filing and approval. This resulted in a minimum number of channels available for Region 52. In the 700 MHz band, county allotments for both narrowband channels have been developed based on population densities relative to adjacent Regions.

6.0 Notification Process

Bob Sanders, original Chairman of the Region 52 RPC, was also the RPC Convener. The first meeting date was held on July 30, 2003. Interested parties were given more than 30 days' notice prior to the first meeting. Announcements of the date, time, location, and purpose of the first meeting were sent to: APCO, IMSA, AASHTO, TX-APCO, PCIA, FCCA, NORTEX COG, SPAG COG, PRPC COG, TX Sheriffs Association, PEMSS, SFFMA, and the Texas Police Chiefs Association. Notices were also published in the Amarillo Daily News, the Lubbock Avalanche-Journal, the Wichita Falls Times-Record and filed with the FCC for publication.

In more recent years, the RPC meeting notification process was primarily accomplished through e-mail. The meetings themselves were conducted by way of GoTo Meeting in order to promote greater participation in the process. Email contact lists were developed collaboratively by the staff of the three sub-regional COGs; with each COG contributing the contact information of the public safety agencies located within their regions to a master contact list. The meeting notices were published in the Texas Register and each COG also posted the meetings so as to elicit participation from other interested parties within their planning region.

Because Region 52 is totally located within the State of Texas; measures were taken to ensure the Texas Statewide Interoperability Coordinator was also received these meeting notices; as well as, the Texas Forest Service, the Texas Department of Public Safety, FEMA, the Department of Homeland Security's Office of Emergency Communications, the Lower Colorado River Authority, Texas Department of Transportation, the Texas Department of State Health Services, the Texas Parks & Wildlife Department and the FCC.

7.0 Regional Plan Administration

7.1 Operations of the Regional Plan Committee

This committee will use Robert's Rules of Order to conduct meetings. All decisions will be by clear consensus vote with each Public Safety Agency having one vote. The meetings are open to all persons and a public input time is given for anyone to express a viewpoint or to have input to the planning.

Although none currently exist, workgroups may be formed in the future, as needed, to work on specific issues. Workgroups, comprised of members of the RPC, are intended to work on details of specific issues and make recommendations to the full committee.

Any changes to the Regional plan must be voted and approved by the full Regional Plan Committee. Workgroups are open to any who want to participate. The Chair of the RPC will appoint the Chair for each workgroup.

A minimum of one meeting per year will be held of the full committee. This will be announced and advertised 90 days in advance by the Committee Chair. Normal time for this meeting will be in January each year.

Beginning two years after FCC approval of this Regional Plan, the Chair will call a meeting of the RPC to elect a Chair, Vice Chair and Secretary to serve for two years. There is no limit to the number of terms that may be served.

If the Chair is unable to serve a complete term the Vice Chair will serve as Chair until the next election meeting. If both the Chair and Vice Chair are unable to serve their full terms one or the other should strive to call a special meeting of the Committee to elect replacements. If for some reason, neither the Chair nor the Vice Chair can call the special meeting; the State or any County within the region may call for a special meeting, giving at least 90-days' notice, to elect replacements.

7.2 Techical Subcommittee

When such subcommittee is created, the primary responsibility of the Region Technical subcommittee will be to review applications from agencies within the region for conformance to plan requirements. The Technical subcommittee will have access to the Computer Assisted Pre-coordination and Resource Database System (CAPRAD) pre-coordination database system, and will review and recommend approval of applications, as they are received in the system. Applications approved by the RPC will be forwarded to the selected certified Public Safety coordinator, then to the FCC by the Public Safety Coordinator for licensure. As currently conceived, the membership of this committee will consist of the Technical subcommittee chairperson, the Interoperability subcommittee chairperson and three other members of the RPC selected by the RPC chair. Membership of the Technical subcommittee will be determined at the annual meeting. The Technical subcommittee duties will be as follows:

- Review applications for compliance to the Region 52 Plan,
- Review appeals, applicant clarifications and applicant presentations,
- Recommend approval or denial to the RPC Chair,
- Maintain coordination with FCC certified frequency coordinators and advisors,
- Keeping the CAPRAD database updated and current.

7.3 Interoperability Subcommittee

Texas maintains a State Interoperability Executive Committee (TSIEC) to administer the interoperability channels. The Texas Statewide Communications Interoperability Coordinator (SWIC) serves as the point of contact for the TSIEC.

The TSIEC has given each COG within the Region 52 are the opportunity to participate on the SIEC; either as a voting member or an alternate. At the present, at least one staff member from each of the three COGs serves on the Texas SIEC and acts as liaison with the Texas SIEC/SWIC to participate and assist with the statewide interoperability planning process.

The Interoperability subcommittee will be as follows:

- Work with the Texas SIEC/SWIC in the development of a statewide interoperability plan that includes Texas' administration of the recognized 700 MHz interoperability channels
- Load interoperability channel assignments in CAPRAD,
- Review application interoperability plans for conformance to the state's administration of the 700 MHz interoperability channels.

7.4 Administrative Subcommittee

When such subcommittee is created, the Administrative subcommittee will be responsible for monitoring adherence to the Region 52 Plan. The membership of this committee will consist of the Interoperability subcommittee chairperson and three other members of the RPC selected by the RPC chairperson. Membership of the committee will be determined at the annual meeting. The committee will remain in place for as long as needed to resolve inter-regional issues and recommend regional plan changes to the FCC.

The Administrative Subcommittee duties are as follows:

- Annually review and update the Region 52 Plan as necessary,
- Monitor various system(s) implementation progress,
- Communicate with applicants to determine if implementation of their systems is in accordance with provisions of their applications,
- Make recommendations to the RPC on applicants that fail to implement systems,
- Make recommendations to resolve inter-regional issues,
- Maintain coordination with neighboring RPC's.

7.5 Procedure for Requesting Spectrum Allotments

A. Upon FCC approval of this Plan, Region 52 will announce to the region that 700 MHz public safety channels are available in the Region and that channels have been assigned to pool allotments to counties within the Region. All feasible methods will be used to notify public safety entities of channel availability in the Region. All requests will be considered on a first come, first served basis. Region 52 supports the use of the National Coordination Committee (NCC) Pre-Assignment Rules and Recommendations and will follow these guidelines as a template to determine if an application submitted to the RPC meets Regional Planning standards. These rules are explained in Appendix M.

It's recommended that applicants familiarize themselves with these recommendations before submitting an application(s) for Region 52 700 MHz public safety system implementation.

Other consideration taken into consideration for determination of priority of application will be:

- Users who are involved in the protection of life and property,
- Multi-agency shared systems that multiple agencies agree to construct a common infrastructure (i.e. State, City, County, and others),
- Large agencies with multiple divisions constructing a common system for all to use (i.e. a large city or county with multiple divisions),
- Trunked use of the frequencies,
- Approved funding to construct the system using the 700 MHz frequencies,
- A statement of the future intentional actions of any currently licensed channels that will be replaced by a new 700 MHz system, and how it may benefit other agencies in the State by releasing these channels back into the Public Safety pool.

PLEASE NOTE*: Agencies will need to fully document technical information, sites, tower heights, area of coverage, Effective Radiated Power (ERP) of transmitter sites, along with any other technical information required for RPC subcommittee review and coordinator review. Agencies are expected to construct systems with maximum signal levels in their coverage area and minimum signal levels in co-channel user's coverage areas. Coverage area in the context of this plan will be defined as the geographical boundaries of agency(s) served by the system plus eight miles. The RPC realizes that radio signals don't stop at political borders. Our attempt is to maximize the use of the frequencies by packing as many users as possible per channel.*

The FCC has not mandated the use of the CAPRAD database but Region 52 will utilize it to the extent in can be used to initiate and receive 700 MHz license applications and to store associated documentation that accompanies each 700 MHz license application. Given the limitations of the system, both applicants and the RPC will have to work cooperatively to facilitate a timely review of applications. The RPC will be flexible in the methods allowed for application submission. For their part, applicants will have to be diligent to ensure that all documents needed to support the review process have been received by the RPC. Provided the application package is complete at the time of submission, the Region 52 RPC will accept submissions paper copies by mail, by email or by any other FCC application filing mechanisms that may become available in the future.

In general and unless otherwise noted and determined to be in the best interest of the region, the Region 52 RPC will adhere to the published National Coordination Committee Implementation Guidelines for 700 MHz Public Safety RPCs, when applicable.

B. When applying for new 700 MHz channels, the RPC encourages 700 MHz applicants to work with their neighboring agencies and those with whom they share a mutual aid relationship. This coordination will help to promote interoperability within their area and facilitate the equitable distribution of existing spectrum allocations for more efficient frequency use. Region 52 reminds applicants to be cognizant of the fact that moving to the 700 MHz band will likely create the need for a degree of isolation between themselves and their neighboring agencies. Region 52 looks forward to working with these applicants on a case-by-case basis to help preserve spectrum availability in their area, while continuing to promote interoperable communications.

C. To request channels from Region 52, a full application package must be completed and submitted to the RPC by the applicant. 700 MHz RPCs need to work with applicants in the process of application submission with regard to CAPRAD as it is limited to the type of applications it can receive. Some applications that need to be submitted to RPCs cannot be submitted via the CAPRAD database due to the technical limitations inherent in the current database.

The application must include:

- An FCC Form 601,
- A short description of the proposed system,
- A justification for the additional spectrum,
- An interference prediction map using the current version of TIA/EIA TSB 88 guidelines,
- Maps showing all interference predicted in the proposed system,
- Documents documenting agency-funding commitments sufficient to fund the development of the proposed system(s)
- An indication as to when they will migrate from their existing system to the new system.

D. The Chair will distribute the request to all other agencies with allotments in the plan for review and approval electronically. Absent a protest, the RPC will approve the application and submit it through the CAPRAD database, if possible, to the applicant's preferred FCC-certified frequency coordinator for processing. This process meets the requirements of Rule 90.176 (c).

E. Allocation Dispute: An agency may protest a proposed system within 30 calendar days of the original distribution. Protests will only be considered if the allocation does not conform to plan criteria or objecting agency or the Chairperson 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. Any costs associated with field tests or any other requirement to obtain Region 52 plan approval is the responsibility of the agency submitting application to Region 52.

The parties involved must resolve the allocation dispute and notify the Region Chair within 14 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. A flowchart of the Region 52 application process can be found in Appendix N.

F. Lower Power "Campus Eligible" General Use Channels: In the implementation of 700 MHz public safety spectrum throughout Region 52, 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 places of public gathering, public universities, transit systems and ports. While these channels have been designated in county pool allotments with proper designations, they do not enjoy the benefits of countywide 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 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.

To guide applicants in the development of such "campus" type systems, the Region 52 RPC has determined that the use of "campus" channels will supplement, and not reduce the number of a county's allotted channels. System parameters must be used that are appropriate to the service area.
The following criteria apply to channels for "limited area" operations:

The 40dBu service contour of the proposed system must not extend more than 2 miles beyond the proposed service area. If this 2-mile distance extends into an adjacent region, the applicant must obtain concurrence from the adjacent region. For co-channel assignments, the 40dBu (50,50) service contour of the proposed system may touch, but not overlap, the 5dBu (50,50) contour of a co-channel system being protected. A proposed system shall be allowed to have its 60dBu (50,50) contour touch, but not overlap the 40dBu service contour of an adjacent/alternate system being protected. Evaluations should be made in both directions to ensure compliance.

Reduced external antenna height, along with reduced ERP, directional antennas, distributed antenna systems, and radiating "leaky coax," are examples of tools that should be utilized in the development of these type systems.

Region 52 will ensure that these types of systems will not interfere with co- channel or adjacent channel users within the region or its adjacent regions. The chairman, or any agency with co-channel or adjacent channel assignments, or any agency with co-channel or adjacent channel allotments, may request engineering studies from the applicant that indicate no harmful interference will be introduced to any co-channel or adjacent channel user prior to application approval. The committee is the final authority on parameters associated with "limited area" type operations.

If Region 52 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 so the service contour does not encroach into the adjacent region **or** the applicant must supply the Region 52 700 MHz RPC with written concurrence from the adjacent region permitting the original design. In summary, 700 MHz RPCs have the flexibility to utilize the channel allotments in their approved plans in the manner that best suits the needs of public safety within that region.

7.6 Procedure for Frequency Coordination

Before applicants submit an application to a recognized FCC frequency coordinator, the application must be reviewed at a frequency meeting of the RPC. The Committee will review the application to ensure it complies with all elements of the Regional Plan. This will **NOT** be a review to ensure the application form meets FCC requirements for filing.

The applicants must submit a copy of the FCC application and supporting documents to the Regional Plan Chair. An interference prediction map must be included in the documentation. TIA/EIA TSB88-A (or latest version) guidelines will be used to produce the interference map. The map must show all interference predicted using TSB88-A guidelines. Any agency with co-channel or adjacent channel allotments may request field tests of signal levels to verify interference signal levels. Agencies must be prepared to conduct these field tests at their own expense, if a request is made.

The frequency meetings will be held as needed to review applications. The FCC certified frequency coordinators will be notified of the meetings. As appropriate, Region 52 will follow the recommended pre-coordination practices found in Appendix M.

7.7 Adjacent Region Spectrum Allocation and Coordination

Region 52 shares borders with Region 29, Region 34, Region 40 and Region 50. While they're not contiguous to the region, Regions 7 and 16 are adjacent regions by virtue of being located within 75 miles of Region 52. Region 52 will coordinate channel allocations with its bordering regions by using the CAPRAD database. This tool will ensure adjacent state notification as well as FCC Certified Frequency Coordinator notification.

As appropriate, the Region 52 Chair will make the final draft copy of this plan available to the Chairs of each adjacent region. To the extent possible, Region 52 intends to satisfy requests from adjacent regions for voice and narrowband data in a timely fashion. If a request is beyond the capability of Region 52 to satisfy; an appeal will be made of the Texas RPC to intercede and work with the affected regions in an effort to resolve any issues there may be.

7.8 Mexico Border Issues

Not Applicable. While Region 50, an adjacent region to Region 52 shares a border with Mexico; Region 52 is not.

7.9 Canadian Border Issues

Not Applicable. Region 52 does not share a border with Canada.

7.10 Regional Plan Updates

The matters addressed in this plan section were necessitated by virtue of actions taken by the FCC as part of Report and Order 14-172. Order 14-172 required those planning regions that have already obtained FCC regional plan approval to update their plans. Those revisions then have to be refiled with the FCC for approval.

However, since at the time of this writing, the Region 52 plan has not yet been FCC approved, the provisions below are being incorporated into the regional plan, as if they were original plan element. Below is an excerpt from the Order that describes the nature of the actions taken by the FCC; followed by the provision being incorporated into this plan.

FCC Report and Order 14-172 (October 24, 2014)
REVISIONS TO 700 MHZ NARROWBAND CHANNEL PLAN

C. Reserve Channels

1. Background

Section 90.531(b)(2) of the Commission's rules reserves twenty-four 12.5 kilohertz bandwidth channel pairs for future designation (Reserve Channels). The Commission held these channels in reserve to meet developing needs for 700 MHz spectrum.
In its 2010 petition, NPSTC proposed that all of the Reserve Channels be designated for temporary deployable mobile trunked infrastructure that could be transported into an incident area to assist with emergency response and recovery. NPSTC asserted that such designation would allow 700 MHz licensees to pre-program these channels into their subscriber radios, eliminating the need during a disaster to reprogram radios in the field or distribute cached radios

2. Discussion

The Commission concluded, "*that the 700 MHz Reserve Channels should be added to the General Use pool and made available for multiple uses under RPC administration. The demand for 700 MHz narrowband spectrum has significantly increased in recent years, particularly in large urban areas. Some 700 MHz licensees have channel requirements that have surpassed what was envisioned in the original channel allotment process*."

To accommodate these spectrum demands, we adopt the following overall approach. Rather than dedicating the Reserve Channels exclusively for use with deployable systems, we require the RPCs to administer the Reserve Channels subject to the following.

In the non T-Band areas, up to eight 12.5 kilohertz channels may be dedicated for temporary deployable trunked use and the rest for General Use, including low-power vehicular repeaters. In the T-Band markets, all twenty-four Reserve Channels will be available for General Use with priority given to relocating T-Band incumbents that commit to return an equal amount of T-Band channels.

The RPCs shall submit channel plans consistent with this Report and Order within six months from publication in the Federal Register.112 We encourage T-Band licensees transitioning to the former Reserve Channels to consider using spectrally efficient 6.25 kHz technology given the limited number (24) of available former Reserve Channels.

Incorporation of the Spectrum in the 769- 775/799-805 MHz band for General Use into the Region 52 700 MHz Regional Plan

The FCC released the reserve channels for General Use under RPC administration with priority access given to T-Band incumbents. The FCC stated, "RPCs have the flexibility to designate a mixture of General Use and temporary (deployable trunked infrastructure) channels in their Regional Plans." To the best of our knowledge, no T-Band licensees are/were allocated in Region 52.

The Region 52 Plan incorporates the following: (1) the new general use channels (i.e. the former reserve channels); (2) the channels recommended by NPSTC and the NRPC for deployable trunked systems; and (3) vehicular repeater systems. Due to the complexities of spectrum management Region 52 will hold all re-allotted channels in the General Use Pool for re-allocation to be determined upon the request of public safety entities for these resources to meet the needs of the specific agency, jurisdiction, and county.

The channels below will be held in the General Use Pool for repurposing when and where needed by public safety agencies. The General Use Pool channels will provide optimal flexibility to meet unanticipated public safety spectrum requirements throughout the region. This will allow the RPC to allocate the new channels through coordination without needlessly encumbering valuable resources.

Table of 700 MHz Reserve Channels added to Region 52's General Use Pool

FCC Channel	CAPRAD Channel Label	Base Frequency	Mobile Frequency	Status
37-38	General Use-D	769.231250	799.231250	To be determined *
61-62	General Use-D	769.381250	799.381250	To be determined *
77-78	General Use	769.481250	799.481250	To be determined **
117-118	General Use-D	769.731250	799.731250	To be determined *
141-142	General Use-D	769.881250	799.881250	To be determined *
157-158	General Use	769.981250	799.981250	To be determined **
197-198	General Use	770.231250	800.231250	To be determined
221-222	General Use	770.381250	800.381250	To be determined
237-238	General Use	770.481250	800.481250	To be determined
277-278	General Use	770.731250	800.731250	To be determined
301-302	General Use	770.881250	800.881250	To be determined
317-318	General Use	770.981250	800.981250	To be determined
643-644	General Use	773.018750	803.018750	To be determined
683-684	General Use	773.268750	803.268750	To be determined
699-700	General Use	773.368750	803.368750	To be determined
723-724	General Use	773.518750	803.518750	To be determined
763-764	General Use	773.768750	803.768750	To be determined
779-780	General Use	773.868750	803.868750	To be determined
803-804	General Use	774.018750	804.018750	To be determined
843-844	General Use	774.268750	804.268750	To be determined
859-860	General Use	774.368750	804.368750	To be determined **
883-884	General Use-D	774.518750	804.518750	To be determined ***
923-924	General Use	774.768750	804.768750	To be determined **
939-940	General Use-D	774.868750	804.868750	To be determined ***

* - *When assigned, will be prioritized for Nationwide Deployable Use*

** - *When assigned, will be prioritized for Vehicular Repeater Use*

*** - *When assigned, will be prioritized for Nationwide Deployable Use (Channels 883-884 and 939-940 have been designated as Alternate and Primary Control Channels for the Nationwide 700 MHz Deployable Trunked Systems)*

The table below summarizes the intended use of the reserve channels that have been added to the region's General Use Pool.

Channels	Added for the Described Intended Use
37-38 61-62 117-118 141-142 883-884 939-940	These channels will be held in reserve until such time they're needed. When requested or needed, they'll be prioritized for use as Nationwide Deployable Trunked Channels consistent with the NPSTC/NRPC recommendation to the FCC utilizing the recommended system and unit identifiers from NPSTC/ NRPC
77-78 157-158	These channels will be held in reserve until such time they're needed. When requested or needed, they'll be prioritized for use as 2 watt vehicular repeater frequencies to be coordinated for and specifically for use with 800 MHz systems in the region due to the needed separation between these frequencies and those utilized by public safety in the 800 MHz band.
859-860 923-924	These channels will be held in reserve until such time they're needed. When requested or needed, they'll be prioritized for use as 2 watt non-800 MHz vehicular repeater frequencies to be coordinated for use with other systems in the region
All other listed channels	These channels will be held in reserve until such time they're needed. Allowing these remaining channels to supplement the existing General Use allotments utilized within the region will promote maximum flexibility of the use of these channels in each region.

Lastly, Region 52 intends to work with the FCC to allow the introduction of new 700 MHz General Use channels in a flexible manner where the channels are available to all existing allotments and can be used most optimally. The Region 52 700 MHz plan aims to underscore the need for solid intra- and inter-region coordination both in the use of the original General Use pool as well as with these new flexible allotments. In order to maximize their value to the region, Region 52 intends to consistently utilize the same intra-region and inter-region coordination practices with these new, flexible General Use allotments as with the other allotments in the region's pool.

7.11 Air to Ground Channels

In its Report and Order (FCC 14-172) dated October 24, 2014 the FCC re-designated the 700 MHz Secondary Trunked channels and reserved them for specific Air to Ground communications between low-altitude aircraft and associated ground stations. The secondary channels are the most suitable channels for this specific Air to Ground purpose as they have no incumbents and little risk of co-channel interference since there are no current Secondary Trunked licensees.

The eight (8) 12.5 KHz Air to Ground channels are listed below:

FCC Channel	Base Frequency	Mobile Frequency	Status
21-22	769.131250	799.131250	Available
101-102	769.631250	799.631250	Available
181-182	770.131250	800.131250	Available
261-262	770.631250	800.631250	Available
659-660	773.118750	803.118750	Available
739-740	773.618750	803.618750	Available
819-820	774.118750	804.118750	Available
899-900	774.618750	804.618750	Available

The FCC also adopted a two (2) watt ERP limit for the use of these channels along with restricting airborne use of these channels to altitudes below 1500 feet Above Ground Level (AGL) to limit the areas impacted by the airborne operations. Given the proximity of these Secondary Trunking Channels to the designated Interoperability channels in the 700 MHz band (immediately adjacent to), the FCC assigned the responsibility for coordinating these channels to each state while permitting aircraft use on both the upper and lower portion of each Secondary Trunked Channel pair. The TSIEC has been tasked with coordinating the use of the Air to Ground Channels in Texas.

8.0 System Design/Efficiency Requirements

8.1 Interference Protection

The channel allotments are based on the assumption that systems will be engineered on an interference-limited basis, not a noise floor-limited basis. Agencies are expected to design their systems for maximum signal levels within their service area and minimum levels in the service areas of other co-channel users. A jurisdiction's service contour is normally the geographical boundaries of the agency served (its service area) plus an area three to five miles beyond.

Systems should be designed for minimum signal strength of 40 dBu in the system's service contour, while minimizing signal power out of that area. TIA/EIA TSB88-A (or latest version) will be used to determine harmful interference, assuming 40 dBu, or greater, signal in all systems' service contours. This may require patterned antennas and extra sites compared to a design that assumes noise limited coverage.

To maximize spectrum utilization, prudent engineering practices and receivers of the highest quality must be used in systems. Given a choice of radios in a given technology family, agencies should choose the units with the specifications most appropriate to their needs and to the environment in which they will be used. This plan will not guarantee agencies protection from interference if their systems are under-constructed (i.e., portions of the desired service area have signal strength less than 40 dBu), or utilize low quality receivers.

Region 52 adopts the interference protection recommendations listed in Appendix K of the Regional Planning Committee Guidelines published by the National Coordination Committee (NCC), and included in this plan as Appendix M.

8.2 Spectrum Efficiency Standards

The applicant's use and implementation of prudent and appropriate engineering practices will be encouraged by the RPC at all times.

In some regions, it is the eventual goal of the FCC and the public safety community for radio equipment to meet the requirement of one voice channel per 6.25 KHz of spectrum. When applying for channels within Region 52, applicants should know that the region has discretion on enforcing channel bandwidth and voice efficiency requirements. As 6.25 kHz migration and technology evolves, instances where an agency creates any "orphaned" 6.25 kHz channels should realize that these channels would be allocated to nearby agencies requesting channels to maintain consistent grouping and utilization of 25 kHz blocks within the region.

Region 52 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.

8.3 Orphaned Channels

Some narrowband pool allotments in Region 52 have a channel bandwidth of 25 KHz. These 25 KHz allotments have been characterized as "technology neutral" and flexible enough to accommodate diverse technologies utilizing multiple bandwidths. If agencies choose a technology that requires less than 25 KHz channel bandwidth for their system, there is the potential for residual, "orphaned channels" of 6.25 KHz or 12.5 KHz bandwidth immediately adjacent to the assigned channel within a given county area. An "orphan channel" may be used at another location and/or by another licensee within the county area where it was originally assigned, if it meets co-channel and adjacent channel interference criteria.

When it is in the best interest of public safety communications and efficient spectrum use within the region, the RPC shall have the authority to move these "orphan channel" allotments, and/or co-channel or adjacent channel allotments affected by the movement of "orphan channels," to other areas throughout the region, as deemed necessary, to maintain spectrum efficiency and/or minimize co-channel or adjacent channel interference.

If, in order to accommodate an applicant's request for channel assignments, it is necessary to move a full 25 KHz channel allotment, or a portion thereof, to a location outside of the county area in which it was originally allotted, the RPC will determine if the request meets frequency coordination and interference protection guidelines, and should be moved to accommodate the request.

If the movement of a full or partial channel allotment is deemed in the best interest of the public safety community, and the full or partial channel is relocated less than 10 miles outside the originally-allocated county boundaries, and both the old and new locations are more than 30 miles from the boundaries of any region adjoining Region 52, no plan amendment will be required. These channel allotment movements will be documented on the CAPRAD database.

If a full or partial channel allotment does not meet co-channel and adjacent channel interference criteria when moving it within the 10 mile distance as listed above, and it is determined by the committee that the full or partial channel cannot be utilized in the region without exceeding the 10 mile distance, Region 52 will reallocate the full or partial channel to a location where its potential use will maintain maximum spectral efficiency.

If the movement of a full or partial channel allotment is deemed in the best interest of the public safety community, and the relocation requires moving a channel allotment from one region to another in the interest of inter-regional sharing and cooperation, each region shall amend its plan and submit the amended plan to the FCC accompanied with written concurrence statements from the participating and adjoining regions.

9.0 Allocation of Narrowband "General Use" Spectrum

9.1 Introduction

The Region 52 Technical Subcommittee recommends that allotments be made on the basis of one 25 KHz channel for every two (2) voice channel requests and one 12.5 KHz channel for each narrowband data channel request. This recommendation is approved by the full Committee and is part of this plan. Allotments will be made in 25 KHz groups to allow for various digital technologies to be implemented. All agencies requesting spectrum during the initial filing window (see Section 7.5) will be allocated channels if plan requirements are met. Agencies using Frequency Division Multiplexing (FDMA) will be expected to maintain 12.5 KHz equivalency when developing systems and will be required to utilize BOTH 12.5 KHz portions of the 25 KHz block. In most cases, this will require the geographic separation of each 12.5 KHz adjacent channel. In order to promote spectrum efficiency, Region 52 will ensure that systems allocated 25 KHz channel blocks will utilize the entire channel and not "orphan" any portions of a system designated channel (See Section 8.3).

9.2 Low Power Secondary Operations

To facilitate portable operation by any licensee, and to provide channels for such operation without impacting the use of primary channels, certain low power secondary use will be permitted. Any public safety entity otherwise licensed to use one or more channels under this Plan may receive authorization to license any additional channel for secondary use, subject to the following criteria:

- All operation of units on such authorized channels will be considered secondary to other licenses on both co-channel and adjacent channels,

- No channels on, or adjacent to, those designated in the Plan for wide area operation and/or mutual aid use will be authorized,
- Channels will be authorized for use in specific areas only, such areas to be within the licensees authorized operational area,
- Maximum power will be limited to 6 watts ERP,
- Use aboard aircraft is prohibited,
- Applications for channels may be submitted to the Committee for consideration at any time and must be accompanied by a showing of need. The Committee may select and authorize licensing of these secondary use channels after consideration of potential interference to co-channel and adjacent channel allotments, allocations and licensees. Authorization may be granted for use of any suitable channel, without prior allotment or allocation to the requesting agency,
- In the event the channels authorized for low power secondary operation are needed by others during any window opening for reassignment, no protection will be afforded to the licensed secondary user, and they may be required to change frequencies or surrender licenses to prevent interference to primary use channels.

9.3 Low Power Channels

The FCC in the 700 MHz band plan set aside channels 1 - 8 paired with 961 – 968 and 949 – 958 paired with 1909 – 1918 for low power use for on-scene incident response purposes using mobiles and portables subject to Commission-approved RPC regional plans. Transmitter power must not exceed 2 watts ERP.

Channels 9 –12 paired with 969 – 972 and 959 – 960 paired with 1919 – 1920 are licensed nationwide for itinerant operation. Transmitter power must not exceed 2 watts ERP. All of these channels may be operated in either the analog or the digital mode.

To facilitate analog modulation this plan will allow aggregation of two channels for 12.5 kHz bandwidth. On scene temporary base and mobile relay stations are allowed (to the extent FCC rules allow) with an antenna height limit of 6.1 meter (20 feet) above the ground. However, users are encouraged to operate in simplex mode whenever possible. This plan does not limit use to only analog operations; these channels are intended for use in a wide variety of applications that may require digital modulation types.

In its dialog leading up to CFR §90.531 allocating the twenty-four low power 6.25 kHz frequency pairs (of which eighteen fall under RPC jurisdiction), the FCC suggested that there is a potential for multiple low power applications, and absent a compelling showing, a sharing approach be employed rather than making exclusive assignments for each specific application because low power operations can co-exist [in relatively close proximity] on the same frequencies with minimal potential for interference due to the 2 watt power restriction.

Although advantages exist in not making assignments, the reverse is also true. If, for example, firefighters operate on a specific frequency or set of frequencies in one area, there is some logic in replicating that template throughout the region for firefighter equipment. If there are no assignments, such a replication is unlikely.

In seeking the middle ground with positive attributes both for and against assignments, we adopt the following assignments associated with the eighteen (18) low power channels for which the Region 52 Regional Planning Committee has responsibility:.

- Channel #'s 1-4 and 949-952 are set aside as **Generic** channels for use by public safety agencies operating within Region 52, and the complementary channel #'s 961-964 and 1909-1912 are set aside as Generic channels also for use by public safety agencies including GPS differential correction telemetry for channels 961-964 and 1909-1912 likewise operating within Region 52.

- Channel #'s 5-8 are designated as **Fire/EMS** channels for licensing and primary use by the Fire/Emergency Medical disciplines, and the complementary channel #'s 965-968 are set aside as Fire/Emergency Medical channels also for licensing and primary use by the Fire/Emergency Medical disciplines.

- Channel #'s 953-956 are set aside as **Law Enforcement** channels for licensing and primary use by the Law Enforcement discipline, and the complementary mobile channel #'s 1913-1916 are set aside as Law Enforcement channels also for licensing and primary use by the Law Enforcement discipline.

- Channel #'s 957-958 are designated as **Multidisciplinary Joint Public Safety Operations** low power channels for licensing and the complementary mobile channel #'s 1917-1918 are also designated as Multidisciplinary Joint Public Safety Operations low power channels for use by political subdivisions and public safety agencies operating under a unified command at a common incident for the express mission of safety of life, property or environment.

Simplex operations may occur on either the base or mobile channels. Users are cautioned to coordinate on-scene use among all agencies involved, particularly when the use of repeater modes is possible at, or in proximity to, a common incident. Users should license multiple channels and be prepared to operate on alternate channels at any given operational area.

The Region 52 Regional Planning Committee urges all 700 MHz users to have the capability to access all of the FCC approved low power and interoperability channels in both repeater and simplex modes. Under no circumstances may a user claim a low power channel as exclusively theirs. The 700 MHz interoperability channels are administered by the TSIEC.

9.4 System Implementation

Region 52 will not be affected by interference potential from existing television stations operating in the 700 MHz spectrum. A written notification will be issued to secondary television station operators/licensees of the intended use of the 700 MHz spectrum in Region 52 (Appendix I). This allows for an applicant to have an immediate review of their application package and, when approved, meet intended construction timeframes identified within the application submittal.

After allocation of channels (Section 7.5) the agency must release a System RFP and sign a contract with a vendor within one year of the channel allocation. If an agency does not implement within the timeframes specified that agency's allotment may be removed from the allotment list. An agency may file a request with the Region Chair for an extension of time to implement. The request should include all details describing why the agency has not implemented and a new implementation schedule. The Committee Chair will advertise this request and set a date for the full committee to vote on the request. If no request for extension is received or the Committee votes not to extend implementation, the Committee Chair will advertise this action and set a filing window to give other agencies a chance to request an allotment of that spectrum.

Should system implementation not begin within two (2) years or if projected planned channel loading is not attained within four (4) years after granting of license, the channels will be returned for re-allotment to others. A one (1) year extension may be supported by the RPC, if it can be shown that circumstances are beyond the control of the applicant. The applicant will be responsible for contacting the FCC to request an extension. Applicants must be acting to the extent of their power to implement the project within their authority.

System implementation will be monitored by a subcommittee of the RPC, appointed by the chairman for that purpose when the need arises. The Region 52 project implementation monitoring subcommittee will be charged with following the progress being made on the implementation of a system. Monitoring of systems implementation by the subcommittee will take place on one (1) year intervals. If progress is made and the system is ultimately implemented the system can be determined "complete".

If progress is not made, the licensee will be advised in writing that they are in default of their plan and the Region 52 plan. The consequences of their lack of progress may include the imposition of a probationary period that could ultimately lead to a recommendation by the Region 52 RPC to the FCC to take whatever actions might be appropriate to resolve the impasse. The Region 52 implementation monitoring subcommittee will continue to track the progress of any system considered to be in default. If progress is still not being made, the subcommittee will inform the RPC and recommend informing the FCC of the lack of progress. The licensee in default can appeal this action or can allow the license to be withdrawn.

If the authorized frequencies are withdrawn they will be returned to the frequency allotment pool for future use.

9.5 Priority for Receiving Spectrum Allocations

Priority for channel allocations will be made on a first come first served basis. Cooperative multi-agency system implementations will be given priority over non-shared single agency systems.

When applying for the new 700 MHz channels, the RPC expects applicants to relinquish any amount of any currently used spectrum and make that spectrum available for use by other agencies in Region 52 upon beneficial use of an implemented 700 MHz radio system. This currently licensed spectrum may be in any public safety band.

***PLEASE NOTE**: Agencies with a primary voice communication system operating under a NPSPAC band 800 MHz license that are requesting 700 MHz channels for system expansion won't be asked to relinquish spectrum. However, they will be asked to include their already licensed spectrum into the loading requirements for a radio system as defined in this plan. The reason being is that most, if not all, radio equipment manufactured for the 700 MHz band is dual capable of operating on an existing 800 MHz NPSPAC licensed system and will likely be included in the justification of the loading of NPSPAC channels. Without this inclusion, theoretically it would be possible for an agency to double its frequency spectrum allocations by applying for an equivalent number of 700 MHz channels, for each 800 MHz channel that it has already licensed and justified loading criteria for, and reuse the same mobile or portable users for both bands, to both planning committees, in Region 52. Although separated in FCC rules and regulations, Region 52 will work with NPSPAC planning committees to attempt to make the most efficient use of spectrum for Public Safety in Region 52.*

Agencies are encouraged to relinquish frequencies that will no longer be used as soon as possible in accordance with FCC rules and regulations.

The number of channels an applicant should retain would be an amount required to provide minimum interoperable communications to surrounding jurisdictions. In order to promote the interests of agencies that will benefit from an applicant submitting a request for 700 MHz spectrum, it is requested that the applicant submit a list of all channels and licenses held on existing public safety channels, and those channels that will be expected to be unlicensed when full beneficial use of 700 MHz channels are realized. The RPC will only distribute this information, and not decide if it is sufficient or not. It must be stressed that the Region 52 RPC supports and promotes multi-agency systems that allow for regional/wide area coverage within the region.

9.6 Channel Loading

Region 52 RPC is aware of the FCC's increased focus on spectral efficiency standards versus the absolute loading of each 700 MHz frequency assignment. However, the goal of the RPC is to encourage efficient utilization of each frequency channel irrespective of bandwidth.

Therefore, Region 52 supports the following channel loading recommendations as provided by the National Regional Planning Committee (NRPC):

- Each applicant for a 700 MHZ trunked system should design their system for a minimum of 70/100/120 or any other number of mobile and portable radios, solely at regional discretion, for each 12.5 kHz voice channel that will be placed in service within five (5) years of the initial plan approval date.

- Single conventional channels should be designed for a minimum load of 70 radios per 12.5 kHz channel. Mobile, portable, data, and control stations will all be considered within this count.

As narrowband technologies improve and become more widely available, channel loading may be required to support migration to a voice efficiency of 70 units per 6.25 kHz channel. Channel loading may also become necessary if in the future, the FCC requires that voice efficiencies meet 6.25 kHz per voice path. Region 52 will use discretion in determining the flexibility of its expectations for channel loading based on any such requirements that exist at the time an application is submitted and on current channel availability and need.

9.7 Wideband Data

At this time, wideband data can only be considered if a FCC waiver is obtained.

9.8 Dispute Resolution – Intra-Regional

In the event an agency disputes the implementation of this Plan or the Federal Communications Committee approval of this Plan or parts of this Plan, the agency must notify the Chair of the dispute in writing. This section does not apply to protests over new spectrum allocations (see Section 7.5). The Chair will attempt to resolve the dispute on an informal basis. If a party to the dispute employs the Chair, then the Vice Chair will attempt resolution. In such cases, the Chair shall be deemed to have a conflict of interest and will be precluded from voting on such matters. If after 30 days the dispute is not resolved, the Chair (or Vice Chair) will appoint a Dispute Resolution Committee consisting of two members from the State of Texas governmental agencies and at least five members from different counties in Region 52. That committee will select a Chair to head the committee and a secretary to document the proceedings.

The Regional Plan Chair (or Vice Chair) will represent the Region in presentations to the Dispute Resolution Committee. The Committee will hear input from the disputing agency, any effected agencies and the Region Chair. The Committee will then meet in executive session to prepare a recommendation to resolve the dispute.

Should this recommendation not be acceptable to the disputing agency/agencies, the dispute and all written documentation from the dispute will be forwarded to the National Regional Planning Council. As a last resort, the dispute will be forwarded to the Federal Communications Commission for final resolution.

10.0 Interoperability Channels

10.1 Introduction

The ability for agencies to effectively respond to mutual aid requests relies on their ability to communicate with each other. Region 52 is subject variety of natural disasters and includes facilities which may be susceptible to a man-made disasters or weapons of mass destruction attacks. Mutual aid is commonly used by agencies in the region. This Plan seeks to facilitate the communications necessary for effective mutual aid.

The addition of new communications systems on the 700 MHz band may increase overall interoperability challenges rather than lessen them. While some new 700 MHz systems may completely replace all legacy systems in some areas, most will probably add to the mix of communications options available in an area.

Therefore, as new 700 MHz systems are planned and deployed, it will be extremely important for their operators to be well informed about other legacy systems in all other bands that are operating in their area, or in areas where they may be called upon to provide mutual aid assistance. Since it is unlikely that the time will come when all public safety communications system operate in a single frequency band with a single technology, only good system planning and cooperation will enable reasonable levels of interoperability to be sustained.

In the future, as new 700 MHz systems are deployed in the region, the expectation is that the new systems will be planned and designed to support interoperability with existing legacy systems as opposed to requiring existing systems to be modified in order to maintain interoperability with the new 700 MHz system. The burden for ensuring this continued interoperability will be on the new 700 MHz system implementer. In addition to meeting the interoperability requirements for the existing legacy band, new 700 MHz systems also need to make provisions for interoperability with VHF, UHF, and other users in the region to a level that is appropriate for their circumstances.

The State of Texas administers the 700 MHz interoperability channels via the Texas Statewide Interoperability Executive Committee (TSIEC) under National Coordination Committee's (NCC) guidelines. The TSIEC has published technical and operational standards for use of the interoperability channels, and it is anticipated that the TSIEC will continue to expand and update these standards as necessary. The Region 52 700 MHz RPC supports the TSIEC. The Chairman of the Region 52 700 MHz RPC or his delegate is a member of the TSIEC and represents Region 52. If at any time the TSIEC is unable to function in the role of administering the interoperability channels in the 700 MHz band, this committee will assume that role in Region 52, and notify the FCC in writing of the change in administrative duties.

10.2 Tactical Channels

Region 52 will not set aside additional channels for interoperability use within the region. It is anticipated the sixty-four FCC designated interoperability channels (6.25 KHz) will be sufficient to provide interoperability (voice and data) within Region 52.

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 TSIEC specifies whichever number is greater, both in the repeater and direct mode. 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 52. The Texas SIEC is the final authority on the interpretation of the distribution of the 700 MHz interoperability channels.

10.3 Deployable Systems

Region 52 strongly 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 all areas while still providing mission critical functionalities. The committee 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 tuned to any of the interoperability tactical channels. Those agencies that are part of a multiagency 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 TSIEC 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.

10.4 Monitoring of Calling Channels

700 MHz general use channel licensees in Region 52 will be responsible for monitoring interoperable calling channels in the manner prescribed by the TSIEC. Guidelines pertaining to the use of the interoperable calling channels are found in Appendix K

11.0 Applicant Requirements and Evaluation

11.1 Introduction

The applicant evaluation criteria established in the NCC process, and as further defined in this plan, will be followed for approval. All requests will be considered on a first come, first served basis.

In cases, where specific frequency allotments are required by numerous applicants at the same time, an applicant evaluation matrix point system will be utilized to determine the successful applicant. In all cases, area of coverage, technical requirements, and channel loading criteria will be applied. Exceptions may apply upon unique circumstances, after review and approval by the RPC. Deviations from FCC rules are not to be approved unless a fully justified waiver request has been presented to the RPC.

The goal of the Region 52 Technical subcommittee is to evaluate and process applications within thirty (30) days after a notification of receipt has been issued by CAPRAD.

The matrix in Section 11.3 below has been prepared to enable consistent evaluation of plans and applications. Variations within the parameters of this plan and submitted applications and/or plans may require extensive evaluation. Therefore, it will be the responsibility of the RPC to evaluate each situation on its own merit.

Each applicant for a trunked system shall certify that a minimum of 70 field radios for each 12.5 kHz channel will be placed in service within five (5) years of the initial plan approval date. If that is not the case, then less than fully loaded channels shall be returned to the allotment pool and the licensee shall modify their license accordingly. Conventional channels shall be loaded to 70 mobile units per channel. Where an applicant does not load a channel to 70 radio/subscriber units, the channel will be available for assignment to other licensees. Mobile, portable and control stations will be considered as mobile units.

11.2 Application Requirements

Each application must contain the following:

- FCC ULS 601 Form(s),
- Explanation of the systems future growth for all agencies involved in the system, including how the system will be loaded and what equipment type and quantity is planned to be purchased to load the system,
- Explanation of the budget commitment for the proposed system,
- State of compliance that the applicant's agency will conform with interoperability requirements of the SIEC plan,
- Any documentation that identifies intended radio channels the agency/entity will be abandoning through the FCC licensing processes, after full beneficial system use of allocated 700 MHz channels, for informational purposes only, and the benefit of other Entities with Region 52.
- Documentation that will assist the evaluation of the application against the Point Matrix system identified in Section 11.3.

The application will be forwarded to the Applicant's designated coordinator for technical review and any appropriate information will be uploaded to CAPRAD. Upon approval by the coordinator the Applicant may submit to the FCC for licensure. Any conflicts encountered during the licensing process, after Regional approval, the application will be returned to the RPC for resolution with the applicant.

11.3 Evaluation Matrix Point System

The following scoring matrix will be used to determine priority for assignment when two or more requests for narrowband channel assignments are in conflict, with the likelihood that one or more request can't be accommodated.

This matrix will only be used when multiple requests are received in the same filing window for the same channels. Otherwise, the first come first served procedure of Section 7.5A will be used.

The maximum number of points available to an application in the prioritization process is 350. Applications receiving the highest point total will receive approval for the channels. Where applicable, such as with multiple disciplines shared systems, the points for all agencies utilizing the system are included in the total. Seven categories will be evaluated.

Soring factor	**Maximum Points Available**
1. **First filed** Priority is given to the first application filed within a filing window, as determined by the CAPRAD posting date, postmark, or their equivalent.	**10**
2. **Protection of life and property** Priority is given to users fundamentally involved with the protection of life and property. Points Law Enforcement 15 Fire/EMS 15 Special Emergency * 12 Emergency Management 12 Highway Maintenance 10 All others 8	**15**
3. **Interoperable Communications** Weighted on the degree of interoperability demonstrated by the project with a range of between 0 to 100 points. **	**100**
4. **Multi-Agency Systems** Applicants that demonstrated they are part of or developing cooperative, multi-agency, systems will be scored with a range of between 0 to 150 points, depending upon the extent of the cooperative system. Points Multi-agency trunked, fully loaded, system 101 – 150 Trunked system, fully loaded, single agency 76 – 100 Mobile data channel fully loaded/channel 76 – 100 Conventional system fully loaded/channel 0 – 75	**150**
5. **Spectrum Efficiency** Weighted on the system's demonstrated degree of spectrum efficient technology. Points Trunked or equally high efficient technology 50 Conventional system using data 50 Technologies that increases system throughput 50	**50**

Soring factor	Maximum Points Available
6. **System Implementation Factors** Weighted on the degree of planning and funding commitment demonstrated for the project by the applicant Points Multi-phase project with funds committed to all phases 0 - 50 Multi-phase project with a plan completed for all phases 0 - 50	**100**
7. **Give-Back Channels** Based on the percentage of the applicant's existing frequencies that will become available for re-use (give-back frequencies).	**25**
Total Maximum Points Available:	**350**

* - *Special Emergency covers environmental protection and includes agencies that are directly tasked with reducing contamination to the air, water or ground by chemicals or waste materials*

** - *Point reductions will be considered for the following:*

- *Ten (10) points for each radio service type function in which the applicant lacks intersystem communication, if direct mobile-to-mobile does not exist.*
- *Five (5) points for each radio service with whom the applicant lacks direct mobile-to-mobile communications.*

Applications will be processed in the most expeditious manner possible by the RPC. After Region 52 approval, the applications will be sent to the coordinator requested by the applicant. All documentation required by the designated coordinator selected in this process will be available through the CAPRAD system. Subsequent to coordination approval the FCC will grant the license(s) to the applicant (see Appendix N flowchart).

12.0 Process for Handling Unformed Regions

The Region 52 RPC recommends that all regions use the following pre-planning methodology to facilitate coordination with adjacent Regions. This procedure will provide a spectrum allotment for adjacent Regions that do not immediately form a Committee.

Counties or other geographic subdivisions within 75 miles of the Regional border need to share spectrum with the adjacent region(s). This sharing is inherent in the CAPRAD Packing Program, as it views all counties nationwide as separate entities while ignoring state borders. With all criteria being equal, this ensures all counties are provided sufficient spectrum in accordance with their surrounding counties. The appropriate ratio of channels will be allotted to counties in adjacent regions based upon each county's population. A 25 kHz building block will be used to distribute spectrum between the regions. A description of the demographics of the affected border areas will also be included. The requirements for adjacent region concurrence will require a waiver if the adjacent region has not yet formed.

The Region filing the Plan must use the pre-planning procedure outlined above. The waiver request must be filed concurrently with the Plan and contained in the cover letter.

13.0 Future Planning

13.1 Database Maintenance

The CAPRAD pre-coordination database has developed channel allotments for each county within Region 52 using criteria such as current population, 2010 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. Region 52 will continue to use the CAPRAD pre-coordination database for other 700 MHz spectrum as it becomes available.

13.2 Inter-Regional Dispute Resolution Process

In the event that a dispute arises between Region 52 and an adjacent Region or Regions, regarding spectrum allocations or implementation, which cannot be resolved within 60 days, the parties to the dispute will request a hearing by the National Regional Planning Oversight Committee.

All six adjacent Regions have signed the Region 52 dispute resolution. See Appendix E for details and Inter-Regional Dispute Resolution Agreements signed by the adjacent Regions.

14.0 Plan Amendments

Region 52 will maintain a website on which all plan documents, meetings announcements, meeting minutes, and other pertinent information will be maintained. At the present, this website can be found at: www.thprpc.org.

It is anticipated that two types of plan modifications will be made in the future: administrative changes that do not alter spectrum allotments in the plan, and changes that do alter the spectrum allotments in the plan. Each of these types of changes will be handled by a different process.

A. From time to time the Committee may need to make changes to the plan that are purely administrative in nature, and that do not alter any spectrum allotments.
   Examples of such changes include changes in officer positions, changes in meetings schedules, changes in application processing procedures, etc.

   Proposed administrative changes to the plan will be presented to the Committee at a properly scheduled meeting, and adopted at that meeting, if possible. Upon a vote by the majority of members in attendance at that meeting, consideration of the change may be held over for subsequent meetings to allow further information to be collected or further debate to occur. Once the proposed change is adopted by the Committee, the amended plan will be filed with the FCC for formal ratification.

Copies will also be provided to the chairmen of the adjoining regions so they are aware of the administrative changes.

B. From time to time the Committee may need to make changes to the plan that alters the allotment of channels. Examples of such changes include situations in which one county-like area has fully exhausted their initial allotment and needs additional channels to meet their demonstrated need, while other county-like areas have demonstrated no interest in planning or funding the use of their allotted channels.

   Proposed changes of this nature will be presented to the Committee at a properly scheduled meeting, and will be considered at that meeting and one subsequent meeting. Once the proposed change is approved by the Committee, notification of the proposed change will be sent to the chairmen of the adjacent regions for their concurrence. The adjoining regions will be requested to provide their comments or consent within 45 calendar days of their receipt of the notification.

   Once adjacent regions' comments or consent is received, or the 45 day period has expired, the Committee will again consider and vote on the proposed change at a properly scheduled meeting. Upon adoption of the change by the Committee, the amended plan will be submitted to the FCC for ratification.

15.0 Certification

I hereby certify that all planning committee meetings, including subcommittee or executive committee meetings were open to the public. A summary of the deliberations of the Committee pursuant to adopting this Plan can be found in Appendix F, Meeting attendance, agendas and other events.

John Kiehl
January 15, 2016
Chairperson, Region 52

Appendix A - By-laws

THE BYLAWS OF REGION 52 700 MHZ REGIONAL PLANNING COMMITTEE

ARTICLE 1
NAME & PURPOSE

1.1 Name and purpose. The name of this Region shall be Region 52 700 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.

2.1 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.

Voting Members. Voting members shall consist of one representative from any single agency engaged in public safety eligible to hold a license under 47 CFR 90.20, 47 CFR 90.523 or 47 CFR 2.103. Except that a single agency shall be allowed no more than one vote for each distinct eligibility category (e.g. police, fire, EMS, highway) within the agency's organization or political jurisdiction. In voting on any issue the individual must identify himself/herself and the agency and eligibility category which he or she represents. Voting members may not vote on issues involving their entity.

Non-Voting Members. Non-voting members are all others interested in furthering the goals of public safety communications.

2.2 Tenure. In general, each member shall hold membership from the date of acceptance until resignation or removal.

2.3 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.

2.4 Suspension and Removal. A representative 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.

2.5 Resignation. A member may resign by delivering written resignation to the chairman, vice-chairman, treasurer or secretary of the Regional Committee or to a meeting of the members.

2.6 Annual Meetings. The annual meeting of the members shall be held as called by the Regional Chair with 21-days' notice to the membership.

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.

2.7 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 chairman or by the vice-chairman, or in case of death, absence, incapacity, by any other officer or, upon written application of two or more members.

2.8 Call and Notice.

A. Annual meetings. Reasonable notice of the time and place of special meetings of the members 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 twenty one days or by e-mail/facsimile at least fourteen days before the meeting, addressed to such member at this or her usual or last known business address, or, to give notice to such member in person or by telephone at least three days before the meeting. (State notification requirements may differ.)

2.9 Quorum. At any meeting of the members, a majority of the officers and {either a minimum number of members or a minimum percentage of members} of the voting members shall constitute a quorum. 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.

2.10 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.

2.11 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.

2.12 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.

2.13 Voting on One's Own Application. At no time can a voting member vote on his/her application.

2.14 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

3.1 Number and qualification. The officers of the Regional Committee shall be a chairman, vice-chairman, treasurer, secretary and such other officers, if any, as the voting members may determine. All officers must be voting members of the Regional Committee.

3.2 Election. The officers shall be elected by the voting members at their first meeting and, thereafter, at the annual meeting of the members.

3.3 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.

3.4 Chairman and Vice Chairman. The chairman 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 chairman shall preside at all meetings of the Regional Committee.

The Vice Chairman, if any, shall have such duties and powers as the voting members shall determine. The vice-chairman shall have and may exercise all the powers and duties of the chairman during the absence of the chairman or in the event of his or her inability to act.

3.5 Treasurer. The treasurer shall be the chief financial officer and the chief accounting officer of the Regional Committee. The treasurer shall be in charge of its financial affairs, funds, and valuable papers and shall keep full and accurate records thereof.

3.6 Secretary. The secretary 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 is absent from any meeting of members, a temporary secretary chosen at the meeting shall exercise the duties of the secretary at the meeting.

3.7 Suspension or Removal. An officer may be suspended with cause by vote of a majority of the voting members.

3.8 Resignation. An officer may resign by delivering his or her written resignation to the chairman, vice-chairman, treasurer, or secretary 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.

3.9 Vacancies. If the office 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 chairman, vice chairman, treasurer and clerk 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

These bylaws may be altered, amended or repealed in whole or in part by vote. The voting members 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

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

The Conduct of Regional Meetings including without limitation, debate and voting, 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 - 700 MHz Regional Planning Committee Membership List

The table below lists the agencies and organizations in Region 52 that have been invited to serve on and/or participate in the Region 52 RPC meetings. This list will be updated in advance of each RPC meeting.

Invited Local Public Safety Organizations and Agencies

First	Last	Title	Organization	County	COG Region
Kiehl	John	RPC Chair; PRPC	Panhandle Regional Planning Commission	Potter	PRPC
Brown	Shane	RPC Secretary / Treasurer;	Panhandle Regional Planning Commission	Potter	PRPC
Bland	Michael	Director of Homeland Security	Nortex Regional Planning Commission	Wichita	Nortex
Corder	David	Homeland Security Mgr	South Plains Association of Governments	Lubbock	SPAG
Williams Beesinger	Staci	County Sheriff	Archer County Sheriff's Office	Archer	Nortex
Elliott	Bob	County Sheriff	Baylor County Sheriff's Office	Baylor	Nortex
Lemons, Jr	K R "Kenny"	County Sheriff	Clay County Sheriff's Office	Clay	Nortex
Brown	Mike	County Sheriff	Foard County Sheriff's Office	Foard	Nortex
Nelson	Mance	County Sheriff	Hardeman County Sheriff's Office	Hardeman	Nortex
Mayo	Melvin F.	County Sheriff	Jack County Sheriff's Office	Jack	Nortex
Cunningham	Paul	County Sheriff	Montague County Sheriff's Office	Montague	Nortex
Wells	Bryan	County Sheriff	Young County Sheriff's Office	Young	Nortex
Duke	David	County Sheriff	Wichita County Sheriff's Office	Wichita	Nortex
Lee	Larry W.	County Sheriff	Wilbarger County Sheriff's Office	Wilbarger	Nortex
Beesinger	Gary W.	County Judge	Archer County Judge's Office	Archer	Nortex
Rogers	Linda	County Judge	Baylor County Judge's Office	Baylor	Nortex

Invited Local Public Safety Organizations and Agencies

First	Last	Title	Organization	County	COG Region
Liggett	Kenneth	County Judge	Clay County Judge's Office	Clay	Nortex
Christopher	Mark	County Judge	Foard County Judge's Office	Foard	Nortex
Ingram	Ronnie	County Judge	Hardeman County Judge's Office	Hardeman	Nortex
Davenport	Mitchell G.	County Judge	Jack County Judge's Office	Jack	Nortex
Sappington	Tommie	County Judge	Montague County Judge's Office	Montague	Nortex
Bullock	John C.	County Judge	Young County Judge's Office	Young	Nortex
Gossom, Jr	Woodrow "Woody"	County Judge	Wichita County Judge's Office	Wichita	Nortex
Tyra	Greg	County Judge	Wilbarger County Judge's Office	Wilbarger	Nortex
Wills	Richard	County Sheriff	Bailey County Sheriff's Office	Bailey	SPAG
Weber	Raymond	County Sheriff	Cochran County Sheriff's Office	Cochran	SPAG
Villanueva	Ethan R.	County Sheriff	Crosby County Sheriff's Office	Crosby	SPAG
Land	Jimmie	County Sheriff	Dickens County Sheriff's Office	Dickens	SPAG
Raissez	Paul	County Sheriff	Floyd County Sheriff's Office	Floyd	SPAG
Morgan	Terry L.	County Sheriff	Garza County Sheriff's Office	Garza	SPAG
Mull	David Brett	County Sheriff	Hale County Sheriff's Office	Hale	SPAG
Cheek, Jr	Ralph C.	County Sheriff	Hockley County Sheriff's Office	Hockley	SPAG
Elliott	Gilbert "Cotton"	County Sheriff	King County Sheriff's Office	King	SPAG
Maddox	Gary	County Sheriff	Lamb County Sheriff's Office	Lamb	SPAG
Rowe	Kelly S.	County Sheriff	Lubbock County Sheriff's Office	Lubbock	SPAG
Franklin	Jerry D.	County Sheriff	Lynn County Sheriff's Office	Lynn	SPAG
Spence	Christopher O.	County Sheriff	Motley County Sheriff's Office	Motley	SPAG

Invited Local Public Safety Organizations and Agencies

First	Last	Title	Organization	County	COG Region
Gilbreath	Larry	County Sheriff	Terry County Sheriff's Office	Terry	SPAG
Corzine	Donald L.	County Sheriff	Yoakum County Sheriff's Office	Yoakum	SPAG
Harrison	Sherri	County Judge	Bailey County Judge's Office	Bailey	SPAG
St. Clair	James	County Judge	Cochran County Judge's Office	Cochran	SPAG
Wigley	David	County Judge	Crosby County Judge's Office	Crosby	SPAG
Arnold	Lesa	County Judge	Dickens County Judge's Office	Dickens	SPAG
Golightly	Penny	County Judge	Floyd County Judge's Office	Floyd	SPAG
Norman	Lee	County Judge	Garza County Judge's Office	Garza	SPAG
Dodson	Dwain	County Judge	Hale County Judge's Office	Hale	SPAG
Sprowls	Larry	County Judge	Hockley County Judge's Office	Hockley	SPAG
Daniel	Duane	County Judge	King County Judge's Office	King	SPAG
DeLoach	James Michael	County Judge	Lamb County Judge's Office	Lamb	SPAG
Head	Tom	County Judge	Lubbock County Judge's Office	Lubbock	SPAG
Franklin	H. G.	County Judge	Lynn County Judge's Office	Lynn	SPAG
Meador	James B.	County Judge	Motley County Judge's Office	Motley	SPAG
Wagner	Jackie D.	County Judge	Terry County Judge's Office	Terry	SPAG
Barron	Jim	County Judge	Yoakum County Judge's Office	Yoakum	SPAG
Walker	J.R.	County Sheriff	Armstrong County Sheriff's Office	Armstrong	PRPC
Davis	Garrett	County Sheriff	Briscoe County Sheriff's Office	Briscoe	PRPC
Terry	Tam	County Sheriff	Carson County Sheriff's Office	Carson	PRPC
Rivera	Salvador	County Sheriff	Castro County Sheriff's Office	Castro	PRPC

Invited Local Public Safety Organizations and Agencies

First	Last	Title	Organization	County	COG Region
Pigg	Michael	County Sheriff	Childress County Sheriff's Office	Childress	PRPC
Allen	Jerry	County Sheriff	Collingsworth Co Sheriff's Office	Collingsworth	PRPC
Scott	Bruce	County Sheriff	Dallam County Sheriff's Office	Dallam	PRPC
Butler	J. Dale	County Sheriff	Deaf Smith County Sheriff's Office	Deaf Smith	PRPC
Blackburn	Charles	County Sheriff	Donley County Sheriff's Office	Donley	PRPC
Copeland	Don	County Sheriff	Gray County Sheriff's Office	Gray	PRPC
Heck	Tom	County Sheriff	Hall County Sheriff's Office	Hall	PRPC
Glass	Tim	County Sheriff	Hansford County Sheriff's Office	Hansford	PRPC
Scott	Franky	County Sheriff	Hartley County Sheriff's Office	Hartley	PRPC
Burroughs	Morse E.	County Sheriff	Hemphill County Sheriff's Office	Hemphill	PRPC
Rowh	Guy	County Sheriff	Hutchinson County Sheriff's Office	Hutchinson	PRPC
Robertson	James	County Sheriff	Lipscomb County Sheriff's Office	Lipscomb	PRPC
DeArmond	J.E.	County Sheriff	Moore County Sheriff's Office	Moore	PRPC
Bouchard	Terry	County Sheriff	Ochiltree County Sheriff's Office	Ochiltree	PRPC
Medlin	David	County Sheriff	Oldham County Sheriff's Office	Oldham	PRPC
Geries	Randy	County Sheriff	Parmer County Sheriff's Office	Parmer	PRPC
Thomas	Brian	County Sheriff	Potter County Sheriff's Office	Potter	PRPC
Richardson	Joel	County Sheriff	Randall County Sheriff's Office	Randall	PRPC
Miller	Dana	County Sheriff	Roberts County Sheriff's Office	Roberts	PRPC
Powell	Joe	County Sheriff	Sherman County Sheriff's Office	Sherman	PRPC
Grubb	Cody	County Sheriff	Swisher County Sheriff's Office	Swisher	PRPC

Invited Local Public Safety Organizations and Agencies

First	Last	Title	Organization	County	COG Region
Finsterwald	Joel	County Sheriff	Wheeler County Sheriff's Office	Wheeler	PRPC
Reed	Hugh	County Judge	Armstrong County Judge's Office	Armstrong	PRPC
Nance	Wayne	County Judge	Briscoe County Judge's Office	Briscoe	PRPC
Powers	Lewis	County Judge	Carson County Judge's Office	Carson	PRPC
Gerber	Carroll	County Judge	Castro County Judge's Office	Castro	PRPC
Mayden	Jay	County Judge	Childress County Judge's Office	Childress	PRPC
James	John	County Judge	Collingsworth Co Judge's Office	Collingsworth	PRPC
Field	David	County Judge	Dallam County Judge's Office	Dallam	PRPC
Simons	Tom	County Judge	Deaf Smith County Judge's Office	Deaf Smith	PRPC
Hall	Jack	County Judge	Donley County Judge's Office	Donley	PRPC
Peet	Richard	County Judge	Gray County Judge's Office	Gray	PRPC
Powell	Ray	County Judge	Hall County Judge's Office	Hall	PRPC
Wilson	Benny	County Judge	Hansford County Judge's Office	Hansford	PRPC
Gordon	Ronnie	County Judge	Hartley County Judge's Office	Hartley	PRPC
Briant	George	County Judge	Hemphill County Judge's Office	Hemphill	PRPC
Blanks	Faye	County Judge	Hutchinson County Judge's Office	Hutchinson	PRPC
Smith	Willis	County Judge	Lipscomb County Judge's Office	Lipscomb	PRPC
Rhoades	Rowdy	County Judge	Moore County Judge's Office	Moore	PRPC
McKinley	Earl	County Judge	Ochiltree County Judge's Office	Ochiltree	PRPC
Allred	Don	County Judge	Oldham County Judge's Office	Oldham	PRPC
Ellis	Trey	County Judge	Parmer County Judge's Office	Parmer	PRPC

Invited Local Public Safety Organizations and Agencies

First	Last	Title	Organization	County	COG Region
Ware	Arthur	County Judge	Potter County Judge's Office	Potter	PRPC
Houdashell	Ernie	County Judge	Randall County Judge's Office	Randall	PRPC
Cook	Vernon	County Judge	Roberts County Judge's Office	Roberts	PRPC
Carter	Terri	County Judge	Sherman County Judge's Office	Sherman	PRPC
Keeter	Harold	County Judge	Swisher County Judge's Office	Swisher	PRPC
Hefley	Jerry	County Judge	Wheeler County Judge's Office	Wheeler	PRPC

Invited State & Federal Agencies

First	Last	Title	Organization	Level of Gov't
Abernathy	David	Assist. Chief	TFS	State
Barney	Mike	Technical Services Mgr	TxDPS	State
Boren	Gregory	Reg. Emergency Communications Coord.	FEMA	Federal
Born	Ken	Region VI Coord.	DHS - OEC	Federal
Campbell	Steven	Program Specialist	TxDPS	State
Castro	Sharlotte	CAM	TxDPS	State
Early	Todd	SWIC; Dep. Assist. Dir;	TxDPS	State
Ervin	Jason	Ops Mgr. Telecom	LCRA	State
Gilbert	Paul	Traffic Systems Specialist	TxDOT	State
Jarrett	Joe	Frequency Coord.	TxDPS	State
Jurrens	Karla	Deputy SWIC	TxDPS	State
Lakey	David	Commissioner	DSHS	State
Lange	Shawn	Telecom Specialist	TP&W	State
Peters	Joe	State Legislative Liaison	TxDPS	State
Sigalos	Louis	Dir. Southwest Reg. Operations & Emerg. Mgt.	FCC	Federal
Sutherland	Carol	Strategic Communications Planning	TxDPS	State

Appendix C - List of Counties/Cities in the 700 MHz Region

The counties and cities in Region 52 are listed by sub-regional COG planning regions below.

Panhandle Regional Planning Commission (PRPC) Texas State Planning Region 1

County	Incorporated Places in County
Armstrong County	Claude
Briscoe County	Quitaque, Silverton
Carson County	Groom, Panhandle, Skellytown, White Deer
Castro County	Dimmitt, Hart, Nazareth
Childress County	Childress
Collingsworth County	Dodson, Wellington
Dallam County	Dalhart (part), Texline
Deaf Smith County	Hereford
Donley County	Clarendon, Hedley, Howardwick
Gray County	Lefors, McLean, Pampa
Hall County	Estelline, Lakeview, Memphis, Turkey
Hansford County	Gruver, Spearman
Hartley County	Channing, Dalhart (part)
Hemphill County	Canadian
Hutchinson County	Borger, Fritch, Sanford, Stinnett
Lipscomb County	Booker, Darrouzett, Follett, Higgins
Moore County	Cactus, Dumas, Sunray
Ochiltree County	Perryton
Oldham County	Adrian, Vega
Parmer County	Bovina, Farwell, Friona
Potter County	Amarillo (part), Bishop Hills
Randall County	Amarillo (part), Canyon, Lake Tanglewood, Palisades, Happy (part)
Roberts County	Miami
Sherman County	Stratford, Texhoma
Swisher County	Happy (part), Kress, Tulia
Wheeler County	Mobeetie, Shamrock, Wheeler

South Plains Association of Governments (SPAG) Texas State Planning Region 2

County	Incorporated Places in County
Bailey County	Muleshoe
Cochran County	Morton, Whiteface
Crosby County	Crosbyton, Lorenzo, Ralls
Dickens County	Dickens, Spurs

County	Incorporated Places in County
Floyd County	Floydada, Lockney
Garza County	Post
Hale County	Abernathy, Hale Center, Petersburg, Plainview
Hockley County	Anton, Opdyke West, Levelland, Smyer, Sundown, Ropesville
King County	No incorporated places
Lamb County	Amherst, Earth, Littlefield, Olton, Springlake, Sudan
Lubbock County	Lubbock, New Deal, Ransom Canyon, Shallowater, Wolfforth
Lynn County	New Home, O'Donnell, Tahoka, Wilson
Motley County	Matador, Roaring Springs
Terry County	Brownfield, Meadow, Wellman
Yoakum County	Denver City, Plains

Nortex Regional Planning Commission (NORTEX) Texas State Planning Region 3

County	Incorporated Places in County
Archer County	Archer City, Holliday, Lakeside City, Megargel, Scotland, Windthorst, Wichita Falls (part)
Baylor County	Seymour
Clay County	Bellevue, Byers, Dean, Henrietta, Jolly, Petrolia,
Cottle County	Paducah
Foard County	Crowell
Hardeman County	Chillicothe, Quanah
Jack County	Bryson, Jacksboro
Montague County	Bowie, Nocona, St. Jo
Wichita County	Burkburnett, Electra, Iowa Park, Wichita Falls (part)
Wilbarger County	Vernon
Young County	Graham, Newcastle, Olney

There are a total of 52 counties and 134 incorporated places located in Region 52.

Appendix D - Sample Cover Letter to Adjacent Regional Chairs to obtain 700 MHz plan approval

Mr. Emery L. Reynolds
Region 7 RPC Chair
Region 7 - Colorado
5002 S Newton Street
Littleton, CO 80123-1712

RE: Region 52 700 MHZ Plan for Review

Dear Chairman Reynolds,

The Region 52 Regional Planning Committee recently completed a draft of the Region 52 700 MHz plan. Per FCC requirements the document is now being sent to our adjacent regions for review and consideration of concurrence.

Enclosed you'll find three documents; they are:

1. A draft copy of the Region 52 700 MHz Plan
2. A draft Letter of Concurrence by Region 7 - Colorado
3. An Inter-Regional Coordination Agreement

As the chief representative for Region 7, if you believe that as written, the plan comports with and does not inhibit Region 7's 700 MHz planning goals, please sign and return Items 2 and 3 listed above to me. I'm also enclosing a pre-paid, self-addressed envelope for your convenience.

Region 52 hopes to submit its 700 MHz Plan to the FCC in early May. If at all possible, I'd ask that you return these two items to me by April 30, 2013. If you're interested, Region 52 has established its website presence at: www.theprpc.org.

Should you have questions or need more information, please contact Shane Brown, Region 52 Secretary/Treasurer or me at (806) 372-3381. In advance, thank you for the timely return of the requested documents.

Sincerely,

John Kiehl
Region 52 RPC Chairman
PRPC
PO Box 9257
Amarillo, TX 79105
Office: 806-372-3381
Email: jkiehl@theprpc.org

Appendix E - Adjacent Region Concurrence Notice

Region 7 Letter of Concurrence

Colorado RPC Committees

FCC Region 7 700 MHz Regional Planning Committee

Letter of Concurrence
May 15, 2013

John Kiehl, Chairperson
Region 52 Regional Planning Committee
P.O. Box 9257
Amarillo, Texas 79015

RE: Region 7 Letter of Concurrence with Region 52 700 MHz Plan

Dear Chairperson Kiehl,

The Region 7 Regional 700 MHz Planning Committee is in receipt of Region 52's Regional 700 MHz Plan. The purpose of this letter is to inform you that the Plan Document has been reviewed and on behalf of Region 7, We find that the Plan Document is compliant with the 700 MHz planning guidance and that it does not conflict with the Region 7 700 MHz Plan.

This letter serves as Region 7's official written concurrence with Region 52's 700 MHz Regional Plan. Thank you.

Sincerely,

Edward S. Boyer

Edward S. Boyer, Chair
FCC Region 7 (Colorado)
700 MHz Regional Planning Committee
State of Colorado
601 E. 18th Ave., Suite 250
Denver, Colorado 80203
T (303) 866-2244, M (303) 881-2480

Region 16 Letter of Concurrence

Letter of Concurrence

Region 50 700 MHZ Plan

Date: 04/30/2013

John Kiehl, Chairman
Region 52 Regional Planning Committee
PO Box 9257
Amarillo, TX 79015

RE: Region 16 Letter of Concurrence with the Region 52 700 MHZ Plan

Dear Chairman Kiehl,

The Region 16 Regional 700 MHz Planning Committee is in receipt of Region 52's Regional 700 MHz Plan. The purpose of this letter is to inform you that the document has been reviewed and on behalf of Region 16, I find that the document is compliant with the 700 MHz planning guidance and that it does not conflict with the Region 16 700 MHz Plan.

This letter serves as Region 16's official written concurrence with Region 52's 700 MHz Regional Plan. Thank you.

Sincerely,

Scott Ekberg, Chair
Region 16 - Kansas
2800 SW Topeka Blvd
Topeka, KS 66611
Email: scott.a.ekberg.nfg@mail.mil
Phone: TBD
Fax:

Region 29 Letter of Concurrence

Letter of Concurrence

Region 50 700 MHZ Plan

Date: July 10, 2013

John Kiehl, Chairman
Region 52 Regional Planning Committee
PO Box 9257
Amarillo, TX 79015

RE: Region 29 Letter of Concurrence with the Region 52 700 MHZ Plan

Dear Chairman Kiehl,

The Region 29 Regional 700 MHz Planning Committee is in receipt of Region 52's Regional 700 MHz Plan. The purpose of this letter is to inform you that the document has been reviewed and on behalf of Region 29, I find that the document is compliant with the 700 MHz planning guidance and that it does not conflict with the Region 29 700 MHz Plan.

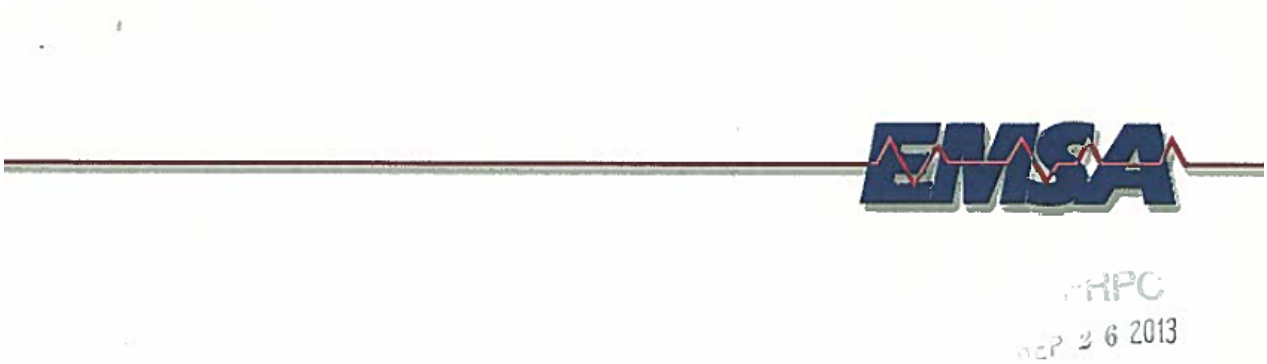
This letter serves as Region 29's official written concurrence with Region 52's 700 MHz Regional Plan. Thank you.

Sincerely,

Jacque Miller

Jacque Miller, Chair
Region 29 – New Mexico
PO Box 22550
Santa Fe, NM 87502-2550
Email: Jacque.Miller@state.nm.us
Phone: 505 476-3766
Fax:

Region 34 Letter of Concurrence



RPC
SEP 26 2013

September 17, 2013

John Kiehl
Region 52 Chair
PRPC Regional Services Director
415 West Eighth Avenue
P. O. Box 9257
Amarillo, TX 79105

RE : Region 52's 700 MHz Regional Plan Amendment

Dear Mr. Kiehl:

This office is in receipt of Region 52's 700 MHz Plan. Region 34 has reviewed and is in concurrence with and approves Region 52's 700 MHz Plan.

Respectfully,

Stephen Williamson,
Chairman, Region 34

cc: Kevin Shoemaker
Gene Thaxton

Region 40 Letter of Concurrence

Region 40 700 MHz Regional Review Committee
Central and North East Texas
Wanda McCarley, Chairman, 817-820-1185 , WandaM@tc911.org.

April 12, 2013

John Kiehl, Regional Services Director
Panhandle Regional Planning Commission
415 SW 8th Ave.
Amarillo, TX 79101-2215
Phone: 806-372-3381
Fax: 806-373-3268
Email: jkeihl@prpc.cog.tx.us
Region 52 RPC Chairman
jkiehl@theprpc.org

Dear Mr. Kiehl

By way of this letter, I am forwarding the Region 40, Regional Review Committee's recommendation to approve Region 52's 700 MHz Communications Plan. The Committee has reviewed the Plan and finds it complete and compliant. I wish you success as you implement the Plan and provide its benefits to the public safety communities throughout the Panhandle Regional Planning Commission.

Should you have questions about this matter, please contact me at Wandam@tc911.org. or Fred Keithley at fkeithley@nctcog.org.

Sincerely,

Wanda McCarley
Region 40 Chair

Cc:

Region 50 Letter of Concurrence

Letter of Concurrence
Region 50 700 MHZ Plan

Date: 6/17/2013

John Kiehl, Chairman
Region 52 Regional Planning Committee
PO Box 9257
Amarillo, TX 79015

RE: Region 50 Letter of Concurrence with the Region 52 700 MHZ Plan

Dear Chairman Kiehl,

The Region 50 Regional 700 MHz Planning Committee is in receipt of Region 52's Regional 700 MHz Plan. The purpose of this letter is to inform you that the document has been reviewed and on behalf of Region 50, I find that the document is compliant with the 700 MHz planning guidance and that it does not conflict with the Region 50 700 MHz Plan.

This letter serves as Region 50's official written concurrence with Region 52's 700 MHz Regional Plan. Thank you.

Sincerely,

Frank Mendez, Chair
Region 50 - Texas - El Paso
8600 Montana, Suite C
El Paso, TX 79925
Email: mendezf@elpasotexas.gov
Phone: 915-771-1058
Fax:

Appendix F - Regional Planning Committee Meeting Minutes

Meeting Copy

REGION 52 MEETING AGENDA

CONVENING MEETING JULY 30, 2003

AGENDA

1. Introduction.
2. Review the status of the FCC Rules for the 700 Mhz. Band.
3. Review the work to date of the Public Safety National Coordinating Committee.
4. Establish a Regional Planning Committee and procedural rules.
   A. Appoint a temporary Secretary.
   B. Nominations for Chair and Vice Chair.
   C. Elections.
   D. Appointment of Secretary, Treasurer and Standing Committee Chairs.
   E. Adoption of By-Laws.
   F. Review plan elements.
   G. Form work groups to develop the Regional Plan.
   H. Establish future meetings and locations.
5. Discuss any miscellaneous business of the Region
6. Adjourn

Inter op Sub Committee
Implementation Sub c
Planning & Technology

Ken Yoder APCO Texas Freq. Coordinator

Robert Pletcher RF Unit Texas DPS
Program Director
chair Texas ~~Interoperability~~ Interagency Radio Work Group

Ted Montgomery - Moore Co Sheriff

Region 52 Regional Planning Committee
Minutes
February 15, 2013

A meeting of the Region 52 Regional Planning Committee (RPC) was held on Friday, February 15, 2013 at 10:00 a.m. The meeting was conducted via "webex" and hosted by the Texas Department of Public Safety.

Members Present:

Vernon Cook, Roberts County; Shane Brown, PRPC; Roger Haney, Potter County; David Gaines, Ken Daughtry, Wheeler County; Randy Geries, Parmer County; Mike Bland, Nortex RPC; Lee Bourgoin, Wichita County; Reeves Easley McPherson, PRPC; Dax Marvel, Sheppard Air Force Base; Kelly DeSautel, Archer County; Bill Price, Wichita County; PJ Lemons, Panhandle RAC; Mitchell Davenport, Jack County; Blaine Bertrand, Randall County; John Kiehl, PRPC

TxDPS Representatives Present:

Todd Early, Mike Barney, Steven Campbell, Carol Sutherland

FEMA Region VI Representatives Present:

Ken Born

John Kiehl, Interim Region 52 Chairman presided; the meeting was called to order at 10:03 a.m.

ITEM 3: Texas Reports: Todd Early, TX SWIC

To avoid conflicts with another meeting, this item was moved to the front of the agenda so that Mr. Todd Early, Texas Statewide Interoperability Coordinator (SWIC) could provide an overview on the following interoperable communications-related matters:

- Operation Texas Talks
- Texas Public Safety Broadband Program

The next meeting of the Statewide Communications Interoperability Plan Committee will be held on April 9-10.

ITEM 1: Call to Order and Roll Call

The Region 52 RPC members present introduced themselves

ITEM 2: Welcoming Remarks

Kiehl welcomed the Region 52 RPC members present and thanked them for taking time to participate in today's meeting

ITEM 4: Update group on RPC previous meeting and mission

Kiehl presented a brief historical background on the need for the development of the Region 52 700 MHz plan and on how the planning process had progressed to the point it's at today.

ITEM 5: Region 52 Election of Officers:

Elections were held for the Region 52 RPC officer positions.

a. Chairman

Kiehl called for nominations for the position of RPC Chairman.

Motion: Nominate John Kiehl
Motion Made by: Vernon Cook
Seconded by: Ken Daughtry
Motion: Mike Bland
Motion Made by: Bill Price
Seconded by: Lee Bourgoin

There being no other nominations, nominations were closed.

Kiehl polled the Region 52 members present; by majority voice vote, John Kiehl was elected Region 52 Chairman.

b. Vice-Chairman

Kiehl the called for nominations for the position of RPC Vice-Chairman

Motion: Nominate Mike Bland by acclamation
Motion Made by: Vernon Cook
Seconded by: Ken Daughtry

There being no other nominations, nominations were closed.

Kiehl called for a vote; there were no dissenting votes. Mike Bland was unanimously elected Region 52 Vice-Chairman

c. Secretary/Treasurer

Kiehl the called for nominations for the position of RPC Secretary/Treasurer

Motion: Nominate Shane Brown
Motion Made by: Ken Daughtry
Seconded by: Vernon Cook

There being no other nominations, nominations were closed.

Kiehl called for a vote; there were no dissenting votes. Shane Brown was unanimously elected Region 52 Secretary/Treasurer

ITEM 6: Discussion of Region 52 Plan

Kiehl noted that the link to the latest draft of the Region 52 MHz plan had been posted on the Region 52 website published in the meeting invitation.

He explained that the document provided the procedural structure by which the Region 52 RPC would operate and included the 700 MHz frequency assignments for the public safety agencies in Region 52. He asked the Region 52 members present if there were any sections of the draft that might be a cause of concern or controversy. No concerns were voiced.

a. Approval of Plan to send to adjacent regions for review and concurrence

Kiehl called for a motion that would allow the draft Region 52 700 Mhz plan to be distributed to adjacent regions for review and consideration of concurrence.

Motion: Approve the draft Region 52 700 MHz plan for distribution to adjacent regions for review and concurrence

Motion Made by: Vernon Cook
Seconded by: Ken Daughtry

Kiehl called for a vote; there were not dissenting votes the draft Region 52 700 MHz plan will now be distributed to the adjacent regions within 75 miles of Region 52 for review and consideration of concurrence.

For the record, the Region 52 MHz plan will be distributed to the following adjacent regions:

Region 7 -	Edward Boyer, Chairperson
Region 29 -	Laura Phillips, Chairperson
Region 16 –	Jason R. Moses, Chairperson
Region 34 -	Stephen Williamson, Chairperson
Region 40 -	Wanda McCarley, Chairperson
Region 50 -	Frank Mendez, Chairperson

ITEM 7: Public Comment

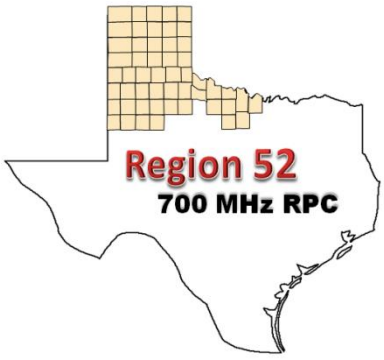
Ken Daughtry requested that the Region 52 website be re-published. There were no other comments.

ITEM 8: Next Meeting Date

Kiehl noted that the next meeting would be held after the adjacent region concurrence letters had been obtained. The process may take several months. The next meeting date is left at TBD.

ITEM 9: Adjournment

There being no further business to discuss, Vernon Cook made the motion to adjourn; motion seconded by Ken Daughtry. The meeting was adjourned at 10:58 a.m.



M E M O R A N D U M

DATE: January 15, 2016

TO: Elected and Public Safety Officials within the 52 county area designated by the FCC as Region 52

FROM: John Kiehl, Chairman, Region 52 Regional Planning Committee (RPC)

SUBJECT: March 31, 2016 Meeting of the Region 52 RPC

I'm writing to invite you to a webex meeting that will be held on March 31, 2016, beginning at 10:00 am. The meeting link and registration information is in the email message accompanying this memo. The purpose of this meeting is to consider the final acceptance of the draft Region 52 700 MHz Plan. If you're getting this memo it's because your jurisdiction is located within the Region 52 planning boundaries and as such, you are a stakeholder in this plan.

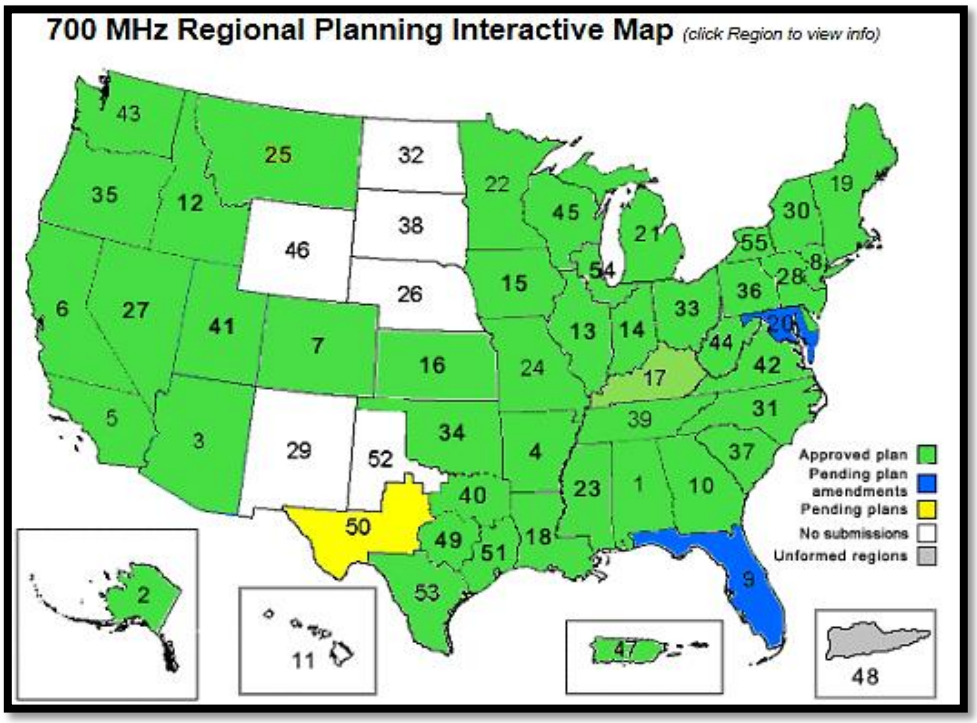
In 1998 the Federal Communications Commission (FCC) established a requirement that each region in the country had to develop a 700 MHz Plan. 55 planning regions were designated nationwide. In our case, Region 52 consists of the counties that lie within the PRPC, SPAG and Nortex planning regions. The deadline for plan submission was January 31, 2008. To date, 49 of the 55 regions have either completed or submitted their plans to the FCC for approval.

During the last RPC meeting, held in February 2013, the committee conditionally approved the draft Region 52 700 plan. That allowed us to seek concurrence of the plan from the adjacent planning areas located within 75 miles of the Region 52 planning area. The last of those concurrence letters was received early this year. The plan is now ready to be sent to the FCC for consideration of final approval.

However, as was committed to you at the last meeting, I stated that after the concurrence letters were received and before the plan was submitted to the FCC, the Region 52 RPC would be given the opportunity to finally approve the plan. That is the primary purpose of this upcoming meeting. The final draft, along with the concurrence letters from our adjacent planning regions is available for your review on:

http://www.prpc.cog.tx.us/Programs/EmergencyPreparedness/region52.html.

There is a certain need for speed in getting this plan finally approved by the FCC; if for no other reason than to simply conclude the planning process. As can be seen with the map on the following page, the Region 52 plan is the only plan in Texas that has yet to be submitted and is one of an only handful of plans in the nation that has not yet been approved by the FCC. That may have something with the fact that we're now 8 years past the submission deadline set by the agency.



Source: http://publicsafety.fcc.gov/pshs/public-safety-spectrum/700-MHz/rpc-map.htm

If you'd like more information about the 700 MHz Regional Planning process, I suggest you visit the FCC website at:

http://transition.fcc.gov/pshs/public-safety-spectrum/700-MHz/regional-planning.html

Attached you'll find an agenda for this upcoming meeting. You're also receiving a copy of the minutes from the last RPC meeting. If you have any difficulty in locating the draft plan or need any other assistance, please contact Shane Brown, PRPC's Regional Emergency Communications & Preparedness Programs Manager (and Region 52 RPC Secretary) or me at (806) 372-3381. We're also working with the COG homeland security staff in your region to facilitate this meeting, so you can also contact Mike Bland (and Region 52 Vice Chairman), with the NORTEX COG, or David Corder, with the SPAG COG, for further information.

The FCC is very big on encouraging participation in these RPC meetings. If you know of other agencies or individuals within your jurisdiction that might have an interest in the plan and in participating in this meeting, please feel free to pass this email and memo along to them. Thank you.

REGION 52 REGIONAL PLANNING COMMITTEE

March 31, 2016 – 10:00 AM

Webex Meeting Hosted by the Texas Department of Public Safety

Meeting Agenda

Item 1: Call to Order and Roll Call

Item 2: Welcoming Remarks

Item 3: Consideration of the Minutes from the Feb. 13 Region 52 RPC Meeting

Item 4: Report on what has transpired since the last Region 52 RPC Meeting

Item 6: Consideration of the Region 52 Plan

a. Approval of Plan to send the FCC for consideration of final approval

Item 7: Public comment

Item 8: Handling review comments from the FCC

Item 9: Next meeting date

Item 10: Adjournment

Appendix G - Interoperability Channel MOU Template

The template below is found in the Texas Statewide Interoperability Channel Plan (TSICP) and is used to set out the understandings that will enable a jurisdiction/agency to utilize the 700 MHz interoperability channels administered by the State of Texas for emergency response purposes. The TSCIP can be found at:

https://www.txdps.state.tx.us/LawEnforcementSupport/communications/interop/documents/tsicpMOU.pdf

---

MEMORANDUM OF UNDERSTANDING
Texas Statewide Interoperability Channel Plan (TSICP)
Original issue, April 1, 2005

Texas Department of Public Safety

And

_____

(Federal Agency, State, Local Jurisdiction, or Emergency Service Organization)

Purpose

This Memorandum of Understanding (MOU) establishes permissions and guidelines for use of interoperability or mutual-aid radio channels by:

- Local government jurisdictions and their associated emergency response agencies;
- State agencies in Texas and their associated emergency response organizations;
- Federal agency local units in Texas and their associated emergency response organizations, and;
- Private sector emergency response organizations licensed or otherwise entitled to operate in the Public Safety Pool as defined in Federal Communication Commission (FCC) Rules, Part 90 (47CFR, subpart B, paragraphs 90.15-90.20).

It imposes certain protocols, procedures, and obligations upon jurisdictions hereby authorized to use state-licensed radio channels held by the Texas Department of Public Safety (TxDPS).

This agreement supersedes the MOU associated with the Immediate Radio Communications Interoperability Plan (IRCIP) of January, 2003.

Authority
Execution of this agreement by state and local entities is authorized by Texas Government Code, Chapter 791 (local governments), Chapter 771 (state agencies), and Texas Government Code Chapter 411.0105 (Public Safety Radio Communications Council). This MOU satisfies FCC Part 90 rules for extending license privileges to others by agreement.

Federal agencies are permitted access to interoperability channels as authorized by the NTIA Manual, 47 CFR, Parts 2.102(c), 2.103; and 7.12. Federal agencies may execute this MOU and shall adhere to the attached guidelines.

Applicability
This MOU authorizes the use of certain radio frequencies by emergency response organizations as defined by Department of Homeland Security (Office of Emergency Communications) and Texas Division of Emergency Management. Generally, this includes organizations in the following governmental disciplines:

Emergency Management	**Public Safety Communications**
Law Enforcement	**Public Health**
Fire Service	**Health Care**
Emergency Medical Services	**Hazardous Materials**
Public Works / Transportation	**Governmental Administration**

This MOU authorizes use of state-licensed frequencies for the purpose of coordination between emergency response agencies and resources. Such coordination may occur during interagency operations, en route travel, or on-incident communications in accordance with an Incident Communications Plan.

Background
The 77th Legislature, in an effort to provide for effective emergency radio communications by state agencies, called for an Interagency Radio Work Group (IRWG) to develop a state agency communications network. That group developed a preliminary plan that was accepted by the state IRWG and the Sheriffs' Association of Texas on March 27, 2001.

Subsequently, the IRWG determined that the state agency communications network should be expanded to include all public safety agencies in the state. This was accomplished by IRWG's development of the IRCIP of January, 2003.

In response to a FCC requirement for establishment of state/regional advisory committees, the Texas Statewide Interoperability Executive Committee (TSIEC) and the Texas Interoperable Communications Coalition (TxICC) were formally established as advisory committees to TxDPS.

The Texas Statewide Interoperability Channel Plan (TSICP), developed by TSIEC and TxICC and included in this MOU, provides essential guidance for interoperable radio communications using VHF, UHF, 700 MHz, and 800 MHz radio equipment for interagency coordination, en route travel, or on-incident communications.

Understandings

TxDPS will:

- Manage and maintain proper licenses for the use of the interoperability frequencies identified herein;
- Manage and maintain an accurate database of federal and state agencies and local government jurisdictions that have accepted and signed this MOU, and;
- Issue updates and revisions to the TSICP contained herein, upon request by the TSIEC, the TxICC, and the Director of the TxDPS.

Jurisdiction will:

- Participate in regional communications planning (generally arranged by a regional Council of Governments) that provides for regional radio communications interoperability;

- Manage use of the interoperability frequencies by its employees, ensuring compliance with the TSICP and federal/state/local laws, ordinances, and rules;

- Use the interoperability frequencies authorized hereby for their intended purpose of coordination between emergency response agencies and resources. Such coordination may occur during interagency operations, en route travel, or on-incident;

- Use the interoperability frequencies for operational and en route communications in accordance with local and regional policies and procedures;

- Use the interoperability frequencies for on-incident communications in accordance with the Incident Communications Plan established by the on-scene Incident Commander;

- Prioritize use of the interoperability frequencies:

    1. Emergency or urgent operation involving imminent danger to life or property;
    2. Disaster or extreme emergency operation requiring extensive interoperability and inter-agency communications;
    3. Special event, generally of a pre-planned nature;
    4. Joint training exercises, and
    5. Inter-agency and en route communications.

- Implement radio communications procedures consistent with the National Incident Management System (NIMS) and Incident Command System (ICS) including:
    - Use “plain language” without 10-codes or agency-specific codes/jargon;
    - Use the calling protocol: "Agency-Unit #, this is Agency-Unit #", rather than "Unit # to Unit #".

Examples: "***Bryan EMS 1605, this is Tyler Fire 2102***" **or** "***Incident Command, this is DPS 505*****"**

- Ensure that mobile, portable, and temporary base radios intended for use by agency leadership (officers) are configured with the appropriate in-band interoperability frequencies as found in the TSICP. This means that, as a minimum, the interoperable frequencies would be added to the day-to-day frequencies used by that entity.

- Ensure that interoperability calling channels are monitored at the Incident Command Post on major incidents requiring significant aid from agencies beyond routine local interoperability. Monitoring shall include one or more of the following:

  - **VCALL10**, analog VHF calling channel;
  - **UCALL40**, analog UHF calling channel;
  - **7CALL50**, digital P25 700 MHz calling Channel, and/or
  - **8CALL90**, analog national calling channel.

  Incident Command Post monitoring may be implemented using cross-band repeaters, communications operator console patching, or VHF/UHF/700/800 MHz fixed or mobile gateway.

The parties mutually agree:

- Jurisdiction and TxDPS agree that their mutual interests will be furthered by continued coordination between the jurisdiction and the TSIEC / Office of the Texas Statewide Interoperability Coordinator (SWIC).

- Jurisdiction and TxDPS agree that this Memorandum of Understanding may be cancelled at any time, by written notice to the other party, or by subsequent agreements.

- Only one MOU per Jurisdiction or Governing Body is required to cover the departments and/or sub-agencies of each jurisdiction, as long as each department or sub-agency is listed on an accompanying attachment.

The attached TSICP (Original Issue March 25, 2005) is incorporated into this MOU in its entirety. The TSICP may be revised by TSIEC and TxDPS from time to time, and revisions will be provided to Jurisdictions by TxDPS.
Should Jurisdiction elect to withdraw from this MOU because of TSICP revisions, notice shall be given by mail to:

Texas Department of Public Safety
Public Safety Communications Service
5805 N. Lamar Boulevard
Austin, TX 78752

Agreement

This Memorandum of Understanding was agreed to _____ day of _____, _____.

*[Please **complete, sign, scan, and then email <u>THIS</u> <u>PAGE</u> <u>ONLY</u>** as attached file to txswic@dps.texas.gov; NOTE: Each jurisdiction must individually sign this agreement – Example: an authorized representative of a city may sign for all public safety agencies in that city; a county may sign for volunteer fire departments (VFD) if the VFD is recognized in the county emergency management plan; however, a county cannot sign for all cities or other public safety agencies in the county that are not a part of county government since they are separate legal entities; a Council of Governments (COG) CANNOT sign for all jurisdictions within the COG, although it is recommended that COGs do execute this agreement; this document is an appendix to the SCIP, and compliance with the SCIP is required to be able to receive federal and state grant funds. All jurisdictions must, therefore, execute this MOU.]*

FOR JURISDICTION

Jurisdiction Name _____

Authorized Signature: _____

Print Name: _____

Title: _____

Jurisdiction Address: _____

_____

_____

Phone: _____ e-mail: _____

Number of mobile, portable, temporary base, and/or mobile relay radios to be operated under TxDPS licenses or MSAT Authorization:

	Mobile	**Portable**	**Temporary Base-Mobile Relay**
150 MHz	_____	_____	_____
450 MHz	_____	_____	_____
700 MHz	_____	_____	_____
800 MHz NPSPAC	_____	_____	_____
Mobile Satellite (MSAT)	_____	_____	_____

(This information is required by TxDPS as a condition of its licenses from the FCC.)

FOR TEXAS DEPARTMENT OF PUBLIC SAFETY

Authorized Signature: _____

Todd M. Early, Deputy Assistant Director
Public Safety Communications Service
Texas DPS Law Enforcement Support Division
P. O. Box 4087, MSC 0259, Austin, TX 78773
Phone: (512) 424-2121 Fax: (512) 424-2899
Todd.Early@dps.texas.gov

Appendix H - Region 52 Channel Allotments

The table below lists the channel allocations made in Region 52 by FCC channel.

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
13-14	12.50 KHz	799.081250 MHz	769.081250 MHz	Hockley Potter Wichita
15-16	12.50 KHz	799.093750 MHz	769.093750 MHz	Castro
17-18	12.50 KHz	799.106250 MHz	769.106250 MHz	Cottle Dallam Gray Lubbock
19-20	12.50 KHz	799.118750 MHz	769.118750 MHz	Archer Hansford Swisher
25-26	12.50 KHz	799.156250 MHz	769.156250 MHz	Hockley Motley Randall Sherman Wheeler
27-28	12.50 KHz	799.168750 MHz	769.168750 MHz	Hockley Motley Randall Sherman Wheeler
29-30	12.50 KHz	799.181250 MHz	799.181250 MHz	Ochiltree Wichita
31-32	12.50 KHz	799.193750 MHz	799.193750 MHz	Ochiltree Wichita
33-34	12.50 KHz	799.206250 MHz	769.206250 MHz	Collingsworth Floyd Potter

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
33-34	12.50 KHz	799.206250 MHz	769.206250 MHz	Potter
35-36	12.50 KHz	799.218750 MHz	799.218750 MHz	Collingsworth Floyd Potter Terry
41-42	12.50 KHz	799.256250 MHz	769.256250 MHz	Childress Jack Lamb Moore
43-44	12.50 KHz	799.268750 MHz	769.268750 MHz	Floyd Hemphill
45-46	12.50 KHz	799.281250 MHz	769.281250 MHz	Baylor Garza Randall Yoakum
47-48	12.50 KHz	799.293750 MHz	769.293750 MHz	Bailey Hall Hutchinson Montague
47-48	12.50 KHz	799.293750 MHz	769.293750 MHz	Bailey Hall Hutchinson Montague
49-50	12.50 KHz	799.306250 MHz	769.306250 MHz	Hale Wheeler Wilbarger
51-52	12.50 KHz	799.318750 MHz	769.318750 MHz	Lipscomb Parmer
53-54	12.50 KHz	799.331250 MHz	769.331250 MHz	Hockley Motley Potter

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
53-54	12.50 KHz	799.331250 MHz	769.331250 MHz	Young
55-56	12.50 KHz	799.343750 MHz	769.343750 MHz	Castro
57-58	2.50 KHz	799.356250 MHz	769.356250 MHz	Gray Lubbock
59-60	12.50 KHz	799.368750 MHz	769.368750 MHz	Hartley Ochiltree Swisher
65-66	12.50 KHz	799.406250 MHz	769.406250 MHz	Archer Donley King Lipscomb Lubbock Oldham
67-68	12.50 KHz	799.418750 MHz	769.418750 MHz	Archer Donley King Lipscomb Lubbock Oldham
69-70	12.50 KHz	799.431250 MHz	769.431250 MHz	Hardeman Hutchinson Parmer
71-72	12.50 KHz	799.443750 MHz	769.443750 MHz	Hardeman Hutchinson Parmer
73-74	12.50 KHz	799.456250 MHz	769.456250 MHz	Cochran Crosby Randall Young
75-76	12.50 KHz	799.468750 MHz	769.468750 MHz	Cochran Crosby

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
75-76	12.50 KHz	799.468750 MHz	769.468750 MHz	Randall Young
81-82	12.50 KHz	799.506250 MHz	769.506250 MHz	Collingsworth Lamb Moore Wichita
83-84	12.50 KHz	799.518750 MHz	769.518750 MHz	Floyd
85-86	12.50 KHz	799.531250 MHz	769.531250 MHz	Cottle Jack Randall Roberts
87-88	12.50 KHz	799.543750 MHz	769.543750 MHz	Bailey
89-90	12.50 KHz	799.556250 MHz	769.556250 MHz	Baylor Carson Dallam Hale
91-92	12.50 KHz	799.568750 MHz	769.568750 MHz	Clay Lipscomb Parmer
93-94	12.50 KHz	799.581250 MHz	769.581250 MHz	Childress Hockley Potter
95-96	12.50 KHz	799.593750 MHz	769.593750 MHz	Castro
97-98	12.50 KHz	799.606250 MHz	769.606250 MHz	Archer Gray King Lubbock
99-100	12.50 KHz	799.618750 MHz	769.618750 MHz	Hansford Swisher

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
105-106	12.50 KHz	799.656250 MHz	769.656250 MHz	Donley King Lubbock Moore
107-108	12.50 KHz	799.668750 MHz	769.668750 MHz	Donley King Lubbock Moore
109-110	12.50 KHz	799.681250 MHz	769.681250 MHz	Deaf Smith Wichita Yoakum
111-112	12.50 KHz	799.693750 MHz	769.693750 MHz	Deaf Smith Wichita Yoakum
113-114	12.50 KHz	799.706250 MHz	769.706250 MHz	Dickens Hutchinson Lamb Young
115-116	12.50 KHz	799.718750 MHz	769.718750 MHz	Dickens Hutchinson Lamb Young
121-122	12.50 KHz	799.756250 MHz	769.756250 MHz	Briscoe Hutchinson Wilbarger
123-124	12.50 KHz	799.768750 MHz	769.768750 MHz	Hartley
125-126	12.50 KHz	799.781250 MHz	769.781250 MHz	Crosby Hemphill Randall Yoakum Young

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
127-128	12.50 KHz	799.793750 MHz	769.793750 MHz	Foard Montague Moore
129-130	12.50 KHz	799.806250 MHz	769.806250 MHz	Donley Lamb Ochiltree
133-134	12.50 KHz	799.831250 MHz	769.831250 MHz	Floyd Hardeman Jack Potter Terry
135-136	12.50 KHz	799.843750 MHz	769.843750 MHz	Castro
137-138	12.50 KHz	799.856250 MHz	769.856250 MHz	Gray Hockley Motley Wichita
139-140	12.50 KHz	799.868750 MHz	769.868750 MHz	Hansford Swisher
145-146	12.50 KHz	799.906250 MHz	769.906250 MHz	Cottle Hale Jack Moore Wheeler
147-148	12.50 KHz	799.918750 MHz	769.918750 MHz	Cottle Hale Jack Moore Wheeler
149-150	12.50 KHz	799.931250 MHz	769.931250 MHz	Armstrong Garza Lipscomb

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
151-152	12.50 KHz	799.943750 MHz	769.943750 MHz	Armstrong Garza Lipscomb
153-154	12.50 KHz	799.956250 MHz	769.956250 MHz	Childress Deaf Smith Floyd Hutchinson Terry Wichita
155-156	12.50 KHz	799.968750 MHz	769.968750 MHz	Childress Deaf Smith Floyd Hutchinson Terry Wichita
161-162	12.50 KHz	800.006250 MHz	770.006250 MHz	Collingsworth Hale Hutchinson Wilbarger
165-166	12.50 KHz	800.031250 MHz	770.031250 MHz	Cottle Garza Randall Wheeler
169-170	12.50 KHz	800.056250 MHz	770.056250 MHz	Baylor Briscoe Hartley Montague Parmer
171-172	12.50 KHz	800.068750 MHz	770.068750 MHz	Dickens
173-174	12.50 KHz	800.081250 MHz	770.081250 MHz	Childress Hemphill Lubbock Potter

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
175-176	12.50 KHz	800.093750 MHz	770.093750 MHz	Castro King
177-178	12.50 KHz	800.106250 MHz	770.106250 MHz	Archer Dallam Floyd Gray Yoakum
179-180	12.50 KHz	800.118750 MHz	770.118750 MHz	Hansford
185-186	12.50 KHz	800.156250 MHz	770.156250 MHz	Archer Carson Castro Lynn
187-188	12.50 KHz	800.168750 MHz	770.168750 MHz	Archer Carson Castro Lynn
189-190	12.50 KHz	800.181250 MHz	770.181250 MHz	Briscoe Hartley King Wheeler
191-192	12.50 KHz	800.193750 MHz	770.193750 MHz	Briscoe Hartley King Wheeler
193-194	12.50 KHz	800.206250 MHz	770.206250 MHz	Lubbock Randall Wilbarger
195-196	12.50 KHz	800.218750 MHz	770.218750 MHz	Lubbock Randall Wilbarger
201-202	12.50 KHz	800.256250 MHz	770.256250 MHz	Clay

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
201-202	12.50 KHz	800.256250 MHz	770.256250 MHz	Donley Foard Hale Moore
205-206	12.50 KHz	800.281250 MHz	770.281250 MHz	Hall Ochiltree Randall Terry Wilbarger
207-208	12.50 KHz	800.293750 MHz	770.293750 MHz	Lamb
209-210	12.50 KHz	800.306250 MHz	770.306250 MHz	Hartley Motley Wichita
211-212	12.50 KHz	800.318750 MHz	770.318750 MHz	Montague
213-214	12.50 KHz	800.331250 MHz	770.331250 MHz	Armstrong Hardeman Lubbock
215-216	12.50 KHz	800.343750 MHz	770.343750 MHz	Hemphill Young
217-218	12.50 KHz	800.356250 MHz	770.356250 MHz	Cochran Collingsworth Deaf Smith Floyd Hutchinson
225-226	12.50 KHz	800.406250 MHz	770.406250 MHz	Baylor Hockley Potter
227-228	12.50 KHz	800.418750 MHz	770.418750 MHz	Baylor Hockley Potter

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
229-230	12.50 KHz	800.431250 MHz	770.431250 MHz	Castro Dickens Sherman
231-232	12.50 KHz	800.443750 MHz	770.443750 MHz	Castro Dickens Sherman
233-234	12.50 KHz	800.456250 MHz	770.456250 MHz	Carson Lubbock Wichita
235-236	12.50 KHz	800.468750 MHz	770.468750 MHz	Carson Lubbock Wichita
241-242	12.50 KHz	800.506250 MHz	770.506250 MHz	Carson Jack Parmer
241-242	12.50 KHz	800.506250 MHz	770.506250 MHz	Carson Jack Parmer
243-244	12.50 KHz	800.518750 MHz	770.518750 MHz	Hale
245-246	12.50 KHz	800.531250 MHz	770.531250 MHz	Baylor Childress Garza Ochiltree Randall
247-248	12.50 KHz	800.543750 MHz	770.543750 MHz	Briscoe Terry
249-250	12.50 KHz	800.556250 MHz	770.556250 MHz	King Potter
251-252	12.50 KHz	800.568750 MHz	770.568750 MHz	Castro Crosby

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
251-252	12.50 KHz	800.568750 MHz	770.568750 MHz	Hansford
253-254	12.50 KHz	800.581250 MHz	770.581250 MHz	Dallam Donley Wichita
255-256	12.50 KHz	800.593750 MHz	770.593750 MHz	Lynn
257-258	12.50 KHz	800.606250 MHz	770.606250 MHz	Clay Floyd Gray Hardeman Oldham Yoakum
259-260	12.50 KHz	800.618750 MHz	770.618750 MHz	Lamb
265-266	12.50 KHz	800.656250 MHz	770.656250 MHz	Collingsworth Hale Montague Potter Wilbarger
267-268	12.50 KHz	800.668750 MHz	770.668750 MHz	Collingsworth Hale Montague Potter Wilbarger
269-270	12.50 KHz	800.681250 MHz	770.681250 MHz	Cochran Dallam Hemphill
271-272	12.50 KHz	800.693750 MHz	770.693750 MHz	Cochran Dallam Hemphill
273-274	12.50 KHz	800.706250 MHz	770.706250 MHz	Cottle Hansford

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
273-274	12.50 KHz	800.706250 MHz	770.706250 MHz	Lubbock Randall Wichita
275-276	12.50 KHz	800.718750 MHz	770.718750 MHz	Cottle Hansford Lubbock Randall Wichita
281-282	12.50 KHz	800.756250 MHz	770.756250 MHz	Hutchinson Lubbock Parmer
285-286	12.50 KHz	800.781250 MHz	770.781250 MHz	Bailey Hall Montague Randall Sherman Wilbarger
287-288	12.50 KHz	800.793750 MHz	770.793750 MHz	Roberts
289-290	12.50 KHz	800.806250 MHz	770.806250 MHz	Hale Jack Moore
291-292	12.50 KHz	800.818750 MHz	770.818750 MHz	Foard Ochiltree
293-294	12.50 KHz	800.831250 MHz	770.831250 MHz	Archer Dallam Dickens Swisher Wheeler
295-296	12.50 KHz	800.843750 MHz	770.843750 MHz	Lipscomb
297-298	12.50 KHz	800.856250 MHz	770.856250 MHz	Carson

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
297-298	12.50 KHz	800.856250 MHz	770.856250 MHz	Castro Lynn
299-300	12.50 KHz	800.868750 MHz	770.868750 MHz	Cochran Floyd
305-306	12.50 KHz	800.906250 MHz	770.906250 MHz	Bailey Clay Crosby Potter
307-308	12.50 KHz	800.918750 MHz	770.918750 MHz	Bailey Clay Crosby Potter
309-310	12.50 KHz	800.931250 MHz	770.931250 MHz	Gray Swisher Yoakum
311-312	12.50 KHz	800.943750 MHz	770.943750 MHz	Gray Swisher Yoakum
313-314	12.50 KHz	800.956250 MHz	770.956250 MHz	Childress Hartley Lubbock Ochiltree Parmer Wichita
315-316	12.50 KHz	800.968750 MHz	770.968750 MHz	Childress Hartley Lubbock Ochiltree Parmer Wichita
321-322	12.50 KHz	801.006250 MHz	771.006250 MHz	Childress

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
321-322	12.50 KHz	801.006250 MHz	771.006250 MHz	Hemphill Lubbock Potter Young
325-326	12.50 KHz	801.031250 MHz	771.031250 MHz	Gray Sherman Wichita Yoakum
327-328	12.50 KHz	801.043750 MHz	771.043750 MHz	Hall
329-330	12.50 KHz	801.056250 MHz	771.056250 MHz	Crosby Hardeman Jack Randall Roberts
333-334	12.50 KHz	801.081250 MHz	771.081250 MHz	Briscoe Lamb Moore
337-338	12.50 KHz	801.106250 MHz	771.106250 MHz	Clay Cottle Dallam Lipscomb Lynn Swisher
341-342	12.50 KHz	801.131250 MHz	771.131250 MHz	Carson Castro
345-346	12.50 KHz	801.156250 MHz	771.156250 MHz	Archer Hockley Oldham Wheeler
347-348	12.50 KHz	801.168750 MHz	771.168750 MHz	Foard

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
349-350	12.50 KHz	801.181250 MHz	771.181250 MHz	Armstrong Dickens Ochiltree Parmer
353-354	12.50 KHz	801.206250 MHz	771.206250 MHz	Collingsworth Hale Hartley
355-356	12.50 KHz	801.218750 MHz	771.218750 MHz	Motley
357-358	12.50 KHz	801.231250 MHz	771.231250 MHz	Bailey Garza Hansford Wilbarger
359-360	12.50 KHz	801.243750 MHz	771.24375	King
361-362	12.50 KHz	801.256250 MHz	771.256250 MHz	Childress Floyd Potter Terry
365-366	12.50 KHz	801.281250 MHz	771.281250 MHz	Hemphill Sherman Wichita
367-368	12.50 KHz	801.293750 MHz	771.293750 MHz	Donley Young
369-370	12.50 KHz	801.306250 MHz	771.306250 MHz	Cochran Crosby Hardeman Montague Randall Roberts
371-372	12.50 KHz	801.318750 MHz	771.318750 MHz	Baylor

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
373-374	12.50 KHz	801.331250 MHz	771.331250 MHz	Hall Hutchinson
377-378	12.50 KHz	801.356250 MHz	771.356250 MHz	Clay Cottle Lynn Swisher
379-380	12.50 KHz	801.368750 MHz	771.368750 MHz	Lipscomb
381-382	12.50 KHz	801.381250 MHz	771.381250 MHz	Deaf Smith Gray
385-386	12.50 KHz	801.406250 MHz	771.406250 MHz	Archer Briscoe Moore
389-390	12.50 KHz	801.431250 MHz	771.431250 MHz	Armstrong Lubbock Ochiltree
393-394	12.50 KHz	801.456250 MHz	771.456250 MHz	Carson Castro Dallam Foard
397-398	12.50 KHz	801.481250 MHz	771.481250 MHz	Bailey Dickens Hansford Wheeler
401-402	12.50 KHz	801.506250 MHz	771.506250 MHz	Hale Potter Yoakum
403-404	12.50 KHz	801.518750 MHz	771.518750 MHz	Motley
405-406	12.50 KHz	801.531250 MHz	771.531250 MHz	Garza Parmer Sherman

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
407-408	12.50 KHz	801.543750 MHz	771.543750 MHz	King
409-410	12.50 KHz	801.556250 MHz	771.556250 MHz	Childress Hemphill Lamb Oldham Young
413-414	12.50 KHz	801.581250 MHz	771.581250 MHz	Floyd Hutchinson Wilbarger
417-418	12.50 KHz	801.606250 MHz	771.606250 MHz	Donley Hartley Hockley
421-422	12.50 KHz	801.631250 MHz	771.631250 MHz	Cottle Jack Roberts Swisher
425-426	12.50 KHz	801.656250 MHz	771.656250 MHz	Baylor Collingsworth Lipscomb Moore Terry
427-428	12.50 KHz	801.668750 MHz	771.668750 MHz	Briscoe
429-430	12.50 KHz	801.681250 MHz	771.681250 MHz	Clay Lynn Ochiltree Randall
433-434	12.50 KHz	801.706250 MHz	771.706250 MHz	Crosby Gray
437-438	12.50 KHz	801.731250 MHz	771.731250 MHz	Cochran Hall

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
437-438	12.50 KHz	801.731250 MHz	771.731250 MHz	Hansford Wichita
439-440	12.50 KHz	801.743750 MHz	771.743750 MHz	Dickens
441-442	12.50 KHz	801.756250 MHz	771.756250 MHz	Hale Hardeman Potter Yoakum
443-444	12.50 KHz	801.768750 MHz	771.768750 MHz	Wheeler
445-446	12.50 KHz	801.781250 MHz	771.781250 MHz	Archer Carson Parmer
449-450	12.50 KHz	801.806250 MHz	771.806250 MHz	Dallam Foard Hemphill Lubbock Montague
453-454	12.50 KHz	801.831250 MHz	771.831250 MHz	Deaf Smith Hutchinson Motley
457-458	12.50 KHz	801.856250 MHz	771.856250 MHz	Armstrong Garza Hartley Lamb Wilbarger
461-462	12.50 KHz	801.881250 MHz	771.881250 MHz	Cottle Roberts Swisher
463-464	12.50 KHz	801.893750 MHz	771.893750 MHz	Donley
465-466	12.50 KHz	801.906250 MHz	771.906250 MHz	Floyd

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
465-466	12.50 KHz	801.906250 MHz	771.906250 MHz	Moore Terry
469-470	12.50 KHz	801.931250 MHz	771.931250 MHz	Hockley Ochiltree Randall
473-474	12.50 KHz	801.956250 MHz	771.956250 MHz	Gray Jack
477-478	12.50 KHz	801.981250 MHz	771.981250 MHz	Castro Childress Hansford Lynn Wichita
479-480	12.50 KHz	801.993750 MHz	771.993750 MHz	King
481-482	12.50 KHz	802.006250 MHz	772.006250 MHz	Baylor Hall Potter
483-484	12.50 KHz	802.018750 MHz	772.018750 MHz	Hale
485-486	12.50 KHz	802.031250 MHz	772.031250 MHz	Bailey Dickens Hardeman Wheeler
489-490	12.50 KHz	802.056250 MHz	772.056250 MHz	Lipscomb Lubbock Sherman Young
493-494	12.50 KHz	802.081250 MHz	772.081250 MHz	Briscoe Hutchinson Parmer
497-498	12.50 KHz	802.106250 MHz	772.106250 MHz	Deaf Smith

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
497-498	12.50 KHz	802.106250 MHz	772.106250 MHz	Hemphill Motley Wilbarger
499-500	12.50 KHz	802.118750 MHz	772.118750 MHz	Hartley Lamb Montague
501-502	12.50 KHz	802.131250 MHz	772.131250 MHz	Armstrong Cottle
505-506	12.50 KHz	802.156250 MHz	772.156250 MHz	Collingsworth Floyd Moore
509-510	12.50 KHz	802.181250 MHz	772.181250 MHz	Carson Crosby Dallam Yoakum
513-514	12.50 KHz	802.206250 MHz	772.206250 MHz	Ochiltree Oldham
517-518	12.50 KHz	802.231250 MHz	772.231250 MHz	Cochran Foard Gray Swisher
521-522	12.50 KHz	802.256250 MHz	772.256250 MHz	Clay Hall Lynn Potter
523-524	12.50 KHz	802.268750 MHz	772.268750 MHz	Baylor
525-526	12.50 KHz	802.281250 MHz	772.281250 MHz	Bailey Dickens Roberts

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
529-5301	12.50 KHz	802.306250 MHz	772.306250 MHz	Archer Lubbock Randall Sherman
533-534	12.50 KHz	802.331250 MHz	772.331250 MHz	Briscoe King Parmer Terry
537-538	12.50 KHz	802.356250 MHz	772.356250 MHz	Hutchinson Wilbarger
541-542	12.50 KHz	802.381250 MHz	772.381250 MHz	Armstrong Childress Lamb Lipscomb
545-546	12.50 KHz	802.406250 MHz	772.406250 MHz	Cottle Deaf Smith Hansford Jack Wheeler
549-550	12.50 KHz	802.431250 MHz	772.431250 MHz	Carson Dallam Hardeman Hockley
553-554	12.50 KHz	802.456250 MHz	772.456250 MHz	Floyd Hemphill Wichita
557-558	12.50 KHz	802.481250 MHz	772.481250 MHz	Donley Garza Moore Yoakum
561-562	12.50 KHz	802.506250 MHz	772.506250 MHz	Hale

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
561-562	12.50 KHz	802.506250 MHz	772.506250 MHz	Ochiltree Young
563-564	12.50 KHz	802.518750 MHz	772.518750 MHz	Foard
565-566	12.50 KHz	802.531250 MHz	772.531250 MHz	Cochran Dickens Gray Hartley
569-570	12.50 KHz	802.556250 MHz	772.556250 MHz	Baylor Lubbock Montague Randall
573-574	12.50 KHz	802.581250 MHz	772.581250 MHz	Castro Hall Roberts
577-578	12.50 KHz	802.606250 MHz	772.606250 MHz	Bailey Briscoe Lynn Oldham Wilbarger
579-580	12.50 KHz	802.618750 MHz	772.618750 MHz	Sherman
581-582	12.50 KHz	802.631250 MHz	772.631250 MHz	Childress Lipscomb Swisher
583-584	12.50 KHz	802.643750 MHz	772.643750 MHz	King
585-586	12.50 KHz	802.656250 MHz	772.656250 MHz	Archer Crosby Hutchinson
589-590	12.50 KHz	802.681250 MHz	772.681250 MHz	Collingsworth Lamb

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
591-592	12.50 KHz	802.693750 MHz	772.693750 MHz	Carson Hardeman Jack
593-594	12.50 KHz	802.706250 MHz	772.706250 MHz	Floyd Hemphill
597-598	12.50 KHz	802.731250 MHz	772.731250 MHz	Cottle Hockley Potter Wheeler Wichita
601-602	12.50 KHz	802.756250 MHz	772.756250 MHz	Dallam Parmer
603-604	12.50 KHz	802.768750 MHz	772.768750 MHz	Garza
605-606	12.50 KHz	802.781250 MHz	772.781250 MHz	Armstrong Hansford Terry
607-608	12.50 KHz	802.793750 MHz	772.793750 MHz	Motley
609-610	12.50 KHz	802.806250 MHz	772.806250 MHz	Clay Hale Hartley
613-614	12.50 KHz	802.831250 MHz	772.831250 MHz	Deaf Smith Dickens Donley Ochiltree
617-618	12.50 KHz	802.856250 MHz	772.856250 MHz	Hall Lynn Moore Wilbarger
621-622	12.50 KHz	802.881250 MHz	772.881250 MHz	Castro

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
621-622	12.50 KHz	802.881250 MHz	772.881250 MHz	Childress Yoakum
623-624	12.50 KHz	802.893750 MHz	772.893750 MHz	Briscoe Montague
625-626	12.50 KHz	802.906250 MHz	772.906250 MHz	Archer Gray Lubbock
627-628	12.50 KHz	802.918750 MHz	772.918750 MHz	Lipscomb
629-630	12.50 KHz	802.931250 MHz	772.931250 MHz	Collingsworth King Sherman Swisher
631-632	12.50 KHz	802.943750 MHz	772.943750 MHz	Bailey
633-634	12.50 KHz	802.956250 MHz	772.956250 MHz	Crosby Hardeman Hutchinson Young
637-638	12.50 KHz	802.981250 MHz	772.981250 MHz	Hockley Randall Wheeler Wichita
639-640	12.50 KHz	802.993750 MHz	772.993750 MHz	Floyd
645-646	12.50 KHz	803.031250 MHz	773.031250 MHz	Foard Jack Lubbock Moore Parmer
647-648	12.50 KHz	803.043750 MHz	773.043750 MHz	Foard Jack

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
647-648	12.50 KHz	803.043750 MHz	773.043750 MHz	Lubbock Moore Parmer
649-650	12.50 KHz	803.056250 MHz	773.056250 MHz	Gray Motley Wichita
651-652	12.50 KHz	803.068750 MHz	773.068750 MHz	Gray Motley Wichita
653-654	12.50 KHz	803.081250 MHz	773.081250 MHz	Hale Potter
655-656	12.50 KHz	803.093750 MHz	773.093750 MHz	Hale Potter
661-662	12.50 KHz	803.131250 MHz	773.131250 MHz	Cochran Hansford Motley Oldham Wilbarger
665-666	12.50 KHz	803.156250 MHz	773.156250 MHz	Childress Clay Hale Potter
667-668	12.50 KHz	803.168750 MHz	773.168750 MHz	Garza
669-670	12.50 KHz	803.181250 MHz	773.181250 MHz	Carson Dallam Jack Lamb
673-674	12.50 KHz	803.206250 MHz	773.206250 MHz	Collingsworth Deaf Smith Hutchinson

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
673-674	12.50 KHz	803.206250 MHz	773.206250 MHz	Lubbock
675-676	12.50 KHz	803.218750 MHz	773.218750 MHz	Foard Yoakum
677-678	12.50 KHz	803.231250 MHz	773.231250 MHz	Dickens Hartley Roberts Swisher Wichita
679-680	12.50 KHz	803.243750 MHz	773.243750 MHz	Lynn Young
685-686	12.50 KHz	803.281250 MHz	773.281250 MHz	Hansford King Lubbock Randall
687-688	12.50 KHz	803.293750 MHz	773.293750 MHz	Hansford King Lubbock Randall
689-690	12.50 KHz	803.306250 MHz	773.306250 MHz	Baylor Gray
691-692	12.50 KHz	803.318750 MHz	773.318750 MHz	Baylor Gray
693-694	12.50 KHz	803.331250 MHz	773.331250 MHz	Clay Floyd Potter Terry
695-696	12.50 KHz	803.343750 MHz	773.343750 MHz	Clay Floyd Potter Terry

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
701-702	12.50 KHz	803.381250 MHz	773.381250 MHz	Baylor Briscoe Lipscomb Moore
705-706	12.50 KHz	803.406250 MHz	773.406250 MHz	Castro Crosby Gray
707-708	12.50 KHz	803.418750 MHz	773.418750 MHz	Cottle
709-710	12.50 KHz	803.431250 MHz	773.431250 MHz	Dallam Montague Randall Terry
711-712	12.50 KHz	803.443750 MHz	773.443750 MHz	Archer
713-714	12.50 KHz	803.456250 MHz	773.456250 MHz	Hall Hutchinson Lamb
715-716	12.50 KHz	803.468750 MHz	773.468750 MHz	Wheeler
717-718	12.50 KHz	803.481250 MHz	773.481250 MHz	Deaf Smith Lubbock Wilbarger
719-720	12.50 KHz	803.493750 MHz	773.493750 MHz	Bailey Carson Childress
725-726	12.50 KHz	803.531250 MHz	773.531250 MHz	Childress Dallam Lubbock Ochiltree Randall
727-728	12.50 KHz	803.543750 MHz	773.543750 MHz	Childress

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
727-728	12.50 KHz	803.543750 MHz	773.543750 MHz	Dallam Lubbock Ochiltree Randall
729-730	12.50 KHz	803.556250 MHz	773.556250 MHz	Gray
731-732	12.50 KHz	803.568750 MHz	773.568750 MHz	Gray
733-734	12.50 KHz	803.581250 MHz	773.581250 MHz	Hale Potter Wichita
735-736	12.50 KHz	803.593750 MHz	773.593750 MHz	Hale Potter Wichita
741-742	12.50 KHz	803.631250 MHz	773.631250 MHz	Garza Lipscomb Potter
743-744	12.50 KHz	803.643750 MHz	773.643750 MHz	Parmer
745-746	12.50 KHz	803.656250 MHz	773.656250 MHz	Gray Hale Yoakum Young
747-748	12.50 KHz	803.668750 MHz	773.668750 MHz	Motley
749-750	12.50 KHz	803.681250 MHz	773.681250 MHz	Collingsworth Lynn Montague Randall
753-754	12.50 KHz	803.706250 MHz	773.706250 MHz	Dickens Donley Hartley Lamb

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
753-754	12.50 KHz	803.706250 MHz	773.706250 MHz	Ochiltree Wichita
755-756	12.50 KHz	803.718750 MHz	773.718750 MHz	Jack
757-758	12.50 KHz	803.731250 MHz	773.731250 MHz	Hardeman Hutchinson Lubbock
759-760	12.50 KHz	803.743750 MHz	773.743750 MHz	Baylor Swisher Wheeler
765-766	12.50 KHz	803.781250 MHz	773.781250 MHz	Clay Lubbock Randall Roberts
767-768	12.50 KHz	803.793750 MHz	773.793750 MHz	Clay Lubbock Randall Roberts
769-770	12.50 KHz	803.806250 MHz	773.806250 MHz	Bailey Donley Hartley
771-772	12.50 KHz	803.818750 MHz	773.818750 MHz	Bailey Donley Hartley
773-774	12.50 KHz	803.831250 MHz	773.831250 MHz	Cottle Hale Hutchinson Wichita Yoakum
775-776	12.50 KHz	803.843750 MHz	773.843750 MHz	Cottle Hale

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
775-776	12.50 KHz	803.843750 MHz	773.843750 MHz	Hutchinson Wichita Yoakum
781-782	12.50 KHz	803.881250 MHz	773.881250 MHz	Bailey Crosby Potter
785-786	12.50 KHz	803.906250 MHz	773.906250 MHz	Clay Dallam Gray Hale King
787-788	12.50 KHz	803.918750 MHz	773.918750 MHz	Garza Wilbarger
789-790	12.50 KHz	803.931250 MHz	773.931250 MHz	Childress Randall Terry
791-792	12.50 KHz	803.943750 MHz	773.943750 MHz	Briscoe
793-794	12.50 KHz	803.956250 MHz	773.956250 MHz	Dickens Lamb Moore Wichita
795-796	12.50 KHz	803.968750 MHz	773.968750 MHz	Montague Ochiltree
797-798	12.50 KHz	803.981250 MHz	773.981250 MHz	Deaf Smith Donley Lubbock
799-800	12.50 KHz	803.993750 MHz	773.993750 MHz	Hutchinson Swisher Yoakum

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
805-806	12.50 KHz	804.031250 MHz	774.031250 MHz	Hall Lipscomb Lubbock Moore
807-808	12.50 KHz	804.043750 MHz	774.043750 MHz	Hall Lipscomb Lubbock Moore
809-810	12.50 KHz	804.056250 MHz	774.056250 MHz	Gray Hardeman Jack Swisher
811-812	12.50 KHz	804.068750 MHz	774.068750 MHz	Gray Hardeman Jack Swisher
813-814	12.50 KHz	804.081250 MHz	774.081250 MHz	Lynn Motley Potter
815-816	12.50 KHz	804.093750 MHz	774.093750 MHz	Lynn Motley Potter
821-822	12.50 KHz	804.131250 MHz	774.131250 MHz	Bailey Baylor Motley Potter Wheeler
825-826	12.50 KHz	804.156250 MHz	774.156250 MHz	Clay Gray Hale King Oldham

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
827-828	12.50 KHz	804.168750 MHz	774.168750 MHz	Hardeman
829-830	12.50 KHz	804.181250 MHz	774.181250 MHz	Garza Hall Hemphill Randall
833-834	12.50 KHz	804.206250 MHz	774.206250 MHz	Briscoe Lamb Lipscomb Moore Young
835-836	12.50 KHz	804.218750 MHz	774.218750 MHz	Crosby
837-838	12.50 KHz	804.231250 MHz	774.231250 MHz	Deaf Smith Donley Foard Ochiltree Terry
839-840	12.50 KHz	804.243750 MHz	774.243750 MHz	Archer Hartley Swisher
845-846	12.50 KHz	804.281250 MHz	774.281250 MHz	Deaf Smith Hutchinson Lubbock Wilbarger
847-848	12.50 KHz	804.293750 MHz	774.293750 MHz	Deaf Smith Hutchinson Lubbock Wilbarger
849-850	12.50 KHz	804.306250 MHz	774.306250 MHz	Dallam Swisher Young

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
851-852	12.50 KHz	804.318750 MHz	774.318750 MHz	Dallam Swisher Young
853-854	12.50 KHz	804.331250 MHz	774.331250 MHz	Hemphill Hockley Montague Motley Potter
855-856	12.50 KHz	804.343750 MHz	774.343750 MHz	Hemphill Hockley Montague Motley Potter
861-862	12.50 KHz	804.381250 MHz	774.381250 MHz	Lubbock Potter
865-866	12.50 KHz	804.406250 MHz	774.406250 MHz	Castro Gray Lynn Motley Sherman Wichita
869-870	12.50 KHz	804.431250 MHz	774.431250 MHz	Dickens Hansford Hardeman Hockley Montague Randall Wheeler
873-874	12.50 KHz	804.456250 MHz	774.456250 MHz	Cochran Floyd Young
875-876	12.50 KHz	804.468750 MHz	774.468750 MHz	Armstrong

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
877-878	12.50 KHz	804.481250 MHz	774.481250 MHz	Foard Hutchinson Parmer Terry
879-880	12.50 KHz	804.493750 MHz	774.493750 MHz	Archer Collingsworth Crosby Hartley Lipscomb
885-886	12.50 KHz	804.531250 MHz	774.531250 MHz	Childress Hansford Lubbock Randall Wichita
887-888	12.50 KHz	804.543750 MHz	774.543750 MHz	Childress Hansford Lubbock Randall Wichita
889-890	12.50 KHz	804.556250 MHz	774.556250 MHz	Briscoe Wheeler Young
891-892	12.50 KHz	804.568750 MHz	774.568750 MHz	Briscoe Wheeler Young
893-894	12.50 KHz	804.581250 MHz	774.581250 MHz	Garza Lamb Montague Potter Wilbarger
895-896	12.50 KHz	804.593750 MHz	774.593750 MHz	Garza Lamb

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
895-896	12.50 KHz	804.593750 MHz	774.593750 MHz	Montague Potter Wilbarger
901-902	12.50 KHz	804.631250 MHz	774.631250 MHz	Dallam Deaf Smith Donley Ochiltree
903-904	12.50 KHz	804.643750 MHz	774.643750 MHz	Bailey Swisher
905-906	12.50 KHz	804.656250 MHz	774.656250 MHz	Carson Childress Lubbock Wichita
907-908	12.50 KHz	804.668750 MHz	774.668750 MHz	Castro
909-910	12.50 KHz	804.681250 MHz	774.681250 MHz	Sherman Wheeler Wilbarger
913-914	12.50 KHz	804.706250 MHz	774.706250 MHz	Hall Hockley Jack Potter
915-916	12.50 KHz	804.718750 MHz	774.718750 MHz	Gray
917-918	12.50 KHz	804.731250 MHz	774.731250 MHz	Hale Hansford Hardeman Young
919-920	12.50 KHz	804.743750 MHz	774.743750 MHz	Armstrong Parmer Terry

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
925-926	12.50 KHz	804.781250 MHz	774.781250 MHz	Hall Lubbock Ochiltree Randall
927-928	12.50 KHz	804.793750 MHz	774.793750 MHz	Hall Lubbock Ochiltree Randall
929-930	12.50 KHz	804.806250 MHz	774.806250 MHz	Dallam Gray Hardeman
931-932	12.50 KHz	804.818750 MHz	774.818750 MHz	Dallam Gray Hardeman
933-934	12.50 KHz	804.831250 MHz	774.831250 MHz	Dickens Lamb Lipscomb Potter Wichita
935-936	12.50 KHz	804.843750 MHz	774.843750 MHz	Dickens Lamb Lipscomb Potter Wichita
941-942	12.50 KHz	804.881250 MHz	774.881250 MHz	Dickens Donley Moore
943-944	12.50 KHz	804.893750 MHz	774.893750 MHz	Montague Roberts
945-946	12.50 KHz	804.906250 MHz	774.906250 MHz	Lubbock Randall

Region 52 Allotments by FCC Channel

FCC Channel	Mobil Bandwidth	Base Frequency	Frequency	County
945-946	12.50 KHz	804.906250 MHz	774.906250 MHz	Wichita
947-948	12.50 KHz	804.918750 MHz	774.918750 MHz	Briscoe King Yoakum

The table below groups the channel allocations made in Region 52 by County.

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Archer	19-20	Voice General Use	769.118750	799.118750
	97-98	Voice General Use	769.606250	799.606250
	177-178	Voice General Use	770.106250	800.106250
	293-294	Voice General Use	770.831250	800.831250
	345-346	Voice General Use	771.156250	801.156250
	385-386	Voice General Use	771.406250	801.406250
	445-446	Voice General Use	771.781250	801.781250
	529-530	Voice General Use	772.306250	802.306250
	585-586	Voice General Use	772.656250	802.656250
	625-626	Voice General Use	772.906250	802.906250
	711-712	Voice General Use	773.443750	803.443750
	839-840	Voice General Use	774.243750	804.243750
	879-880	Voice General Use	774.493750	804.493750
	65-66	Voice State License	769.406250	799.406250
	67-68	Voice State License	769.418750	799.418750
	185-186	Voice State License	770.156250	800.156250
	187-188	Voice State License	770.168750	800.168750
Armstrong	213-214	Voice General Use	770.331250	800.331250
	349-350	Voice General Use	771.181250	801.181250
	389-390	Voice General Use	771.431250	801.431250
	457-458	Voice General Use	771.856250	801.856250
	501-502	Voice General Use	772.131250	802.131250
	541-542	Voice General Use	772.381250	802.381250
	605-606	Voice General Use	772.781250	802.781250
	875-876	Voice General Use	774.468750	804.468750
	919-920	Voice General Use	774.743750	804.743750

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Armstrong	149-150	Voice State License	769.931250	799.931250
	151-152	Voice State License	769.943750	799.943750
Bailey	47-48	Voice General Use	769.293750	799.293750
	87-88	Voice General Use	769.543750	799.543750
	285-286	Voice General Use	770.781250	800.781250
	357-358	Voice General Use	771.231250	801.231250
	397-398	Voice General Use	771.481250	801.481250
	485-486	Voice General Use	772.031250	802.031250
	525-526	Voice General Use	772.281250	802.281250
	577-578	Voice General Use	772.606250	802.606250
	631-632	Voice General Use	772.943750	802.943750
	719-720	Voice General Use	773.493750	803.493750
	781-782	Voice General Use	773.881250	803.881250
	821-822	Voice General Use	774.131250	804.131250
	903-904	Voice General Use	774.643750	804.643750
	305-306	Voice State License	770.906250	800.906250
	307-308	Voice State License	770.918750	800.918750
	769-770	Voice State License	773.806250	803.806250
	771-772	Voice State License	773.818750	803.818750
Baylor	45-46	Voice General Use	769.281250	799.281250
	89-90	Voice General Use	769.556250	799.556250
	169-170	Voice General Use	770.056250	800.056250
	245-246	Voice General Use	770.531250	800.531250
	371-372	Voice General Use	771.318750	801.318750
	425-426	Voice General Use	771.656250	801.656250
	481-482	Voice General Use	772.006250	802.006250
	523-524	Voice General Use	772.268750	802.268750
	569-570	Voice General Use	772.556250	802.556250
	701-702	Voice General Use	773.381250	803.381250
	759-760	Voice General Use	773.743750	803.743750
	821-822	Voice General Use	774.131250	804.131250
	225-226	Voice State License	770.406250	800.406250
	227-228	Voice State License	770.418750	800.418750
	689-690	Voice State License	773.306250	803.306250
	691-692	Voice State License	773.318750	803.318750
Briscoe	121-122	Voice General Use	769.756250	799.756250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Briscoe	169-170	Voice General Use	770.056250	800.056250
	247-248	Voice General Use	770.543750	800.543750
	333-334	Voice General Use	771.081250	801.081250
	385-386	Voice General Use	771.406250	801.406250
	427-428	Voice General Use	771.668750	801.668750
	493-494	Voice General Use	772.081250	802.081250
	533-534	Voice General Use	772.331250	802.331250
	577-578	Voice General Use	772.606250	802.606250
	623-624	Voice General Use	772.893750	802.893750
	701-702	Voice General Use	773.381250	803.381250
	791-792	Voice General Use	773.943750	803.943750
	833-834	Voice General Use	774.206250	804.206250
	947-948	Voice General Use	774.918750	804.918750
	189-190	Voice State License	770.181250	800.181250
	191-192	Voice State License	770.193750	800.193750
	889-890	Voice State License	774.556250	804.556250
	891-892	Voice State License	774.568750	804.568750
Carson	89-90	Voice General Use	769.556250	799.556250
	241-242	Voice General Use	770.506250	800.506250
	297-298	Voice General Use	770.856250	800.856250
	341-342	Voice General Use	771.131250	801.131250
	393-394	Voice General Use	771.456250	801.456250
	445-446	Voice General Use	771.781250	801.781250
	509-510	Voice General Use	772.181250	802.181250
	549-550	Voice General Use	772.431250	802.431250
	591-592	Voice General Use	772.693750	802.693750
	669-670	Voice General Use	773.181250	803.181250
	719-720	Voice General Use	773.493750	803.493750
	905-906	Voice General Use	774.656250	804.656250
	185-186	Voice State License	770.156250	800.156250
	187-188	Voice State License	770.168750	800.168750
	233-234	Voice State License	770.456250	800.456250
	235-236	Voice State License	770.468750	800.468750
Castro	15-16	Voice General Use	769.093750	799.093750
	55-56	Voice General Use	769.343750	799.343750
	95-96	Voice General Use	769.593750	799.593750
	135-136	Voice General Use	769.843750	799.843750

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Castro	175-176	Voice General Use	770.093750	800.093750
	251-252	Voice General Use	770.568750	800.568750
	297-298	Voice General Use	770.856250	800.856250
	341-342	Voice General Use	771.131250	801.131250
	393-394	Voice General Use	771.456250	801.456250
	477-478	Voice General Use	771.981250	801.981250
	573-574	Voice General Use	772.581250	802.581250
	621-622	Voice General Use	772.881250	802.881250
	705-706	Voice General Use	773.406250	803.406250
	865-866	Voice General Use	774.406250	804.406250
	907-908	Voice General Use	774.668750	804.668750
	185-186	Voice State License	770.156250	800.156250
	187-188	Voice State License	770.168750	800.168750
	229-230	Voice State License	770.431250	800.431250
	231-232	Voice State License	770.443750	800.443750
Childress	41-42	Voice General Use	769.256250	799.256250
	93-94	Voice General Use	769.581250	799.581250
	173-174	Voice General Use	770.081250	800.081250
	245-246	Voice General Use	770.531250	800.531250
	321-322	Voice General Use	771.006250	801.006250
	361-362	Voice General Use	771.256250	801.256250
	409-410	Voice General Use	771.556250	801.556250
	477-478	Voice General Use	771.981250	801.981250
	541-542	Voice General Use	772.381250	802.381250
	581-582	Voice General Use	772.631250	802.631250
	621-622	Voice General Use	772.881250	802.881250
	665-666	Voice General Use	773.156250	803.156250
	719-720	Voice General Use	773.493750	803.493750
	789-790	Voice General Use	773.931250	803.931250
	905-906	Voice General Use	774.656250	804.656250
	153-154	Voice State License	769.956250	799.956250
	155-156	Voice State License	769.968750	799.968750
	313-314	Voice State License	770.956250	800.956250
	315-316	Voice State License	770.968750	800.968750
	725-726	Voice State License	773.531250	803.531250
	727-728	Voice State License	773.543750	803.543750
	885-886	Voice State License	774.531250	804.531250
	887-888	Voice State License	774.543750	804.543750

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Clay	91-92	Voice General Use	769.568750	799.568750
	201-202	Voice General Use	770.256250	800.256250
	257-258	Voice General Use	770.606250	800.606250
	337-338	Voice General Use	771.106250	801.106250
	377-378	Voice General Use	771.356250	801.356250
	429-430	Voice General Use	771.681250	801.681250
	521-522	Voice General Use	772.256250	802.256250
	609-610	Voice General Use	772.806250	802.806250
	665-666	Voice General Use	773.156250	803.156250
	785-786	Voice General Use	773.906250	803.906250
	825-826	Voice General Use	774.156250	804.156250
	305-306	Voice State License	770.906250	800.906250
	307-308	Voice State License	770.918750	800.918750
	693-694	Voice State License	773.331250	803.331250
	695-696	Voice State License	773.343750	803.343750
	765-766	Voice State License	773.781250	803.781250
	767-768	Voice State License	773.793750	803.793750
Cochran	217-218	Voice General Use	770.356250	800.356250
	299-300	Voice General Use	770.868750	800.868750
	369-370	Voice General Use	771.306250	801.306250
	437-438	Voice General Use	771.731250	801.731250
	517-518	Voice General Use	772.231250	802.231250
	565-566	Voice General Use	772.531250	802.531250
	661-662	Voice General Use	773.131250	803.131250
	873-874	Voice General Use	774.456250	804.456250
	73-74	Voice State License	769.456250	799.456250
	75-76	Voice State License	769.468750	799.468750
	269-270	Voice State License	770.681250	800.681250
	271-272	Voice State License	770.693750	800.693750
Collingsworth	81-82	Voice General Use	769.506250	799.506250
	161-162	Voice General Use	770.006250	800.006250
	217-218	Voice General Use	770.356250	800.356250
	353-354	Voice General Use	771.206250	801.206250
	425-426	Voice General Use	771.656250	801.656250
	505-506	Voice General Use	772.156250	802.156250
	589-590	Voice General Use	772.681250	802.681250
	629-630	Voice General Use	772.931250	802.931250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Collingsworth	673-674	Voice General Use	773.206250	803.206250
	749-750	Voice General Use	773.681250	803.681250
	879-880	Voice General Use	774.493750	804.493750
	33-34	Voice State License	769.206250	799.206250
	35-36	Voice State License	769.218750	799.218750
	265-266	Voice State License	770.656250	800.656250
	267-268	Voice State License	770.668750	800.668750
Cottle	17-18	Voice General Use	769.106250	799.106250
	85-86	Voice General Use	769.531250	799.531250
	165-166	Voice General Use	770.031250	800.031250
	337-338	Voice General Use	771.106250	801.106250
	377-378	Voice General Use	771.356250	801.356250
	421-422	Voice General Use	771.631250	801.631250
	461-462	Voice General Use	771.881250	801.881250
	501-502	Voice General Use	772.131250	802.131250
	545-546	Voice General Use	772.406250	802.406250
	597-598	Voice General Use	772.731250	802.731250
	707-708	Voice General Use	773.418750	803.418750
	145-146	Voice State License	769.906250	799.906250
	147-148	Voice State License	769.918750	799.918750
	273-274	Voice State License	770.706250	800.706250
	275-276	Voice State License	770.718750	800.718750
	773-774	Voice State License	773.831250	803.831250
	775-776	Voice State License	773.843750	803.843750
Crosby	125-126	Voice General Use	769.781250	799.781250
	251-252	Voice General Use	770.568750	800.568750
	329-330	Voice General Use	771.056250	801.056250
	369-370	Voice General Use	771.306250	801.306250
	433-434	Voice General Use	771.706250	801.706250
	509-510	Voice General Use	772.181250	802.181250
	585-586	Voice General Use	772.656250	802.656250
	633-634	Voice General Use	772.956250	802.956250
	705-706	Voice General Use	773.406250	803.406250
	781-782	Voice General Use	773.881250	803.881250
	835-836	Voice General Use	774.218750	804.218750
	879-880	Voice General Use	774.493750	804.493750
	73-74	Voice State License	769.456250	799.456250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Crosby	75-76	Voice State License	769.468750	799.468750
	305-306	Voice State License	770.906250	800.906250
	307-308	Voice State License	770.918750	800.918750
Dallam	17-18	Voice General Use	769.106250	799.106250
	89-90	Voice General Use	769.556250	799.556250
	177-178	Voice General Use	770.106250	800.106250
	253-254	Voice General Use	770.581250	800.581250
	293-294	Voice General Use	770.831250	800.831250
	337-338	Voice General Use	771.106250	801.106250
	393-394	Voice General Use	771.456250	801.456250
	449-450	Voice General Use	771.806250	801.806250
	509-510	Voice General Use	772.181250	802.181250
	549-550	Voice General Use	772.431250	802.431250
	601-602	Voice General Use	772.756250	802.756250
	669-670	Voice General Use	773.181250	803.181250
	709-710	Voice General Use	773.431250	803.431250
	785-786	Voice General Use	773.906250	803.906250
	901-902	Voice General Use	774.631250	804.631250
	269-270	Voice State License	770.681250	800.681250
	271-272	Voice State License	770.693750	800.693750
	725-726	Voice State License	773.531250	803.531250
	727-728	Voice State License	773.543750	803.543750
	849-850	Voice State License	774.306250	804.306250
	851-852	Voice State License	774.318750	804.318750
	929-930	Voice State License	774.806250	804.806250
	931-932	Voice State License	774.818750	804.818750
Deaf Smith	217-218	Voice General Use	770.356250	800.356250
	381-382	Voice General Use	771.381250	801.381250
	453-454	Voice General Use	771.831250	801.831250
	497-498	Voice General Use	772.106250	802.106250
	545-546	Voice General Use	772.406250	802.406250
	613-614	Voice General Use	772.831250	802.831250
	673-674	Voice General Use	773.206250	803.206250
	717-718	Voice General Use	773.481250	803.481250
	797-798	Voice General Use	773.981250	803.981250
	837-838	Voice General Use	774.231250	804.231250
	901-902	Voice General Use	774.631250	804.631250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Deaf Smith	109-110	Voice State License	769.681250	799.681250
	111-112	Voice State License	769.693750	799.693750
	153-154	Voice State License	769.956250	799.956250
	155-156	Voice State License	769.968750	799.968750
	845-846	Voice State License	774.281250	804.281250
	847-848	Voice State License	774.293750	804.293750
Dickens	171-172	Voice General Use	770.068750	800.068750
	293-294	Voice General Use	770.831250	800.831250
	349-350	Voice General Use	771.181250	801.181250
	397-398	Voice General Use	771.481250	801.481250
	439-440	Voice General Use	771.743750	801.743750
	485-486	Voice General Use	772.031250	802.031250
	525-526	Voice General Use	772.281250	802.281250
	565-566	Voice General Use	772.531250	802.531250
	613-614	Voice General Use	772.831250	802.831250
	677-678	Voice General Use	773.231250	803.231250
	753-754	Voice General Use	773.706250	803.706250
	793-794	Voice General Use	773.956250	803.956250
	869-870	Voice General Use	774.431250	804.431250
	941-942	Voice General Use	774.881250	804.881250
	113-114	Voice State License	769.706250	799.706250
	115-116	Voice State License	769.718750	799.718750
	229-230	Voice State License	770.431250	800.431250
	231-232	Voice State License	770.443750	800.443750
	933-934	Voice State License	774.831250	804.831250
	935-936	Voice State License	774.843750	804.843750
Donley	129-130	Voice General Use	769.806250	799.806250
	201-202	Voice General Use	770.256250	800.256250
	253-254	Voice General Use	770.581250	800.581250
	367-368	Voice General Use	771.293750	801.293750
	417-418	Voice General Use	771.606250	801.606250
	463-464	Voice General Use	771.893750	801.893750
	557-558	Voice General Use	772.481250	802.481250
	613-614	Voice General Use	772.831250	802.831250
	753-754	Voice General Use	773.706250	803.706250
	797-798	Voice General Use	773.981250	803.981250
	837-838	Voice General Use	774.231250	804.231250
	901-902	Voice General Use	774.631250	804.631250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Donley	941-942	Voice General Use	774.881250	804.881250
	65-66	Voice State License	769.406250	799.406250
	67-68	Voice State License	769.418750	799.418750
	105-106	Voice State License	769.656250	799.656250
	107-108	Voice State License	769.668750	799.668750
	769-770	Voice State License	773.806250	803.806250
	771-772	Voice State License	773.818750	803.818750
Floyd	43-44	Voice General Use	769.268750	799.268750
	83-84	Voice General Use	769.518750	799.518750
	133-134	Voice General Use	769.831250	799.831250
	177-178	Voice General Use	770.106250	800.106250
	217-218	Voice General Use	770.356250	800.356250
	257-258	Voice General Use	770.606250	800.606250
	299-300	Voice General Use	770.868750	800.868750
	361-362	Voice General Use	771.256250	801.256250
	413-414	Voice General Use	771.581250	801.581250
	465-466	Voice General Use	771.906250	801.906250
	505-506	Voice General Use	772.156250	802.156250
	553-554	Voice General Use	772.456250	802.456250
	593-594	Voice General Use	772.706250	802.706250
	639-640	Voice General Use	772.993750	802.993750
	873-874	Voice General Use	774.456250	804.456250
	33-34	Voice State License	769.206250	799.206250
	35-36	Voice State License	769.218750	799.218750
	153-154	Voice State License	769.956250	799.956250
	155-156	Voice State License	769.968750	799.968750
	693-694	Voice State License	773.331250	803.331250
	695-696	Voice State License	773.343750	803.343750
Foard	127-128	Voice General Use	769.793750	799.793750
	201-202	Voice General Use	770.256250	800.256250
	291-292	Voice General Use	770.818750	800.818750
	347-348	Voice General Use	771.168750	801.168750
	393-394	Voice General Use	771.456250	801.456250
	449-450	Voice General Use	771.806250	801.806250
	517-518	Voice General Use	772.231250	802.231250
	563-564	Voice General Use	772.518750	802.518750
	675-676	Voice General Use	773.218750	803.218750

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Foard	837-838	Voice General Use	774.231250	804.231250
	877-878	Voice General Use	774.481250	804.481250
	645-646	Voice State License	773.031250	803.031250
	647-648	Voice State License	773.043750	803.043750
Garza	45-46	Voice General Use	769.281250	799.281250
	165-166	Voice General Use	770.031250	800.031250
	245-246	Voice General Use	770.531250	800.531250
	357-358	Voice General Use	771.231250	801.231250
	405-406	Voice General Use	771.531250	801.531250
	457-458	Voice General Use	771.856250	801.856250
	557-558	Voice General Use	772.481250	802.481250
	603-604	Voice General Use	772.768750	802.768750
	667-668	Voice General Use	773.168750	803.168750
	741-742	Voice General Use	773.631250	803.631250
	787-788	Voice General Use	773.918750	803.918750
	829-830	Voice General Use	774.181250	804.181250
	149-150	Voice State License	769.931250	799.931250
	151-152	Voice State License	769.943750	799.943750
	893-894	Voice State License	774.581250	804.581250
	895-896	Voice State License	774.593750	804.593750
Gray	17-18	Voice General Use	769.106250	799.106250
	57-58	Voice General Use	769.356250	799.356250
	97-98	Voice General Use	769.606250	799.606250
	137-138	Voice General Use	769.856250	799.856250
	177-178	Voice General Use	770.106250	800.106250
	257-258	Voice General Use	770.606250	800.606250
	325-326	Voice General Use	771.031250	801.031250
	381-382	Voice General Use	771.381250	801.381250
	433-434	Voice General Use	771.706250	801.706250
	473-474	Voice General Use	771.956250	801.956250
	517-518	Voice General Use	772.231250	802.231250
	565-566	Voice General Use	772.531250	802.531250
	625-626	Voice General Use	772.906250	802.906250
	705-706	Voice General Use	773.406250	803.406250
	745-746	Voice General Use	773.656250	803.656250
	785-786	Voice General Use	773.906250	803.906250
	825-826	Voice General Use	774.156250	804.156250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Gray	865-866	Voice General Use	774.406250	804.406250
	915-916	Voice General Use	774.718750	804.718750
	309-310	Voice State License	770.931250	800.931250
	311-312	Voice State License	770.943750	800.943750
	649-650	Voice State License	773.056250	803.056250
	651-652	Voice State License	773.068750	803.068750
	689-690	Voice State License	773.306250	803.306250
	691-692	Voice State License	773.318750	803.318750
	729-730	Voice State License	773.556250	803.556250
	731-732	Voice State License	773.568750	803.568750
	809-810	Voice State License	774.056250	804.056250
	811-812	Voice State License	774.068750	804.068750
	929-930	Voice State License	774.806250	804.806250
	931-932	Voice State License	774.818750	804.818750
Hale	49-50	Voice General Use	769.306250	799.306250
	89-90	Voice General Use	769.556250	799.556250
	161-162	Voice General Use	770.006250	800.006250
	201-202	Voice General Use	770.256250	800.256250
	243-244	Voice General Use	770.518750	800.518750
	289-290	Voice General Use	770.806250	800.806250
	353-354	Voice General Use	771.206250	801.206250
	401-402	Voice General Use	771.506250	801.506250
	441-442	Voice General Use	771.756250	801.756250
	483-484	Voice General Use	772.018750	802.018750
	561-562	Voice General Use	772.506250	802.506250
	609-610	Voice General Use	772.806250	802.806250
	665-666	Voice General Use	773.156250	803.156250
	745-746	Voice General Use	773.656250	803.656250
	785-786	Voice General Use	773.906250	803.906250
	825-826	Voice General Use	774.156250	804.156250
	917-918	Voice General Use	774.731250	804.731250
	145-146	Voice State License	769.906250	799.906250
	147-148	Voice State License	769.918750	799.918750
	265-266	Voice State License	770.656250	800.656250
	267-268	Voice State License	770.668750	800.668750
	653-654	Voice State License	773.081250	803.081250
	655-656	Voice State License	773.093750	803.093750
	733-734	Voice State License	773.581250	803.581250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Hale	735-736	Voice State License	773.593750	803.593750
	773-774	Voice State License	773.831250	803.831250
	775-776	Voice State License	773.843750	803.843750
Hall	47-48	Voice General Use	769.293750	799.293750
	205-206	Voice General Use	770.281250	800.281250
	285-286	Voice General Use	770.781250	800.781250
	327-328	Voice General Use	771.043750	801.043750
	373-374	Voice General Use	771.331250	801.331250
	437-438	Voice General Use	771.731250	801.731250
	481-482	Voice General Use	772.006250	802.006250
	521-522	Voice General Use	772.256250	802.256250
	573-574	Voice General Use	772.581250	802.581250
	617-618	Voice General Use	772.856250	802.856250
	713-714	Voice General Use	773.456250	803.456250
	829-830	Voice General Use	774.181250	804.181250
	913-914	Voice General Use	774.706250	804.706250
	805-806	Voice State License	774.031250	804.031250
	807-808	Voice State License	774.043750	804.043750
	925-926	Voice State License	774.781250	804.781250
	927-928	Voice State License	774.793750	804.793750
Hansford	19-20	Voice General Use	769.118750	799.118750
	99-100	Voice General Use	769.618750	799.618750
	139-140	Voice General Use	769.868750	799.868750
	179-180	Voice General Use	770.118750	800.118750
	251-252	Voice General Use	770.568750	800.568750
	357-358	Voice General Use	771.231250	801.231250
	397-398	Voice General Use	771.481250	801.481250
	437-438	Voice General Use	771.731250	801.731250
	477-478	Voice General Use	771.981250	801.981250
	545-546	Voice General Use	772.406250	802.406250
	605-606	Voice General Use	772.781250	802.781250
	661-662	Voice General Use	773.131250	803.131250
	869-870	Voice General Use	774.431250	804.431250
	917-918	Voice General Use	774.731250	804.731250
	273-274	Voice State License	770.706250	800.706250
	275-276	Voice State License	770.718750	800.718750
	685-686	Voice State License	773.281250	803.281250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Hansford	687-688	Voice State License	773.293750	803.293750
	885-886	Voice State License	774.531250	804.531250
	887-888	Voice State License	774.543750	804.543750
Hardeman	133-134	Voice General Use	769.831250	799.831250
	213-214	Voice General Use	770.331250	800.331250
	257-258	Voice General Use	770.606250	800.606250
	329-330	Voice General Use	771.056250	801.056250
	369-370	Voice General Use	771.306250	801.306250
	441-442	Voice General Use	771.756250	801.756250
	485-486	Voice General Use	772.031250	802.031250
	549-550	Voice General Use	772.431250	802.431250
	591-592	Voice General Use	772.693750	802.693750
	633-634	Voice General Use	772.956250	802.956250
	757-758	Voice General Use	773.731250	803.731250
	827-828	Voice General Use	774.168750	804.168750
	869-870	Voice General Use	774.431250	804.431250
	917-918	Voice General Use	774.731250	804.731250
	69-70	Voice State License	769.431250	799.431250
	71-72	Voice State License	769.443750	799.443750
	809-810	Voice State License	774.056250	804.056250
	811-812	Voice State License	774.068750	804.068750
	929-930	Voice State License	774.806250	804.806250
	931-932	Voice State License	774.818750	804.818750
Hartley	59-60	Voice General Use	769.368750	799.368750
	123-124	Voice General Use	769.768750	799.768750
	169-170	Voice General Use	770.056250	800.056250
	209-210	Voice General Use	770.306250	800.306250
	353-354	Voice General Use	771.206250	801.206250
	417-418	Voice General Use	771.606250	801.606250
	457-458	Voice General Use	771.856250	801.856250
	499-500	Voice General Use	772.118750	802.118750
	565-566	Voice General Use	772.531250	802.531250
	609-610	Voice General Use	772.806250	802.806250
	677-678	Voice General Use	773.231250	803.231250
	753-754	Voice General Use	773.706250	803.706250
	839-840	Voice General Use	774.243750	804.243750
	879-880	Voice General Use	774.493750	804.493750

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Hartley	189-190	Voice State License	770.181250	800.181250
	191-192	Voice State License	770.193750	800.193750
	313-314	Voice State License	770.956250	800.956250
	315-316	Voice State License	770.968750	800.968750
	769-770	Voice State License	773.806250	803.806250
	771-772	Voice State License	773.818750	803.818750
Hemphill	43-44	Voice General Use	769.268750	799.268750
	125-126	Voice General Use	769.781250	799.781250
	173-174	Voice General Use	770.081250	800.081250
	215-216	Voice General Use	770.343750	800.343750
	321-322	Voice General Use	771.006250	801.006250
	365-366	Voice General Use	771.281250	801.281250
	409-410	Voice General Use	771.556250	801.556250
	449-450	Voice General Use	771.806250	801.806250
	497-498	Voice General Use	772.106250	802.106250
	553-554	Voice General Use	772.456250	802.456250
	593-594	Voice General Use	772.706250	802.706250
	829-830	Voice General Use	774.181250	804.181250
	269-270	Voice State License	770.681250	800.681250
	271-272	Voice State License	770.693750	800.693750
	853-854	Voice State License	774.331250	804.331250
	855-856	Voice State License	774.343750	804.343750
Hockley	13-14	Voice General Use	769.081250	799.081250
	53-54	Voice General Use	769.331250	799.331250
	93-94	Voice General Use	769.581250	799.581250
	137-138	Voice General Use	769.856250	799.856250
	345-346	Voice General Use	771.156250	801.156250
	417-418	Voice General Use	771.606250	801.606250
	469-470	Voice General Use	771.931250	801.931250
	549-550	Voice General Use	772.431250	802.431250
	597-598	Voice General Use	772.731250	802.731250
	637-638	Voice General Use	772.981250	802.981250
	869-870	Voice General Use	774.431250	804.431250
	913-914	Voice General Use	774.706250	804.706250
	25-26	Voice State License	769.156250	799.156250
	27-28	Voice State License	769.168750	799.168750
	225-226	Voice State License	770.406250	800.406250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Hockley	227-228	Voice State License	770.418750	800.418750
	853-854	Voice State License	774.331250	804.331250
	855-856	Voice State License	774.343750	804.343750
Hutchinson	47-48	Voice General Use	769.293750	799.293750
	121-122	Voice General Use	769.756250	799.756250
	161-162	Voice General Use	770.006250	800.006250
	217-218	Voice General Use	770.356250	800.356250
	281-282	Voice General Use	770.756250	800.756250
	373-374	Voice General Use	771.331250	801.331250
	413-414	Voice General Use	771.581250	01.581250
	453-454	Voice General Use	771.831250	801.831250
	493-494	Voice General Use	772.081250	802.081250
	537-538	Voice General Use	772.356250	802.356250
	585-586	Voice General Use	772.656250	802.656250
	633-634	Voice General Use	772.956250	802.956250
	673-674	Voice General Use	773.206250	803.206250
	713-714	Voice General Use	773.456250	803.456250
	757-758	Voice General Use	773.731250	803.731250
	799-800	Voice General Use	773.993750	803.993750
	877-878	Voice General Use	774.481250	804.481250
	69-70	Voice State License	769.431250	799.431250
	71-72	Voice State License	769.443750	799.443750
	113-114	Voice State License	769.706250	799.706250
	115-116	Voice State License	769.718750	799.718750
	153-154	Voice State License	769.956250	799.956250
	155-156	Voice State License	769.968750	799.968750
	773-774	Voice State License	773.831250	803.831250
	775-776	Voice State License	773.843750	803.843750
	845-846	Voice State License	774.281250	804.281250
	847-848	Voice State License	774.293750	804.293750
Jack	41-42	Voice General Use	769.256250	799.256250
	85-86	Voice General Use	769.531250	799.531250
	133-134	Voice General Use	769.831250	799.831250
	241-242	Voice General Use	770.506250	800.506250
	289-290	Voice General Use	770.806250	800.806250
	329-330	Voice General Use	771.056250	801.056250
	421-422	Voice General Use	771.631250	801.631250
	473-474	Voice General Use	771.956250	801.956250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Jack	545-546	Voice General Use	772.406250	802.406250
	591-592	Voice General Use	772.693750	802.693750
	669-670	Voice General Use	773.181250	803.181250
	755-756	Voice General Use	773.718750	803.718750
	913-914	Voice General Use	774.706250	804.706250
	145-146	Voice State License	769.906250	799.906250
	147-148	Voice State License	769.918750	799.918750
	645-646	Voice State License	773.031250	803.031250
	647-648	Voice State License	773.043750	803.043750
	809-810	Voice State License	774.056250	804.056250
	811-812	Voice State License	774.068750	804.068750
King	97-98	Voice General Use	769.606250	799.606250
	175-176	Voice General Use	770.093750	800.093750
	249-250	Voice General Use	770.556250	800.556250
	359-360	Voice General Use	771.243750	801.243750
	407-408	Voice General Use	771.543750	801.543750
	479-480	Voice General Use	771.993750	801.993750
	533-534	Voice General Use	772.331250	802.331250
	583-584	Voice General Use	772.643750	802.643750
	629-630	Voice General Use	772.931250	802.931250
	785-786	Voice General Use	773.906250	803.906250
	825-826	Voice General Use	774.156250	804.156250
	947-948	Voice General Use	774.918750	804.918750
	65-66	Voice State License	769.406250	799.406250
	67-68	Voice State License	769.418750	799.418750
	105-106	Voice State License	769.656250	799.656250
	107-108	Voice State License	769.668750	799.668750
	189-190	Voice State License	770.181250	800.181250
	191-192	Voice State License	770.193750	800.193750
	685-686	Voice State License	773.281250	803.281250
	687-688	Voice State License	773.293750	803.293750
Lamb	41-42	Voice General Use	769.256250	799.256250
	81-82	Voice General Use	769.506250	799.506250
	129-130	Voice General Use	769.806250	799.806250
	207-208	Voice General Use	770.293750	800.293750
	259-260	Voice General Use	770.618750	800.618750
	333-334	Voice General Use	771.081250	801.081250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Lamb	409-410	Voice General Use	771.556250	801.556250
	457-458	Voice General Use	771.856250	801.856250
	499-500	Voice General Use	772.118750	802.118750
	541-542	Voice General Use	772.381250	802.381250
	589-590	Voice General Use	772.681250	802.681250
	669-670	Voice General Use	773.181250	803.181250
	713-714	Voice General Use	773.456250	803.456250
	753-754	Voice General Use	773.706250	803.706250
	793-794	Voice General Use	773.956250	803.956250
	833-834	Voice General Use	774.206250	804.206250
	113-114	Voice State License	769.706250	799.706250
	115-116	Voice State License	769.718750	799.718750
	893-894	Voice State License	774.581250	804.581250
	895-896	Voice State License	774.593750	804.593750
	933-934	Voice State License	774.831250	804.831250
	935-936	Voice State License	774.843750	804.843750
Lipscomb	51-52	Voice General Use	769.318750	799.318750
	91-92	Voice General Use	769.568750	799.568750
	295-296	Voice General Use	770.843750	800.843750
	337-338	Voice General Use	771.106250	801.106250
	379-380	Voice General Use	771.368750	801.368750
	425-426	Voice General Use	771.656250	801.656250
	489-490	Voice General Use	772.056250	802.056250
	541-542	Voice General Use	772.381250	802.381250
	581-582	Voice General Use	772.631250	802.631250
	627-628	Voice General Use	772.918750	802.918750
	701-702	Voice General Use	773.381250	803.381250
	741-742	Voice General Use	773.631250	803.631250
	833-834	Voice General Use	774.206250	804.206250
	879-880	Voice General Use	774.493750	804.493750
	65-66	Voice State License	769.406250	799.406250
	67-68	Voice State License	769.418750	799.418750
	149-150	Voice State License	769.931250	799.931250
	151-152	Voice State License	769.943750	799.943750
	805-806	Voice State License	774.031250	804.031250
	807-808	Voice State License	774.043750	804.043750
	933-934	Voice State License	774.831250	804.831250
	935-936	Voice State License	774.843750	804.843750

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Lubbock	17-18	Voice General Use	769.106250	799.106250
	57-58	Voice General Use	769.356250	799.356250
	97-98	Voice General Use	769.606250	799.606250
	173-174	Voice General Use	770.081250	800.081250
	213-214	Voice General Use	770.331250	800.331250
	281-282	Voice General Use	770.756250	800.756250
	321-322	Voice General Use	771.006250	801.006250
	389-390	Voice General Use	771.431250	801.431250
	449-450	Voice General Use	771.806250	801.806250
	489-490	Voice General Use	772.056250	802.056250
	529-530	Voice General Use	772.306250	802.306250
	569-570	Voice General Use	772.556250	802.556250
	625-626	Voice General Use	772.906250	802.906250
	673-674	Voice General Use	773.206250	803.206250
	717-718	Voice General Use	773.481250	803.481250
	757-758	Voice General Use	773.731250	803.731250
	797-798	Voice General Use	773.981250	803.981250
	861-862	Voice General Use	774.381250	804.381250
	905-906	Voice General Use	774.656250	804.656250
	945-946	Voice General Use	774.906250	804.906250
	65-66	Voice State License	769.406250	799.406250
	67-68	Voice State License	769.418750	799.418750
	105-106	Voice State License	769.656250	799.656250
	107-108	Voice State License	769.668750	799.668750
	193-194	Voice State License	770.206250	800.206250
	195-196	Voice State License	770.218750	800.218750
	233-234	Voice State License	770.456250	800.456250
	235-236	Voice State License	770.468750	800.468750
	273-274	Voice State License	770.706250	800.706250
	275-276	Voice State License	770.718750	800.718750
	313-314	Voice State License	770.956250	800.956250
	315-316	Voice State License	770.968750	800.968750
	645-646	Voice State License	773.031250	803.031250
	647-648	Voice State License	773.043750	803.043750
	685-686	Voice State License	773.281250	803.281250
	687-688	Voice State License	773.293750	803.293750
	725-726	Voice State License	773.531250	803.531250
	727-728	Voice State License	773.543750	803.543750
	765-766	Voice State License	773.781250	803.781250
	767-768	Voice State License	773.793750	803.793750

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Lubbock	805-806	Voice State License	774.031250	804.031250
	807-808	Voice State License	774.043750	804.043750
	845-846	Voice State License	774.281250	804.281250
	847-848	Voice State License	774.293750	804.293750
	885-886	Voice State License	774.531250	804.531250
	887-888	Voice State License	774.543750	804.543750
	925-926	Voice State License	774.781250	804.781250
	927-928	Voice State License	774.793750	804.793750
Lynn	255-256	Voice General Use	770.593750	800.593750
	297-298	Voice General Use	770.856250	800.856250
	337-338	Voice General Use	771.106250	801.106250
	377-378	Voice General Use	771.356250	801.356250
	429-430	Voice General Use	771.681250	801.681250
	477-478	Voice General Use	771.981250	801.981250
	521-522	Voice General Use	772.256250	802.256250
	577-578	Voice General Use	772.606250	802.606250
	617-618	Voice General Use	772.856250	802.856250
	679-680	Voice General Use	773.243750	803.243750
	749-750	Voice General Use	773.681250	803.681250
	865-866	Voice General Use	774.406250	804.406250
	185-186	Voice State License	770.156250	800.156250
	187-188	Voice State License	770.168750	800.168750
	813-814	Voice State License	774.081250	804.081250
	815-816	Voice State License	774.093750	804.093750
Montague	47-48	Voice General Use	769.293750	799.293750
	127-128	Voice General Use	769.793750	799.793750
	169-170	Voice General Use	770.056250	800.056250
	211-212	Voice General Use	770.318750	800.318750
	285-286	Voice General Use	770.781250	800.781250
	369-370	Voice General Use	771.306250	801.306250
	449-450	Voice General Use	771.806250	801.806250
	499-500	Voice General Use	772.118750	802.118750
	569-570	Voice General Use	772.556250	802.556250
	623-624	Voice General Use	772.893750	802.893750
	709-710	Voice General Use	773.431250	803.431250
	749-750	Voice General Use	773.681250	803.681250
	795-796	Voice General Use	773.968750	803.968750
	869-870	Voice General Use	774.431250	804.431250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Montague	943-944	Voice General Use	774.893750	804.893750
	265-266	Voice State License	770.656250	800.656250
	267-268	Voice State License	770.668750	800.668750
	853-854	Voice State License	774.331250	804.331250
	855-856	Voice State License	774.343750	804.343750
	893-894	Voice State License	774.581250	804.581250
	895-896	Voice State License	774.593750	804.593750
Moore	41-42	Voice General Use	769.256250	799.256250
	81-82	Voice General Use	769.506250	799.506250
	127-128	Voice General Use	769.793750	799.793750
	201-202	Voice General Use	770.256250	800.256250
	289-290	Voice General Use	770.806250	800.806250
	333-334	Voice General Use	771.081250	801.081250
	385-386	Voice General Use	771.406250	801.406250
	425-426	Voice General Use	771.656250	801.656250
	465-466	Voice General Use	771.906250	801.906250
	505-506	Voice General Use	772.156250	802.156250
	557-558	Voice General Use	772.481250	802.481250
	617-618	Voice General Use	772.856250	802.856250
	701-702	Voice General Use	773.381250	803.381250
	793-794	Voice General Use	773.956250	803.956250
	833-834	Voice General Use	774.206250	804.206250
	941-942	Voice General Use	774.881250	804.881250
	105-106	Voice State License	769.656250	799.656250
	107-108	Voice State License	769.668750	799.668750
	145-146	Voice State License	769.906250	799.906250
	147-148	Voice State License	769.918750	799.918750
	645-646	Voice State License	773.031250	803.031250
	647-648	Voice State License	773.043750	803.043750
	805-806	Voice State License	774.031250	804.031250
	807-808	Voice State License	774.043750	804.043750
Motley	53-54	Voice General Use	769.331250	799.331250
	137-138	Voice General Use	769.856250	799.856250
	209-210	Voice General Use	770.306250	800.306250
	355-356	Voice General Use	771.218750	801.218750
	403-404	Voice General Use	771.518750	801.518750
	453-454	Voice General Use	771.831250	801.831250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Motley	497-498	Voice General Use	772.106250	802.106250
	607-608	Voice General Use	772.793750	802.793750
	661-662	Voice General Use	773.131250	803.131250
	747-748	Voice General Use	773.668750	803.668750
	821-822	Voice General Use	774.131250	804.131250
	865-866	Voice General Use	774.406250	804.406250
	25-26	Voice State License	769.156250	799.156250
	27-28	Voice State License	769.168750	799.168750
	649-650	Voice State License	773.056250	803.056250
	651-652	Voice State License	773.068750	803.068750
	813-814	Voice State License	774.081250	804.081250
	815-816	Voice State License	774.093750	804.093750
	853-854	Voice State License	774.331250	804.331250
	855-856	Voice State License	774.343750	804.343750
Ochiltree	59-60	Voice General Use	769.368750	799.368750
	129-130	Voice General Use	769.806250	799.806250
	205-206	Voice General Use	770.281250	800.281250
	245-246	Voice General Use	770.531250	800.531250
	291-292	Voice General Use	770.818750	800.818750
	349-350	Voice General Use	771.181250	801.181250
	389-390	Voice General Use	771.431250	801.431250
	429-430	Voice General Use	771.681250	801.681250
	469-470	Voice General Use	771.931250	801.931250
	513-514	Voice General Use	772.206250	802.206250
	561-562	Voice General Use	772.506250	802.506250
	613-614	Voice General Use	772.831250	802.831250
	753-754	Voice General Use	773.706250	803.706250
	795-796	Voice General Use	773.968750	803.968750
	837-838	Voice General Use	774.231250	804.231250
	901-902	Voice General Use	774.631250	804.631250
	29-30	Voice State License	769.181250	799.181250
	31-32	Voice State License	769.193750	799.193750
	313-314	Voice State License	770.956250	800.956250
	315-316	Voice State License	770.968750	800.968750
	725-726	Voice State License	773.531250	803.531250
	727-728	Voice State License	773.543750	803.543750
	925-926	Voice State License	774.781250	804.781250
	927-928	Voice State License	774.793750	804.793750

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Oldham	257-258	Voice General Use	770.606250	800.606250
	345-346	Voice General Use	771.156250	801.156250
	409-410	Voice General Use	771.556250	801.556250
	513-514	Voice General Use	772.206250	802.206250
	577-578	Voice General Use	772.606250	802.606250
	661-662	Voice General Use	773.131250	803.131250
	825-826	Voice General Use	774.156250	804.156250
	65-66	Voice State License	769.406250	799.406250
	67-68	Voice State License	769.418750	799.418750
Parmer	51-52	Voice General Use	769.318750	799.318750
	91-92	Voice General Use	769.568750	799.568750
	169-170	Voice General Use	770.056250	800.056250
	241-242	Voice General Use	770.506250	800.506250
	281-282	Voice General Use	770.756250	800.756250
	349-350	Voice General Use	771.181250	801.181250
	405-406	Voice General Use	771.531250	801.531250
	445-446	Voice General Use	771.781250	801.781250
	493-494	Voice General Use	772.081250	802.081250
	533-534	Voice General Use	772.331250	802.331250
	601-602	Voice General Use	772.756250	802.756250
	743-744	Voice General Use	773.643750	803.643750
	877-878	Voice General Use	774.481250	804.481250
	919-920	Voice General Use	774.743750	804.743750
	69-70	Voice State License	769.431250	799.431250
	71-72	Voice State License	769.443750	799.443750
	313-314	Voice State License	770.956250	800.956250
	315-316	Voice State License	770.968750	800.968750
	645-646	Voice State License	773.031250	803.031250
	647-648	Voice State License	773.043750	803.043750
Potter	13-14	Voice General Use	769.081250	799.081250
	53-54	Voice General Use	769.331250	799.331250
	93-94	Voice General Use	769.581250	799.581250
	133-134	Voice General Use	769.831250	799.831250
	173-174	Voice General Use	770.081250	800.081250
	249-250	Voice General Use	770.556250	800.556250
	321-322	Voice General Use	771.006250	801.006250
	361-362	Voice General Use	771.256250	801.256250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Potter	401-402	Voice General Use	771.506250	801.506250
	441-442	Voice General Use	771.756250	801.756250
	481-482	Voice General Use	772.006250	802.006250
	521-522	Voice General Use	772.256250	802.256250
	597-598	Voice General Use	772.731250	802.731250
	665-666	Voice General Use	773.156250	803.156250
	741-742	Voice General Use	773.631250	803.631250
	781-782	Voice General Use	773.881250	803.881250
	821-822	Voice General Use	774.131250	804.131250
	861-862	Voice General Use	774.381250	804.381250
	913-914	Voice General Use	774.706250	804.706250
	33-34	Voice State License	769.206250	799.206250
	35-36	Voice State License	769.218750	799.218750
	225-226	Voice State License	770.406250	800.406250
	227-228	Voice State License	770.418750	800.418750
	265-266	Voice State License	770.656250	800.656250
	267-268	Voice State License	770.668750	800.668750
	305-306	Voice State License	770.906250	800.906250
	307-308	Voice State License	770.918750	800.918750
	653-654	Voice State License	773.081250	803.081250
	655-656	Voice State License	773.093750	803.093750
	693-694	Voice State License	773.331250	803.331250
	695-696	Voice State License	773.343750	803.343750
	733-734	Voice State License	773.581250	803.581250
	735-736	Voice State License	773.593750	803.593750
	813-814	Voice State License	774.081250	804.081250
	815-816	Voice State License	774.093750	804.093750
	853-854	Voice State License	774.331250	804.331250
	855-856	Voice State License	774.343750	804.343750
	893-894	Voice State License	774.581250	804.581250
	895-896	Voice State License	774.593750	804.593750
	933-934	Voice State License	774.831250	804.831250
	935-936	Voice State License	774.843750	804.843750
Randall	45-46	Voice General Use	769.281250	799.281250
	85-86	Voice General Use	769.531250	799.531250
	125-126	Voice General Use	769.781250	799.781250
	165-166	Voice General Use	770.031250	800.031250
	205-206	Voice General Use	770.281250	800.281250
	245-246	Voice General Use	770.531250	800.531250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Randall	285-286	Voice General Use	770.781250	800.781250
	329-330	Voice General Use	771.056250	801.056250
	369-370	Voice General Use	771.306250	801.306250
	429-430	Voice General Use	771.681250	801.681250
	469-470	Voice General Use	771.931250	801.931250
	529-530	Voice General Use	772.306250	802.306250
	569-570	Voice General Use	772.556250	802.556250
	637-638	Voice General Use	772.981250	802.981250
	709-710	Voice General Use	773.431250	803.431250
	749-750	Voice General Use	773.681250	803.681250
	789-790	Voice General Use	773.931250	803.931250
	829-830	Voice General Use	774.181250	804.181250
	869-870	Voice General Use	774.431250	804.431250
	945-946	Voice General Use	774.906250	804.906250
	25-26	Voice State License	769.156250	799.156250
	27-28	Voice State License	769.168750	799.168750
	73-74	Voice State License	769.456250	799.456250
	75-76	Voice State License	769.468750	799.468750
	193-194	Voice State License	770.206250	800.206250
	195-196	Voice State License	770.218750	800.218750
	273-274	Voice State License	770.706250	800.706250
	275-276	Voice State License	770.718750	800.718750
	685-686	Voice State License	773.281250	803.281250
	687-688	Voice State License	773.293750	803.293750
	725-726	Voice State License	773.531250	803.531250
	727-728	Voice State License	773.543750	803.543750
	765-766	Voice State License	773.781250	803.781250
	767-768	Voice State License	773.793750	803.793750
	885-886	Voice State License	774.531250	804.531250
	887-888	Voice State License	774.543750	804.543750
	925-926	Voice State License	774.781250	804.781250
	927-928	Voice State License	774.793750	804.793750
Roberts	85-86	Voice General Use	769.531250	799.531250
	287-288	Voice General Use	770.793750	800.793750
	329-330	Voice General Use	771.056250	801.056250
	369-370	Voice General Use	771.306250	801.306250
	421-422	Voice General Use	771.631250	801.631250
	461-462	Voice General Use	771.881250	801.881250
	525-526	Voice General Use	772.281250	802.281250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Roberts	573-574	Voice General Use	772.581250	802.581250
	677-678	Voice General Use	773.231250	803.231250
	943-944	Voice General Use	774.893750	804.893750
	765-766	Voice State License	773.781250	803.781250
	767-768	Voice State License	773.793750	803.793750
Sherman	285-286	Voice General Use	770.781250	800.781250
	325-326	Voice General Use	771.031250	801.031250
	365-366	Voice General Use	771.281250	801.281250
	405-406	Voice General Use	771.531250	801.531250
	489-490	Voice General Use	772.056250	802.056250
	529-530	Voice General Use	772.306250	802.306250
	579-580	Voice General Use	772.618750	802.618750
	629-630	Voice General Use	772.931250	802.931250
	865-866	Voice General Use	774.406250	804.406250
	909-910	Voice General Use	774.681250	804.681250
	25-26	Voice State License	769.156250	799.156250
	27-28	Voice State License	769.168750	799.168750
	229-230	Voice State License	770.431250	800.431250
	231-232	Voice State License	770.443750	800.443750
Swisher	19-20	Voice General Use	769.118750	799.118750
	59-60	Voice General Use	769.368750	799.368750
	99-100	Voice General Use	769.618750	799.618750
	139-140	Voice General Use	769.868750	799.868750
	293-294	Voice General Use	770.831250	800.831250
	337-338	Voice General Use	771.106250	801.106250
	377-378	Voice General Use	771.356250	801.356250
	421-422	Voice General Use	771.631250	801.631250
	461-462	Voice General Use	771.881250	801.881250
	517-518	Voice General Use	772.231250	802.231250
	581-582	Voice General Use	772.631250	802.631250
	629-630	Voice General Use	772.931250	802.931250
	677-678	Voice General Use	773.231250	803.231250
	759-760	Voice General Use	773.743750	803.743750
	799-800	Voice General Use	773.993750	803.993750
	839-840	Voice General Use	774.243750	804.243750
	903-904	Voice General Use	774.643750	804.643750
	309-310	Voice State License	770.931250	800.931250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Swisher	311-312	Voice State License	770.943750	800.943750
	809-810	Voice State License	774.056250	804.056250
	811-812	Voice State License	774.068750	804.068750
	849-850	Voice State License	774.306250	804.306250
	851-852	Voice State License	774.318750	804.318750
Terry	133-134	Voice General Use	769.831250	799.831250
	205-206	Voice General Use	770.281250	800.281250
	247-248	Voice General Use	770.543750	800.543750
	361-362	Voice General Use	771.256250	801.256250
	425-426	Voice General Use	771.656250	801.656250
	465-466	Voice General Use	771.906250	801.906250
	533-534	Voice General Use	772.331250	802.331250
	605-606	Voice General Use	772.781250	802.781250
	709-710	Voice General Use	773.431250	803.431250
	789-790	Voice General Use	773.931250	803.931250
	837-838	Voice General Use	774.231250	804.231250
	877-878	Voice General Use	774.481250	804.481250
	919-920	Voice General Use	774.743750	804.743750
	33-34	Voice State License	769.206250	799.206250
	35-36	Voice State License	769.218750	799.218750
	153-154	Voice State License	769.956250	799.956250
	155-156	Voice State License	769.968750	799.968750
	693-694	Voice State License	773.331250	803.331250
	695-696	Voice State License	773.343750	803.343750
Wheeler	49-50	Voice General Use	769.306250	799.306250
	165-166	Voice General Use	770.031250	800.031250
	293-294	Voice General Use	770.831250	800.831250
	345-346	Voice General Use	771.156250	801.156250
	397-398	Voice General Use	771.481250	801.481250
	443-444	Voice General Use	771.768750	801.768750
	485-486	Voice General Use	772.031250	802.031250
	545-546	Voice General Use	772.406250	802.406250
	597-598	Voice General Use	772.731250	802.731250
	637-638	Voice General Use	772.981250	802.981250
	715-716	Voice General Use	773.468750	803.468750
	759-760	Voice General Use	773.743750	803.743750
	821-822	Voice General Use	774.131250	804.131250
	869-870	Voice General Use	774.431250	804.431250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Wheeler	909-910	Voice General Use	774.681250	804.681250
	25-26	Voice State License	769.156250	799.156250
	27-28	Voice State License	769.168750	799.168750
	145-146	Voice State License	769.906250	799.906250
	147-148	Voice State License	769.918750	799.918750
	189-190	Voice State License	770.181250	800.181250
	191-192	Voice State License	770.193750	800.193750
	889-890	Voice State License	774.556250	804.556250
	891-892	Voice State License	774.568750	804.568750
Wichita	13-14	Voice General Use	769.081250	799.081250
	81-82	Voice General Use	769.506250	799.506250
	137-138	Voice General Use	769.856250	799.856250
	209-210	Voice General Use	770.306250	800.306250
	253-254	Voice General Use	770.581250	800.581250
	325-326	Voice General Use	771.031250	801.031250
	365-366	Voice General Use	771.281250	801.281250
	437-438	Voice General Use	771.731250	801.731250
	477-478	Voice General Use	771.981250	801.981250
	553-554	Voice General Use	772.456250	802.456250
	597-598	Voice General Use	772.731250	802.731250
	637-638	Voice General Use	772.981250	802.981250
	677-678	Voice General Use	773.231250	803.231250
	753-754	Voice General Use	773.706250	803.706250
	793-794	Voice General Use	773.956250	803.956250
	865-866	Voice General Use	774.406250	804.406250
	905-906	Voice General Use	774.656250	804.656250
	945-946	Voice General Use	774.906250	804.906250
	29-30	Voice State License	769.181250	799.181250
	31-32	Voice State License	769.193750	799.193750
	109-110	Voice State License	769.681250	799.681250
	111-112	Voice State License	769.693750	799.693750
	153-154	Voice State License	769.956250	799.956250
	155-156	Voice State License	769.968750	799.968750
	233-234	Voice State License	770.456250	800.456250
	235-236	Voice State License	770.468750	800.468750
	273-274	Voice State License	770.706250	800.706250
	275-276	Voice State License	770.718750	800.718750
	313-314	Voice State License	770.956250	800.956250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Wichita	315-316	Voice State License	770.968750	800.968750
	649-650	Voice State License	773.056250	803.056250
	651-652	Voice State License	773.068750	803.068750
	733-734	Voice State License	773.581250	803.581250
	735-736	Voice State License	773.593750	803.593750
	773-774	Voice State License	773.831250	803.831250
	775-776	Voice State License	773.843750	803.843750
	885-886	Voice State License	774.531250	804.531250
	887-888	Voice State License	774.543750	804.543750
	933-934	Voice State License	774.831250	804.831250
	935-936	Voice State License	774.843750	804.843750
Wilbarger	49-50	Voice General Use	769.306250	799.306250
	121-122	Voice General Use	769.756250	799.756250
	161-162	Voice General Use	770.006250	800.006250
	205-206	Voice General Use	770.281250	800.281250
	285-286	Voice General Use	770.781250	800.781250
	357-358	Voice General Use	771.231250	801.231250
	413-414	Voice General Use	771.581250	801.581250
	457-458	Voice General Use	771.856250	801.856250
	497-498	Voice General Use	772.106250	802.106250
	537-538	Voice General Use	772.356250	802.356250
	577-578	Voice General Use	772.606250	802.606250
	617-618	Voice General Use	772.856250	802.856250
	661-662	Voice General Use	773.131250	803.131250
	717-718	Voice General Use	773.481250	803.481250
	787-788	Voice General Use	773.918750	803.918750
	909-910	Voice General Use	774.681250	804.681250
	193-194	Voice State License	770.206250	800.206250
	195-196	Voice State License	770.218750	800.218750
	265-266	Voice State License	770.656250	800.656250
	267-268	Voice State License	770.668750	800.668750
	845-846	Voice State License	774.281250	804.281250
	847-848	Voice State License	774.293750	804.293750
	893-894	Voice State License	774.581250	804.581250
	895-896	Voice State License	774.593750	804.593750
Yoakum	45-46	Voice General Use	769.281250	799.281250
	125-126	Voice General Use	769.781250	799.781250
	177-178	Voice General Use	770.106250	800.106250

Region 52 Detailed Channel Allotments by County

County Name	Channel	Class	Base Freq	Mobile Freq
Yoakum	257-258	Voice General Use	770.606250	800.606250
	325-326	Voice General Use	771.031250	801.031250
	401-402	Voice General Use	771.506250	801.506250
	441-442	Voice General Use	771.756250	801.756250
	509-510	Voice General Use	772.181250	802.181250
	557-558	Voice General Use	772.481250	802.481250
	621-622	Voice General Use	772.881250	802.881250
	675-676	Voice General Use	773.218750	803.218750
	745-746	Voice General Use	773.656250	803.656250
	799-800	Voice General Use	773.993750	803.993750
	947-948	Voice General Use	774.918750	804.918750
	109-110	Voice State License	769.681250	799.681250
	111-112	Voice State License	769.693750	799.693750
	309-310	Voice State License	770.931250	800.931250
	311-312	Voice State License	770.943750	800.943750
	773-774	Voice State License	773.831250	803.831250
	775-776	Voice State License	773.843750	803.843750
Young	53-54	Voice General Use	769.331250	799.331250
	125-126	Voice General Use	769.781250	799.781250
	215-216	Voice General Use	770.343750	800.343750
	321-322	Voice General Use	771.006250	801.006250
	367-368	Voice General Use	771.293750	801.293750
	409-410	Voice General Use	771.556250	801.556250
	489-490	Voice General Use	772.056250	802.056250
	561-562	Voice General Use	772.506250	802.506250
	633-634	Voice General Use	772.956250	802.956250
	679-680	Voice General Use	773.243750	803.243750
	745-746	Voice General Use	773.656250	803.656250
	833-834	Voice General Use	774.206250	804.206250
	873-874	Voice General Use	774.456250	804.456250
	917-918	Voice General Use	774.731250	804.731250
	73-74	Voice State License	769.456250	799.456250
	75-76	Voice State License	769.468750	799.468750
	113-114	Voice State License	769.706250	799.706250
	115-116	Voice State License	769.718750	799.718750
	849-850	Voice State License	774.306250	804.306250
	851-852	Voice State License	774.318750	804.318750
	889-890	Voice State License	774.556250	804.556250
	891-892	Voice State License	774.568750	804.568750

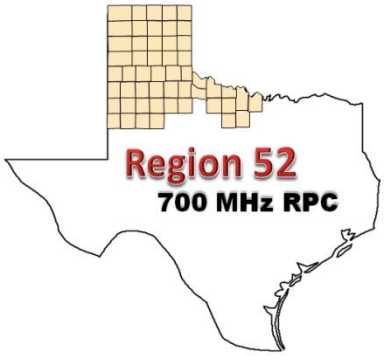
Appendix I - DTV Transition

The Digital Television Transition (DTV) was completed in June 2009. TV Channels 63-64 and 68-69 should no longer be in operation and impacting 700 MHz public safety spectrum. This section was intended to guide RPCs during the DTV transition to ensure that the potential for interference to and from public safety 700 MHz use and incumbent TV stations was acknowledged when both were in operation. That transition has been completed and this section is no longer needed.

The TV stations operating within Region 52 include:

County	Channel	Call Sign	Location	Latitude	Longitude
				NAD83	NAD83
Lubbock	64	K41KW-D	Lubbock	33°30'57.48"	101°50'54.3"W
	64	NEW	Lubbock	33°31'33N"	101°52'7W"
	65	K65HS	Lubbock	33°29'11"N	101°52'56"W
	65	NEW	Lubbock	33°29'11"N	101°52'56"W
	67	K67HQ	Lubbock	33°31'33N"	101°52'7W"
	67	K67HQ	Lubbock	33°35'5"N	101°50'54"W
	69	K69IM	Lubbock	33°34'48N"	101°50'48W"
	69	KDFL-LP	Lubbock	33°30'56"N	101°50'54"W
Ochiltree	62	K62DD	Perryton	36°7'4N"	100°48'7W"
	64	K64AC	Perryton	36°6'26N"	100°47'32W"
	66	K66AB	Perryton	36°6'26N"	100°47'32W"
	68	K68AD	Perryton	36°6'26N"	100°47'32W"
Parmer	63	K63GN	Bovina, Etc.	34°35'13N"	102°52'6W"
Potter	64	K64GK	Amarillo	35°15'41"N	101°52'52"W
	69	K69IH	Amarillo	35°15'41"N	101°52'52"W
Randall	64	K64GK	Amarillo	35°5'9N"	101°54'48W"
	69	K69IH	Amarillo	35°5'9N"	101°54'48W"
Wichita	63	JE0415FC	Wichita Falls	33°54'4N"	98°32'21W"
	68	K68GK	Wichita Falls	33°53'23N"	98°33'31W"
	68	KTWW-LP	Wichita Falls	33°52'48"N	98°35'18"W

NOTIFICATION OF FCC APPROVAL OF 700 MHz REGIONAL PLAN



Secondary LPTV and/or TV Translator Station and Call Sign
Address

To Whom It May Concern:

This letter serves as formal notification of the FCC approval of the 700 MHz Regional Planning for Region 52 (Northwest Texas). A copy of the approved plan can be found at: www.theprpc.org. By this letter, (TV Station Call sign/location) is reminded that its operations are secondary to future, primary public safety land mobile operations. Low power TV stations and TV translators may not cause interference to public safety operations and must accept any interference they might receive from those operations. For more information concerning this requirement, please reference FCC Report and Order 97-421 (December 31, 1997) and more specifically, paragraphs 14 and 25-31 of that Order. You will be notified if and when public safety systems have been implemented in the band.

Sincerely,

Mr./Ms. (Regional Chair)
Regional Chairperson Region 52
Contact Info

NOTE: Though the Digital Television Transition (DTV) was completed in the region without interference or controversy; this letter was sent to TV stations in the region as a courtesy.

Appendix J - 700 MHz Texas SIEC Plan

Below is an excerpt from the Texas Statewide Interoperability Channel Plan (TSICP) developed by the Texas Statewide Interoperability Executive Committee (TSIEC), the Texas Interoperable Communications Coalition (TxICC) and the Texas Department of Public Safety (TxDPS) dated May 13, 2014 (Change #16).

This section of the TSICP addresses the State of Texas' administration of the 700 MHz Interoperability channels. The full text of the TSCIP can be found at: http://www.txdps.state.tx.us/LawEnforcementSupport/communications/interop/documents/tsicpMOU.pdf

5. SPECIFIC GUIDELINES – 700 MHz Channels

For 700 MHz interoperability, the 32 repeater channels, with their associated 32 direct channels, are described in Table 5.1 below. Table 5.2 includes the corresponding Tactical Repeater Configuration.

Note the following:

- 700 MHz interoperability channels are identified by the FCC for interoperability use within Texas. All fixed 700 MHz interoperable channel locations must be reviewed by the Office of the Texas SWIC prior to implantation. Some of these interoperable channels may already be licensed by multiple agencies for interoperability use throughout the state.

- All 700 MHz interoperability channels are to be used as multi-discipline, multi-agency public safety interoperability calling channels for all public safety agencies and other signatories to the MOU associated with this channel plan. These channels are designated for interoperable 700 MHz communications between mobile/portable radios and base stations, temporary base stations, and on-incident incident commander.

- The tactical repeater channels and direct channels identified in Table 5.1should be assigned on-incident by the incident commander.

- National efforts to standardize interoperability channel names/labels have been undertaken to ensure that public safety equipment uses a common naming convention. These labels are listed in Tables 5.1 and 5.2 and all participating agencies must use these labels.

Table 5.1
700 MHz Interoperability Channels (12.5 kHz)

Emission Designator 11K2G2E

Mobile and Portable Configuration					
Label	**Receive**	**Transmit**	**Station Class**	**P25 NAC Hex/Dec**	**Use**
7CALL50	769.24375	799.24375	FX1T / MO	$293 / 659	Calling Channel
7CALL50D	769.24375	769.24375	FX1T / MO	$293 / 659	Calling Channel (Direct)
7TAC51	769.14375	799.14375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC51D	769.14375	769.14375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7TAC52	769.64375	799.64375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC52D	769.64375	769.64375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7TAC53	770.14375	800.14375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC53D	770.14375	770.14375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7TAC54	770.64375	800.64375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC54D	770.64375	770.64375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7TAC55	769.74375	799.74375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC55D	769.74375	769.74375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7TAC56	770.24375	800.24375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC56D	770.24375	770.24375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7GTAC57	770.99375	800.99375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7GTAC57D	770.99375	770.99375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7MOB59	770.89375	800.89375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7MOB59D	770.89375	770.89375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7LAW61	770.39375	800.39375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7LAW61D	770.39375	770.39375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7LAW62	770.49375	800.49375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7LAW62D	770.49375	770.49375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7FIRE63	769.89375	799.89375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7FIRE63D	769.89375	769.89375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7FIRE64	769.99375	799.99375	FX1T / MO	$293 / 659	Tactical Repeater Channel

Table 5.1
700 MHz Interoperability Channels (12.5 kHz)

Emission Designator 11K2G2E

Mobile and Portable Configuration					
Label	**Receive**	**Transmit**	**Station Class**	**P25 NAC Hex/Dec**	**Use**
7FIRE64D	769.99375	769.99375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7MED65	769.39375	799.39375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7MED65D	769.39375	769.39375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7MED66	769.49375	799.49375	FX1T / MO	$293 / 659	Tactical Repeater Channel
7MED66D	769.49375	769.49375	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7DATA69	770.74375	800.74375	FX1T / MO	$293 / 659	Tactical Data Repeater Channel
7DATA69D	770.74375	770.74375	FX1T / MO	$293 / 659	Tactical Data Channel (Direct)
7TAC71	773.10625	803.10625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC71D	773.10625	773.10625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7TAC72	773.60625	803.60625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC72D	773.60625	773.60625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7TAC73	774.10625	804.10625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC73D	774.10625	774.10625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7TAC74	774.60625	804.60625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC74D	774.60625	774.60625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7TAC75	773.75625	803.75625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC75D	773.75625	773.75625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7TAC76	774.25625	804.25625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7TAC76D	774.25625	774.25625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7GTAC77	774.85625	804.85625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7GTAC77D	774.85625	774.85625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7MOB79	774.50625	804.50625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7MOB79D	774.50625	774.50625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7LAW81	774.00625	804.00625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7LAW81D	774.00625	774.00625	FX1T / MO	$293 / 659	Tactical Channel (Direct)

Table 5.1
700 MHz Interoperability Channels (12.5 kHz)

Emission Designator 11K2G2E

Mobile and Portable Configuration					
Label	**Receive**	**Transmit**	**Station Class**	**P25 NAC Hex/Dec**	**Use**
7LAW82	774.35625	804.35625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7LAW82D	774.35625	774.35625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7FIRE83	773.50625	803.50625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7FIRE83D	773.50625	773.50625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7FIRE84	773.85625	803.85625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7FIRE84D	773.85625	773.85625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7MED86	773.00625	803.00625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7MED86D	773.00625	773.00625	FX1T / MO	$293 / 659	Tactical Channel (Direct)

The remainder of this page is intentionally blank

Table 5.2
700 MHz Interoperability Channels (12.5 kHz)

Emission Designator 11K2G2E

Temporary Calling Channel / Tactical Repeater Configuration					
Label	**Receive**	**Transmit**	**Station Class**	**P25 NAC Hex/Dec**	**Use**
7CALL50	769.24375	799.24375	FB2T	$293 / 659	Temporary Calling Channel Repeater
7TAC51	769.14375	799.14375	FB2T	$293 / 659	Temporary Tactical Repeater
7TAC52	769.64375	799.64375	FB2T	$293 / 659	Temporary Tactical Repeater
7TAC53	770.14375	800.14375	FB2T	$293 / 659	Temporary Tactical Repeater
7TAC54	770.64375	800.64375	FB2T	$293 / 659	Temporary Tactical Repeater
7TAC55	769.74375	799.74375	FB2T	$293 / 659	Temporary Tactical Repeater
7TAC56	770.24375	800.24375	FB2T	$293 / 659	Temporary Tactical Repeater
7GTAC57	770.99375	800.99375	FB2T	$293 / 659	Temporary Tactical Repeater
7MOB59	770.89375	800.89375	FB2T	$293 / 659	Temporary Tactical Repeater
7LAW61	770.39375	800.39375	FB2T	$293 / 659	Temporary Tactical Repeater
7LAW62	770.49375	800.49375	FB2T	$293 / 659	Temporary Tactical Repeater
7FIRE63	769.89375	799.89375	FB2T	$293 / 659	Temporary Tactical Repeater
7FIRE64	769.99375	799.99375	FB2T	$293 / 659	Temporary Tactical Repeater
7MED65	769.39375	799.39375	FB2T	$293 / 659	Temporary Tactical Repeater
7MED66	769.49375	799.49375	FB2T	$293 / 659	Temporary Tactical Repeater
7DATA69	770.74375	800.74375	FB2T	$293 / 659	Temporary Tactical Data Repeater
7TAC71	773.10625	803.10625	FB2T	$293 / 659	Temporary Tactical Repeater
7TAC72	773.60625	803.60625	FB2T	$293 / 659	Temporary Tactical Repeater
7TAC73	774.10625	804.10625	FB2T	$293 / 659	Temporary Tactical Repeater
7TAC74	774.60625	804.60625	FB2T	$293 / 659	Temporary Tactical Repeater
7TAC75	773.75625	803.75625	FB2T	$293 / 659	Temporary Tactical Repeater
7TAC76	774.25625	804.25625	FB2T	$293 / 659	Temporary Tactical Repeater
7GTAC77	774.85625	804.85625	FB2T	$293 / 659	Temporary Tactical Repeater
7MOB79	774.50625	804.50625	FB2T	$293 / 659	Temporary Tactical Repeater

Table 5.2
700 MHz Interoperability Channels (12.5 kHz)

Emission Designator 11K2G2E

Temporary Calling Channel / Tactical Repeater Configuration					
Label	**Receive**	**Transmit**	**Station Class**	**P25 NAC Hex/Dec**	**Use**
7LAW81	774.00625	804.00625	FB2T	$293 / 659	Temporary Tactical Repeater
7LAW82	774.35625	804.35625	FB2T	$293 / 659	Temporary Tactical Repeater
7FIRE83	773.50625	803.50625	FB2T	$293 / 659	Temporary Tactical Repeater
7FIRE84	773.85625	803.85625	FB2T	$293 / 659	Temporary Tactical Repeater
7MED86	773.00625	803.00625	FB2T	$293 / 659	Temporary Tactical Repeater
7MED87	773.35625	803.35625	FB2T	$293 / 659	Temporary Tactical Repeater
7DATA89	774.75625	804.75625	FB2T	$293 / 659	Temporary Tactical Data Repeater

Appendix K – 700 MHz Interoperability/Channel Nomenclature

Table of 700 MHz Interoperability Channels

For Specific Uses/Services
* - Mandatory

16 CHANNEL SETS	DESCRIPTION	LABEL
Channel 23 & 24	*General Public Safety Services (secondary trunk)*	*7TAC58*
Channel 103 & 104	*General Public Safety Services (secondary trunk)*	*7TAC62*
Channel 183 & 184	*General Public Safety Services (secondary trunk)*	*7TAC66*
Channel 263 & 264	*General Public Safety Services (secondary trunk)*	*7TAC70*
Channel 39 & 40	Calling Channel *	7CAL59
Channel 119 & 120	General Public Safety Service *	7TAC63
Channel 199 & 200	General Public Safety Service	7TAC67
Channel 279 & 280	Mobile Data	7DAT71
Channel 63 & 64	Emergency Medical Service	7EMS60
Channel 143 & 144	Fire Service	7FIR64
Channel 223 & 224	Law Enforcement Service	7LAW68
Channel 303 & 304	Mobile Repeater *	7MOB68
Channel 79 & 80	Emergency Medical Service	7EMS61
Channel 159 & 160	Fire Service	7FIR65
Channel 239 & 240	Law Enforcement Service	7LAW69
Channel 319 & 320	Other Public Service *	7TAC73
Channel 657 & 658	*General Public Safety Services (secondary trunk)*	*7TAC74*
Channel 737 & 738	*General Public Safety Services (secondary trunk)*	*7TAC78*
Channel 817 & 818	*General Public Safety Services (secondary trunk)*	*7TAC82*
Channel 897 & 898	*General Public Safety Services (secondary trunk)*	*7TAC86*
Channel 681 & 682	Calling Channel *	7CAL75
Channel 761 & 762	General Public Safety Service *	7TAC79
Channel 841 & 842	General Public Safety Service	7TAC83
Channel 921 & 922	Mobile Date	7DAT87
Channel 641 & 642	Emergency Medical Service	7EMS76
Channel 721 & 742	Fire Services	7FIR80
Channel 801 & 802	Law Enforcement Service	7LAW84

16 CHANNEL SETS	DESCRIPTION	LABEL
Channel 881 & 882	Mobile Repeater *	7MOB88
Channel 697 & 698	Emergency Medical Service	7EMS77
Channel 777 & 778	Fire Services	7FIR81
Channel 857 & 858	Law Enforcement Service	7LAW85
Channel 937 & 938	Other Public Services *	7TAC 89

Project 25 Common Air Interface
Interoperability Channel Technical 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 pre-amble of the P25 signal and repeated periodically throughout the transmission. Its purpose is to provide selective access to an 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

The use of 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 grou 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 alows the ability to define manufacturer specifici 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 unencrypted messages of $0000000000000000000.

Encryption Algorithm ID and Key ID

The Project 25 Common Air Interace allows the ability to define specific encryption algorithms and encryption keys. In order to ensure that all users can communicate, encryption should 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 of $0000. These same defaults may be used for the other Interoperability channels when encryption is not used.

Use of encryption is allowed on the other Interoperability channels. Regional Planning Committees need to define appriate Message ID, Encryption Algorithm ID, and Encryption Key ID to be used in the encrypted mode on Interoperability channels.

Appendix L – Inter-Regional Coordination Procedures and Resolution of Disputes Template

Region 52 700 MHz Plan
Inter-Regional Coordination Agreements

I. INTRODUCTION

This is a mutually agreed upon Inter-Regional Coordination Procedures Agreement ("the Agreement") by and between the Regional Planning Committees of Region 52 and:

a) Region 7 - Colorado
b) Region 16 – Kansas
c) Region 29 – New Mexico
d) Region 34 - Oklahoma
e) Region 40 – Texas-Dallas
f) Region 50 – Texas-El Paso

Whereas, Agreement hereto by all parties was confirmed on the 17th day of September, 2013.

II. INTER-REGIONAL COORDINATION AGREEMENT

1. The following is the specific procedure for Inter-Regional Coordination which has been agreed upon by Regions 7, 16, 29, 34, 40, 50 and 52, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees as might be required.

   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 [1]. This information will be sent to the adjacent Regional, chairperson(s) using the CAPRAD database.

   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**

1 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 with 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. This meeting may be held in person or via WebEx, GoTo meeting, or similar video conferencing method. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons, via the email addresses recorded in the CAPRAD database. Findings may include, but not be limited to:

a. 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 co-channel/adjacent channel interference free protection to existing licensees within the adjacent Region.

2 If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the appropriate subcommittee of the National Regional Planning Council (NRPC), or any subsequent oversight organization. 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 NRPC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the email addresses recorded in the CAPRAD database. The NRPC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.

a) 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.

b) Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).

c) Upon Commission issuance of an *Order* adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the *Order* to the adjacent Regional chairperson(s) and may then advise the applicant(s) that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

IV. CONCLUSION

In agreement hereto, Regions 7, 16, 29, 34, 40, 50 and 52 do hereunto set their signatures and the day and year written.

Region 7 _____ Date: 15-May-2013

Region 16 _____ Date: 04/30/2013

Region 29 _____ Date: July 10, 2013

Region 34 _____ Date: Sept. 17, 2013

Region 40 _____ Date: April 12, 2013

Region 50 _____ Date: 06/17/2013

Region 52 _____ Date: 01-Apr-2013

[1] - *If an applicant's proposed service area or interference contour extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service areas shall normally be defined as the area included in the geographical boundary of the applicant, plus three (3) miles. Interference contour shall normally be defined as a 5 dBu co-channel contour or a 60 dBu adjacent channel contour. Other definitions of service are or interference shall be justified with an accompanying Memorandum of Understanding (MOU) or other application documentation between agencies (i.e., mutual aid agreements).*

Appendix M – Simplified 700 MHz Pre-Assignment Rules and Recommendations

This paper describes a process for coordinating the initial block assignments of 700 MHz channels before details of actual system deployments is available. In this initial phase, there is little actual knowledge of the specific equipment to be deployed and the exact antenna sites locations. As a result, a simple, high-level method is proposed to establish guidelines for frequency coordination. When actual systems are deployed, additional details will be known and the system designers will be required to select specific sites and supporting hardware to control interference.

The calculations and examples presented in this Appendix are specific to ANSI/TIA/EIA-102 series (Project 25) standards, unless stated otherwise. General Use channels may employ other digital technologies. When evaluating interference potential involving other digital technologies, refer to the latest version of TIA Technical Services Bulletin TSB-88.

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.

For co-channel assignments, the 40 dBμ service 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 dBμ interfering contour will be allowed to touch but not overlap the 40 dBμ service contour of the system being evaluated. All contours are (50,50).

For adjacent and alternate channels, the 60 dBμ interfering contour will be allowed to touch but not overlap the 40 dBμ service contour of the system being evaluated. All contours are (50,50).

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 1μV/m (customarily denoted as 40 dBμ). 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 dBμ field strength can be deployed up to a defined distance 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.

This is important that public safety systems have adequate margins for reliability within their service area in the presence of interference, including the potential for interference from CMRS infrastructure in adjacent bands.

The value of 40 dBµ ?in the 700 MHz band corresponds to a signal of -92.7 dBm, received by a half- wavelength dipole (l/2) antenna. The thermal noise floor for a 6.25 kHz bandwidth receiver would be in the range of -126 dBm, so there is a margin of approximately 33 dB available for "noise limited" reliability. Figure 1 shows show the various interfering sources and how they accumulate to form a composite noise floor that can be used to determine the "reliability" or probability of achieving the desired performance in the presence of various interfering sources with differing characteristics.

If CMRS out-of-band emissions (OOBE) noise is allowed to be equal to the original thermal noise floor, there is a 3 dB reduction1 in the available margin. This lowers the reliability and/or the channel performance of Public Safety systems. The left side of Figure 1 shows that the original 33 dB margin is reduced by 3 dB to only 30 dB available to determine "noise + CMRS OOBE limited" performance and reliability.

There are also different technologies with various channel bandwidths and different performance criteria. C/N in the range of 17 – 20 dB is required to achieve channel performance.

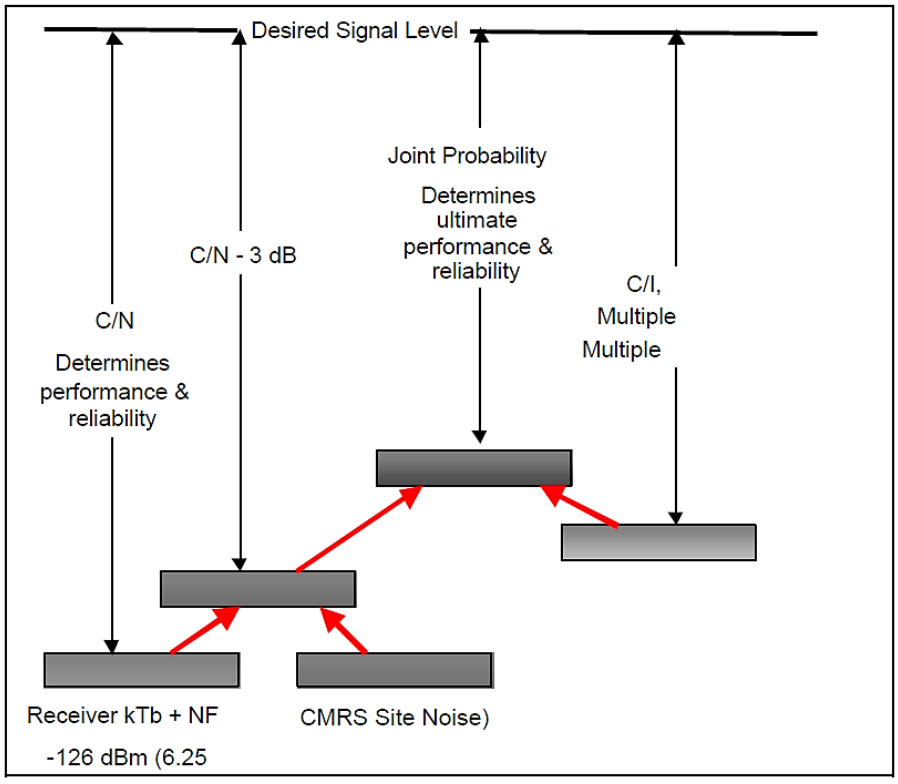


Figure 1 - Interfering Sources Create A "Noise" Level Influencing Reliability

In addition, unknown adjacent and alternate channel assignments need to be accounted for. The co-channel and adjacent/alternate sources are shown in the right hand side of Figure 1. At the edge of the service area, there would normally be only a single co-channel source, but there could potentially be several adjacent or alternate channel sources involved. It is recommended that co-channel assignments limit interference to <1% at the edge of the service area (worst case mile). A C/I ratio of 26.4 dB plus the required capture value (~10 dB) is required to achieve this goal.2

The ultimate performance and reliability has to take into consideration both the noise sources (thermal & CMRS OOBE) and all the interference sources. The center of Figure 1 shows that the joint probability that the both performance criteria and interference criteria are met must be determined.

Table 1 shows estimated performance considering the 3 dB rise in the noise floor at the 40 dBμ signal level. Performance varies due to the different Cf/N requirements and noise floors of the different modulations and channel bandwidths.

Note that since little is known about the effects of terrain, an initial lognormal standard deviation of 8 dB is used.

Comparison of Joint Reliability for various				
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver ENBW (kHz)	6	6	9	18
Noise Figure(10 dB)	10	10	10	10
Receiver Noise Floor (dBm)	-126.22	-126.22	-124.46	-121.45
Rise in Noise Floor (dB)	3.00	3.00	3.00	3.00
New Receiver Noise Floor (dB)	-123.22	-123.22	-121.46	-118.45
40 dBu = -92.7 dBm	-92.7	-92.7	-92.7	-92.7
Receiver Capture (dB)	10.0	10.0	10.0	10.0
Noise Margin (dB)	30.52	30.52	28.76	25.75
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
C/N Margin (dB)	**13.52**	**13.52**	**10.76**	**5.75**
Standard deviation (8 dB)	8.0	8.0	8.0	8.0
Z	1.690	1.690	1.345	0.718
Noise Reliability (%)	**95.45%**	**95.45%**	**91.06%**	**76.37%**
C/I for <1% prob of capture	36.4	36.4	36.4	36.4
I (dBu)	3.7	3.7	3.7	3.7
I (dBm)	-129.0	-129.0	-129.0	-129.0
Joint Probability (C & I)	**94.7%**	**94.7%**	**90.4%**	**76.1%**
40 dBu = -92.7 dBm @ 770 MHz				

Table 1 Joint Probability For Project 25, 700 MHz Equipment Configurations.

These values are appropriate for a mobile on the street, but are considerably short to provide reliable communications to portables inside buildings.

Portable In-Building Coverage

Most Public Safety communications systems, today, are designed for portable in-building3 coverage and the requirement for >95 % reliable coverage. To analyze the impact of requiring portable in building coverage and designing to a 40 dBμ service contour, several scenarios are presented. The different scenarios involve a given separation from the desired sites. Whether simulcast or multi-cast is used in wide-area systems, the antenna sites must be placed near the service area boundary and directional antennas, directed into the service area, must be used. The impact of simulcast is included to show that the 40 dBμ service contour must be able to fall outside the edge of the service area in order to meet coverage requirements at the edge of the service area. From the analysis, recommendations are made on how far the 40 dBμ service contour should extend beyond the service area.

Table 2 estimates urban coverage where simulcast is required to achieve the desired portable in building coverage. Several assumptions are required to use this estimate.

- Distance from the location to each site. Equal distance is assumed.
- CMRS noise is reduced when entering buildings. This is not a guarantee as the type of deployments is unknown. It is possible that CMRS units may have transmitters inside buildings. This could be potentially a large contributor unless the CMRS OOBE is suppressed to TIA's most recent recommendation and the "site isolation" is maintained at 65 dB minimum.
- The 40 dBμ service contour is allowed to extend beyond the edge of the service area boundary.
- Other configurations may be deployed utilizing additional sites, lower tower heights, lower ERP and shorter site separations.

Estimated Performance at 2.5 miles from each site				
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver Noise Floor (dBm)	-126.20	-126.20	-124.50	-118.50
Signal at 2.5 miles (dBm)	-72.7	-72.7	-72.7	-72.7
Margin (dB)	53.50	53.50	51.80	45.80
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
Building Loss (dB)	20	20	20	20
Antenna Loss (dBd)	8	8	8	8
Reliability Margin	8.50	8.50	5.80	-2.20
Z	1.0625	1.0625	0.725	-0.275
Single Site Noise Reliability (%)	**85.60%**	**85.60%**	**76.58%**	**39.17%**
Simulcast with 2 sites	97.93%	97.93%	94.51%	62.99%
Simulcast with 3 sites	99.70%	99.70%	98.71%	77.49%
Simulcast with 4 sites	99.96%	99.96%	99.70%	86.30%

Table 2, Estimated Performance From Site(s) 2.5 Miles From Typical Urban Buildings.

Table 2 shows for the example case of 2.5 miles that a single site cannot provide >95% reliability. Either more sites must be used to reduce the distance, or other system design techniques must be used to improve the reliability. For example, the table shows that simulcast can be used to achieve public safety levels of reliability at this distance. Table 2 also shows that the difference in performance margin requirements for wider bandwidth channels requires more sites and closer site-to-site separation.

Figures 2 and 3 show how the configurations would potentially be deployed for a typical site with 240 Watts ERP. This is based on:

• 75 Watt transmitter	18.75 dBW
• 200 foot tower	
• 10 dBd 180 degree sector antenna	+10.0 dBd
• 5 dB of cable/filter loss	- 5.0 dB
	23.75 dBW ≈ 240 Watts (ERPd)

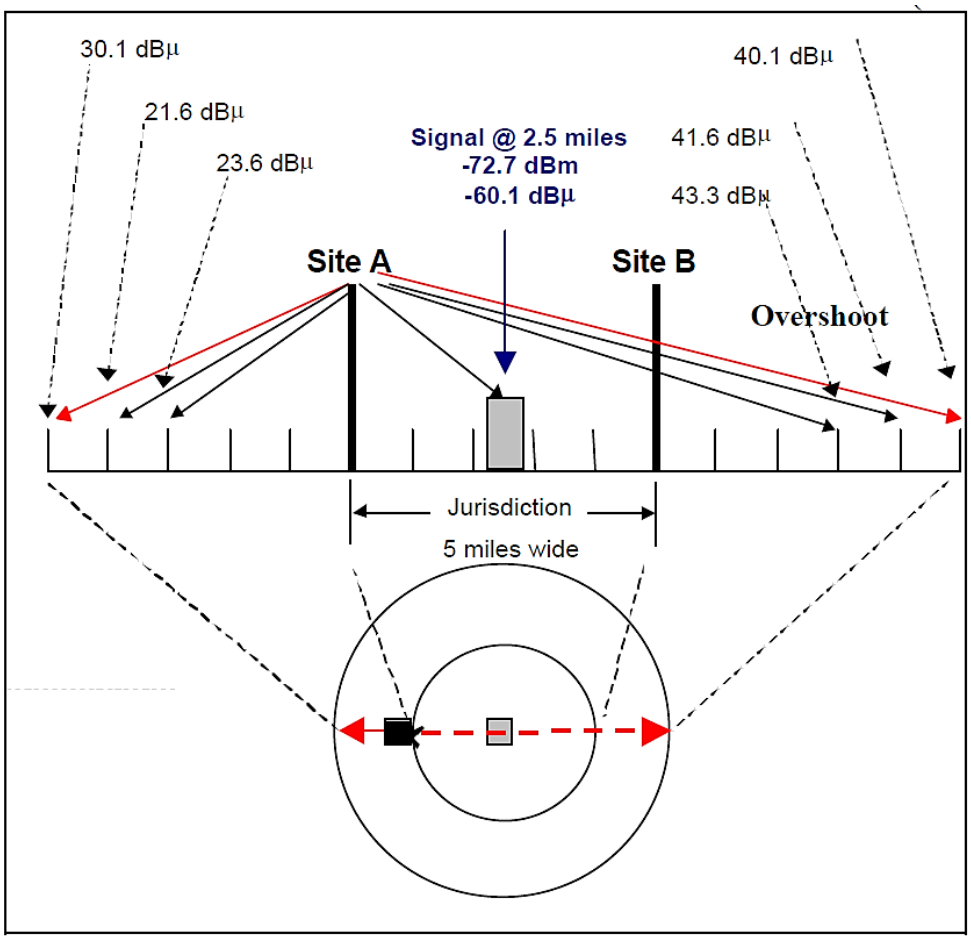


Figure 2 - Field Strength From Left Most Site.

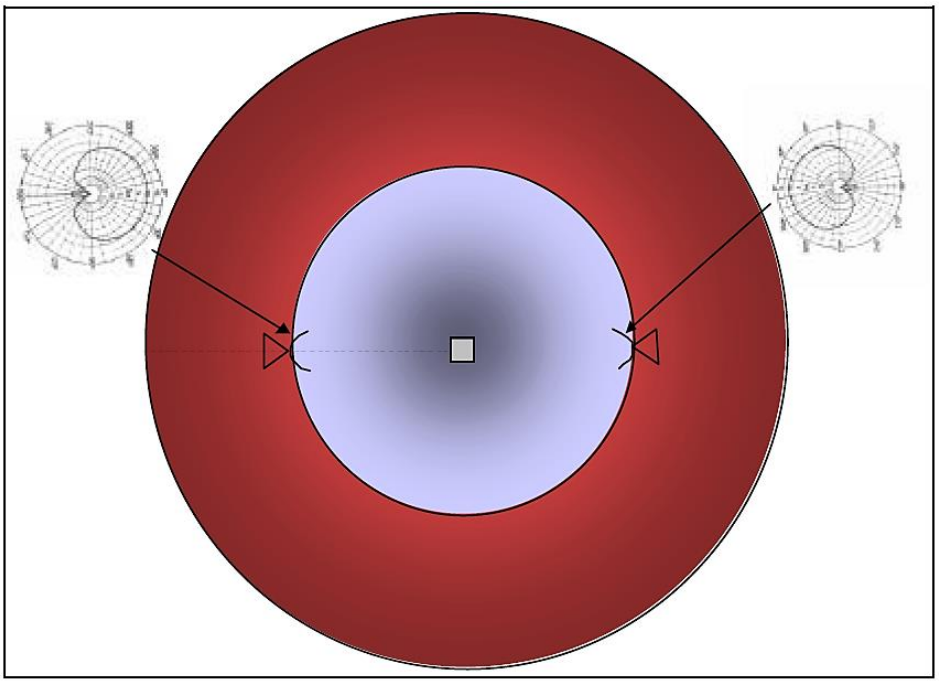


Figure 3 - Antenna Configuration Required To Limit Field Strength Off "Backside"

Figure 2 is for an urbanized area with a jurisdiction defined as a 5 mile circle. To provide the necessary coverage to portables in buildings at the center of the jurisdiction requires that the sites be placed along the edge of the service area and utilize directional antennas oriented toward the center of the service area (Figure 3). In this case, at 5 miles beyond the edge of the service area, the sites would produce a composite field strength of approximately 40 dBμ. Since one site is over 10 dB dominant, the contribution from the other site is not considered. The control of the field strength behind the site relies on a 20 dB antenna with a Front to Back Ratio (F/B) specification as shown in Figure 3. This performance may be optimistic due to back scatter off local obstructions in urbanized areas. However, use of antennas on the sides of buildings can assist in achieving better F/B ratios and the initial planning is not precise enough to prohibit using the full 20 dB.

The use of a single site at the center of the service area is not normally practical. To provide the necessary signal strength at the edge of the service area would produce a field strength 5 miles beyond in excess of 44 dBμ. However, if the high loss buildings were concentrated at the service area's center, then potentially a single site could be deployed, assuming that the building loss sufficiently decreases near the edge of the service area allowing a reduction in ERP to achieve the desired reliability.

Instead of directional antennas, down tilting of antennas to control the 40 dBμ is not practical in this scenario. For a 200 foot tall tower, the center of radiation from a 3 degree down tilt antenna hits the ground at ~ 0.75 miles4. The difference in angular discrimination from a 200 foot tall tower at service area boundary at 5 miles and service contour at 10 miles is approximately 0.6 degrees, so ERP is basically the same as ERP toward the horizon.

It would not be possible to achieve necessary signal strength at service area boundary and have 40 dBμ service contour be less than 5 miles away.

Tables 3 and 4 represent the same configuration, but for less dense buildings. In these cases, the distance to extend the 40 dBμ service contour can be determined from Table 5.

Estimated Performance at 3.5 miles from each site				
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver Noise Floor (dBm)	-126.20	-126.20	-124.50	-118.50
Signal at 3.5 miles (dBm)	-77.7	-77.7	-77.7	-77.7
Margin (dB)	48.50	48.50	46.80	40.80
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
Building Loss (dB)	15	15	15	15
Antenna Loss (dBd)	8	8	8	8
Reliability Margin	8.50	8.50	5.80	-2.20
Z	1.0625	1.0625	0.725	-0.275
Single Site Noise Reliability (%)	**85.60%**	**85.60%**	**76.58%**	**39.17%**
Simulcast with 2 sites	97.93%	97.93%	94.51%	62.99%
Simulcast with 3 sites	99.70%	99.70%	98.71%	77.49%
Simulcast with 4 sites	99.96%	99.96%	99.70%	86.30%

Table 3 - Lower Loss Buildings, 3.5 Mile From Site(s)

Estimated Performance at 5.0 miles from each site				
Channel Bandwidth	6.25 kHz	12.5 kHz	12.5 kHz	25.0 kHz
Receiver Noise Floor (dBm)	-126.20	-126.20	-124.50	-118.50
Signal at 5.0 miles (dBm)	-82.7	-82.7	-82.7	-82.7
Margin (dB)	43.50	43.50	41.80	35.80
C/N Required for DAQ = 3	17.0	17.0	18.0	20.0
Building Loss (dB)	10	10	10	10
Antenna Loss (dBd)	8	8	8	8
Reliability Margin	8.50	8.50	5.80	-2.20
Z	1.0625	1.0625	0.725	-0.275
Single Site Noise Reliability (%)	**85.60%**	**85.60%**	**76.58%**	**39.17%**
Simulcast with 2 sites	97.93%	97.93%	94.51%	62.99%
Simulcast with 3 sites	99.70%	99.70%	98.71%	77.49%
Simulcast with 4 sites	99.96%	99.96%	99.70%	86.30%

Table 4 - Low Loss Buildings, 5.0 Miles From Site(s)

Note that the receive signals were adjusted to offset the lowered building penetration loss. This produces the same numerical reliability results, but allows increasing the site to building separation and this in turn lowers the magnitude of the "overshoot" across the service area.

Table 5 shows the field strength for a direct path and for a path reduced by a 20 dB F/B antenna. This allows the analysis to be simplified for the specific example being discussed.

	Site A Direct Path	Site B Back Side of 20 dB F/B Antenna
Overshoot Distance (mi)	Field Strength (dBµ)	Field Strength (dBµ)
1	73.3	53.3
2	63.3	43.3
2.5	60.1	40.1
3	57.5	37.5
4	53.3	**33.5**
5	50.1	30.1
…	…	
10	40.1	
11	**38.4**	
12	37.5	
13	36.0	
14	34.5	
15	33.0	

Table 5 - Field Strength Vs. Distance From Site

For the scenarios above, the composite level at the Service Contour is the sum of the signals from the two sites. The sum cannot exceed 40 dBµ. Table 5 allows you to calculate the distance to Service Contour given the distance from one of the sites.

Scenario 1: Refer to Figure 3a. Site B is just inside the Service Area boundary and Service Contour must be <5 Miles outside Service Area boundary. Signal level at Service Contour from Site B is 30.1 dBµ. Signal level for Site A can be up to 40 dBµ, since when summing two signals with >10 dB delta, the lower signal level has little effect (less than 0.4 dB in this case). Therefore, Site A can be 10 miles from the Service Contour, or 5 miles inside the Service Area boundary. The coverage performance for this scenario is shown in Table 2, above, for 20 dB building loss typical of urban areas.

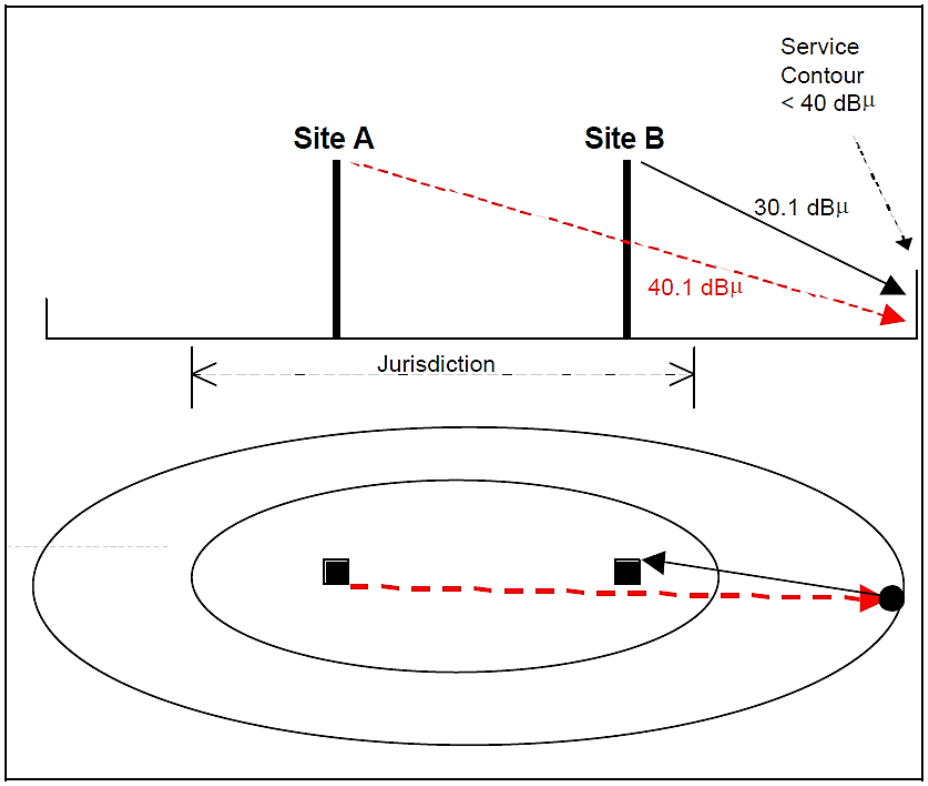


Figure 3a. Scenario 1 on Use of Table 5

Scenario 2: Refer to bold data in Table 5. Site B is just inside the Service Area boundary and Service Contour must be <4 Miles outside Service Area boundary. Signal level at Service Contour from Site B is 33.5 dBμ. Signal level for Site A can be up to 38.4 dBμ. (See Attachment B for simple method to sum the powers of signals expressed in decibels.) The composite power level is 39.7 dBμ. Therefore, Site A can be slightly less than 11 miles from the Service Contour, or ~7 miles inside the Service Area boundary. The coverage performance for this example is shown in Table 3, above, for 15 dB building loss typical of suburban areas.

Scenario 3: Site B is just inside the Service Area boundary and Service Contour must be <3 Miles outside Service Area boundary. Signal level at Service Contour from Site B is 37.5 dBμ. Signal level for Site A can be up to 36.4 dBμ. (See Attachment B simple method to sum signals expressed in decibels.) The composite power level is 40.0 dBμ. Therefore, Site A can be ~13 miles from the Service Contour, or ~10 miles inside the Service Area boundary. The coverage performance for this example is shown in Table 4, above, for 10 dB building loss typical of rural areas.

Service Contour Extension Recommendation

The resulting recommendation for extending the 40 dBμ service contour beyond the service area boundary is:

Type of Area	Extension (mi.)
Urban (20 dB Buildings)	5
Suburban (15 dB Buildings)	4
Rural (10 dB Buildings)	3

Table 6 - Recommended Extension Distance Of 40 dBµ Field Strength

Using this recommendation, the 40 dBµ service contour can then be constructed based on the defined service area without having to perform an actual prediction.

Interfering Contour

Table 1 above shows that 36.4 dB of margin is required to provide 10 dB of co-channel capture and <1% probability of interference. Since the 40 dBµ service contour is beyond the edge of the service area, some relaxation in the level of interference is reasonable. Therefore, a 35 dB cochannel C/I ratio is recommended and is consistent with what is currently being licensed in the 821-824/866-869 MHz Public Safety band.

Co-Channel Interfering Contour Recommendation

- Allow the constructed 40 dBµ (50,50) service contour to extend beyond the edge of the defined service area by the distance indicated in Table 6.
- Allow the 5 dBµ (50,50) interfering contour to intercept but not overlap the 40 dBµ service contour.

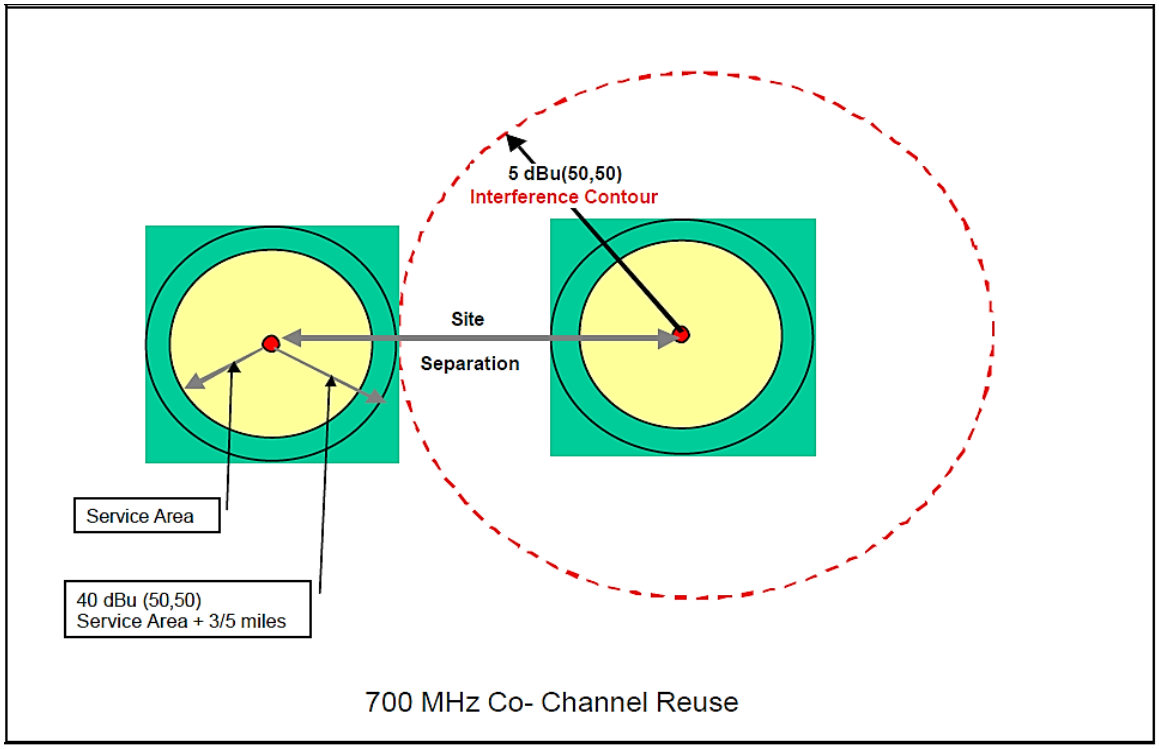


Figure 4 - Co-Channel Reuse Criterion

Adjacent and Alternate Channel Considerations

Adjacent and alternate channels are treated as being noise sources that alter the composite noise floor of a victim receiver. Using the 47 CFR §90.543 values of ACCP can facilitate the coordination of adjacent and alternate channels. The C/I requirements for <1% interference can be reduced by the value of ACCPR. For example to achieve an X dB C/I for the adjacent channel that is -40 dBc a C/I of [X-40] dB is required. Where the alternate channel ACP value is -60 dBc, then the C/I = [X-60] dB is the goal for assignment(s). There is a compounding of interference energy, as there are numerous sources, i.e. co channel, adjacent channels and alternate channels plus the noise from CMRS OOBE.

There is insufficient information in 47 CFR §90.543 to include the actual receiver performance. Receivers typically have "skirts" that allow energy outside the bandwidth of interest to be received. In addition, the FCC defines ACCP differently than does the TIA. The term used by the FCC is the same as the TIA definition of ACP. The subtle difference is that ACCP defines the energy intercepted by a defined receiver filter (e.g., 6 kHz ENBW). ACP defines the energy in a measured bandwidth that is typically wider than the receiver (e.g., 6.25 kHz channel bandwidth). As a result, the FCC values are optimistic at very close spacing and somewhat pessimistic at wider spacings, as the typical receiver filter is less than the channel bandwidth.

In addition, as channel bandwidth is increased, the total amount of noise intercepted rises compared to the level initially defined in a 6.25 kHz channel band width. However, the effect is diminished at very close spacings as the slope of the noise curve falls off rapidly. At greater spacings, the slope of the noise curve is essentially flat and the receiver's filter limits the noise to a rise in the thermal noise floor.

Digital receivers tend to be less tolerant to interference than analog. Therefore, a 3 dB reduction in the C/(I+N) can reduce a DAQ = 3 to a DAQ = 2, which is threshold to complete muting in digital receivers. Therefore to maintain a DAQ = 3, at least 17 dB of fading margin plus the 26.4 dB margin for keeping the interference below 1% probability is required, for a total margin of 43.4 dB. However, this margin would be at the edge of the service area and the 40 dBμ service contour is allowed to extend past the edge of the service area.

Frequency drift is controlled by the FCC requirement for 0.4-ppm stability when locked. This equates to approximately a 1 dB standard deviation, which is negligible when associated with the recommended initial lognormal standard deviation of 8 dB and can be ignored.

The ANSI/TIA/EIA-102 series (Project 25) standards require that a transceiver receiver have an ACIPR of 60 dB. This implies that an ACCPR ³ 65 dB will exist for a "companion receiver". A companion receiver is one that is designed for the specific modulation. At this time the highest likelihood is that receivers will be deploying the following receiver bandwidths at the following channel bandwidths.

Note that these calculations apply only to interference between systems built to Project 25 standards. General Use channels may employ other digital technologies.

Estimated Receiver Parameters	
Channel Bandwidth	Receiver Bandwidth
6.25 kHz	5.5 kHz
12.5 kHz	5.5 or 9 kHz
25 kHz	18.0 kHz

Table 7 - Estimated Receiver Parameters

Based on 47 CFR ¶90.543 and the P25 requirement for an ACCPR [3] 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 ACCPR is available for both adjacent 25 kHz spectrum blocks.

The assumption is that initial spectrum coordination sorts are based on 25 kHz bandwidth channels. This provides the maximum flexibility by using 65 dB ACCPR for all but one possible combination of 6.25 kHz channels within the 25 kHz allotment.

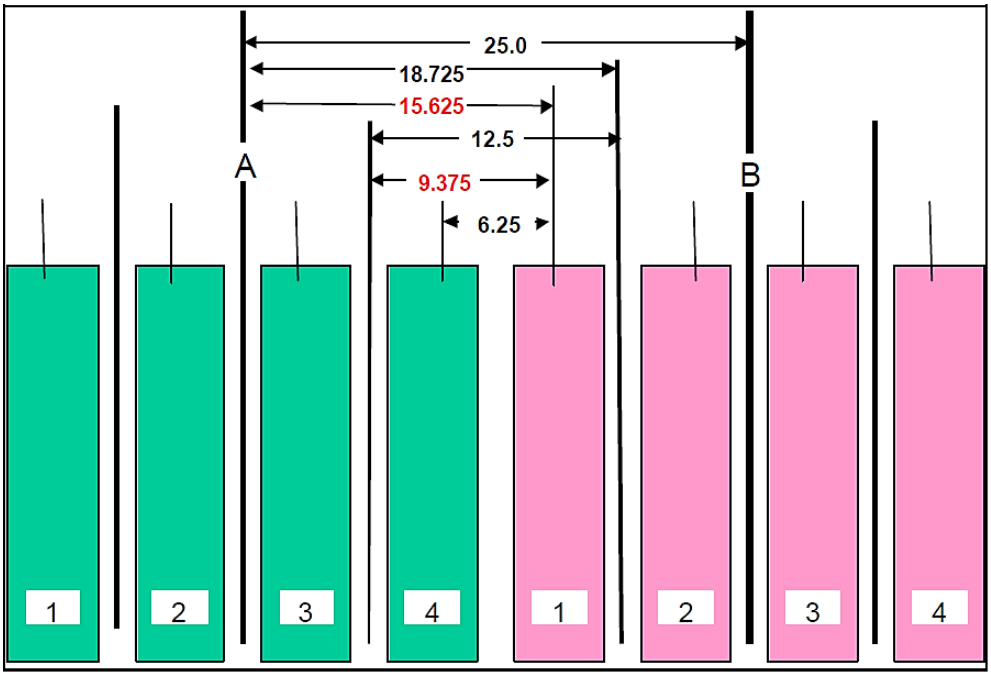


Figure 5, Potential Frequency Separations

Case	Spacing	ACCPR
25 kHz to 25 kHz	25 kHz	65 dB
25 kHz to 12.5 kHz	18.725 kHz	65 dB
25 kHz to 6.25 kHz	15.625 kHz	>40 dB
12.5 kHz to 12.5 kHz	12.5 kHz	65 dB

Case	Spacing	ACCPR
12.5 kHz to 6.25 kHz	9.375 kHz	>40 dB
6.25 kHz to 6.25 kHz	6.25 kHz	65 dB

Table 8 - ACCPR Values For Potential Frequency Separations

All cases meet or exceed the FCC requirement. The most troublesome cases occur where the wider bandwidths are working against a Project 25 Phase 2 narrowband 6.25 kHz channel. This pre-coordination based upon 25 kHz spectrum blocks still works if system designers and frequency coordinators keep this consideration in mind and move the edge 6.25 kHz channels inward away from the edge of the system. This approach allows a constant value of 65 dB ACCPR to be applied across all 25 kHz spectrum blocks regardless of what channel bandwidth is eventually deployed. There will also be additional coordination adjustments when exact system design details and antenna sites are known.

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 25 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.

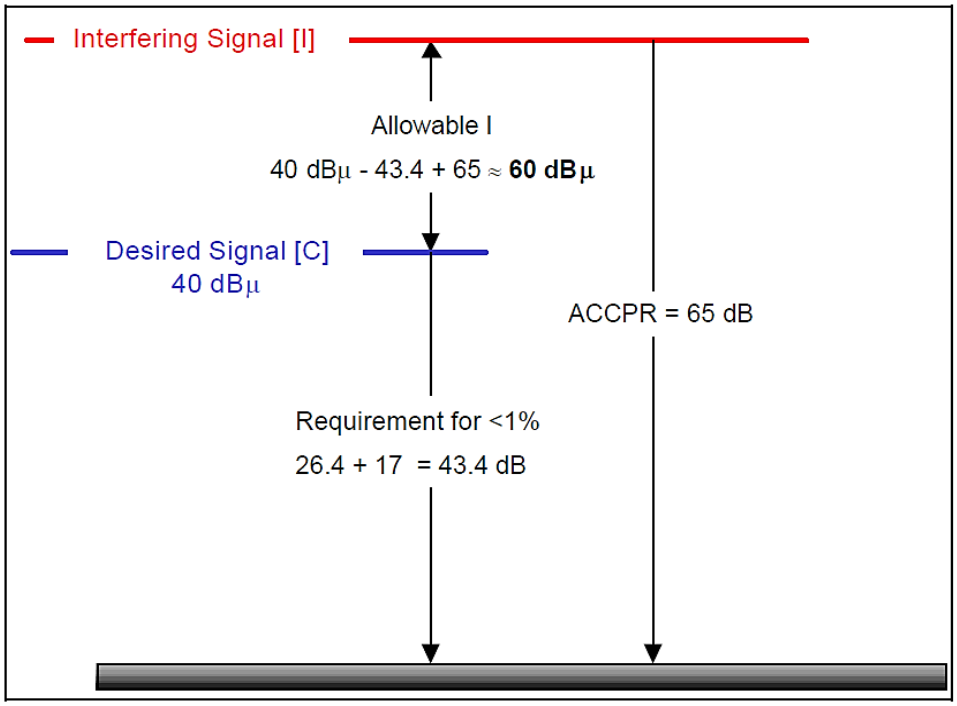


Figure 6 - Adjusted Adjacent 25 kHz Channel Interfering Contour Value

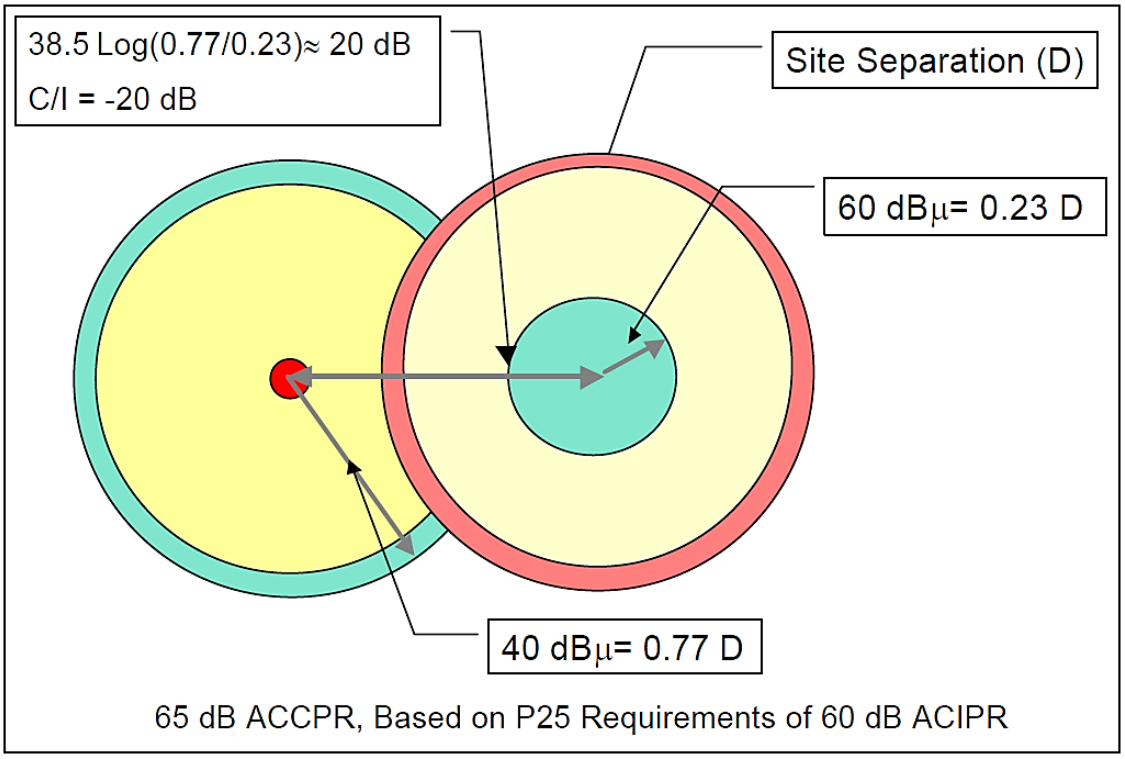


Figure 7 - Example Of Adjacent/Alternate Overlap Criterion

Adjacent Channel Interfering Contour Recommendation

An adjacent (25 kHz) channel shall be allowed to have its 60 dBμ (50,50) interfering contour touch but not overlap the 40 dB? (50,50) service contour of a system being evaluated. Evaluations should be made in both directions.

Final Detailed Coordination
This simple method is only adequate for presorting large blocks of spectrum to potential entities. A more detailed analysis should be executed in the actual design phase to take all the issues into consideration.

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 Project 25 Phase 1 to Phase 2
- Actual ACCP
- Balanced Systems
- Mobiles vs. Portables

- Use of voting
- Use of simulcast
- Radio specifications
- Simplex Operation
- Future unidentified requirements

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. This type operation is also quite common in the lower frequency bands. In those cases, evaluation of base-to-base as well as mobile-to-mobile interference should be considered and evaluated.

Attachment A

Carrier to Interference Requirements

- Co Channel
- Adjacent and Alternate Channels

Both involve using a C/I ratio. The C/I ratio requires a probability be assigned. For example, if 10% Interference is specified, the C/I implies 90% probability of successfully achieving the desired ratio. 1% interference means that there is a 99% probability of achieving the desired C/I.

$$\frac{C}{I}\% = \frac{1}{2} \bullet erfc\left(\frac{\frac{C}{I}\text{margin}}{2\sigma}\right) \quad (1)$$

This can also be written in a form using the standard deviate unit (Z). In this case the Z for the desired probability of achieving the C/I is entered. For example, for a 90% probability of achieving the necessary C/I, Z = 1.28.

$$\frac{C}{I}\% = Z \cdot \sqrt{2} \cdot \sigma \quad (2)$$

Location Standard Deviation (o) dB	5.6	6.5	8	10
Probability %				
10%	10.14 dB	11.77 dB	14.48 dB	18.10 dB
5%	13.07 dB	15.17 dB	18.67 dB	23.33 dB
4%	13.86 dB	16.09 dB	19.81 dB	24.76 dB
3%	14.90 dB	17.29 dB	21.28 dB	26.20 dB
2%	16.27 dB	18.88 dB	23.24 dB	29.04 dB
1%	18.45 dB	21.42 dB	26.36 dB	32.95 dB

Table A1 - Probability Of Not Achieving C/I For Various Location Lognormal Standard Deviations

These various relationships are shown in Figure A1, a continuous plot of equation(s) 1 and 2.

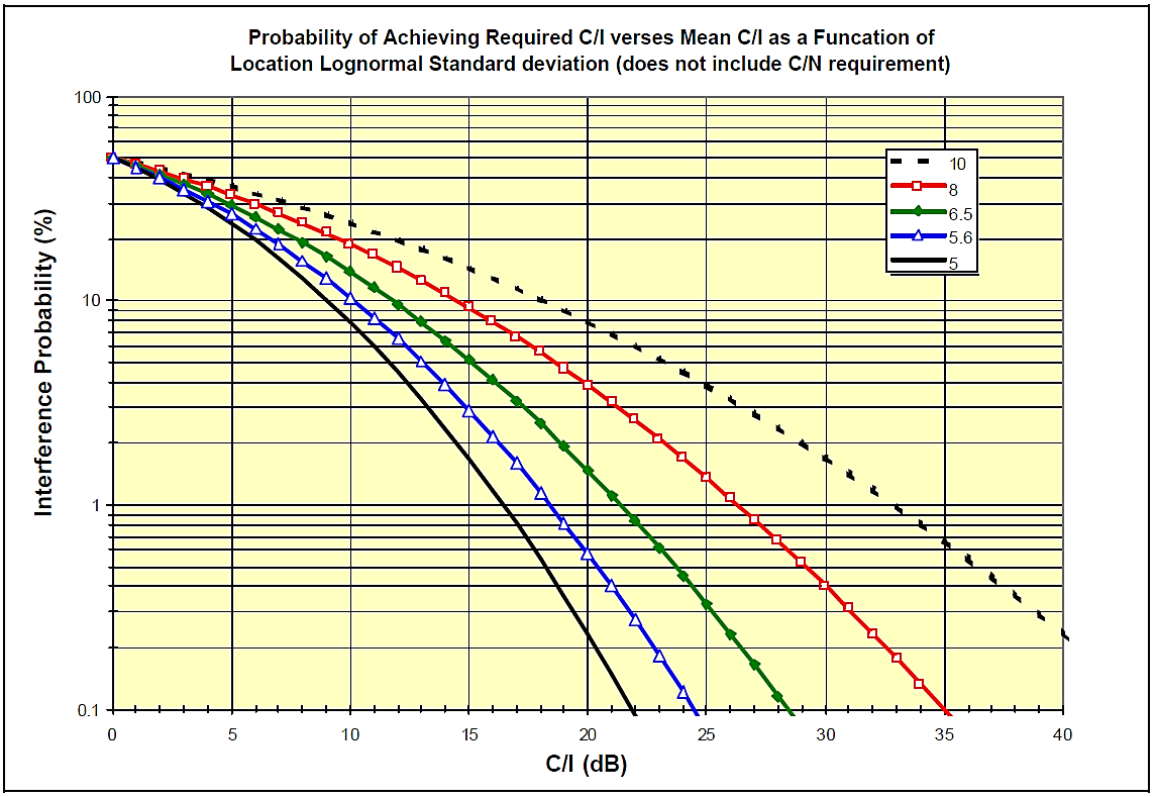


Figure A1, Probability Of Achieving Required C/I As A Function Of Location Standard Deviation

For co-channel the margin needs to include the "capture" requirement. When this is done, then a 1% probability of co channel interference can be rephrased to mean, there is a 99% probability that the "capture ratio" will be achieved. The capture ratio varies with the type of modulation. Older analog equipment has a capture ratio of approximately 7 dB. Project 25 FDMA is specified at 9 dB. Figure A1 shows the C/I requirement without including the capture requirement.

The 8 dB value for lognormal location standard deviation is reasonable when little information is available. Later when a detailed design is required, additional details and high-resolution terrain and land usage databases will allow a lower value to be used. The TIA recommended value is 5.6 dB. Using 8 dB initially and changing to 5.6 dB provides additional flexibility necessary to complete the final system design.

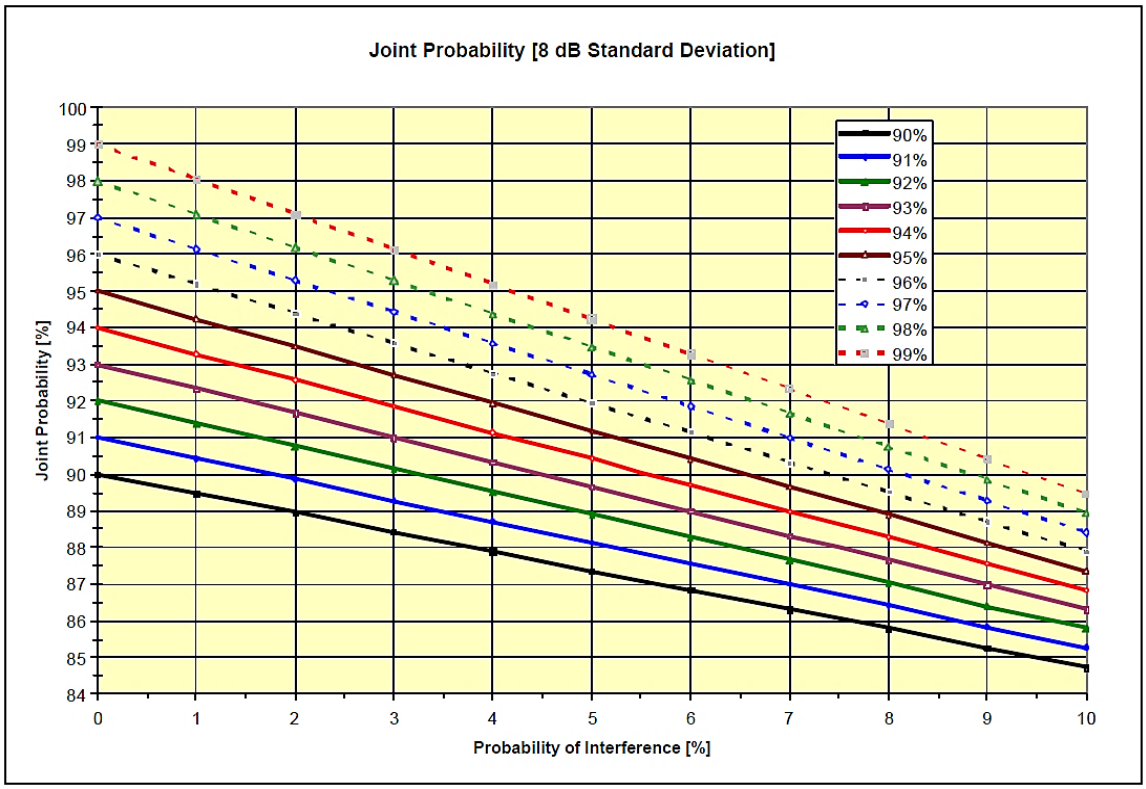
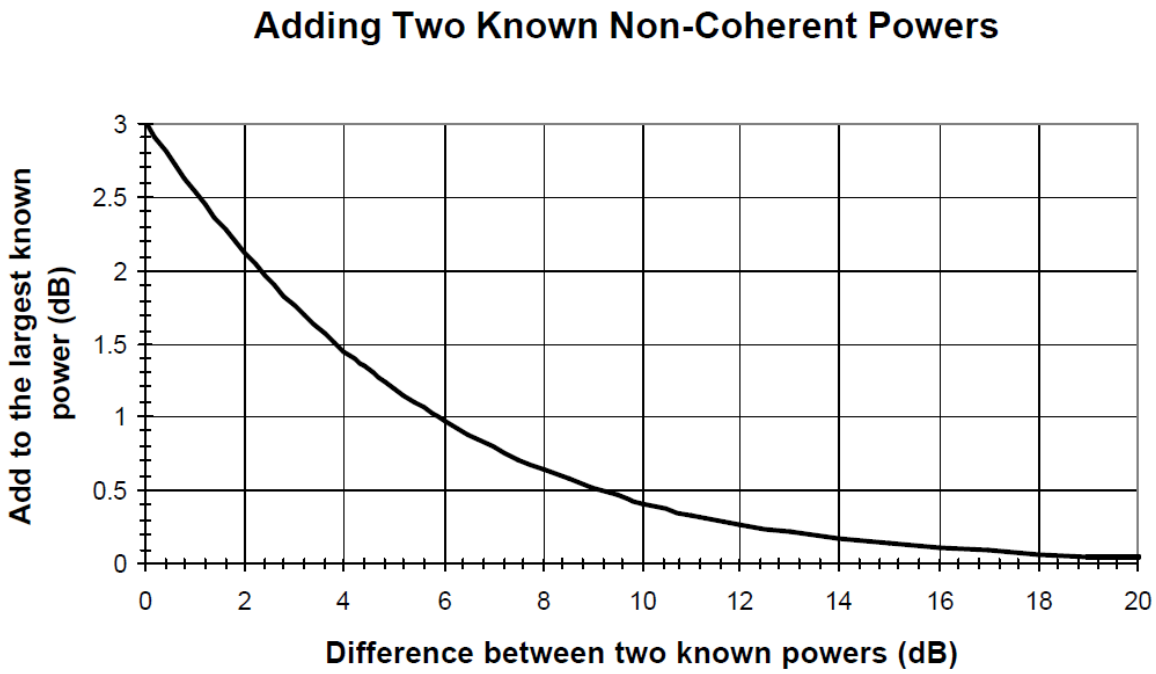


Figure A2 - Effect Of Joint Probability On The Composite Probability

For adjacent and alternate channels, the channel performance requirement must be added to the C/I ratio. When this is applied, then a 1% probability of adjacent/alternate channel interference can be rephrased to mean, there is a 99% probability that the "channel performance ratio" will be achieved.

Attachment B



In order to sum the power of two or more signals expressed in dBm or dBµ, the level should be converted to a voltage level or a power level, summed (root of the sum of the squares), and then converted back to dBm or dBµ.

The chart above provides simple method to sum two power levels expressed in dBm or dBµ. First find the difference between the two signals on the horizontal axis. Go up to the curve and across to the vertical axis to find the power delta. Add the power delta to the larger of the two original signal levels.

Example 1: Signal A is 36.4 dBµ. Signal B is 37.5 dBµ. Difference is 1.1 dB. Power delta is about 2.5 dB. Composite signal level is 37.5 dBµ + 2.5 dB = 40 dBµ.

Example 2: Signal is –96.3 dBm. Signal B is –95.2 dBm. Difference is 1.1 dB. Power delta is about 2.5 dB. Composite signal level is –95.2 dBm + 2.5 dB = -92.7 dBm.

Appendix N – Region 52 – 700 MHz Application Process