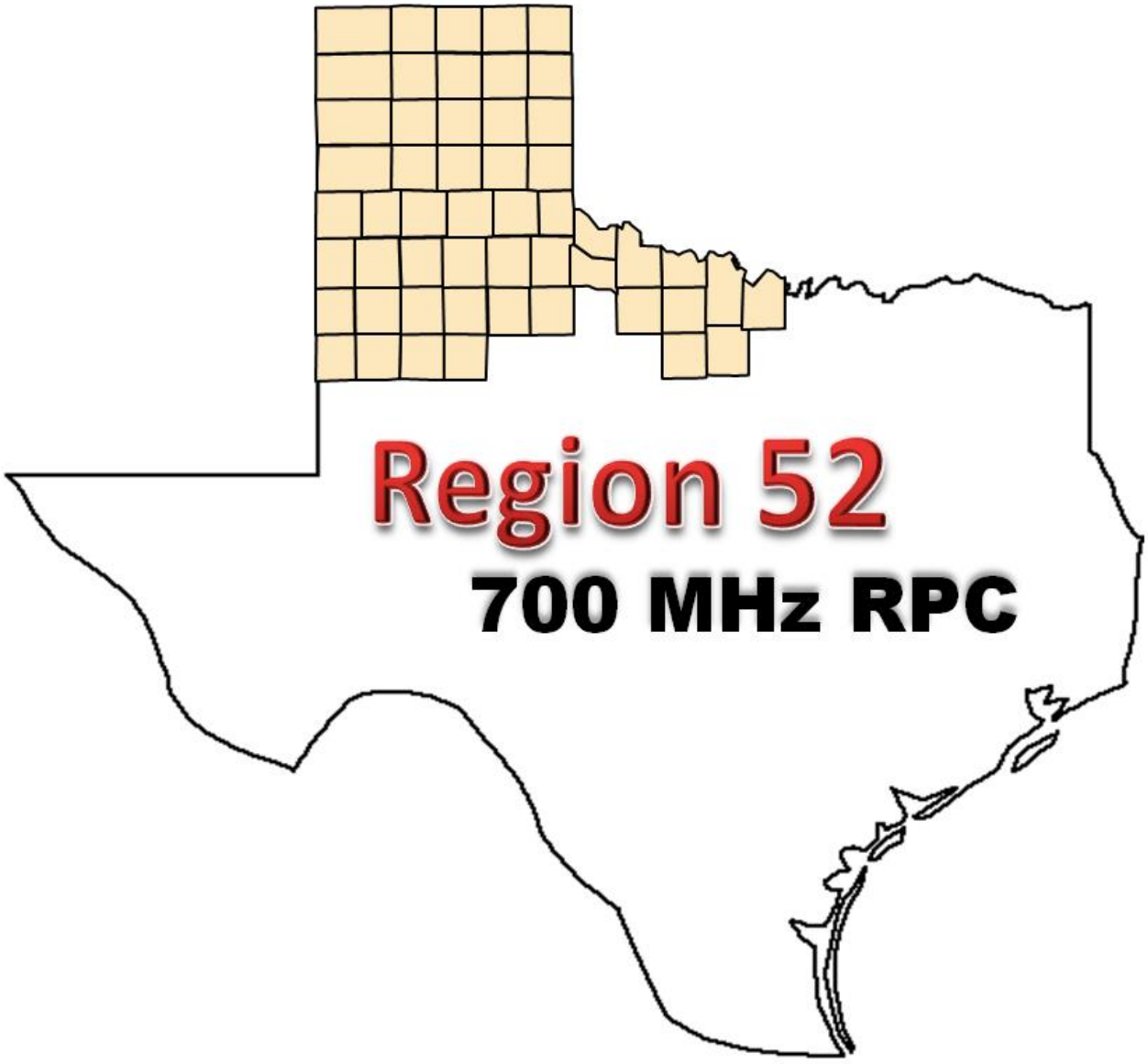
Region 52: 700 MHz Regional Plan

Lubbock/Amarillo/Wichita Falls

Council of Governments



52 Counties Covering 49,198 Miles

1 764-776/794-806 MHz Regional Plan for Region 52

This document is the 764-776 and 794-805 MHz Plan for Regional Planning Committee 52 (Lubbock) describing how the General Use frequencies as defined in 47 CFR §90.531(b)(6) will be allocated and implemented in the Region. This section is provided in compliance with 47 CFR §90.527 (a)(1). Unless stated otherwise, any reference to "700 MHz" in this Plan means the 769-775 and 799-805 MHz frequencies established for public safety general use in 47 CFR 90.531(b)(6) and other subparts for which Regional Planning Committees have responsibility.

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

1.1 Regional Officers and Membership

At the time of transmittal of this plan to the FCC, the following individuals serve in leadership roles of the Region 52 Regional Planning Committee.

The 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: jkeihl@prpc.cog.tx.us

The 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

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

Shane Brown, Regional Communications Program Manager
Panhandle Regional Planning Commission
415 SW 8th Ave.
Amarillo, TX 79101-2215
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From time to time, as described in the Committee By-Laws (**Appendix A**) these positions will be subject to re-election. At any such time as one of these positions changes, the Chair will be responsible for taking the following actions:

- Providing notice to the FCC of the changes
- Providing notice to the entity maintaining the CAPRAD system of the changes

Such changes will not be considered as plan modifications, and will not require that this document be resubmitted to the FCC for public notice and comment cycles.

Membership in the Region 52 Regional Planning Committee is open to any interested party.
Committee officer requirements, voting procedures and membership attendance requirements are listed in the Region 52 Regional Planning Committee bylaws**.** **Appendix A** contains these bylaws. Voting and operating procedures are described in Section 2.3 of this plan.

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. Many, if not all, public safety radio users are constantly bombarded with outside interference, noise, and overcrowding. It is with these problems in mind that this plan was developed.

This regional plan was developed with the objective of assuring all levels of public safety/public service agencies that radio communications 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, special medical services and a pool for state agency use with adequate reserve allocations for future needs in all areas, and a method to appeal initial allocations based on need.

The National Plan as developed by NPSPAC, was followed very 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 bound to occur in public safety and public service communications operations long into the future.

2 Regional Planning Committee

2.1 Description of Region

Region 52 is comprised of the following 52 counties in the Panhandle and South Plains of Texas.

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.

According to the 2010 Census, the population of Region 52 is 1,087,446.

Region 52 covers 49,198 square miles and is composed of three Texas Councils of Governments. They are:

Panhandle Regional Planning Commission, 26,000 Sq. Miles, 26 Counties, Population 427,927.

South Plains Association of Governments, 13,737 Sq. Miles, 15 Counties, Population 436,699.

NORTEX Regional Planning Commission, 9,461 Sq. Miles, 11 Counties, Population 222,820.

The Panhandle of Texas is a 26,000 square mile area encompassing 10 percent of the state's land mass. Its citizens live in 26 counties and 59 cities. There is only one city over 50,000 in population which is the City of Amarillo. The Panhandle is considered very flat with no mountains and no large bodies of water. The area is predominately rural in character with an agricultural and petrochemical

economic base. No jurisdiction in the region is using the 700MHz or 800 MHz frequency bands at the present time or in the foreseeable future.

The South Plains of Texas is a 13,737 square mile area. Its citizens live in 15 counties and 45 cities. There is only one city over 50,000 in population which is the City of Lubbock. The South Plains are also flat with no mountains and no large bodies of water. The area is predominately rural in character with agriculture, agribusiness, and service industries economic base. The City of Lubbock is the only jurisdiction using the 800MHz band. No jurisdiction is using the 700MHz band at the present time or in the foreseeable future.

The North Texas area is a 9,461 square mile area. Its citizens live in 11 counties. There is only one city over 50,000 in population which is the City of Wichita Falls. North Texas is flat with no mountains and no large bodies of water. The area is predominately rural in character, with an agricultural and service industries economic base. The City of Wichita Falls is the only jurisdiction using the 800MHz band. No jurisdiction is using the 700MHz band at the present time or in the foreseeable future.

2.2 Notification Process

Bob Sanders, chairman of the Region 52 700 MHz Regional Planning Committee, was the 700 MHz Convener. The first 700 MHz Regional Planning Committee meeting date was 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 and the Wichita Falls Times-Record.

Copies of the notice issued by the Convener, the mailed notice of Region 52's meeting, the public notice issued by the FCC (DA 03-1869), and the ads placed in multiple newspapers are included in **Appendix B1-First Meeting**

2.3 Operations of the Regional Planning Committee

This committee uses Robert's Rules of Order to conduct meetings. All decisions are made by clear consensus vote with each public safety agency in attendance having one (1) vote. Additional voting member considerations are listed in the Region 52 Bylaws, **Appendix A-By Laws**.

The meetings are open to all interested persons and public input time is provided for anyone to express a viewpoint or to have input to the regional planning process. Any changes to the regional plan must be voted on and approved by a majority of members attending a full Regional Planning Committee meeting, in accordance with the procedures contained in Section 2.6 of this plan.

Officers of the committee are the chairman, and secretary/treasurer. They are elected for one year terms at the annual meeting of the committee. If the chairman is unable to serve a complete term, the secretary will serve as chairman until the next committee meeting.

2.4 Dispute Resolution – Intra-Regional

In the event an agency disputes the implementation of all or parts of this plan, the agency must notify the chairman of the dispute in writing. The chairman will first attempt to resolve the dispute on an informal basis. If a party to the dispute employs the chairman, then the secretary will attempt resolution. If after 60 days the dispute is not resolved, the chairman (or secretary) will appoint an Appeals Subcommittee consisting of five members from jurisdictions in Region 52.

In order to ensure that the appeal process is open and understandable to everyone, the RPC has developed the following procedures. Those involved in the appeal process can expect the RPC and its members to follow these procedures (as may be amended from time to time). Where any matter arises during the course of an appeal that is not addressed in this document, the RPC will do whatever is necessary to enable it to adjudicate the appeal fairly, effectively, and completely. As the RPC gains experience, it will refine and, if necessary, change its policies. Any changes made to the procedure will require an administrative modification to the Regional Plan and will be made available to the public. The RPC will make every effort to process appeals in a timely fashion and issue decisions expeditiously. For each appeal occurrence, a majority of the members of the subcommittee will designate one of its members to be the Chair.

A**.** If any subcommittee member becomes aware of any facts that would lead an informed person, viewing the matter reasonably and practically, to conclude that another member, whether consciously or unconsciously, would not decide a matter fairly, that member will be prohibited from conducting the appeal unless consent is obtained from all parties to continue. In addition, any party to an appeal may challenge a member on the basis of real or a reasonable

apprehension of bias.

B. To ensure the appeal process is kept open and fair to the participants, any correspondence to the subcommittee must be sent to its Chair and be copied to all other subcommittee members and other parties to the appeal, if applicable. Subcommittee members will not contact a party on any matter relevant to the merits of the appeal, unless that member puts all other parties on notice and gives them an opportunity to participate. The appeal process is public in nature and all meetings regarding the appeal will be open to the public.

C. The subcommittee hears appeals from a determination or assignment by the RPC and includes the following: number of channels assigned, interference, or any other criteria that the region shall establish.

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

E. A notice of appeal must be served upon the RPC. The notice of appeal may be "delivered" by mail, courier, e-mail (must be on the appealing entity's official letterhead and include the originator's signature, such as using a scanned image in Portable Document Format of an original letter) or hand delivered, to the Chair and Secretary of the RPC. The Secretary will in-turn transmit notice of the appeal to all then-current RPC members via e-mail within five working days of receipt. To be accepted for consideration the notice of appeal must include:

1. The name and address of the appellant;
2. The name of the person, if any, making the request for an appeal on behalf of the appellant;
3. The address for service of the appellant;
4. The grounds for appeal (a detailed explanation of the appellant's objections to the determination - describe errors in the decision);
5. A description of the relief requested (what the appellant wants the RPC to do at the end of the appeal);
6. The signature of the appellant or the appellant's representative.

F. To appeal a determination or assignment, the entity that is subject to the determination must deliver a notice of appeal within twenty-one (21) calendar days after receiving the decision. If a notice of appeal is not delivered within the time required, the right to an appeal is lost.

G. The RPC has the discretion to extend the time to appeal either before or after the twenty-one (21) calendar day deadline. A request for an extension should be made to the Chair and Secretary in writing, and include the reasons for the delay in filing the notice of appeal, and any other reasons which the requester believes support an extension of time to file the appeal. In deciding whether to grant an extension, the RPC will consider whether fairness requires an

extension. The RPC will consider the length of the delay, the reasons for the delay, any prejudice to those affected by the delay, and any adverse impact that may result from an extension. Other factors not identified here could also be relevant, depending on the circumstances of the particular case.

H. The RPC may reject a notice of appeal if it is determined that the appellant does not have standing to appeal, or the RPC does not have jurisdiction over the subject matter or the remedy sought. Before an appeal is rejected, the RPC Chair will inform the appellant of this in writing, with reasons, and give the appellant a twenty-one (21) calendar day opportunity to make additions or corrections.

I. The Appeals Subcommittee has the discretion to add any other person who may be "affected" by the appeal as a party to the appeal. Anyone desiring to obtain party status should make a written request to the Appeals Subcommittee Chair as early as possible. The written request should contain the following information:

1. The name, address, telephone number and email address (if any), of the person submitting the request;
2. A detailed description of how the person is "affected" by the notice of appeal
3. The reasons why the person should be included in the appeal;
4. The signature of the person submitting the request.

J. The Appeals Subcommittee may also invite or permit someone to participate in a hearing as an intervener. Interveners are generally individuals or groups that do not meet the criteria to become a party (i.e. "may be affected by the appeal") but have sufficient interest in, or some relevant expertise or view in relation to the subject matter of the appeal. Anyone wanting to take part in an appeal as an intervener should send a written request to the Appeals Subcommittee Chair. The written request should contain information that qualifies the intervener's interest and expertise to assist in the matter while also demonstrating why they should not be considered a party to the appeal. Prior to inviting or permitting a person to participate in a proceeding as an intervener, or deciding on the extent of that participation, the Appeals Committee will provide all parties with an opportunity to comment if they wish to do so.

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

L. The Appeals Subcommittee will follow the general rule that the burden or responsibility for proving a fact lies with the person who asserts it.

M. Any party intending to present expert evidence at a hearing will be required to provide the subcommittee, and all other parties to the appeal, with reasonable advance notice that an expert will be called to give an opinion. The

notice should include a brief statement of the expert's qualifications and areas of expertise. If a party intends to produce, at a hearing, a written statement or report prepared by an expert, a copy of the statement or report should be provided to the Subcommittee and all parties to the appeal within a reasonable time before the statement or report is given in evidence. Unless there are compelling reasons for later admission, expert reports should be distributed not less than twenty-one (21) calendar days prior to the hearing date.

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

O. If a party is not satisfied with the decision of the Appeals Subcommittee, he or she can appeal that decision to the full membership of the RPC or to the 700 MHz National Planning Oversight Committee or other body designated to handle matters of this nature.

As a last resort, the dispute will be forwarded to the Federal Communications Commission for final resolution.

2.5 Dispute Resolution – Inter-Regional

In the event that a dispute arises between Region 52 and an adjacent region or regions, regarding channel allotments or assignments that cannot be resolved within 60 days, the parties to the dispute will request a hearing by the appropriate subcommittee of the National Regional Planning Council (NRPC), or any subsequent oversight organization.

2.6 Plan Amendments

Region 52 will maintain a website on which all plan documents, meetings announcements, meeting minutes, and other pertinent information will be maintained. 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.

3 Regional Plan Administration

3.1 Allotment of Narrowband "General Use" Channels

This regional plan uses the 2008 general use channel sort as shown on the CAPRAD database for narrowband general use channels. The CAPRAD sort and allotment process used many factors, including population densities and geographic terrain features, to achieve nationwide allotments that are efficient, while minimizing co-channel and adjacent channel interference both within and between neighboring regions. Region 52 utilizes the CAPRAD database and will

maintain the regional plan and current frequency allotment/assignment information on the database.

It must be emphasized that the initial allotments produced by the CAPRAD sort are starting points for frequency assignments in all regions. The major purpose of the CAPRAD sort was to establish non-interfering allotments along all regional borders, thus greatly simplifying the initial coordination between all adjoining regions. Indeed, the technical proposal paper for the initial 2003 CAPRAD sort stated, "Pre-allotments may be altered without the need for inter-regional coordination as long as adjacent regions are not impacted. Changes that impact adjacent region(s) can only be made with inter-regional concurrence(s)."

The Region 52 Regional Planning Committee has both the ability to initiate and accept recommendations, and the authority to change the frequency allotments.

If at any time a system is assigned channels within Region 52 and the system cannot be developed within the agreed terms, the channels will be returned to the original county pool allotment and again be available to other agencies in the region.

Allotments to all the counties within Region 52 have been made utilizing the national CAPRAD database sort. During the 2008 CAPRAD sort of the reconfigured 700 MHz public safety band, regions were given the opportunity to have the sort done at 25 KHz spacing (as had been done nationwide in the 2003 sort), or at 12.5 KHz spacing.

It is expected that all agencies requesting spectrum during the initial filing window (see Section 3.6.A) will be assigned channels if plan requirements and interference standards are met. Agencies using 25 KHz channels 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. To the maximum extent possible, and in order to promote spectrum efficiency, Region 52 will ensure that systems allocated 25 KHz channel blocks will utilize all of the channel, and not "orphan" any portions of an assigned channel. (See Section 3.5, below)

3.2 "Limited Area" Operations

In the implementation of 700 MHz public safety systems throughout Region 52, there may be opportunities for increased channel reuse by developing radio systems for "limited area" type operations. Examples of those who may be able to capitalize on this opportunity include hospitals, stadiums, malls, places of public gathering, universities, and industry such as Bell Helicopter/Textron, Pantex and large cattle feeding operations. In many instances, these facilities require a smaller or more specific geographical coverage area than was

assumed in the channel packing plan, and may be able to reuse channels more efficiently. These “limited area” type systems also, in many cases, require in-building or confined space/ tunnel radio coverage or communications along a linear pathway, such as a right of way.

To encourage applicants to develop such “limited area” type systems, the Region 52 Regional Planning Committee has determined that the use of “limited area” channels will supplement, and not reduce the number of a county’s allotted channels. Channels assigned to this type operation can lead to effective system development, along with increased spectral efficiency, if the service contour and interference protection needs of the system are carefully considered in system planning. 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 a request for “limited area” use and the proposed service contour encroaches into an adjacent region before the channel is assigned to a specific system in that region, the proposed system must be modified so its service contour does not encroach into the adjacent region or the applicant must supply the Region 52 700 MHz Regional Planning Committee with written concurrence from the adjacent region allowing the design.

3.3 "Give Back" Channels

When applying for new 700 MHz channels, the Regional Planning Committee expects applicants to relinquish an amount of currently used spectrum ("give back channels") and make that spectrum again available for use. This currently licensed spectrum may be in any public safety band. This requirement does not apply to agencies with existing 800 MHz systems that are requesting 700 MHz channels for system expansion. The number of channels an applicant may retain after this "give back" may include those needed for interoperable communications with surrounding jurisdictions. If an agency considers the number of channels relinquished by the applicant to be insufficient, their objection will be handled in the same manner as an assignment dispute (see section 3.7).

It is anticipated each agency will have a certain migration period during which both their existing frequencies and their 700 MHz assignments will be utilized. The Regional Planning Committee will review and approve an appropriate "give back" timetable that will allow a specified time period for new system optimization. This will make an applicant's legacy system available to the applicant for a limited time period during migration, implementation, and optimization of the new system. When both the applicant and the Regional Planning Committee agree upon the number of "give back" channels and a date is established for implementation of the new system, the applicant will provide the committee with a 'giveback agreement' letter containing all pertinent give back channel information. This will enable other agencies in the area to benefit from, license, and implement the applicant's "give back" channels.

Frequency "give back" requirements also apply for regional systems where system participants maintain discrete licenses for their own operations. In the case of a partnership system, all participating political subdivisions or agencies are required to participate in the "give back" plan. Should one political subdivision or agency act as host of a regional system, both the host agency and the constituent agencies must participate in the "give back" plan. Region 52 may utilize any mechanism needed to retain "give back" frequencies within the region and allow for maximum spectral use.

Frequencies used for non-voice critical infrastructure support functions [such as Supervisory Control and Data Acquisition (SCADA) systems] as well as frequencies that are used for interoperability with other regional, state, or national agencies that rely on other frequency bands for emergency operations (such as, but not limited to, the Texas Interoperability Channel Plan channels), may be exempted by the committee as candidates for "give back". Frequencies used by an applicant for such purposes, as well as the specific use and a network/ system diagram, must be shown in the application documentation package to enable the Regional Planning Committee to consider exemptions.

Operational Fixed, or any frequency or radio sub-system used for fixed mode of operations to support the operation of another radio system shall be considered part of the “give back” along with the fundamental system being returned. They comprise an inclusive unit.

Microwave frequencies, or systems licensed within the “Microwave Public Safety Pool” (radio service Code “MW”) shall be exempt from this requirement.

In cases of hardship or untoward implementation, the Regional Planning Committee will consider, on a case-by-case basis, extensions of the “give back” timetable. Should there be a protest the dispute resolution process in Section 2.4 of this document shall apply.

3.4 Low Power Channels

The FCC in the 700 MHz band plan set aside channels 1 - 8 paired with 961 – 968, and channels 949 –958 paired with 1909 – 1918, for on-scene incident response purposes using low power mobiles and portables subject to Commission-approved regional plans. Channels 9 –12 paired with 969 – 972, and channels 959 – 960 paired with 1919 – 1920, are licensed nationwide for itinerant operation. Transmitter power and/or ERP on any of these channels must not exceed the maximum allowed by the FCC for these channels. All of these channels may be operated in either the analog or the digital mode.

This plan does not limit use to analog only operations, and channels are intended for use in a wide variety of applications that may require digital modulation types as well.

On scene temporary base and mobile relay stations are allowed (to the extent FCC rules allow) with antenna height limit of 6.1 meters (20 feet) above ground level (AGL). However, users are encouraged to operate in simplex mode with the least amount of power to reliably maintain communications whenever possible.

In its dialog leading up to the rules 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. They stated that, absent a compelling showing, a shared approach should be employed rather than making exclusive assignments for each specific application, since low power operations can co-exist, in relatively close proximity, on the same frequencies, with minimal potential for interference due to the FCC power and/or ERP restriction. Although advantages exist in not making assignments, the reverse is also true. If, for example, firefighters operate on a specific channel or set of channels in one area, there is some logic in replicating that usage 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:

Generic – Base channel #'s 1-4 and 949-952 are designated as generic low power channels for licensing and use by all disciplines of public safety agencies operating in Region 49, and the complementary mobile channels #'s 961-964 and 1909-1912 are set aside as generic low power channels for licensing and use by all disciplines of public safety agencies operating in Region 49.

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

Law – Base channel #'s 953-956 are designated as Law Enforcement low power 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 low power channels also for licensing and primary use by the Law Enforcement discipline.

Multidisciplinary Joint Public Safety Operations – Base 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 Texas Statewide Interoperability Executive Committee.

3.5 "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 Regional Planning Committee 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, 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 Regional Planning Committee 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.

3.6 Procedure for Requesting Channel Assignments

A diagram of the Region 52 700 MHz application process has been included in this plan as **Appendix D.**

A. Upon FCC approval of this plan, the chairman will announce the opening of an initial filing window, and that specific channels have been allotted to each county area in the region. All available methods will be used to notify public safety entities of the filing window and channel availability in the region (see Section 2.1). Subsequent filing windows will be established at 6 month intervals.

   Following the close of the first filing window, thirteen (13) successive filing windows will occur at six month intervals. In addition to processing any applications received during the fourteenth filing windows, the Committee will also then make a decision on whether to add additional filing windows, or to allow the filing window approach to automatically sunset.

   If no action is taken by the Committee to add additional filing windows, subsequent applications will be received and processed on a first-come, first served basis. Channel assignments will not be constrained to the allocations of this plan, but, instead, will be made opportunistically to allow for the best possible spectrum utilization while meeting the needs of active applicants. This could result in spectrum allotted to some county-like areas, but has sat fallow for seven years, being applied for and made productive by applicants who are making active use of the 700 MHz spectrum.

B. All requests for assignments of channels will be considered on a first come, first served basis. Multiple requests for the same channels arriving in the same filing window, and requests for more channels than are allotted to the applicant's area, will be processed in accordance with the priority matrix given in Section 4 of this plan. Region 52 supports the National Coordination Committee Pre-Assignment Rules and Recommendations listed in **Appendix E**, and will use these guidelines to determine if an application submitted to the Regional Planning Committee meets regional planning and interference protection standards. It is recommended that applicants familiarize themselves with these standards prior to submitting their applications. In general, and unless otherwise noted, the Region 52 Regional Planning Committee will adhere to the published National Coordination Committee Guidelines for 700 MHz Public Safety Regional Planning Committees.

C. When applying for new 700 MHz channels, the Regional Planning Committee expects applicants to work with neighboring agencies to promote and continue the establishment of interoperability within their communities, to allow for equitable distribution of the frequency allotments, and to promote efficient frequency use. The Region 52 Regional Planning Committee expects applicants to recognize that moving to the 700 MHz band may create a degree of isolation between themselves and neighboring agencies, and expects applicants to maintain or improve interoperability with their neighbors.

D. To request an assignment of channels from Region 52, a full application package must be submitted to the CAPRAD database at http://caprad.org. The application package must include:

1. FCC Form 601 (or its equivalent form as required by the FCC) with all appropriate schedules and attachments;

2. a description of the proposed system;

3. a justification for the additional spectrum;

4. a proposed system loading schedule;

5. a proposed system implementation schedule;

6. an interference prediction map using the current version of TIA/EIA TSB 88 guidelines;

7. documents indicating agency-funding commitments sufficient to fund the development of the proposed system(s);

8. a list of all frequencies that will continue to be used by the applicant, and their specific uses;

9. a list of “give-back” channels, if applicable;

10. a list of all Region 52 entities with co-channel or adjacent channel assignments, and a statement indicating the date and manner by which each of these entities was notified of this application; and

11. a statement acknowledging the FCCs deadline of 12/31/2016 for operating at 6.25 KHz channel spacing, or its equivalent.

Exceptions in accepting applications will be made by the chairman if applicants have demonstrated a need for 700 MHz channels and cannot access the CAPRAD database.

E. The secretary will cause all then-current Regional Planning Committee members to be notified by e-mail that an application is available for review, and notice of the application will also be posted on the Region's web site and list server. Requests will be considered and approved, providing that harmful interference is not caused to existing users. The technical parameters defining the limits of any possible interference are given in section 7.1 of this plan. Service area and service contours should also meet the values designated in section 7.1 of this plan. As frequencies allocated to the counties are assigned and used, requests for short-spacing of channels that meet the FCC's criteria for short-spacing will be considered on a case-by-case basis.

Absent a protest within 60 calendar days of the secretary's e-mail notification, the application will be approved, and (if applicable), upon receipt of a "giveback agreement" letter (see Section 3.3), the chairman or his delegate will submit it, through the CAPRAD database, to the applicant's preferred FCC certified frequency coordinator for processing. This process meets the requirements of FCC Rule 90.176 (c). The CAPRAD database will reflect the approved application and place the channels for the proposed system in "pre-license" status.

3.7 Assignment Disputes

An agency may protest a proposed system within 60 calendar days following the secretary's e-mail notification. Protests will only be considered if the requested assignment does not conform to plan criteria or the objecting agency or the chairman can show that harmful interference is likely based on the information submitted in the application. If an agency with licensed, or pre-licensed/region assigned, co-channel or adjacent channel assignments objects to a proposed assignment due to concerns about potential interference, the objecting agency may request field tests be done to confirm or refute the interference potential. The completion of these field tests will be required for Region 52 application approval. Service and interference contours of the proposed system(s) should meet values designated in Section 7.1 of this document. Any costs associated with field tests or any other requirements for obtaining regional approval are the responsibility of the agency submitting the application to Region 52. The parties involved must resolve the assignment dispute and notify the chairman within 120 calendar days. If the parties involved cannot resolve the assignment dispute within that time frame, the dispute will be handled by the appeals process described in section 2.4. If approved, the application will be submitted through the CAPRAD database to the applicant's chosen FCC-certified frequency coordinator for processing.

Any application that has been modified in any way that would change the systems' coverage or interference contours must be resubmitted in the same manner as the original application, and new 60 day e-mail notifications will be made.

3.8 NPSPAC Channels

If a 700 MHz applicant has not yet fully exhausted its 821 MHz (806 MHz after Rebanding) allotments, the 700 MHz RPC should encourage the applicant, where technically appropriate, to fully utilize their 821 MHz allotments first. The purpose for this is to ensure maximum utilization of all allotted spectrum with similar technical characteristics.

4 Priority Matrix

In the event that several requests for narrowband channel assignments conflict and cannot all be accommodated, the following scoring matrix will be used to determine priority for assignment This matrix will only be used if two or more requests are received in the same filing window for the same channels. Otherwise, the first come first served procedure of Section 3.6.B will be used.

Priority is given to the first application filed within a filing window, as determined by the CAPRAD posting date, postmark, or their equivalent (10 points).

Priority is given to users fundamentally involved with the protection of life and property (15 points)

Priority is given to multi-agency systems that promote multi-agency, inter-discipline interoperable communications. These systems can be either a group of separate departments within a large agency or groups of agencies operating together under a large blanket agency, or a combination of both. (25 points)

Priority is given to systems that achieve spectrum efficiency through high levels of channel loading. (25 points)

Documentation of proposed funding and proof of financial commitment, accompanied by a RFP (Request for Proposal) outlining the design of the proposed system and detailing the development of the requested channels. (25 points)

The percentage of the applicant's existing frequencies that will be available for re-use (give-back frequencies). (10 points)

This scoring process will be performed by the five member Intra-Regional Appeals Subcommittee (see section 2.4) using the above criteria.

5 Process for handling unformed adjacent Regions

All four of the regions adjacent to Region 52 have formed their committees and have elected their chairmen. Therefore, there is no need for a process for handling unformed adjacent regions.

6 Coordination with Adjacent Regions

The Regions adjacent to Region 52 are listed below:

Region 50

Region 40

Region 29

Region 07

Region 16

Region 34

Region 52 has coordinated channel allotments and received concurrence from all its bordering regions by providing copies of this plan (including channel allotments) to each adjacent region using the CAPRAD database and e-mail, and by mailing hard copies of the plan to all adjacent regions' chairmen.

Region 52's plan will also be available for viewing by all interested parties via the CAPRAD 700 MHz database. The CAPRAD pre-coordination database can be used to determine which channels are available that will not interfere with Region 52 allotments or systems. The CAPRAD database and its associated packing plan provides minimum channel allotments for all of Region 52's bordering regions. This method was recommended by the NCC Implementation Subcommittee as a way to assure that adjacent regions, which did not enter the regional planning process immediately, would not find all frequencies already allotted or assigned at their borders.

Therefore, adjacent Regions 50, 40, 29, 07, 16 and 34 should all be able to satisfy voice and narrowband data requests along their border areas with Region 52.

However, if an adjacent region has difficulties satisfying intra-regional requests

due to channel allocation within Region 52, this committee pledges to work with that adjacent region to resolve any issues that might hinder interoperability or reduce any benefit to public safety communications.

7 System Design/Efficiency Requirements

7.1 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 best specifications. This plan will not protect agencies 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 E.**

7.2 Spectrum Efficiency Standards

It is the goal of the FCC for radio equipment to use one voice channel per 6.25 KHz of spectrum. Requests for channel assignments in Region 49 must include an acknowledgement of the 12/31/2016 deadline for converting all equipment to 6.25 KHz or 6.25 KHz equivalent technology. Where possible, narrowband 6.25 KHz channels may be aggregated for data use to a maximum bandwidth of 25 KHz. As 6.25 KHz migration continues, "orphaned" 6.25 KHz channels may be re-allotted to maintain consistent grouping and utilization of 25 KHz blocks (see

Section 3.5).

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 efficiency for all agencies involved than could be achieved individually.

7.3 System Loading Criteria

Efficient use of spectrum requires minimum channel loading standards both for trunked and conventional system architectures. Subscriber loading for conventional systems in the 700 MHz band will be approved on a case-by-case basis

FCC rules require that systems using 6 or more channels use trunking technology. However, trunking may be used for systems with fewer channels. The following table indicates the minimum subscriber loading criteria within the 5 year slow-growth period for trunked systems in the 700 MHz band:

Subscriber units	**12.5 KHz Talk Paths (or equivalent)**	**Subscriber units**	**12.5 KHz Talk Paths (or equivalent)**
50-100	2	300-350	7
100-150	3	350-400	8
150-200	4	400-450	9
200-250	5	450-500	10
250-300	6		

Additional channels may be assigned for larger trunked systems at the rate of one additional talk path per 75 subscriber units exceeding 500 units. Applicants requesting additional frequencies to expand an existing system must show loading of 100 % or more on their existing system.

Justification for adding frequencies or retaining existing frequencies may be provided by a traffic loading study instead of loading by the count of subscriber units per talk path. It will be the responsibility of the applicant to provide a verifiable study showing sufficient airtime usage to merit additional frequencies. Documentation of airtime usage, excluding telephone interconnect air time, during the peak busy hour on three consecutive days will be required to demonstrate system loading.

It is also recognized that systems or sites may be licensed in Region 49 which are part of larger regional radio systems which may be networked, or have their master control in another region, and which allow for subscriber roaming

throughout multiple regions. Loading for these systems or sites may consider the effects of system wide roaming, and will be determined on a case-by-case basis.

Should a demand for frequencies exist in the region after the supply of assignable frequencies has been exhausted, any system having frequencies assigned under this plan for four years or longer that is not loaded to a least 70% of subscriber loading may be required to surrender one or more frequencies for reassignment .

7.4 Expansion of Existing 800 MHz Systems

Licensees of existing 800 MHz systems that wish to expand by using 700 MHz frequencies must meet the requirements of the FCC and both this 700 MHz plan and the Region 52 800 MHz Public Safety Radio Communications Plan. If the two Region 52 plans are in conflict, the dispute resolution process outlined in Section 2.4 will be used on a case-by-case basis to determine which plan governs.

7.5 System Implementation

An agency may file a request with the Regional Planning Committee chairman for an extension of time to implement their system. The request should include all details describing why the system has not been implemented, and a new implementation schedule. The request will be processed in the same manner as an application for assignments (see section 3.6.E), with any dispute handled according to section 3.7.

8 Interoperability Channels

8.1 Introduction

The ability of agencies to effectively respond to mutual aid requests directly depends on their ability to communicate with each other. Texas is subject to a 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 required among agencies. This plan supports the communications necessary for effective mutual aid, including, but not limited to, the use of Project 25 Common Air Interface standards and accepted common channel names for interoperability channels.

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.

The most common strategy that has been followed in the past, and that this plan anticipates will be followed in Region 52 700 MHz system deployments, is the concept of new systems incorporating appropriate interoperability into their plans and designs, rather than expecting the legacy systems to figure out how to operate with the new system. New 700 MHz systems not only need to meet the interoperability requirements for that band; they also need to provide mechanisms to interoperate with VHF, UHF, and other users 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 Regional Planning Committee supports the Texas Statewide Interoperability Executive Committee. The Chairman of the Region 52 700 MHz Regional Planning Committee, or his delegate, is a member of the Texas Statewide Interoperability Executive Committee (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.

8.2 Tactical Channels

Due to the immediate availability of 700 MHz public safety channels in most areas of Texas, Region 52 will not set aside additional channels for interoperability within the region. It is anticipated that the sixty-four FCC designated interoperability channels (6.25 KHz) will be sufficient to provide voice and data interoperability in 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 required either by NCC guidelines or by the Texas Statewide Interoperability Executive Committee, whichever number is greater, both in the repeater and direct mode.

Channel displays will be in accordance with the state or national guidelines that have common alphanumeric nomenclature to avoid any misinterpretation of their identity.

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

8.4 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. **Appendix F** includes NCC and other documents containing Interoperability guidelines.

9 Future Planning

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.

10 Certification

I hereby certify that all planning committee meetings were open to the public.

John Kiehl,
Chairman, Region 52

February 27, 2013

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 can **not** 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.

PUBLIC NOTICE

REGION 52 (TEXAS – PANHANDLE, HIGH PLAINS AND NORTHWEST)
700 MHz REGIONAL PLANNING COMMITTEE
ANNOUNCES FIRST MEETING

The Region 52 (Texas – Panhandle, High Plains and Northwest) 700 MHz Public Safety Regional Planning Committee Convener announces that the initial meeting of Region 52 700 MHz Public Safety Regional Planning Committee will be held on Wednesday, July 30, 2003, in the Hospitality Suite of the City of Amarillo Civic Center, 400 S. Buchanan St., Amarillo, Texas.

The meeting of the Region 52 700 MHz National Public Safety Planning Advisory Committee will convene at 10:00 a.m. The agenda for this meeting includes:

1. Review the status of the FCC Rules for the 700 MHz Band,
2. Review the work to date of the Public Safety National Coordination Committee,
3. Establish a Regional Planning Committee and procedural rules,
4. Elect a Chairperson,
5. Review plan elements, and
6. Form workgroups to develop the Regional Plan.

The Region 52 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers whose sole purpose or principal purpose is to protect the safety of life, health, or property in Region 52 would utilize these frequencies. It is essential that not only public safety, but all government, Native American Tribal, and non-governmental organizations eligible under Section 90.523 of the Commission's Rules be represented in order to ensure that each agency's future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate and represent your agency's needs.

All interested parties wishing to participate in the planning for the use of new Public Safety spectrum in the 700 MHz band are encouraged to attend. For further information about the meeting, please contact:

Bob Sanders, Convener
Region 52, 700 MHz Regional Planning Committee
City of Amarillo
Department of Communications
P. O. Box 1971
Amarillo, Texas 79105
PH: 806-378-6851
FX: 806-378-6895
Email: bob.sanders@ci.amarillo.tx.us

ok ✓	APCO	apco@apco911.org
✓	IMSA - Fire	fireems@imsasafety.org
✓	AASHTO	info@aashto.org
✓	TX APCO	txapco@txapco.org
X	PCIA	andrewd@pcia.~~org~~com
ok ✓	FCCA	fcca@sso.org
✓	NORTEX	tkeesee@texasconnection.org
✓	SPAG	dyarnell@spag.org
✓	PERS	pers@antden.com
✓	Sheriffs Assn	info@txsheriffs.org
✓	PRPC	pnielsen@prpc.cog.tx.us
✓	PEMSS	pemss@arn.net
X	SFMT FC Assn	hcampbell@SFFMA.org
✓	TX Police Chiefs Assn	tammymartin@texaspolicechiefs.org

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Bob Sanders, Convener
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City of Amarillo
Department of Communications
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Amarillo, Texas 79105
PH: 806-378-6851
FX: 806-378-6895
Email: bob.sanders@ci.amarillo.tx.us

Classifieds
- Announcements
- Transportation
- Employment
- Merchandise
- Financial
- Trading Post
- Rentals
- Real Estate for Sale
- Pets & Supplies
- Public Notices
- Service Connection

Classified Tools
- AdHound
- My List
- Help

announcements
- Obituaries
- Anniversaries
- Weddings
- Engagements
- Birthdays
- Memorials
- Submit your announcement

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- Wilson's Weblog
- How Now Joe Brown
- Lake Levels
- Game Day Heroes
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Location: TX **Date:** 7/21/2003
Source: Wichita Falls Times Record

1-1

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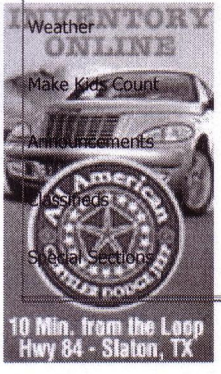

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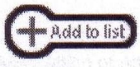

NOTICE TO CONTRACTORS Texas Cooperative Purchasing Network (TCPN), Region IV Education Service Center, requests sealed proposals from general contractors for six (6) Area Job Order Contracts (JOCs) to provide minor construction, renovations, repairs, and alterations services for use by public and private schools, colleges, universities, cities, counties, and other government entities in the State of Texas. Teaming between JOC contractors, local contractors, subcontractors, and A/Es is encouraged. **A Training Seminar for potential providers and users of JOC under these contracts will be held at Education Service Center IV, 7145 West Tidwell Road, Houston, Texas 77092 at 8:00 AM, August 5, 2003.** Contractors, Subcontractors, Architects, Engineers, Education Service Center staff, and School District Personnel are invited to attend. A continental breakfast will be served. There will be a nominal charge of $25.00 for the training seminar to offset expenses. Immediately following the Training Seminar, interested parties may participate for a Focus Group to review the Draft Review Request for Sealed Proposals and provide comments, feedback, and input. Persons interested in attending the Training Seminar should provide their name, organization, Email address, phone number, fax number, and address to: Doug Rupe at: drupe@esc4.net . Those interested in participating in the Focus Group should indicate their Focus Group participation in the

PUBLIC NOTICE

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Federal Communications Commission
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DA 03-1869
May 30, 2003

WIRELESS TELECOMUNICATIONS BUREAU ACTION

REGION 52 (TEXAS – PANHANDLE, HIGH PLAINS AND NORTHWEST) 700 MHz REGIONAL PLANNING COMMITTEE ANNOUNCES FIRST MEETING

The Region 52 (Texas – Panhandle, High Plains and Northwest) 700 MHz Public Safety Regional Planning Committee Convener announces that the initial meeting of Region 52 700 MHz Public Safety Regional Planning Committee will be held on Wednesday, July 30, 2003, in the Hospitality Suite of the City of Amarillo Civic Center, 400 S. Buchanan St., Amarillo, Texas.

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4. Elect a Chairperson,
5. Review plan elements, and
6. Form workgroups to develop the Regional Plan.

The Region 52 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers whose sole purpose or principal purpose is to protect the safety of life, health, or property in Region 52 would utilize these frequencies. It is essential that not only public safety, but all government, Native American Tribal, and non-governmental organizations eligible under Section 90.523 of the Commission's Rules be represented in order to ensure that each agency's future spectrum needs are considered in the allocation process. Administrators who are not oriented in the communications field should delegate someone with

this knowledge to attend, participate and represent your agency's needs.

All interested parties wishing to participate in the planning for the use of new Public Safety spectrum in the 700 MHz band are encouraged to attend. For further information about the meeting, please contact:

(over)

Bob Sanders, Convener
Region 52, 700 MHz Regional Planning Committee
City of Amarillo
Department of Communications
P. O. Box 1971
Amarillo, Texas 79105
PH: 806-378-6851
FX: 806-378-6895
Email: bob.sanders@ci.amarillo.tx.us

-FCC-

PANHANDLE REGIONAL PLANNING COMMISSION

M E M O R A N D U M

DATE: January 24, 2013

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

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

SUBJECT: February 15, 2013 Meeting of the Region 52 RPC

I'm writing to invite you to a webex meeting that will be held on February 15, 2013, beginning at 10:00 am. The meeting registration information is in email message accompanying this memo. The purpose of this meeting is to initiate the process of considering then adopting the Region 52 700 MHz Plan. If you're getting this memo it's because your jurisdiction is located within the Region 52 planning boundaries.

For those of you outside the Panhandle, I work for the PRPC in Amarillo and by default; I'm temporarily filling the role as chairman of the Region 52 RPC. I've been working with my associates at the Nortex RPC (Mike Bland) and SPAG (David Corder) to get this meeting organized.

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, 48 of the 55 regions have either completed or submitted their plans to the FCC for approval.

The Region 52 planning process actually began in July, 2003. The former RPC Chairman, Bob Sanders, recently retired to south Texas but before he left Amarillo, he presented PRPC staff with a box containing all the plan elements that were previously developed by the RPC. Basically, the plan had been completed; it simply needed to be compiled. PRPC assembled those elements into the document that's now being presented to you for your review. We also agreed to fill the Chairman and Secretary/Treasurer positions on an interim basis so that the plan approval process could get underway.

In the interest of honoring the plan as it currently reads, the draft plan has been posted on the Region 52 section of the PRPC's website. The plan now reads, "*Region 52 will maintain a website on which all plan documents, meetings announcements, meeting minutes, and other pertinent information will be maintained*." This was done primarily for expediency. If during the meeting on the 15th, the RPC Chairmanship changes hands, the documents can be relocated to a site of the new Chairman's choice. The draft plan can be found at: http://www.prpc.cog.tx.us/.

415 West Eighth Avenue
P.O. Box 9257
Amarillo, TX 79105
(806) 372-3381
(806) 373-3268 (fax)
www.theprpc.org

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

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

Now, we'll have the distinction of being the last region in Texas to submit their plan to the FCC. Because of that, our Statewide Communications Interoperability Coordinator (SWIC), Todd Early, Deputy Assistant Director of the Texas DPS Law Enforcement Support Division and his team will be extremely supportive in helping us push our plan across the finish line.

Mr. Early will be joining us at the next meeting to provide updates on other communications issues likely to be of interest to you including, (1) the status of House Bill 442 (Operation Texas Talks [OTT] mission critical public safety needs) in the Texas Legislature and (2) the new National Public Safety Broadband Network (NPSBN) that is being constructed (rural public safety is a national priority for this project). These issues are related to but separate from the primary purpose of this meeting; however Todd's reports should add addition value to the meeting.

Attached you'll find an agenda for this upcoming meeting. I'm also sending you a document that explains what OTT is all about. If you have difficulty in locating the draft plan or need any other assistance, please contact Shane Brown, PRPC's Regional Emergency Communications & Preparedness Programs Manager or me at (806) 372-3381. As noted earlier, we've also been working with the COG homeland security staff in your region, so you can also contact Mike Bland or David Corder for further information.

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

Posted on the PRPC Website on Friday, January 25, 2013 at:

http://theprpc.org/Programs/EmergencyPreparedness/region52.html

REGION 52 REGIONAL PLANNING COMMITTEE

February 15, 2012 – 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: Texas Reports: Todd Early, TX SWIC

Item 4: Update group on RPC previous (1st) meeting and mission

Item 5: Region 52 Election of Officers:

a. Chairman

b. Vice-Chair

c. Secretary/Treasurer

Item 6: Discussion of Region 52 Plan

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

Item 7: Public comment

Item 8: Next meeting date

Item 9: Adjournment

NOTICE OF MEETING
REGION 52 700 MHz REGIONAL PLANNING COMMITTEE

A meeting of the Region 52 700 MHz Regional Planning Committee will be held on February 15, 2013, beginning at 10:00 a.m. This meeting will be conducted electronically by webex and hosted by the Texas Department of Public Safety. This meeting is open to the public; the participation particulars are provided below:

.....

Topic: Region 52 - Regional Planning Committee meeting
Date: Friday, February 15, 2013
Time: 10:00 a.m., Central Standard Time
Meeting Number: 924 369 852
Meeting Password: (This meeting does not require a password.)

To join the online meeting (Now from mobile devices!)

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Access code: **924 369 852**

.....

Region 52 encompasses the 52 counties that lie within the Nortex Regional Planning Commission, the South Plains Association of Governments and the Panhandle Regional Planning Commission. The primary purpose of this meeting will be to consider the provisional approval of the draft Region 52 700 Mhz Plan which includes the allocation of 700 Mhz spectrum to public safety agencies across the Region 52 area. The agenda for this meeting and the draft plan may be reviewed on-line at: http://theprpc.org/Programs/EmergencyPreparedness/region52.html

All interested parties wishing to participate in the review and consideration of this draft plan are encouraged to attend. For further information about this meeting, please contact John Kiehl, Interim Region 52 Chairman, Panhandle Regional Planning Commission, PO Box 5257, Amarillo, TX 79105; PH (806) 372-3381; FX (806) 373-3268; Email: jkiehl@theprpc.org.

Open Meeting Submission

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TRD:	2013000632
Date Posted:	01/25/2013
Status:	Accepted
Agency Id:	0877
Date of Submission:	01/25/2013
Agency Name:	Panhandle Regional Planning Commission
Committee:	Region 52 700 MHz Regional Planning Committee
Liaison Id:	5
Date of Meeting:	02/15/2013
Time of Meeting:	10:00 AM **(##:## AM Local Time)**
Street Location:	415 West Eighth Avenue
City Location:	Amarillo
State Location:	TX
Liaison Name:	John Kiehl
Additional Information Obtained From:	John Kiehl @ (806) 372-3381

REGION 52 REGIONAL PLANNING COMMITTEE
February 15, 2012 ¿ 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: Texas Reports: Todd Early, TX SWIC
Item 4: Update group on RPC previous (1st) meeting and mission
Item 5: Region 52 Election of Officers:
a. Chairman
b. Vice-Chair
c. Secretary/Treasurer
Item 6: Discussion of Region 52 Plan
a. Approval of Plan to send to adjacent regions for review and concurrence
Item 7: Public comment
Item 8: Next meeting date
Item 9: Adjournment

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 (1st) 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. 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-Chair

c. Secretary Chairman

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.

NOTE:

These meeting minutes, along with the PowerPoint presentations delivered during the meeting will be posted on the Region 52 website at: http://www.prpc.cog.tx.us/.

Meeting Participation Information:
Topic: Region 52 - Regional Planning Committee meeting
Date: Friday, February 15, 2013
Time: 10:00 a.m., Central Standard Time
Meeting Number: 924 369 852
Meeting Password: (This meeting does not require a password.)

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Agenda:

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Call-in toll-free number (US/Canada): 1-877-668-4493
Call-in toll number (US/Canada): 1-650-479-3208
Toll-free dialing restrictions:
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Access code: 924 369 852

For Assistance during this meeting, contact:
steven.campbell@dps.texas.gov
1-512-424-5303

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NOTICE OF MEETING
REGION 52 700 MHz REGIONAL PLANNING COMMITTEE

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To receive a call back, provide your phone number when you join the meeting, or call the number below and enter the access code.
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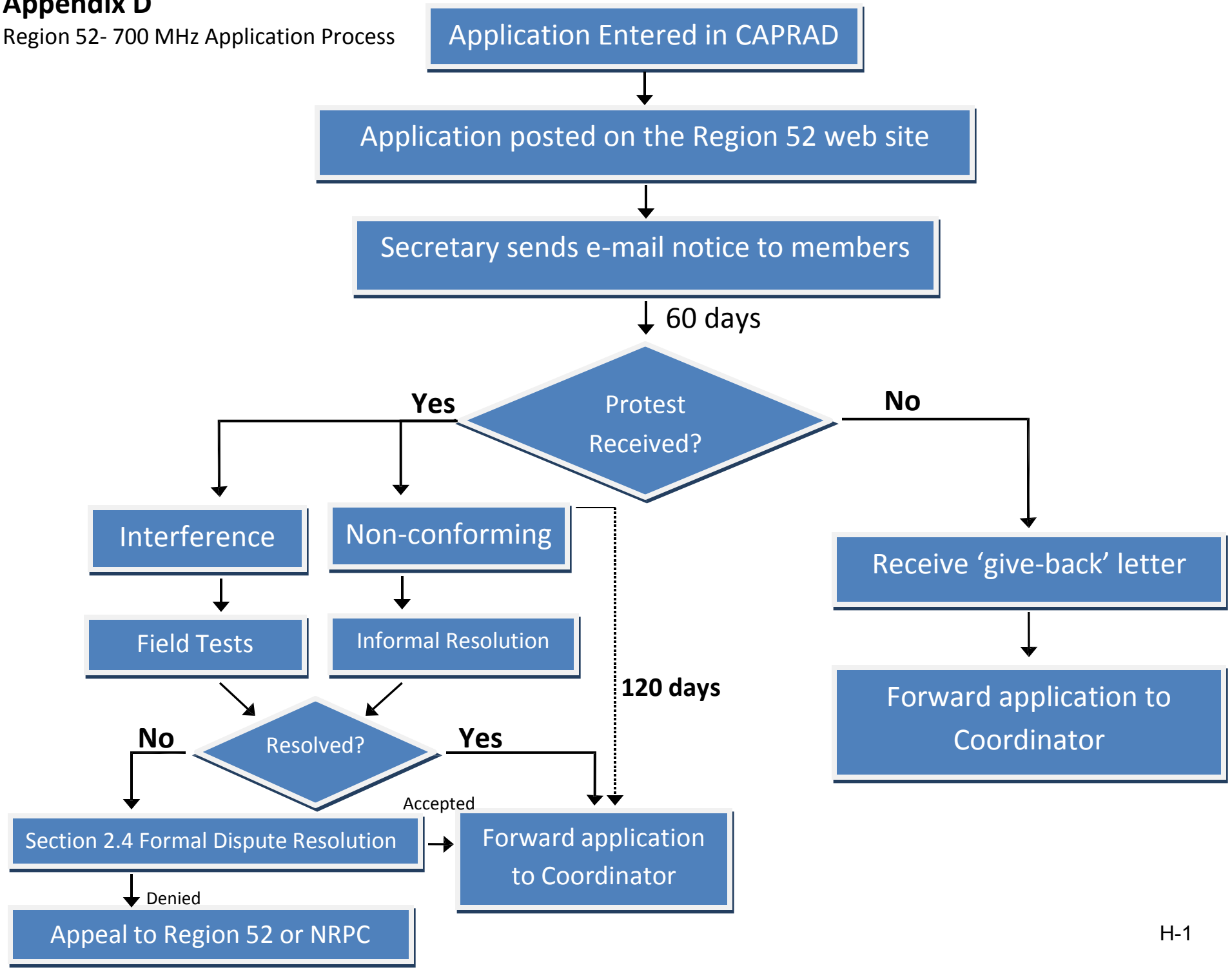
Appendix D

Region 52- 700 MHz Application Process



APPENDIX E
Simplified 700 MHz Pre-Assignment Rules Recommendation

Introduction

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 ?n the 700 MHz band corresponds to a signal of -92.7 dBm, received by a half-wavelength dipole (/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 reduction[1] 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.

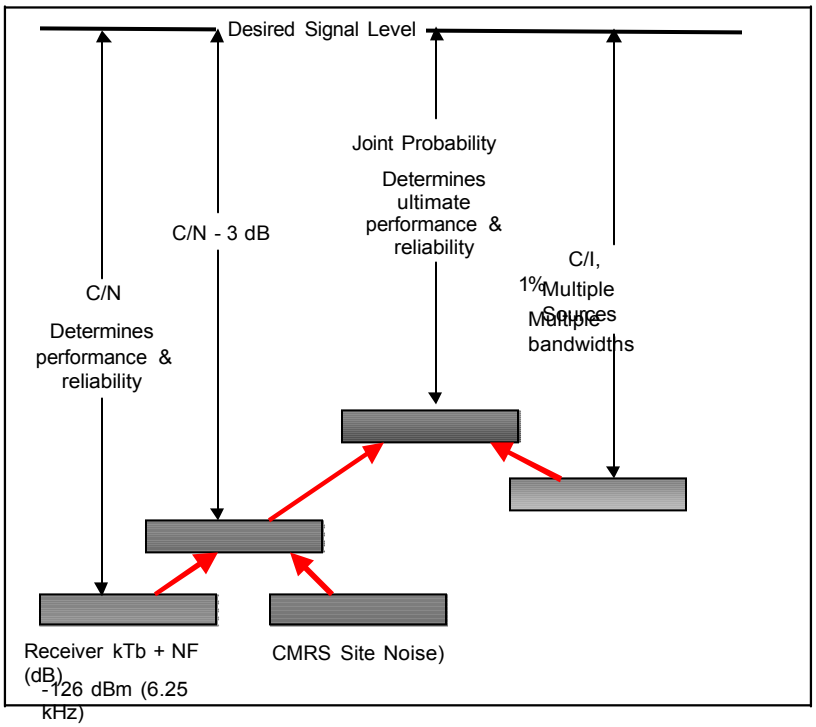


Figure 1 - Interfering Sources Create A "Noise" Level Influencing Reliability

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

[1] TIA TR8 made this 3 dB allowance for CMRS OOBE noise during the meetings in Mesa, AZ, January 2001.

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 affects 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

[2] See Attachment A for an explanation of how the 1% interference value is defined and derived.

Most Public Safety communications systems, today, are designed for portable in-building[3] 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.

[3] Building penetration losses typically required for urban = 20 dB, suburban = 15 dB, rural = 10 dB.

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)

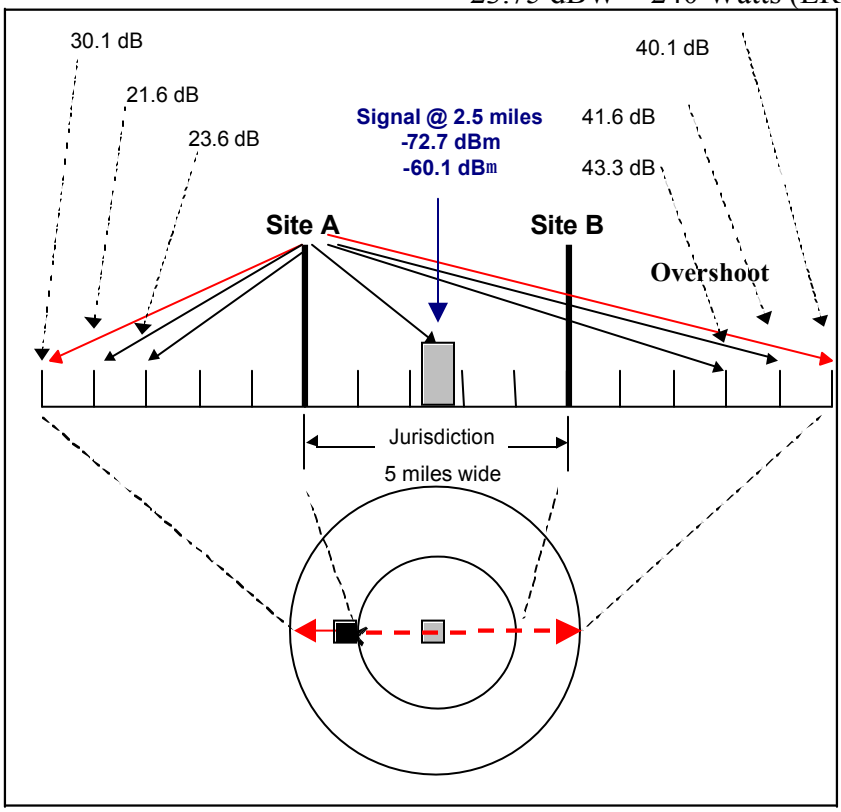


Figure 2 - Field Strength From Left Most Site.

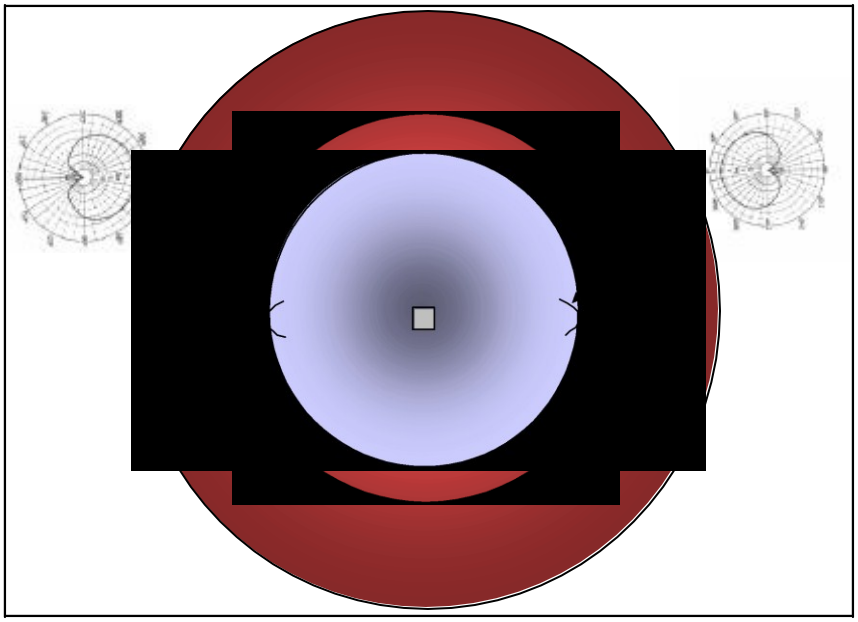


Figure 3 - Antenna Configuration Required To Limit Field Strength Off "Backside"

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 optomistic 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, downtilting 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 downtilt antenna hits the ground at ~ 0.75 miles[4]. 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

[4] Use of high gain antennas with down-tilt on low-level sites is one of the causes of far-near interference experienced in the 800 MHz band.

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 can not 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 perfomance for this scenario is shown in Table 2, above, for 20 dB building loss typical of urban areas.

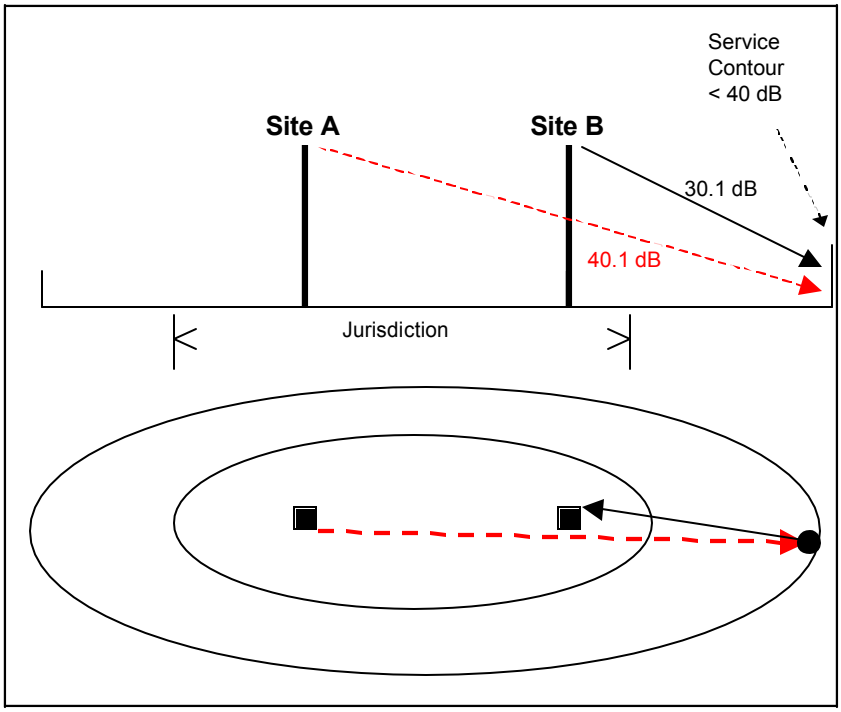


Figure 3a. Scenario 1 on Use of Table 5

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 perfomance 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 perfomance 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 co-channel 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.

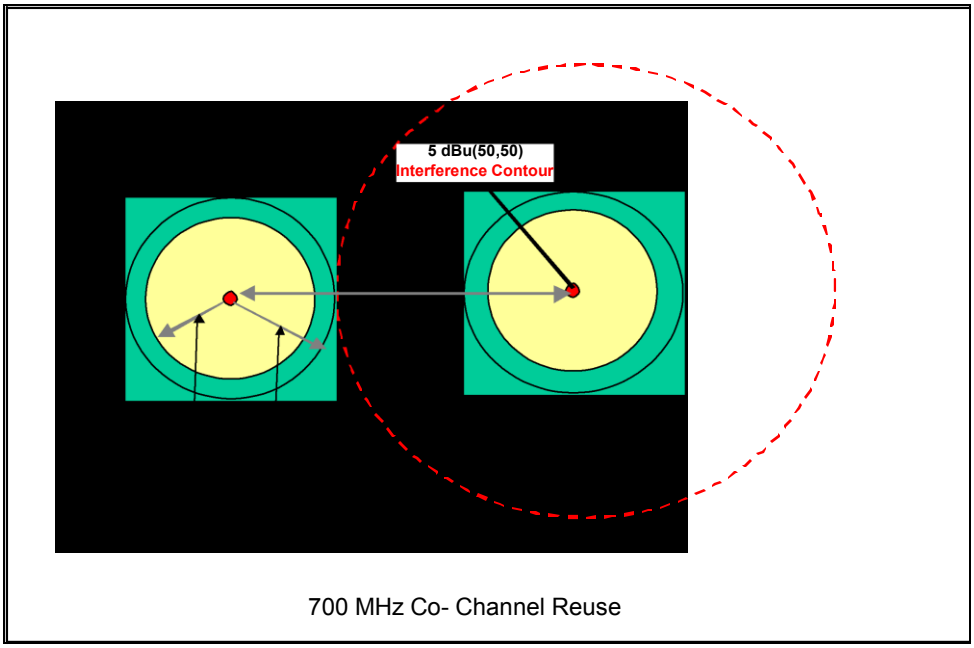


Figure 4 - Co-Channel Reuse Criterion

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 bandwidth. 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 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 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.

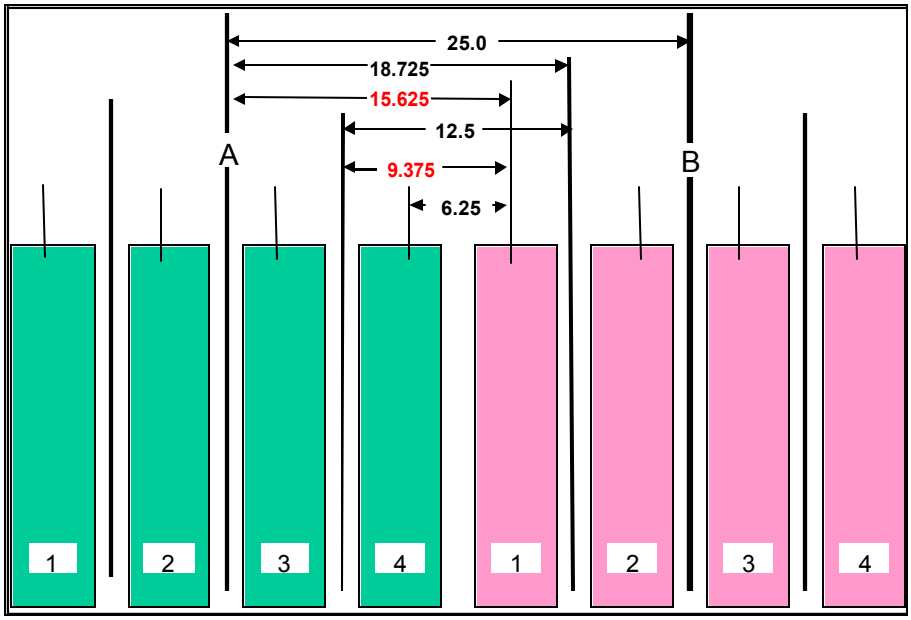


Figure 5, Potential Frequency Separations

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
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.

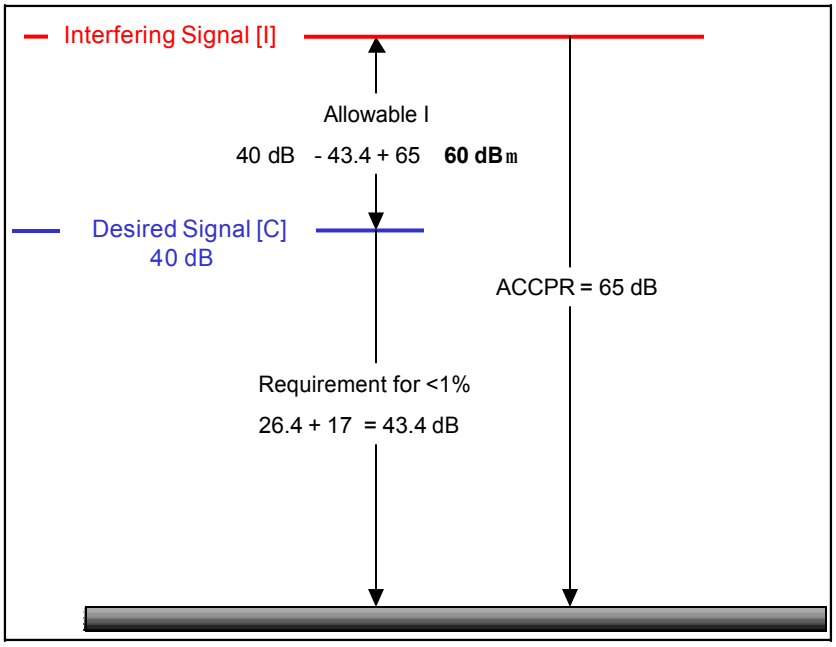


Figure 6 - Adjusted Adjacent 25 kHz Channel Interfering Contour Value

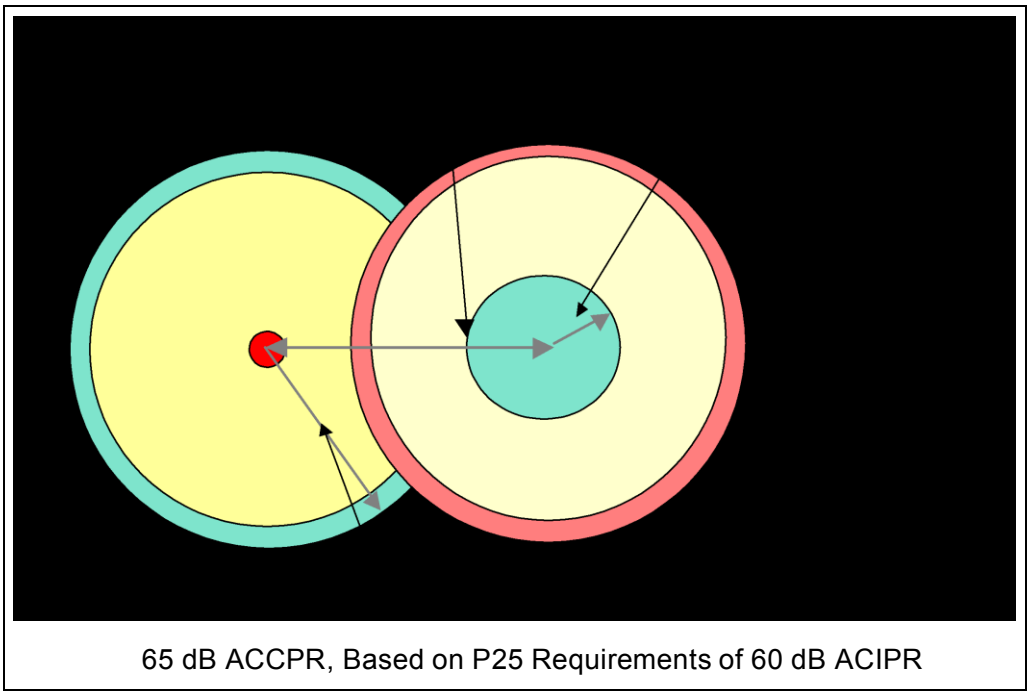


Figure 7 - Example Of Adjacent/Alternate Overlap Criterion

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

There are two different ways that Interference is considered.

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.

$$\frac{C}{I}\% \quad \frac{1}{2} \quad erfc \ \frac{\frac{C}{I}\text{margin}}{2s} \tag{1}$$

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, $Z = 1.28$.

$$\frac{C}{I}\% \quad Z \ \sqrt{2} \ s \tag{2}$$

The most common requirements for several typical lognormal standard deviations (?) are included in the following table based on Equation (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.

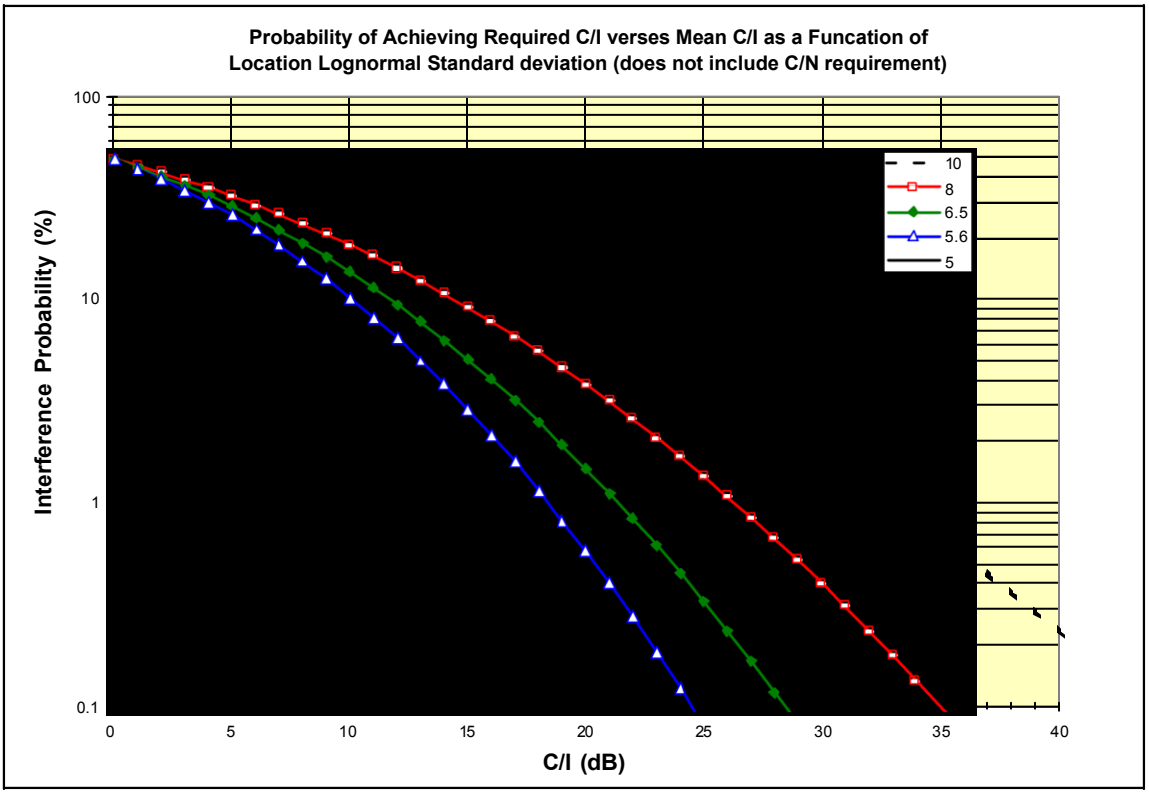


Figure A1, Probability Of Achieving Required C/I As A Function Of Location Standard Deviation

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.

To determine the desired probability that both the C/N and C/I will be achieved requires that a joint probability be determined. Figure A2 shows the effects of a family of various levels of C/N reliability and the joint probability (Y-axis) in the presence of various probabilities of Interference. Note that at 99% reliability with 1% interference (X-axis) that the reduction is nearly the difference. This is because the very high noise reliability is degraded by the interference, as there is little probability that the noise criterion will not be satisfied. At 90%, the 1% interference has a greater likelihood that it will occur simultaneously when the noise criterion not being met, resulting in less degradation of the 90%.

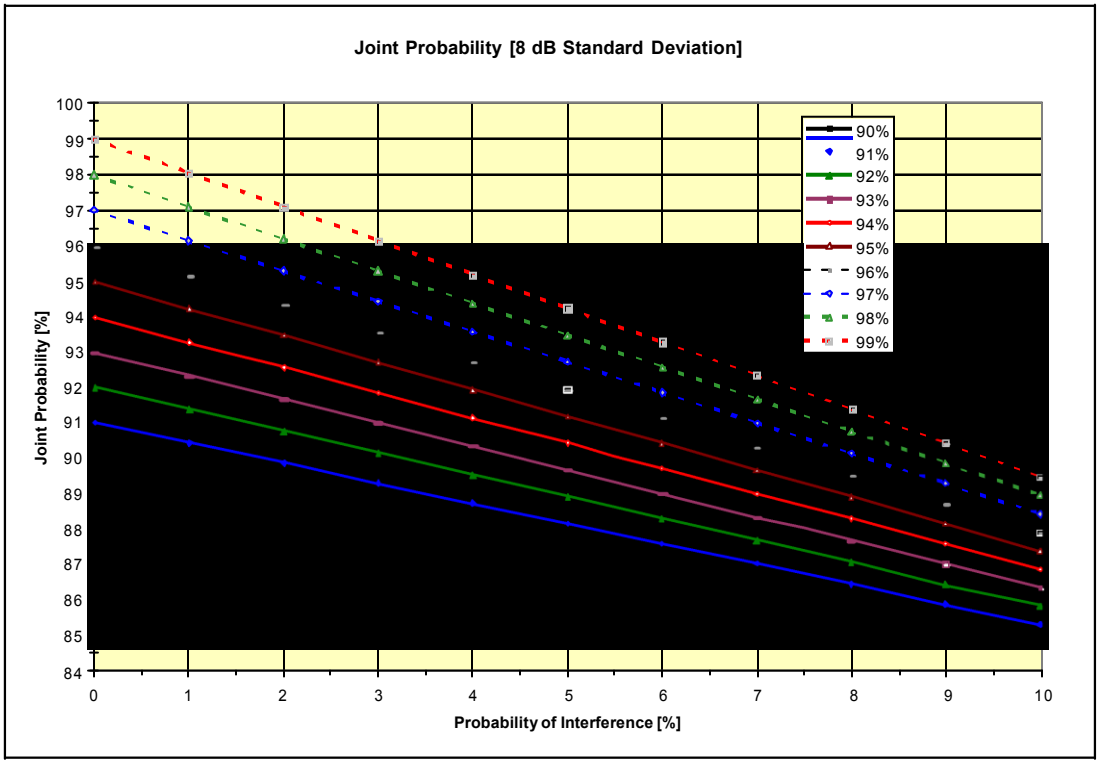
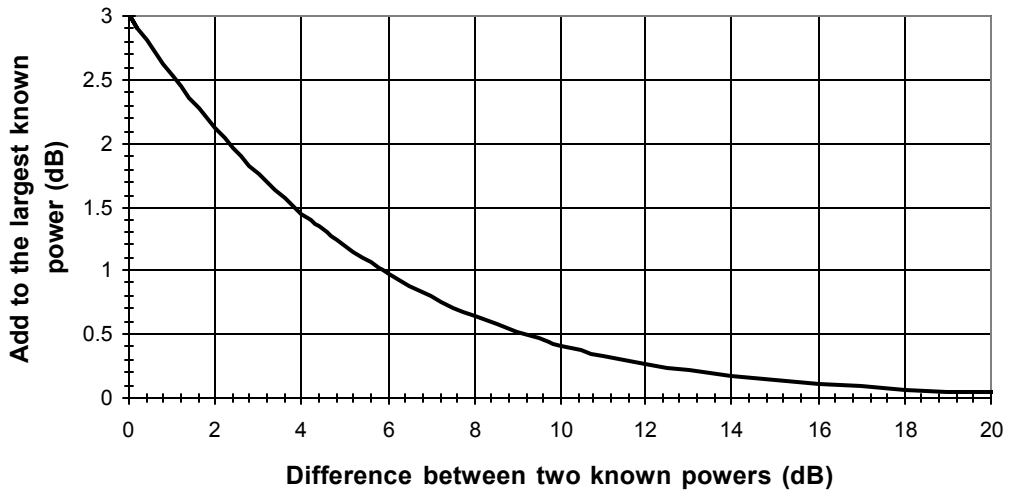


Figure A2 - Effect Of Joint Probability On The Composite Probability

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

Adding Two Known Non-Coherent Powers



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 F

700 MHz Interoperability channel recommended nomenclature and Texas State Interoperability Committee guidelines

Region 52 will follow the guidelines presented in the most current Texas Statewide Interoperability Channel Plan, found at the following website:

http://www.txdps.state.tx.us/LawEnforcementSupport/communications/interop/index.htm

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The Texas State Interoperability Channel Plan for 700MHz at the time of Plan Submission is as follows:
(See Next Page)

7. SPECIFIC GUIDELINES -- 700 MHz Channels

For narrowband 700 MHz interoperability, the 32 narrowband repeater channels, with their associated 32 direct channels, are described in Figure 4 below.

Figure 4

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
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 Repeater Channel
7DATA69D	770.74375	770.74375	FX1T / MO	$293 / 659	Tactical 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)
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)
7MED87	773.35625	803.35625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7MED87D	773.35625	773.35625	FX1T / MO	$293 / 659	Tactical Channel (Direct)
7DATA89	774.75625	804.75625	FX1T / MO	$293 / 659	Tactical Repeater Channel
7DATA89D	774.75625	774.75625	FX1T / MO	$293 / 659	Tactical Channel (Direct)

Temporary Calling Channel / Tactical Repeater Configuration					
Label	**Transmit**	**Receive**	**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 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
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 Repeater

Note the following:

- Narrowband 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 Texas Statewide Interoperability Executive Committee (TSIEC) 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 narrowband 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 Figure 4 should be assigned on-incident by the incident commander.
- Wide implementation of 700 MHz radio systems is not anticipated until after 2008 (Some equipment is presently capable of 700/800 MHz operation). Users of this channel plan should anticipate development of additional guidance prior to that time.
- National efforts to standardize interoperability channel names have been undertaken to ensure that public safety equipment uses a common naming convention. In accordance with these efforts, the labels shown are to be implemented by as soon as possible, but no later than January 1, 2009. These labels are listed in the Figure 4 and all participating agencies must use these labels.

01/15/2013

Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile 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	769.181250 MHz	Ochiltree Wichita
31-32	12.50 KHz	799.193750 MHz	769.193750 MHz	Ochiltree Wichita
33-34	12.50 KHz	799.206250 MHz	769.206250 MHz	Collingsworth Floyd Potter Terry
35-36	12.50 KHz	799.218750 MHz	769.218750 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
49-50	12.50 KHz	799.306250 MHz	769.306250 MHz	Hale Wheeler Wilbarger

Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
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 Young
55-56	12.50 KHz	799.343750 MHz	769.343750 MHz	Castro
57-58	12.50 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 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

Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
				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
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
127-128	12.50 KHz	799.793750 MHz	769.793750 MHz	Foard Montague Moore

Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
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
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

Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
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
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 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

Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
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
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
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 Hansford

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Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
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 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

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Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
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 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 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

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Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
				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
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	771.243750 MHz	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
373-374	12.50 KHz	801.331250 MHz	771.331250 MHz	Hall

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Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
				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
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

Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
				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 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 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

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Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
				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 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

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Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
529-530	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 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

Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
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
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 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

Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
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 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

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Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
				Deaf Smith Hutchinson 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
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

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Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
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 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 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

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Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
				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 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

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
				Swisher Yoakum
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
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

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Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
				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
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
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

Region 52 - Texas - Lubbock
Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
				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 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

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Allotments by FCC Channel

FCC Channel	Mobile Bandwidth	Base Frequency	Frequency	County
919-920	12.50 KHz	804.743750 MHz	774.743750 MHz	Armstrong Parmer Terry
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 Wichita
947-948	12.50 KHz	804.918750 MHz	774.918750 MHz	Briscoe King Yoakum

Area 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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
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
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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	801.581250
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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
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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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
	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

Area Name	Channel	Class	Base Freq	Mobile Freq
	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
	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