

# Region 49

# National Public Safety Plan 700 MHz Regional Review Committee www.region49.org

July 20, 2010

Federal Communications Commission Office of the Secretary 445 12<sup>th</sup> Street NW Washington, D.C. 20554

Attention: Chief, Public Safety and Homeland Security Bureau

Subject: WTB Docket No. 02-378, Region 49 (Texas – Austin) 700 MHz Regional Plan

#### Dear Madam Secretary:

Attached is the Region 49, 700 MHz Regional Plan for your review and approval. This plan was approved by the membership of the Regional Planning Committee on April 9, 2010. Copies of the plan were then distributed to the four adjoining regions for their review and concurrence. Copies of each of the four letters of concurrence are included as Attachment 2 to our plan.

I want to thank the National Coordinating Committee (NCC), the National Public Safety Telecommunications Council (NPSTC), and the National Regional Planning Council (NRPC) and their leadership for the tools and guidance that helped us through the planning process.

It is our hope that this plan will receive your approval and allow public safety entities throughout our region to access this much needed frequency spectrum.

Please feel free to contact me if there are any questions at 979-595-2801, ext. 2045, or <a href="mayworm@bvcog.org">mayworm@bvcog.org</a>.

Sincerely,

Ronald G. Mayworm

Chairman

Ron Mayworm, Chairman 3708 E. 29<sup>th</sup> Street # 128 Bryan TX 77802 (979) 595-2801 ext. 2045 (979)595-2810 [FAX] ron@ktsignals.com Karla Jurrens, Secretary P. O. Box 4087, MSC 0259 Austin TX 78773 (512) 424-2104 \(512) 424-2899 [FAX] karla.jurrens@txdps.state.tx.us



# Region 49 – Texas (Central Texas)

700MHz Regional Plan

# **Table of Contents**

1	764-776/794	l-806 MHz Regional Plan for Region 49 (Central Texas)					
	1.1 Regi	onal Officers and Membership	4				
2	Regional Pla	anning Committee	5				
	2.1 Desc	ription of Region	5 8				
	2.2 Notif	2.2 Notification Process					
	2.3 Operations of the Regional Planning Committee						
	•	ute Resolution – Intra-Regional	11 14				
	2.5 Dispute Resolution – Inter-Regional						
	2.6 Plan Amendments						
3		an Administration	15				
		ment of Narrowband "General Use" Channels	15				
		ted Area" Operations	16				
		e Back" Channels	18				
		Power Channels	19				
	•	naned Channels"	21				
		edure for Requesting Channel Assignments	22				
		gnment Disputes PAC Channels	24				
1			25 25				
4	Priority Matr		26				
6	<ul><li>5 Process for handling unformed adjacent Regions</li><li>6 Coordination with Adjacent Regions</li></ul>						
7		ign/Efficiency Requirements	26 27				
'	•	ference Protection	27				
		trum Efficiency Standards	27				
	•	em Loading Criteria	28				
		Insion of Existing 800MHz Systems	29				
	•	em Implementation	29				
8	•	lity Channels	29				
	8.1 Intro	•	29				
	8.2 Tactical Channels						
	8.3 Deployable Systems						
	8.4 Moni	toring of Calling Channels	31				
9	Future Planr	ning	31				
10	Certification		32				
Αŗ	opendices	5					
Δn	pendix A	Region 49 Bylaws	A-1				
	pendix A pendix B	Region 49 Members, Agencies, Contact Information	B-1				
	pendix C	Meeting Notices, Attendee Lists, Publication Verifications,	ו ט				
, .p	policin o	Agendas, & Minutes	C-1				
Ар	pendix D	700 MHz Interoperability channel recommended nomencla	ature				
		and Texas State Interoperability Committee guidelines	D-1				

Appendix E	NCC 700 MHz Pre-Assignment Rules/Recommendations	E-1
Appendix F	Region 49 Channel allotments	F-1
Appendix G	Inter Regional Dispute Resolution Agreement	G-1
Appendix H	Region 49 700 MHz Application Process	H-1
Attachments		
Attachment 1	Signed Inter Regional Dispute Resolution Agreements	1-1
Attachment 2	Letters of Concurrence	2-1

# 1 764-776/794-806 MHz Regional Plan for Region 49 (Central Texas)

This document is the regional plan for Region 49 (Central Texas) describing how the 746-776/796-806 MHz General Use frequencies will be allocated and implemented in the region.

#### 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 49 Regional Planning Committee.

The Regional Chairman of Region 49 is Ron Mayworm. His contact information is below:

Ron Mayworm, Radio System Manager
Brazos Valley Wide Area Communications System (BVWACS)
Brazos Valley Council of Governments
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Bryan, TX 77802-4128
Phone 979-595-2801 ex. 2045
Fax 979-595-2810
Email ron@ktsignals.com

The Secretary/Treasurer of Region 49 is Karla Jurrens. Her contact information is below:

Karla Jurrens, Systems Design Analyst Public Safety Communications Bureau Texas Department of Public Safety P. O. Box 4087, MSC 0259 Austin, TX 78773 Phone (512) 424-2104 Fax (512) 424-2899 Email Karla.Jurrens@txdps.state.tx.us

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

 Modifying the Region 49 web site (www.Region49.org) to reflect 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.

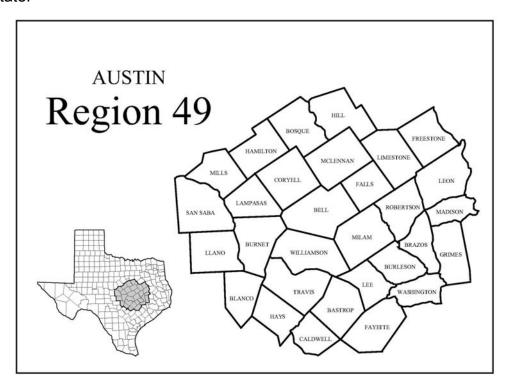
Membership in the Region 49 Regional Planning Committee is open to any interested party.

Committee officer requirements, voting procedures and membership attendance requirements are listed in the Region 49 Regional Planning Committee bylaws. **Appendix A** contains these bylaws. **Appendix B** includes a list of Region 49's members and their agency/affiliation through the date of plan submission. Voting and operating procedures are described in Section 2.3 of this plan.

# 2 Regional Planning Committee

### 2.1 Description of Region

Region 49 is comprised of 30 counties in central Texas. The following figure shows the geographical relationship of the counties to each other and to the rest of the state.



The following table lists each of the 30 counties and indicates the following information for each county:

- county area in square miles
- the county's estimated population in 2005
- the approximate maximum ground level elevation (above sea level) in the county
- the county's population density (persons per square mile) used by CAPRAD to develop the 700 MHz channel allocations (based on 2000 census figures)
- a general description of the county's topography

COUNTY	AREA (SqMi)	POPULATION (2005 estimate)	~MIN. ELEV.	~MAX. ELEV.	POPULATION DENSITY (2000)	TOPOGRAPHIC CHARACTERIZATION
Bastrop	895	68,957	400	600	64.989	Rolling uplands & broken hills
Bell	1055	252,658	450	1200	224.563	Rolling prairies to rolling uplands, deeply cut with steep bluffs along the Balcones Escarpment
Blanco	714	9,317	800	1850	11.836	Hilly to mountainous
Bosque	989	18,041	480	1200	17.392	Rolling hills
Brazos	588	161,380	200	350	260.192	Rolling prairie
Burleson	668	17,529	225	475	24.747	Undulating to hilly; eastern part is a broad valley
Burnet	1000	38,547	700	1700	34.283	Rolling hills & prairies with local deep dissections
Caldwell	546	35,751	375	500	58.993	Low rolling to hilly
Coryell	1031	74,190	600	1493	71.288	Plateaus & grasslands
Falls	765	18,194	300	500	24.153	Broad flatlands to gently rolling
Fayette	950	23,077	200	600	22.951	Level to steep slopes
Freestone	888	18,775	600	900	20.363	Coastal plain upland
Grimes	799	24,754	193	415	29.677	Coastal plain boundary; gently rolling
Hamilton	844	8,191	900	1600	9.847	Rolling prairie with abruptly rising flat-topped buttes
Hays	694	122,884	600	1400	143.964	Hilly and plains divided by the Balcones Escarpment
Hill	1012	34,378	400	900	33.585	Level plains & gently rolling hills
Lampasas	714	20,743	850	1700	24.945	Rolling prairie with sloping hills
Lee	631	16,732	270	970	24.912	Level plain & gently rolling hills
Leon	1078	16,352	150	500	14.305	Rolling plains
Limestone	931	22,481	375	665	24.262	Level to rolling prairies
Llano	941	18,497	800	2000	18.233	"Hill Country" on the eastern part of the Edwards Plateau

Madison	473	13,181	213	364	27.553	Rolling prairie
McLennan	1031	219,344	400	850	204.934	Flat to rolling with locally steep slopes along the
						Balcones Escarpment
Milam	1019	25,453	250	600	23.840	Level to slightly rolling
Mills	734	5,100	1100	1700	6.885	Hills & plateaus
Robertson	854	16,162	250	500	18.723	Flat to gently rolling
San Saba	1136	6,138	1100	1800	5.453	Steep to rolling, with deep local dissections
Travis	989	882,077	400	1300	821.061	Divided by the Balcones Escarpment
Washington	611	31,834	200	500	49.855	Gently rolling hills
Williamson	1137	315,490	400	1300	222.635	Coastal plain and western plain divided by the Balcones Escarpment
TOTALS	25,717	2,536,407				

In general, the region includes portions of the high plains, central plains, and coastal plains of Texas. The western counties consist of the rolling hills and prairies of the high plains. The eastern counties consist of the gently rolling coastal plains and prairies.

The most significant geological feature of the region is the Balcones Escarpment, which runs through Hays, Travis, Williamson, Bell, and McLennan counties. The escarpment consists of steep cliffs and cliff-like structures. The area adjacent to the escarpment is popularly known as the Texas Hill Country, where the land is highly dissected by fast-moving streams through deep-sided canyons.

Population densities (based on 2000 census data) in the region range from a rural 5.453 persons/square mile to an urban 821.061 persons/square mile. There are seven cities with populations exceeding 50,000 in the region. The cities (and their counties) are: Austin (Travis & Williamson); Waco (McLennan); Killeen (Bell); College Station (Brazos); Bryan (Brazos); Round Rock (Williamson); and Temple (Bell).

The variety of terrain and population densities presents some unique problems in achieving full radio coverage of some jurisdictions' areas. All these factors were considered when designing flexibility into this plan.

In previous NPSPAC 821 MHz frequency allotments, spectrum amounts disproportionate to population densities were allotted. In the 700 MHz band, county allotments for the narrowband channels have been developed based on terrain characteristics and population densities both within the region and relative to adjacent regions. Due to the region's diverse population densities and the scarce spectrum resources in the region's heavily populated areas, it is anticipated the majority of requests for voice/data spectrum will be from the

metropolitan areas, several of which currently operate existing 800 MHz radio networks.

There are four Metropolitan Statistical Areas located in the Region. Their names, counties in which they are located, and their estimated 2005 populations (per the Texas State Demographer) are:

Austin/Round Rock	Travis & Williamson	1,425,159
Killeen/Temple/Fort Hood	Bell & Coryell	347,591
Waco	McLennan	219,344
Bryan/College Station	Brazos	195,071

It is anticipated that other areas within Region 49 may request 700 MHz channels from established county pool allotments to either expand existing 800 MHz systems or develop new 700 MHz systems.

#### 2.2 Notification Process

Ron Mayworm, chairman of the Region 49 821 MHz Regional Review Committee, was the 700 MHz Convener. The first 700 MHz Regional Planning Committee meeting date was October 29, 2001. Interested parties were given more than 60 days' notice prior to the first meeting. Announcements of the date, time, location, and purpose of the first meeting were sent to the FCC Wireless Telecommunications Bureau and published in the Association of Public Safety Communications Officials, Inc. magazine. More than 700 copies of the first meeting notice were mailed to all known federal, state, and local public safety agencies within the region, utilizing mailing lists supplied by the area's Councils of Governments and the Texas State Commission on Fire Protection. Legal notices were published twice in each of the following newspapers published within the region: The Waco Tribune-Herald, the Austin American-Statesman, the Bryan/College Station Eagle, and the Temple Daily Telegram.

Based on information from the Bureau of Indian Affairs, there are no Native American tribal reservations located within Region 49. However, copies of the first meeting's notice were mailed to all known tribal headquarters addresses located in the state of Texas.

Copies of the notice issued by the FCC, the mailed notice of Region 49's meeting, the notice placed in the APCO Bulletin, and the ads placed in multiple newspapers are included in **Appendix C.1**.

At the first meeting all participants were asked by which methods they had received notice of the meeting. The great majority of participants had received the direct mail notices. None of the participants had seen any of the published

newspaper notices. Therefore, it was decided to discontinue placing expensive newspaper notices for future meetings.

Subsequent meetings of the committee were also publicized by FCC Notice, postings in the Region 49 web site, and direct mailings. These subsequent notices were also issued more than 30 days before the meeting date, and copies are included in **Appendix C.2.** 

The Chairmen of the Outreach Committee utilized many resources to develop mailing lists of as many federal, state, and local public safety agencies with offices in the region as possible. A sample mailing list is included in **Appendix C.5**.

Meetings of the committee were held at various geographic locations throughout the region to promote participation by representatives from all entities within the region.

Since Region 49 includes the state capitol, Austin, and is headquarters to many state agencies, participation by state agencies, particularly the Department of Public Safety and the Texas Department of Transportation, was common. Most meetings were also attended by one or more members of the Texas Statewide Interoperability Executive Committee.

The Region 49 700 MHz list-serve, http://groups.yahoo.com/group/RPC49/ was created in November of 2001. The Region 49 web site www.Region49.org and a replacement list serve, 700mail@region49.org, created November 6, 2003, were also used to exchange information as well as disseminate meeting times, dates, locations, and agendas throughout the regional planning process.

In each of the announcements, invitees were encouraged to provide input into the planning process. During the meetings, participants were encouraged to comment on the meeting's agenda items and any other pertinent matters. Comments were given at the meetings, provided ahead of the meetings on the web sites, and made directly to the chairman, other committee officers, and the subcommittee chairmen.

When comments were made at meetings, the chairman acknowledged the question/comment, and deliberation followed until the commenting party was satisfied or until additional information could be gathered and presented at the next meeting. If voting was necessary, Roberts Rules of Order were followed.

#### 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 49 Bylaws, **Appendix A**.

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, secretary, and 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.

Subcommittees have been formed as needed to work on specific issues. At the first meeting three subcommittees were formed. These subcommittees are intended to work on the details of specific issues and make recommendations to the full committee for the development of the regional plan. Participation in subcommittees is open to any member. The chairman of the Regional Planning Committee appoints each subcommittee chairman. The initial Region 49 subcommittees and their current chairmen are listed below:

Bylaws: Ken Biederman, Burleson County, Chairman (now deceased)

**Plan Writing:** Ron Mayworm, Brazos Valley Council of Governments, Chairman

**Outreach:** Karla Jurrens, Texas Department of Public Safety, Chairman

A minimum of one (1) meeting per year will be held of the full committee. This annual meeting will be held in Austin, Texas, on October 15<sup>th</sup> of each year, or on the next business day if the 15<sup>th</sup> is a weekend or holiday. The chairman also has the authority to call meetings whenever he/she deems it necessary or in the best interest of the region to convene. In an attempt to offer as many people as possible the opportunity to contribute to the committee, some of the meetings have been, and will continue to be held in various locations within region 49.

Regular meetings of the full committee will be scheduled during the 30 day period beginning 90 days after the close of each 6 month filing window for applications (see section 3.6 A).

A chronological list of meetings, meeting announcements, agendas, and meeting minutes documenting Region 49's progress in 700 MHz development is located in **Appendix C** of this document.

Texas has formed a Statewide Interoperability Executive Committee (SIEC) to manage the 700 MHz interoperability channels. The Texas SIEC includes the chairman of the Region 49 Regional Planning Committee as a member.

#### 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 49.

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 the listserver 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 49 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. See **Appendix G** for a sample Inter-Regional Dispute Resolution Agreement, and **Attachment 1** for copies of the signed agreements between Region 49 and its adjacent Regions 40, 50, 51, and 53.

#### 2.6 Plan Amendments

Region 49 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 49 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 49 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 49 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 49 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. In region 49, representatives of 23 counties chose to have the sort for their counties at 12.5 KHz spacing. Representatives of 7 counties (Bell, Coryell, Hamilton, Lampasas, Milam, Mills, and San Saba) chose to have the sort for their counties at 25 KHz. **Appendix F** reflects the results of these choices.

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 49 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 49, 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 ports. 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 inbuilding 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 49 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 49 will ensure that these types of systems will not interfere with cochannel 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 49 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 49 700 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 49 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 49 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 49 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 49 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 49, 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 49 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 49 700 MHz application process has been included in this plan as **Appendix H.** 

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 49 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 49 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 49 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 49, 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 49 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 49 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 49. 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, interdiscipline 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 49 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 49 are listed below:

Region 40

Region 50

Region 51

Region 53

Region 49 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 49'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 49 allotments or systems. The CAPRAD database and its associated packing plan provides minimum channel allotments for all of Region 49'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 40, 50, 51, and 53 should all be able to satisfy voice and narrowband data requests along their border areas with Region 49. However, if an adjacent region has difficulties satisfying intra-regional requests due to channel allocation within Region 49, 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 underconstructed (i.e., portions of the desired service area have signal strength less than 40 dBu), or utilize low quality receivers.

Region 49 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 49 encourages small agencies to partner with other agencies in multiagency 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 49 800 MHz Public Safety Radio Communications Plan. If the two Region 49 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 49 700 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 49 700 MHz Regional Planning Committee supports the Texas Statewide Interoperability Executive Committee. The Chairman of the Region 49 700 MHz Regional Planning Committee, or his delegate, is a member of the Texas Statewide Interoperability Executive Committee (TSIEC) and represents Region 49. 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 49, 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 central Texas, Region 49 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 49.

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 49 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 49 will be responsible for monitoring interoperable calling channels in the manner prescribed by the TSIEC. **Appendix D** 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 49.

# 10 Certification

I hereby certify that all planning committee meetings, including subcommittee or executive committee meetings were open to the public. A summary of the deliberations of the committee pursuant to adopting this plan can be found in **Appendix C.4**, in the minutes of the April 9, 2010, Regional Planning Committee meeting.

Ronald G. Mayworm Chairman, Region 49

# Appendix A

#### BYLAWS OF REGION 49 (CENTRAL TEXAS) 700 MHZ REGIONAL PLANNING COMMITTEE

#### **ARTICLE I**

#### NAME & PURPOSE

The name of this committee shall be the Region 49 (Central Texas) 700 Mhz Regional Planning Committee. Its primary purpose is to foster cooperation between members, to develop a Regional Plan for use of the 700 Mhz Public Safety band in the 30 county Central Texas area, and to implement that plan. This committee is formed in accordance with 47 USC 90.257 and the procedures detailed in the Federal Communication's *First Report and Order and Third Notice of Proposed Rulemaking* (14 FCC Rcd 152), and the *Second Memorandum Opinion and Order* (15 FCC Rcd 16851).

#### **ARTICLE II**

#### **MEMBERS**

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

- 2.1 <u>Number, Election and Qualification</u>. The Regional Committee shall have two classes of members, "voting members" and "non-voting members." New members may be added at annual, special, or regular meetings.
  - A. Voting Members. Voting members shall consist of one representative from any agency engaged in public safety in the thirty (30) county Central Texas area (the Counties of Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson) that is eligible to hold a license under 47 CFR 90.523 or 47 CFR 2.103. No single agency shall be allowed more than one member for each distinct eligibility category (e.g. police, fire, EMS, highway) within the agency's organization or political jurisdiction. When voting on any issue, upon the specific request of any member, the voting members must identify themselves and the agency and eligibility category which they represent. Voting members may not vote on issues involving their entity.
  - B. Non-Voting Members. Non-voting members are all others interested in furthering the goals of public safety communications.
  - 2.2 <u>Tenure</u>. 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 by these bylaws, the members shall have such other powers and rights as the membership may determine from time to time.
- 2.4 <u>Suspension and Removal</u>. A member may be suspended or removed with cause by vote of a majority of members held at an annual, special, or regular meeting, after reasonable notice and an opportunity to be heard. Failure to attend 50% of meetings held in a calendar year, either in person or by proxy, shall be a specific cause for removal from the membership.
- 2.5 <u>Resignation</u>. A member may resign by delivering written resignation to any officer of the Regional Committee or to a meeting of the members.
- 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 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 any meeting. The proxy shall terminate after the final adjournment of such meeting.

#### **ARTICLE III**

#### **MEETINGS**

- 3.1 Annual Meetings. An annual meeting of the members shall be held at Austin, Texas, on the fifteenth day of October of each year, or if that date is a weekend or legal holiday in the place where the meeting is to be held, then on the next succeeding business day that is not a legal holiday. 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 3.1, 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 Sections 3.2 and 3.4.
- 3.2 <u>Special Meetings</u>. Special meetings of the members may be held at any time and at any place within the regional area. Special meetings of the members may be called by the chairman, or in case of death, absence, or incapacity, by any other officer, or upon written application to the secretary of two or more members.
- 3.3 <u>Regular Meetings.</u> Regular meetings of the committee shall be held periodically according to a schedule established in the Regional Plan. It is the prerogative of the Chairman to cancel any regular meeting at which there is no business to be conducted..

#### 3.4 Call and Notice.

- A. Meetings. Reasonable notice of the time and place of annual, special, and regular meetings of the members shall be given to each member. Such notice must specify the purposes of the meeting.
- 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 fifteen (15) business days, or by e-mail/facsimile at least ten (10) business days before the meeting, addressed to such member at his or her usual or last known business address, or, to give notice to such member in person or by telephone at least ten (10) business days before the meeting.

- 3.5 Quorum. At any meeting of the members thirty (30) per cent of the voting members as of the close of the most previous Annual, Special, or Regular meeting 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.
- 3.6 <u>Action by Vote</u>. Each voting member 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 cast by the voting members present shall decide any question, including election to any office, unless otherwise provided by law or by these bylaws.
- 3.7 <u>Action by Writing.</u> 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.

#### ARTICLE IV

#### OFFICERS AND AGENTS

- 4.1 <u>Number and qualification</u>. The officers of the Regional Committee shall be a chairman, treasurer, secretary and such other officers, if any, as the voting members may determine.
- 4.2 <u>Election.</u> The officers shall be elected by the voting members at the first meeting and, thereafter, at the annual meeting of the members.
- 4.3 <u>Tenure</u>. The officers shall each hold office until the annual meeting of the members held within a 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.
- 4.4 <u>Chairman</u>. 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.
- 4.5 <u>Treasurer</u>. 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. The office of Treasurer may be combined with the office of Secretary.
- 4.6 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. The office of Secretary may be combined with the office of Treasurer.

- 4.7 <u>Suspension or Removal.</u> An officer may be suspended with cause by vote of a majority of the voting members.
- 4.8 <u>Resignation.</u> An officer may resign by delivering his or her written resignation to any other officer 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.
- 4.9 <u>Vacancies.</u> 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, treasurer and secretary until his or her successor is elected and qualified, or in each case until he or she sooner dies, resigns, is removed or becomes disqualified.

#### **ARTICLE V**

#### **AMENDMENTS**

These bylaws may be altered, amended or repealed in whole or in part. The voting members may by a twothirds vote, alter, amend, or repeal any bylaws adopted by the Regional Committee members or otherwise adopt, alter, amend or repeal any action taken by the voting members.

#### **ARTICLE VI**

#### DISSOLUTION

This Regional Committee may be dissolved by the vote of two-thirds plus one of the members in good standing at a special meeting called for such purpose. On dissolution, any assets remaining shall be distributed to one or more regularly organized and qualified charitable, educational, scientific or philanthropic organization(s) selected by those members in attendance at this special called meeting. The FCC shall be notified.

#### **ARTICLE VII**

#### **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 2000 edition, tenth edition, Henry M. Robert III, William J. Evans, Daniel H. Honeman, and Thomas J. Balch.

## Appendix B

## Region 49 (Central Texas) 700 MHZ Regional Planning Committee Membership

Name	Entity	Agency	Address	City	Zip Email	Voting Member
Mayworm, Ron	Brazos Valley COG	BVCOG	PO Drawer 4128	Bryan	77802 ron@ktsignals.com	Υ
Petrey, Greg	Brazos County		300 E. 26th Street	Bryan	77803	Υ
Wilson, Dennis	Limestone County	Sheriffs Office	1221 E Yeagua St.	Groesbeck	76642 ddwilson@glade.net	Υ
Ford, Don	Limestone County	Fire Dept.	_			Υ
Whitaker, HD	Freestone County	Sheriffs Office	PO Drawer 47	Fairfield	75840	Υ
Bushaker, Clinton	Winchester Area VFD	VFD	8810 FM 153	Winchester	78945	Υ
Horcica, Ronnie	City of College Station	Police Dept.	2611 Texas Ave. South	College Station	77840 rhurcica@ci.college-station.tx.us	Υ
Keener, Charles	City of Burleson	Police Dept.	225 W. Renfro	Burleson	76028 crknnr@txcyber.com	Υ
Biederman, Ken	Burleson County	VFD .			<b>G</b> ,	Υ
Sanders, Art	M/A-COM				verd.sandersar@tycoelectronics.com	N
Cochran, John	City of Luling	Police Dept.	1800 E. Pierce	Luling	78648 jc7100@hotmail.com	Υ
Young, Gary	City of Copperas Cove	Fire Dept.	415 S. Main St	Copperas Cove	76522 gyoung@ci.copperas-cove.tx.us	Υ
Galiana, Michael	City of Copperas Cove		415 S. Main St	Copperas Cove	76522 mgaliana@ci.copperas-cove.tx.us	Υ
Newbury, Jerry	State of Texas	DPS .	5805 N. Lamar	Austin	78773 jerry.newbury@txdps.state.tx.us	Υ
Marchant, Ed	State of Texas	DPS	5805 N. Lamar	Austin	78773 edward.merchant@txdps.state.tx.us	Υ
Davis, Bill	City of Austin	Fire Dept.	PO Box 1088	Austin	78767 william.davis@ci.austin.tx.us	Υ
Richards, Dan	Travis County	Sheriffs Office	PO Box 1748	Austin	78767 dan.richard@co.travis.tx.us	Υ
Ward, Linda	Lee County	Sheriffs Office	PO Box 98	Giddings	78942 lward@bluebon.net	Υ
McCune, Jim	City of Brenham	Police Dept.	210 N. Park	Brenham	77834 mccune@f12web.net	Υ
Jacobs, Patrick	City of Brenham	Police Dept.	210 N. Park	Brenham	77834 ptjacobs@brenhampd.org	Υ
Meadows, Clinton	City of Martindale	Police Dept.	PO Box 365	Martindale	78655	Υ
Blare, Larry	City of Waco	Police Dept.	PO Box 2570	Waco	76702 larrybl@ci.waco.tx.us	Υ
Coggins, Frank	City of Lockhart	Police Dept.	214 Bufkin Ln	Lockhart	78644 coggins@lockhart-tx.org	Υ
Burton, John	City of Round Rock	Fire Dept.	203 Commerce Blvd	Round Rock	78664 jburton@round-rock.tx.us	Υ
Leslie, Walt	Travis County	Fire Dept.	PO Box 1088	Austin	78767 walter.leslie@co.travis.tx.us	Υ
Allen, Sam	City of Lockhart	Police Dept.	214 Bufkin Ln	Lockhart	78644 sallen@lockhart-tx.org	Υ
Dalrymple, Dewayne	City of Lockhart	Police Dept.	214 Bufkin Ln	Lockhart	78644 ddalrymple@lockhart-tx.org	Υ
Stewart, Becky	CAPCOG	Emergency Mgt.	6800 Burleson Rd	Austin	78744 bstewart@capco.state.tx.us	Υ
Shelton, Brice	Motorola	0 , 0			brice.shelton@motorola.com	N
Gutierrez, Andres	City of Jonestown	Police Dept.	18649 FM 1431, 4-A	Jonestown	78645 andres_gutierrex@hotmail.com	Υ
Thompson, Roger	City of Jonestown	Police Dept.	18649 FM 1431, 4-A	Jonestown	78645 rogthomps@aol.com	Υ
Turner, Robert	City of Austin	EMS	PO Box 1088	Austin	78767 robert.turner@ci.austin.tx.us	Y
Yoder, Ken	APCO	-	2504 Piping Rock Tr	Austin	78748 kyoder3@austin.rr.com	N
Law, Daniel	Caldwell County	Sheriffs Office	1204 Reed Dr	Lockhart	78644 dlaw@caldwellcosheriff.com	Y
Gott, Rodney	Caldwell County	Sheriffs Office	1204 Reed Dr	Lockhart	78644	Ϋ́
Herndon, Richard	State of Texas	TxDOT	125 E 11th St	Austin	78701 rherndon@dot.state.tx.us	Y
Simpson, Mike	City of Austin	Police Dept.	1006 Smith Rd	Austin	78721 mike.simpson@ci.austin.tx.us	Y

## Region 49 (Central Texas) 700 MHZ Regional Planning Committee Membership

Regional Flamming Committee Membership						Voting	
Name	Entity	Agency	Address	City	Zip	Email	Member
Worsham, Patrick	AUE					pat.worsham@alexutil.com	N
Cox, Lee	City of Mexia	Police Dept.	101 S McKinney	Mexia	76667	cpl_cox@glade.net	Υ
Canaday, Wayne	McLennan County	Comms.	501 Washington Ave	Waco	76701	wayne.canaday@co.mclennan.tx.us	Υ
Geltmeier, Wil	State of Texas	TxDOT	125 E 11th St	Austin		wgeltme@hotmail.com	Υ
Hobby, Danny	Travis County		PO Box 1088	Austin	78767	danny.hobby@co.travis.tx.us	Υ
Covey, Craig	M/A-COM					coveyc@tycoelectronics.com	N
Slaughter, Aaron	City of Lockhart	Fire Dept.	201 W Market	Lockhart	78644	aslaughter@lockhart-tx.org	Υ
Sawyer, Jim	Dailey Wells					jsawyer@dwcomm.com	N
Sweet, David	Dailey Wells					david@dwcomm.com	N
Blowers, Bill	Bell County	Comms.	708 West Ave O	Belton	76513	william.blowers@co.bell.tx.us	Υ
Benton, James	State of Texas	DPS	5805 N. Lamar	Austin	78773	james.benton@txdps.state.tx.us	Υ
Driscoll, Tim	RCC Consultants					tdriscoll@rcc.com	N
Paez, Gilbert	City of Austin	Comms.	PO Box 1088	Austin	78767	gilbert.paez@ci.austin.tx.us	Υ
Ganner, Maureen	City of Round Rock		221 E Main	Round Rock	78664	mganner@round-rock.tx.us	Υ
Ganner, Ray	Ganner Assoc					rganner@ganner.com	N
Ferguson, Harold	City of Waco	Fire Dept.	PO Box 2570	Waco	76702	haroldf@ci.waco.tx.us	Υ
Rinehart, Bette	Motorola	·				c18923@email.mot.com	N
Cross, Dalton	Bell County	Comms.	708 West Ave O	Belton	76513	dalaton.cross@co.bell.tx.us	Υ
Brotherton, Chuck	Travis County	Emergency Mgt.	PO Box 1088	Austin		charles.brotherton@co.travis.tx.us	Υ
Young, Ted	City of Marble Falls	Police Dept.	209 Main St	Marble Falls		ted.young@ci.marble-falls.tx.us	Υ
Graalum, Ken	City of Cedar Park	Comms.	911 Quest Pkwy	Cedar Park		graalum@ci.cedar-park.tx.us	Υ
Hollingsworth, Archie	Burnet County	Sheriffs Office	1601 E Polk	Burnet	78611	sergent106@burnetcountytexas.org	Υ
Boyce, Charlie	Burnet County	Sheriffs Office	1601 E Polk	Burnet		captain103@burnetcountytexas.org	Υ
Keith, Larry	Leon County	Sheriffs Office	606 E St. Mary's St	Centerville	75833	leoncoso@cji.net	Υ
Pletcher, Robert	State of Texas	DPS	5805 N. Lamar	Austin		robert.pletcher@txdps.state.tx.us	Υ
Sevier, Michael	BVCOG	Emergency Mgt.	PO Drawer 4128	Bryan		msevier@bvcog.org	Υ
Connor, Kyle	M/A-COM					connork@tycoelectronics.com	N
Lindemann, Elizabeth	City of Austin		1006 Smith Rd	Austin	78721	elizabeth.lindemann@ci.austin.tx.us	Υ
Guerrero, Arletha	City of Austin	Comms.	1006 Smith Rd	Austin	78721	arletha.guerro@ci.austin.tx.us	Υ
Clawson, David	City of Taylor		500 South Main	Talyor	76574	david.clawson@ci.taylor.tx.us	Υ
Mooney, Rita	State of Texas	DPS	5805 N. Lamar	Austin		rita.mooney@txdps.state.tx.us	Υ
Cassard, Clay	Motorola					clay.cassard@motorola.com	N
Wynn, John	Austin Community Co	ollege	5930 Middle Fiskville Rd	Austin	78752	jwynn@austincc.edu	Υ
Wisener, Rosanna	City of San Marcos	Police Dept.	2300 S IH-35	San Marcos		wisener_rosanna@ci.san-marcos.tx.us	Υ
Minnick, Mark	City of San Marcos	Police Dept.	2300 S IH-35	San Marcos		minnick_mark@ci.san-marcos.tx.us	Υ
Swim, Larry	Fayette County	•	4141 Markwardt Rd	Round Top		therauch@industryinet.com	Υ
Knapp, Cristy	Llano County	EMS	200 W Ollie	Llano		cknapp@llanomemorial.org	Υ
Knapp, Greg	Llano County	EMS	200 W Ollie	Llano	78643	gknapp@llanomemorial.org	Υ

## Region 49 (Central Texas) 700 MHZ Regional Planning Committee Membership

		J	J	•			Voting
Name	Entity	Agency	Address	City	Zip	Email	Member
Martin, Ron	Motorola					ron.martin@motorola.com	N
Scheets, Peter	City of Bryan	Police Dept.	301 S. Texas Ave	Bryan	77803	3 scheetsp@bryantx.gov	Υ
Gruetzner, Richard	Travis County	Sheriffs Office	PO Box 1748	Austin	78767	richard.gruetzner@co.travis.tx.us	Υ
McLean, Jim	City of Pflugerville	Police Dept.	PO Box 679	Pflugerville	78691	l jmclean@cityofpflugerville.com	Υ
Smith, Rusty	City of Robinson	Police Dept.	111 W Lyndale	Robinson	76706	3 r.smith@robinsonpd.org	Υ
Babin, Alain	City of Round Rock	Police Dept.	615 E Palm Valley Blvd	Round Rock	78664	ababin@round-rock.tx.us	Υ
Fail, Zeta	City of College Station	Police Dept.	2611 Texas Ave. South	College Station	77840	) zfail@cstx.gov	Υ
Roper, Ben	City of College Station	·	2611 Texas Ave. South	College Station	77840	) broper@cstx.gov	Υ
Wright, Terry	City of Kyle/Hays Co.	Fire Dept.	210 W Moore St	Kyle	78640	) twright@kylefire.com	Υ

## **Appendix C**

# Region 49 Meeting Notices, Mailing Lists, Publications Verifications, Agendas, & Minutes

# Chronological List of Region 49 (Central Texas) 700MHz Regional Planning Committee and Subcommittee Meetings.

- 1- October 29.2001 Regional Planning Committee Meeting
- 2- November 28, 2001 Bylaws and Plan Writing Subcommittees
- 3- December 30, 2003 Regional Planning Committee Meeting
- 4- June 28, 2006 Regional Planning Committee Meeting
- 5- August 17, 2006 Regional Planning Committee Meeting
- 6- October 19, 2006 Regional Planning Committee Meeting
- 7- January 18, 2007 Regional Planning Committee Meeting
- 8- January 24, 2008 Regional Planning Committee Conference Call
- 9- April 9, 2010 Regional Planning Committee Meeting

Appendix C.1	Initial Meeting Documents	C-2
Appendix C.2	Public Notices for subsequent meetings	C-17
Appendix C.3	Agendas for subsequent meetings	C-29
Appendix C.4	Meeting Minutes for subsequent meetings	C-35
Appendix C.5	Region 49 Contact Mailing List	C-69

News media information 202 / 418-0500 Fax-On-Demand 202 / 418-2830 TTY 202 / 418-2555 Internet: http://www.fcc.gov ftp.fcc.gov

> DA 01-1935 August 14, 2001

#### WIRELESS TELECOM ACTION

## REGION 49 (CENTRAL TEXAS) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES FIRST MEETING

The Region 49 (Central Texas) 700 MHz Public Safety Planning Committee announces that its first meeting will be held on Monday, October 29, 2001, at 1:30 p.m., at the City of Austin Learning Resource Center, 2800 Spirit of Texas Drive, Austin, Texas. The purpose of the meeting is to:

- 1. Organize the committee,
- 2. Select a chairman and other officers, and
- 3. Establish subcommittees to plan for the future use of radio frequencies in the 700 MHz band.

The Region 49 700 MHz Public Safety Planning Committee meeting is open to the public. All eligible public safety providers in the Central Texas area, including the counties of Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson may utilize these frequencies. It is essential that participants be representatives of all eligible public safety providers in order to ensure that your agencies' 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 should plan to attend. For further information, please contact:

Ronald G. Mayworm, Convener Wireless Systems Manager P. O. Box 9435 College Station, TX 77842 (979) 764-3406 (voice) (979) 764-3664 (fax) email: ron@ktsignals.com

- F.C.C. -

Dear Public Safety Official,

In 1997 Congress directed the Federal Communications Commission (FCC) to reallocate 24 MHz of spectrum at 700 MHz for public safety use. Since then the FCC has adopted technical standards and established rules that allow for the most efficient and flexible use of this spectrum, both now and into the future.

As part of the regulatory process, the Commission has decided to establish 55 Regional Planning Committees (RPCs) to enable local determination of frequency allotments, user priorities, and interference criteria based on local terrain. (These RPCs are similar to, but separate and distinct from the committees that currently exist for the 821 MHz NPSPAC frequencies.)

This new 700 MHz band holds many opportunities for public safety communications. Each region can allot up to

- 1,232 voice and low-speed data channels,
- 96 wideband channels (suitable for high-speed data, images, and other future technologies), and
- 32 low-power channels.

164 channels have also been reserved to allow for an unprecedented amount of interoperability between public safety agencies at all levels of government.

The first meeting of the Regional Planning Committee for the 30 county Central Texas area will be held at 1:30 pm on October 29, 2001, at the City of Austin Learning Resource Center, 2800 Spirit of Texas Drive (at the new airport). This committee is responsible for developing a plan that considers and, to the degree possible, meets the spectrum requirements of all eligible entities within the region. Funding for the first year of the committee's work has been provided by a grant from the National Institute of Justice.

As the Convener of this first meeting, I invite you and all other eligible entities to participate in the planning process. Meeting your agency's present and future spectrum needs can best be ensured by your participation.

A copy of the formal meeting announcement is enclosed. Please share this information with any neighboring agencies who might not have received this mailing, and feel free to contact me if you have any questions.

Sincerely,

Ron Mayworm Region 49 Convener (979)764-3406

## The Corporate Advisor

BOB BROWN AND JACK DANIEL . CORPORATE ADVISORY COMMITTEE



## **Chapter CAC Program Expanding**

It's always a pleasure to see a good plan coming together. The chapter CAC breakfast at the Salt Lake City conference was one of those events.

As an integral part of the redefinition of the International Corporate Advisory Committee (CAC) activities undertaken two years ago, development of a local corporate representative in every APCO chapter is considered an important step in assuring the long-term effectiveness and vitality of the CAC.

Working with other APCO committees, such as the CETF, we are seeing a new awareness of the support and service commercial members of APCO can have at the local chapter level, as well as in the national association.

Many APCO chapters are finding that actively participating commercial members can add a new, rich dimension and diversity of thought to their activities, especially in planning and managing successful vendor exhibits, sponsorships, training and fund-raising for the benefit of all chapter members.

This year there were 50 attendees at the annual Chapter Corporate Representatives and Chapter Presidents breakfast, representing 26 APCO chapters. The importance of the corporate representatives to the chapters was reflected in the fact that most were active at the board level of their chapters.

We congratulate these chapters and are looking forward to the time when we have a commercial representative in every APCO chapter.

Bob Brown, the CAC Membership Subcommittee chair, moderated the meeting with an agenda oriented to build on the benefit to APCO of open, two-way communications between local- and national-level commercial advisors.

The CAC mission statement provides a vision of our objectives: "To further communications and improve corporate rep-

resentation within each APCO chapter and to interact with the international CAC of APCO on matters of interest to the manufacturing and service providers to APCO members."

The chapter representatives were given an update of the national CAC's sub-committees activities: corporate membership, conferences and symposiums, sponsorships, training and technical. All chapter representatives are invited to contribute and participate in these sub-committees.

In turn, the chapter representatives shared comments about their chapter activities, plans and suggestions to grow the value of the commercial community to APCO at all levels.

The growth of commercial member support of APCO and exchange of constructive comments at this year's meeting demonstrated again the strong symbiotic relationship between the commercial and other membership of APCO. Our efforts for the association are truly mutually rewarding.

Based on the level of interest and professionalism evident at this meeting, we are looking forward to a successful year for APCO and the commercial advisors everywhere.

For additional information about joining the international CAC or establishing a chapter corporate representative and the associated duties, e-mail Bob Brown at bob.brown@motorola.com.

The "Corporate Advisor" a monthly feature column in the APCO BULLETIN portion of Public Safety Communications magazine. It is written by members of APCO's Corporate Advisory Committee. The column conveys information and solicits opinions concerning issues related to the corporate/commercial membership of APCO International. Direct any questions you have or issues you would like to discuss to our committee via our e-mail address: advise-corp@apco911.org.

## Meetings, Conferences and Symposia

#### October

- 2 Nebruka Chapter Fall Conference, Ogallala, Neb.
- 4-5 Project 25 Symposium, Pittiburgh, Pa.
- 7-9 Kansas Chapter Fall Conference
- 10 Iowa Chapter Fall Meeting
- 1042 New Mexico APCO/NENA State Conference, Lis Cruces, N.M.
- 10-12 Oregon APCO/NENA Conference, Welches, Ore.
- 12 Northern California Chapter Meeting, Fresun County, Calif.
- Region 10 700 MHz Planning Committee (first meeting), Forsyth, Ga. Contact Way Hall, convener, by phone at (404) 626-2042, by fax at (404) 657-0302 or by a mail at whall@doms.state.gatus.
- 14-18 APCO Canada Regional Conference, Pentieton, British Columbia, Canada
- 16-17 Atlantic Chapter Annual Conference and Business Meeting, Marlborough, Mass.

- 7-9 Kansas Chapter Fall Conference
- 21-24 Illinois APCO/ICC 9-1-1 Conference, Springfield, Ill.
- 25-28 Worter Sam Symposium Knowlle, Iran.
- 29 Region 49 700 MHz Planning Committee (first meeting), Austin, Texas Contact Ros Mayworm, convener, by phone at (979) 764-3406, by fax as (979) 764-3664 or by 6 mail at ron@kxtignels.com.

#### November

- 2 CPRA Yearly Disparch Seminar, Orange County, Calif.
- 8-8 Georgia APCO Fall Training Conference, Dillard, Ca.
- 8 Minnesora Annual Chapter Meeting
- 8 Northern California Chapter Meeting, Contra Costa County Calif.
- 16 Ohio Chapter Meeting
- 16 Arizona APCO/NENA General Meeting
- 27-28 APCO/NENA Wireless 9-1-1 Forum, Dallas, Texas

2B October 2001

# Austin American-Statesman

PO#: 01-82

Ad ID#: 8NNN00500 Acct#: 9797790911

Account Name: BRAZOS COUNTY EMERGENC

BRAZOS COUNTY EMERGENCY COMMUNICATIONS DISTRICT P.O. BOX 911 BRYAN,TX 77806

#### AFFIDAVIT OF PUBLICATION

THE STATE OF TEXAS COUNTY OF TRAVIS

Before me, the undersigned authority, a Notary Public in and for the County of Travis, State of Texas, on this day personally appeared:

Garnayle S. Jenkins

Classified Advertising Agent of the Austin American-Statesman, a daily newspaper published in said County and State that is generally circulated in Travis, Hays, Burnet and Williamson Counties, who being duly sworn by me, states that the attached advertisement was published in said newspaper on the following dates, to wit:

First Published:

8/29/01

Last Published:

9/19/01

Times Published:

0

Classification:

9980

Lines:

56

Cost:

2700

\$371.84

and that the attached is a true copy of said advertisement.

2001

SWORN AND SUBSCRIBED TO BEFORE ME, this the

DEBI J. DELK Notary Public, State of Texas My Commission Expires February 16, 2004 \_day of \_

Notary Public in and for TRAVIS COUNTY, TEXAS

305 South Congress Ave., P.O. Box 670, Austin, Texas 78767-0670 512-445-3541

## AFFIDAVIT OF PUBLICATION

THE STATE OF TEXAS COUNTY OF BRAZOS

On this 4th day of, September 2001, Personally, appeared before me, the undersigned a Notary Public in and for said county and state, Juanita Zgabay of *THE EAGLE*, a newspaper published in Bryan, County of Brazos, State of Texas, and generally circulated in Brazos, Grimes, Robertson, Milam, Leon, Burleson, Madison, and Lee, who, being by me duly sworn, on oath States that:

Region 49 (Central Texas) 700MHz Public Safety Planning Committee
Announces First Meeting

Was published in said newspaper in 1 issues thereof on the following dates:

August 28, 2001.

Subscribed and sworn to before me, this the 4th Day of September 2001.

L NDA C RGEY
Notary Public, State of Texas
My Commission Expires
MARCH 25, 2003

Notary Public, Brazos County, Texas

exas to consider or 2001.

total taxes in the istrict #3 by 7.87

3555. Additional information is available on our website at www.ci.college-station.tx.us

The City of College Station reserves the right to reject any or all bids and to waive informalities and irregularities.

8-21-01, 8-28-01

#### TICE

on District #2 will y, September 10, FM 2038, Kurten, d tax rate for tax 0298 per \$100 of

total taxes in the District #2 by 4.93

3

pting bids for the beived at:

ision -

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8, 2001

### REGION 49 (CENTRAL TEXAS) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES FIRST MEETING

The Region 49 (Central Texas) 700 MHz Public Safety Planning Committee announces that its first meeting will be held on Monday, October 29, 2001, at 1:30 p.m. CST, at the City of Austin Learning Resource Center, 2800 Spirit of Texas Drive, Austin, Texas.

The purpose of the meeting is to organize the committee, select a chairman and other officers, and establish subcommittees to plan for the future use of radio frequencies in the 764/776 and 794/806 MHz band. These frequencies would be utilized by all eligible public safety providers, whose sole or principal purpose is to protect the safety of life, health, or property in the Central Texas area, including the counties of Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson pursuant to 47 U.S.C. §337(f)(1)(A).

It is essential that participants be representatives of all eligible public safety providers in order to ensure that their agencies' 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 their agency's needs.

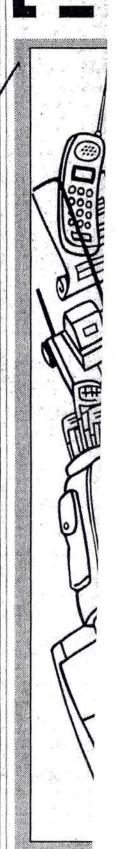
All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band should plan to attend. For further information, please contact:

P. O. Box 9435 College Station, TX 77842 (979) 764-3406 (voice)

(979) 764-3664 (fax) \*\*

email: ron@ktsignals.com

8-28-01, 9-18-01



\*Select units & L

## PUBLISHER'S AFFIDAVIT

STATE OF TEXAS COUNTY OF BELL

BEFORE ME, the undersigned authority, personally appeared STAN THOMAS and after being by me duly sworn, says that he is the CLASSIFIED MANAGER of the Temple Daily Telegram, a newspaper published in Bell County, Texas, (generally circulated in: Bell, Coryell, Milam, Williamson, McLennan, Falls and Lampasas Counties) and that the Notice, a copy of which is hereto attached, was published in said newspaper on the following date(s):

August 26 and September 19, 2001.

For: Brazos County Emergency Communication District

Price: \$199.28
Ad Number: 15505962
Times Published: Two (2)

Stan Thomas, Classified Manager

SUBSCRIBED AND SWORN TO before me, the day of September 25, 2001

Notary Public in and for Bell County, Texas

(SEAL)



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TEMPLE DAILY TELEGRAM

Notices

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#### REGION 49 (CENTRAL TEXAS) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES FIRST MEETING

The Region 49 (Central Texas) 700 MHz Public Safety Planning Committee announces that its first meeting will be held an Monday, October 29, 2001, at 1:30 o.m. C5T, at the Cify of Austin Learning Resource Center, 200 Spirit of Texas Drive, Austin, Texas.

2003 Spirit of Texas Drive, Austin, Texas.

The purpose of the meeting is to organize the committee, select a chairman and other officers, and establish subcommittee to plan for the future USC of radio frequencies in the 764775 and 72490 MHz board. These frequencies equity be utilized by all eliable public safety providers, whois sole we principal purpose is to protect he safety of life, health, or property in the Central Texas area, including the counties of Bostrop, Bell, Blanco, Bostrop, Burley, Coltwell, Coryell, Fally, Engoles, Freedoms, Grines, Hamilton, Blass, Hill, Lampassa, Lee, Lean, Limestone, Liano, Modison, McLennan, Millism, Mills, Robertson, San Sabo, Travis, Washington, and Williamson pursuant to 47 U.S.C. \$337(1)(1)(A):

If is essential that participants be representatives at all eligible public safety providers in order to ensure that their agencies' future spectrum needs are considered in the aliacation process, Administrators who are not oriented in the communications field should delegate someone with this knowledge to attend, participate, and represent their agency's needs.

All interested porties wishing to perficiente in the planning for the use of new sublic safety spectrum in the 20 MHz band should plan to attend. For further information, please contact.

Ronald G. Mayworm, Convener P.O. Box 943 College Biotion, TX 77842 (7)791 7643406 (upice) (7791 764364 (fox)) email: ron@ktsignals.com

PAID

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FORWARDING AND ADDRESS CORRECTION REQUESTED

## THE STATE OF TEXAS

## COUNTY OF McLENNAN

Before me, the undersigned autho	ority, this day personally appeared <u>Annmarie Penrod</u>
and after being by me duly sworn,	says that she is <u>Classified Advertising Manager</u>
of the Waco Tribune-Herald, a nev	vspaper published in Waco, McLennan County, Texas
and that the Notice, a copy of whi	ich is hereto attached, was published in said newspaper on
the following named dates, to-wit:	
On <u>August 29, 2001</u> and <u>S</u>	September 19, 2001
	Annmarie Penrod, Classified Advertising Manager
Subscribed and sworn to before n	ne, this <u>19 th</u> day of <u>September, 2001</u>
	<u> </u>
L SPYPES U. MAIN	Kim Walts, Notary Public McLennan County, Texas
Kim Walls My Commission Expires September 16, 2004	Commission Expires: September 16, 2004

REGION 49 (CENTRAL TEXAS) 700 MHz PUBLIC SAFETY PLANNING COMMITTEE ANNOUNCES FIRST MEETING The Region 49 (Central Texas) 700 MHz Public Safety Planning Committee amounces that its first meeting will be held on Monday, October 29, 2001, at 1:30 p.m. CST, at the City of Austin Learning Resource Center, 2800 Spirit of Texas Drive, Austin, Texas. The purpose of the meeting is to organize the committee, select a chairman and other officers and establish subcom-

militees to plan for the future use of radio frequencies in the 754/775 and 794/805 MHz band. These frequencies would be utilized by all eligible public satety providers, whose sole or principle purpose is to protect the safety of life, health, or oroperty in the Central Texas area, including the counties of Basticop Bell, Blance Bosque, Brazos, Burleson, Burnet Caldwell Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Liano, Madisan, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson pursuant to 47 U.S.C. §337(f)(Tl/A). It is essential that participants be representatives of all eligible public safety providers in order to ensure that their agencies. Inture 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 their agency sneeds.

All interested parties wishing to participate in the planning for the use of new public safety spectrum in the 700 MHz band should plan to attend. For further information please contact.

P.O. Box 9435
College Station, TX 77842 mittees to plan for the future

P.O. Box 9435 College Station, TX 77842 (979)-764-3405 (voice) (979)-764-3664 (fax) email: ron @ktsignals.com

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AND AND WHALL OF SPECIAL SALE PROPERTY.

## Region 49 (Central Texas) Meeting Agenda

Call to Order-

Appoint temporary Secretary

Presentation- 700 MHz basics

Financial Report-

Elect Chairman-

Consider/Adopt proposed Bylaws

Elect Secretary and Treasurer

Establish Sub-committees

- Plan Writing Sub-committee
- Interoperability Sub-committee
- Outreach Sub-committee
- Other Sub-committees

Region 49 Listserver

Solicit hosts for future meetings

Adjourn

10-29-2001

# Region 49, Regional Review Committee Attendance Sign-in Sheet

Date: October 29, 2001 Meeting/Event: 700 MHz Planning Committee

Name	Representing	Email for future meeting notices
1 DENNIS D. Wilson	Limestone C 50	ddwilson@ glass. NEt
2 Don C Fuel	Leviste Co - Fire	
3 HD. WHITAKEN	FREESTONE CO - BO	Drawon 47 FAIRFIELD 75840
4 CHNTON W BUSHACKER	WINCHESTON ARONV FID	WINCHESTER TI 78945
5 RONNIE HORCICA	Cry OF CS - POLICE	Morcica DCi. Colleges boton tx. 4x
6 Charles R. Kenner	Burleson County PD	CTKNNR @ Tx cyber, com.
7 LEN BIEDERMAN	BURLESON COUNTY FD	
8 KEN YOUER	TXPDPS PO	YODERKO ATTGLOBALINET
ART SANDERS	MH Com Vent.	SANDERSARCTYCOELECTIONICS, CODY
7 John CochTAN	huling P.D.	& JC7100 @ HOTMAIL. COM
10 Gary Young	Copperas Cove Fire Dept	9 40 ung Q Ci, Coppe ras - cove , 4x. US
11 Michael GALLANA	CopperAS COVE P.D.	MEDIANA & CICOPRIA -CONEDTO.US
JERRY NEWBURY	TX'DPS	Jerry. Newbury @ TXDPS. STATE. TX.US
Ed Marchart	TX OPS	Edward. Marchant @ TXDPS. STETE. TX. US
12 Bill Davis	City of Austin - AFREBEAT	- william davis @ cj. austin-tx. U.s
13 DAN Richards	TRAVES County S.O.	dan. richards @Co. travis. tx. 45
14 LINDA Waso	Lee Co. 5.0.	lward & bluebonnet
15 Jim Mc Cone	Brenham P.D.	McCune @ F/2WEB. Net.
Patrick T. Jacobs	Brenham P.D.	Ptiacobs @ Bredam Ad. org
16 Clint mentions	martindale PD	

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# Region 49, Regional Review Committee Attendance Sign-in Sheet

Date: October 29, 2001 Meeting/Event: 700 MHz Planning Committee

	Name	Representing no	Email for future meeting notices	
17	LARRY BLARE	CITY OF Waco (McLEnnan)	LARRY BL @ CI. WACO. TX. US	
18	FRANK COGGINS	LOCKHART POLICE DEAT	coggins@lockhart-tx.org	
19	John Burton	Round Rock Fire Dest	burton @round-rock.tx.us	, >
20	Walterheslie	Travis County Pile	walter Loslie ecotravis TX.45	
21	Sam ALLEN	CITY OF LOCKHART POLICE DOP	NELLAMAS @ MSN. COM	
	Dewayne DAlRymple	Lockhart Police Dept.	ddAlRymple @ lockhART - TX. ORG	1211
22	Becky Stewalt	Capeo	Disterent @ Caper. State trus	
	BRICE SINETEN	MOTERULA	BRICE SITEZEN OMUTORULA.	Con
23	Andres Gutierrez	Jonestown P.D.	andres - gutierrez @hotmaio	)
,	ROGER THOMPSON	JONESTOWN POLICE DEPT	ROGTHOMPS@ an/ com	
24	Robert Tymer	City of Austra - AUSTIN	robert turner os al ciaustin, to	<.U
25	Daviel C. CAW	Caldwell County 5.0.	7	
0/	Rodney W. Cott	Caldwell County 5.0.		
24	Richard Herudan	Tx001	Therndon@dot.state.tx.us	
27	MIKE SIMPSON	CITY OF AUSTIN- HUSTIN.	Mike. simpson@ci.austin.tx.4	5
/	<u> </u>	/		
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	1.			

## Region 49 700 MHz Regional Planning Committee

Minutes of the October 29, 2001, meeting

**Item 1:** Call to order: Convener Ron Mayworm called the initial meeting of the Region 49, 700 MHz Regional Planning Committee (RPC) to order at 1:40 pm. The following members and guests were present:

Ron Mayworm, Convener Greg Petrey, Brazos County 9-1-1 Dennis Wilson, Limestone Co. SO Don Ford, Limestone Co. Fire HD Whitaker, Freestone Co, SO Clinton Bushacker, Winchester VFD Ronnie Horcica, College Station PD Charles Keener, Burleson Co. FD Ken Biederman, Burleson Co. FD Art Sanders, M/A Com John Cochran, Luling PD Gary Young, Copperas Cove FD Michael Gallawy, Copperas Cove FD Jerry Newbury, TX DPS Ed Marchant, TX DPS Bill Davis, City of Austin FD Dan Richards, Travis Co. SO Linda Waso, Lee Co. SO Jim McClure, Brenham PD

Patrick Jacobs, Brenham PD Clint Meadows, Martindale PD Larry Blare, City of Waco PD Frank Coggins, Lockhart PD John Burton, Round Rock FD Walter Leslie, Travis Co. FD Sam Allen, Lockhart PD Dewayne Dalrymple, Lockhart PD Becky Stewart, CAPCO Brice Shelton, Motorola Andres Gutierrez, Jonestown PD Roger Thompson, Jonestown PD Robert Turner, City of Austin EMS Ken Yoder, APCO Freq. Coord. Daniel Law, Caldwell Co. SO Rodney Gott, Caldwell Co. SO Richard Herndon, TxDOT Mike Simpson, City of Austin PD

Convener Ron Mayworm introduced himself and explained the purpose of today's meeting. Mr. Mayworm also introduced Ken Yoder, APCO Frequency Coordinator and Becky Stewart, 3<sup>rd</sup> Vice president of the Texas Chapter of APCO.

**Item 2:** Appointment of temporary secretary: Mr. Mayworm appointed Greg Petrey temporary Secretary.

Presentation: 700 MHz basics: Mr. Mayworm presented a Power Point presentation (attached to the original copy of these minutes) concerning the use, management and licensing of the 700 MHz spectrum. Mr. Mayworm reported that the FCC had directed the 821 MHz Chairman to appoint a Convener for the 700 MHz initial meeting. 800 MHz Chairman Ron Mayworm appointed himself as Convener. Mr. Mayworm also indicated that the FCC guidelines had been followed concerning the required 60 day notice of this meeting. The meeting notice was published in the Austin American Statesman, Temple Daily Telegram, Waco Tribune/Herald and the Bryan/College Station Eagle. In addition, direct mail notices were sent to over 600

entities in Central Texas. Mike Simpson asked if any other region besides Region 51 (Houston) had convened. Mr. Mayworm indicated that Region 49 was the second region to convene. Ken Yoder indicated that Region 53 would convene on November 13, 2001. Mr. Simpson asked for clarification that the Region 49 plan would only have to be "signed-off-on" by Region 51. Mr. Mayworm indicated that this was correct, and that this procedure had been verified with the FCC. Dan Richards asked if the current Region 49 committee could assume the responsibilities of the 700 MHz spectrum. Mr. Mayworm indicated that since the rules governing who can be licensed in the two bands are different that a new 700 MHz Committee will have to be formed. Mr. Mayworm conceded that the membership will probably be very similar, but they would have to be two separate committees. Dan Richards questioned if members would have to be approved by their governing body or if this committee is empowered to appoint members. Mr. Mayworm indicated that the planning committee can operate independently, based on FCC guidelines. Mike Simpson offered clarification that this planning committee was open to all entities in the 30 counties and would produce a regional plan. The new plan would outline who the members of the 700 MHz Regional Review Committee would be and how they would operate. Mr. Mayworm indicated that this was exactly the procedure. Mr. Simpson asked how long we had to produce a plan. Mr. Mayworm indicated that the FCC had set a deadline of three (3) years from the date the committee is convened. Mr. Mayworm indicated that he thought the plan could be completed much sooner than that, with a target date of one (1) year. Richard Herndon asked if there was a repository of information from other regions or mechanisms to receive that information. Mr. Mayworm indicated that he would research the availability of information and report back to the committee.

- **Item 4:** Financial Report: Mr. Mayworm announced that the committee had received a grant for initial planning. Mr. Mayworm also announced that the Brazos County Emergency Communications District had agreed to be the grant manager. Our account balance as of October 13, 2003, is \$1,070.74. (A complete financial report is attached to the official minutes)
- Item 5: Elect Chairman: Mr. Mayworm opened the floor for nominates for the office of Chairman. Jerry Newbury nominated Ron Mayworm. The motion was seconded by Dan Richards. Becky Stewart moved that nominations cease. Hearing no objections, Mr. Mayworm closed the nominations and accepted the Chairmanship.
- Item 6: Consider/adopt proposed bylaws: Chairman Mayworm presented proposed interim bylaws for the committee. Mr. Mayworm noted that on the last page where Roberts rules of order is listed that a newer version is now available. Becky Stewart moved that the bylaws be approved as presented. Motioned was seconded by Ken Biederman. Mr. Simpson called a point of order for clarification of committee membership. Mr. Mayworm indicated that Police, Fire, EMS or Highway representatives were eligible for membership. Mr. Simpson asked that everyone identify what agency they were representing. Mr. Herndon asked if Mr. Mayworm could indicate where this document had been changed from the original. Mr. Mayworm provided detail on the changes. Mr. Herndon also asked about voting since multiple people may be representing the same agency. Mike Simpson also indicated that everyone needed to indicate what entity they were voting for. Chairman Mayworm asked the secretary to call the roll and have each person indicate what entity they are voting for. The roll was

called and each person's entity was marked on the official sign in sheet [and noted above]. Dan Richards questioned the 10% quorum requirement and asked for discussion. Ron Mayworm indicated that that number would be a sliding percentage based on the attendance at the last meeting, not 10% of the eligible membership. Greg Petrey asked if section 2.1.a would not cap the membership at 120. Mr. Mayworm indicted that it would not because each fire department in the county for example would have a potential vote not just one vote for the county. General discussion was held concerning the dynamics of the group and how to determine membership. Dan Richards offered a friendly amendment to the motion to raise the quorum to 30%. Becky Stewart accepted the friendly amendment. Following discussion, Becky Stewart withdrew her original motion. Robert Turner moved that the by-laws be adopted as interim with the amendment to raise the required quorum to 30%. The motion was seconded by Ken Yoder and passed unanimously.

Break a 3:15 p.m.

The meeting was called back to order at 3:40 p.m.

Item 7: Elect secretary and treasurer: Chairman Mayworm requested nominations for the position of Secretary/Treasurer. Ken Yoder nominated Greg Petrey. Mike Simpson moved that nominations cease. Becky Stewart seconded the motion. Greg Petrey was elected Secretary/Treasurer by acclimation.

**Item 8:** Establish subcommittees: Chairman Mayworm appointed himself to the plan committee. Mr. Mayworm requested volunteers for this committee. Mr. Mayworm indicated that he was not going to appoint an interoperability subcommittee at this time. Greg Petrey was appointed as chairman of the outreach committee. Ken Biederman was appointed as bylaws subcommittee chairman. Richard Herndon agreed to help on the by-laws committee.

**Item 9:** Region 49 Listserver: Chairman Mayworm advised those present about the Region 49 listserver on Yahoo.com. He requested all interested parties sign-up for the listserver.

Item 10: Solicit hosts for future meetings: Chairman Mayworm indicated that the FCC would like for these meetings to be held in various locations in the region. He asked for hosts for upcoming meetings.

The meeting was adjourned at 4:05 p.m.

Respectfully Submitted;

Greg Petrey, Secretary



News media information 202 / 418-0500 Fax-On-Demand 202 / 418-2830 TTY 202 / 418-2555 Internet: http://www.fcc.gov

> DA 03-3407 October 27, 2003

#### WIRELESS TELECOMMUNICATIONS BUREAU

REGION 49 (CENTRAL TEXAS) REGIONAL PLANNING COMMITTEES FOR PUBLIC SAFETY 700 MHz BAND AND PUBLIC SAFETY 800 MHz BAND(NPSPAC) ANNOUNCE REGIONAL PLANNING MEETINGS

The Region 49 (Central Texas)<sup>1</sup> Regional Planning Committees announce two Region 49 Public Safety planning meetings to be held on Tuesday, December 30, 2003, at the Texas Criminal Law Enforcement Auditorium, Building E, 6100 Guadalupe, Austin, Texas.

The 700 MHz Regional Planning Committee will convene at 9:00 a.m. The agenda for this meeting includes the following items:

- 1. Review and approve agenda.
- 2. Review and approve minutes of the October 29, 2001, meeting
- 3. Treasurer's Report Greg Petrey
- 4. Subcommittee reports
  - a. Bylaws Subcommittee Ron Mayworm
  - b. Plan Writing Subcommittee Ron Mayworm
- 5. Discussion and possible action on adopting the interim bylaws as the permanent by laws
- 6. Update on the CAPRAD700 MHz database Ron Mayworm and Ken Yoder
- 7. Update on the Region 49 website and listserver Greg Petrey
- 8. Review and discussion on the draft Region 49 700 MHz plan
- 9. An overview of the 50 MHz of spectrum allocated to public safety in the 4.9 GHz band
- A review of the FCC Docket 00-32 and the parameters outlined for agencies to operate in the 4.9 GHz band
- 11. A review of the FCC's requirement for a plan to be developed within 12 months by the 700 MHz Regional Planning Committee for implementation of the 4.9 GHz spectrum in the region

Region 49- Central Texas includes the following counties:

- 12. Discussion and possible action regarding the committee's intent to coordinate frequency assignments in the new 4.9 GHz public safety band
- 13. Old Business
- 14. New business
- 15. Receive public comments
- 16. Schedule Next Meeting

The 800 MHz (NPSPAC) Regional Planning Committee will convene at 3:00 p.m. at the Texas Criminal Law Enforcement Auditorium, Building E, 6100 Guadalupe, Austin, Texas. The agenda for this meeting includes the following items:

- 1. Review and approve agenda
- 2. Review and approve minutes of the March 27, 2003 meeting
- 3. Consideration and possible action regarding the application of the City of Waco for mobile use of the 5 NPSPAC mutual aid channels
- 4. Consideration and possible action regarding any other applications received by the Secretary more than 30 days prior to this meeting
- 5. Old Business
- 6. New Business
- 7. Receive public comments
- 8. Schedule Next Meeting

Both of the Region 49 Public Safety Planning Committee meetings are open to the public. All eligible public safety providers in the Central Texas area, including the counties of Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson may utilize these frequencies.

State and local governments and certain nongovernmental organizations that provide public safety services are eligible for licensing in the 700 MHz band. (See Section 90.523, FCC Rules for details.) All governmental eligibles, including Native American Tribal Governments, as well as nongovernmental eligibles should be represented at these meetings to ensure that each entity's future spectrum needs are considered in the planning 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 and 800 MHz band, or the newly allocated 4.9 GHz band within Region 49 are encouraged to attend. For further information, please contact:

Ron G. Mayworm, Chairman Region 49 700 MHz Regional Planning Committee P. O. Box 1595 Bryan, Texas 77806

Phone: (979) 209-5475 E-mail: ron@ktsignals.com

General information regarding public safety radio spectrum and the regional planning process is available on the Commission's internet site at: <a href="http://wireless.fcc.gov/publicsafety/">http://wireless.fcc.gov/publicsafety/</a>.

- FCC -

News media information 202 / 418-0500 Fax-On-Demand 202 / 418-2830 TTY 202 / 418-2555 Internet: http://www.fcc.gov ftp.fcc.gov

> DA 06-949 April 28, 2006

#### WIRELESS TELECOMMUNICATIONS BUREAU

### REGION 49 (CENTRAL TEXAS) PLANNING COMMITTEES TO HOLD 700 MHz REGIONAL PUBLIC SAFETY PLANNING MEETING AND

800 MHz (NPSPAC) REGIONAL PUBLIC SAFETY PLANNING MEETING (PR Docket 92-190)

The Region 49 (Central Texas)<sup>1</sup> Regional Planning Committees will hold two consecutive Region 49 Public Safety planning meetings.

On Wednesday, June 28, 2006, the Region 49 700 MHz Regional Planning Committee meeting will convene at 9:30 a.m. in the Preparedness Training Room of the Waco McLennan County Public Health District, 225 W. Waco Drive, Waco, TX 76707.

The agenda for this meeting includes:

- 1. Review and approve agenda
- 2. Election of a new Secretary
- 3. Review and approve minutes of the December 30, 2003, meeting
- 4. Treasurer's Report Ron Mayworm
- 5. Election of a new Treasurer
- 6. Plan Writing Subcommittee report
- 7. Update on the CAPRAD 700 MHz database
- 8. Update on the Region 49 website and listserver
- An overview of recent activities regarding use of broadband technologies in the 700 MHz band
- 10. Review and discussion of the draft Region 49 700 MHz plan
- 11. Old business
- 12. New business
- 13. Receive public comments
- 14. Adjourn

<sup>&</sup>lt;sup>1</sup> Region 49 - Central Texas includes the following counties: Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson.

A copy of the draft Region 49 700 MHz plan will be posted on the Region 49 web site, www.bc911.org/Reg49/, by May 31, 2006.

On Wednesday, June 28, 2006, the Region 49 800 MHz Review Committee will convene at 1:00 p.m. in the Preparedness Training Room of the Waco McLennan County Public Health District, 225 W. Waco Drive, Waco, TX 76707.

The agenda for this meeting includes:

- 1. Review and approve agenda
- 2. Review and approve minutes of the March 9, 2006, meeting
- 3. Consideration and possible action regarding any applications received by the Secretary more than 30 days prior to this meeting
- 4. Update on the status of Rebanding in Region 49
- 5. Old business
- New business
- 7. Receive public comments
- 8. Adjourn

The Region 49 Public Safety Regional Planning Committee meetings are 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 the Central Texas area may 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 Federal Communications 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 conversant with telecommunications technology should ensure that their respective agencies are represented suitably conversant staff.

All interested parties wishing to participate in the planning for use of public safety spectrum in the 700 MHz and 800 MHz bands within Region 49 are encouraged to attend. For further information, please contact

Ron Mayworm, Chairman Region 49 700 MHz Regional Planning Committee P. O. Box 1585 Bryan, TX 77806 (979) 209-5475 ron@ktsignals.com

-FCC-

News media information 202 / 418-0500 Fax-On-Demand 202 / 418-2830 TTY 202 / 418-2555 Internet: http://www.fcc.gov ftp.fcc.gov

> DA 06-1426 July 11, 2006

### WIRELESS TELECOMMUNICATIONS BUREAU

## REGION 49 (CENTRAL TEXAS) 700 MHz PUBLIC SAFETY REGIONAL PLANNING COMMITTEE TO HOLD TWO PLANNING MEETINGS

The Region 49 (Central Texas)<sup>1</sup> 700 MHz Regional Planning Committee will hold two planning meetings, each of which will start at 9:30 a.m., at the City of Austin Learning Resource Center, 2800 Spirit of Texas Drive, Austin, Texas. The meeting dates are:

- Thursday, August 17, 2006, and
- Thursday, October 19, 2006.

The purpose of these meetings is to continue the allocation planning process for the 700 MHz spectrum and to review and consider approving the proposed plan document for Region 49. A copy of the draft Region 49 700 MHz plan will be posted on the Region 49 web site at <a href="https://www.bc911.org/Reg49/">www.bc911.org/Reg49/</a> for at least three calendar days prior to each meeting.

The Region 49 700 MHz Public Safety Regional Planning Committee meetings are 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 the Central Texas area may 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 Federal Communications Commission's Rules be represented in order to ensure that each agency's future spectrum needs are considered in the allocation process.

All interested parties wishing to participate in the planning for use of public safety spectrum in the 700 MHz and 800 MHz bands within Region 49 are encouraged to attend. For further information, please contact:

Ron Mayworm, Chairman Region 49 700 MHz Regional Planning Committee P.O. Box 1585, Bryan, TX 77806 PH: (979) 209-5475 ron@ktsignals.com

-FCC-

<sup>&</sup>lt;sup>1</sup> Region 49 - Central Texas includes the following counties: Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson.

News media information 202 / 418-0500 Fax-On-Demand 202 / 418-2830 TTY 202 / 418-2555 Internet: http://www.fcc.gov ftp.fcc.gov

> DA 06-1426 July 11, 2006

### WIRELESS TELECOMMUNICATIONS BUREAU

## REGION 49 (CENTRAL TEXAS) 700 MHz PUBLIC SAFETY REGIONAL PLANNING COMMITTEE TO HOLD TWO PLANNING MEETINGS

The Region 49 (Central Texas)<sup>1</sup> 700 MHz Regional Planning Committee will hold two planning meetings, each of which will start at 9:30 a.m., at the City of Austin Learning Resource Center, 2800 Spirit of Texas Drive, Austin, Texas. The meeting dates are:

- Thursday, August 17, 2006, and
- Thursday, October 19, 2006.

The purpose of these meetings is to continue the allocation planning process for the 700 MHz spectrum and to review and consider approving the proposed plan document for Region 49. A copy of the draft Region 49 700 MHz plan will be posted on the Region 49 web site at <a href="https://www.bc911.org/Reg49/">www.bc911.org/Reg49/</a> for at least three calendar days prior to each meeting.

The Region 49 700 MHz Public Safety Regional Planning Committee meetings are 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 the Central Texas area may 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 Federal Communications Commission's Rules be represented in order to ensure that each agency's future spectrum needs are considered in the allocation process.

All interested parties wishing to participate in the planning for use of public safety spectrum in the 700 MHz and 800 MHz bands within Region 49 are encouraged to attend. For further information, please contact:

Ron Mayworm, Chairman Region 49 700 MHz Regional Planning Committee P.O. Box 1585, Bryan, TX 77806 PH: (979) 209-5475 ron@ktsignals.com

-FCC-

<sup>&</sup>lt;sup>1</sup> Region 49 - Central Texas includes the following counties: Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson.

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> DA 06-2518 December 14, 2006

#### PUBLIC SAFETY AND HOMELAND SECURITY BUREAU ACTION

## REGION 49 (CENTRAL TEXAS) 700 MHz PUBLIC SAFETY REGIONAL PLANNING COMMITTEE TO HOLD MEETING

The Region 49 (Central Texas)<sup>1</sup> 700 MHz Public Safety Regional Planning Committee will hold its next meeting on Thursday, January 18, 2007, at 9:30 a.m. at the Bell County Communications Center, 708 W. Avenue O, Belton, Texas.

The agenda for this meeting includes:

- Review and approve agenda
- Review and approve minutes of the October 19, 2006 meeting
- Treasurer's report
- Report of the Outreach Committee
- Report of the Plan Writing Committee
- Update on the Region 49 website and listserver
- Review and discussion of the draft Region 49 700 MHz plan
- Old business
- New business
- Receive public comments
- Adjourn

A copy of the latest draft Region 49 700 MHz plan will be posted on both the Computer Assisted Pre-coordination Resource and Database (CAPRAD)<sup>2</sup> system and the Region 49 web site, at <a href="https://www.Region49.org">www.Region49.org</a>, by January 16, 2007.

<sup>&</sup>lt;sup>1</sup> Region 49 (Central Texas) encompasses the following counties: Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson.

<sup>&</sup>lt;sup>2</sup> The Computer Assisted Pre-coordination Resource and Database System (CAPRAD) is a tool available to regional planning committees to pre-designate initial 700 MHz channel allotments in county-like area frequency pools. CAPRAD is administered by the National Law Enforcement and Corrections Technology Center-Rocky Mountain Region (NLECTC-RM), a program of the National Institute of Justice hosted by the University of Denver through the Denver Research Institute, and is available at <a href="http://caprad.nlectc.du.edu">http://caprad.nlectc.du.edu</a>.

The Region 49 700 MHz Public Safety Regional Planning Committee meeting is open to the public. All eligible public safety providers whose sole or principal purpose is to protect the safety of life, health, or property in Region 49 may utilize these frequencies. It is essential that public safety agencies in all areas of government, including state, municipality, county, and 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 their agency's needs.

All interested parties wishing to participate in planning for the use of public safety spectrum in the 700 MHz band within Region 49 should plan to attend. For further information, please contact:

Ron Mayworm, Chairman
Region 49 700 MHz Public Safety Regional Planning Committee
P. O. Box 1585
Bryan, TX 77806
(979) 209-5475
ron@ktsignals.com

From: **Charles Brotherton** 

Charles Brotherton; Region 49 700 MHz RPC To:

Date: 1/24/2008

Time: 10:00 AM - 11:00 AM

URGENT: Region 49 700 MHZ RPC Phone Conference Subject: Place: Phone Bridge: (877) 807-5706, Conference ID 173380 Attachments: RPC49\_AllotmentSurvey.doc; CAPRAD Resort 1-11-2008.doc

The FCC has requested an immediate response from each planning region to the survey attached here, "RPC49 Allotment Survey." The response deadline is January 31st. A meeting of the Region 49 700 MHZ planning committee therefore is set for this coming Thursday, January 24th, from 10 a.m. to 11 a.m. CST (1 hour).

This meeting will be by telephone conference only. To join the conference, dial (877) 807-5706 and enter conference ID number 173380.

Prior to this telephone conference, please review the attached documents. During the meeting, we will discuss regional needs related to the 700 MHZ CAPRAD re-sort. Our goal for this meeting is to reach consensus for the region's response to the FCC survey. We have to consider whether to go with the "default" new CAPRAD sort, which will allot 700 MHZ frequencies in 4-channel, 25 KHz blocks with 250 KHz combiner separation, or to recommend 12.5 KHz allotments at the same, or tighter, spacing.

Two documents are attached: "RPC49 AllotmentSurvey.doc" and "CAPRAD Resort 1-11-08.doc." Please review these documents and contact me or Region 49 Chairman Ron Mayworm (rmayworm@bryantx.gov) with any questions you have prior to the telephone conference.

Thank you. Chuck

#### **Chuck Brotherton**

**Emergency & Wireless Communications Manager** Travis County Emergency Services Contact info: desk (512) 854-4895 cell (512) 636-6825 pager (512) 935-0007 fax (512) 854-4786 Charles.Brotherton@co.travis.tx.us

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DA 10-438

March 15, 2010

PUBLIC SAFETY AND HOMELAND SECURITY BUREAU ANNOUNCES
REGION 49 (CENTRAL TEXAS) PLANNING COMMITTEES TO HOLD 700 MHZ REGIONAL
PUBLIC SAFETY PLANNING AND 800 MHZ (NPSPAC) REGIONAL PUBLIC SAFETY
PLANNING MEETINGS

(PR Docket 92-190)

The Region 49 (Texas-Austin)<sup>1</sup> Public Safety Regional Planning Committees (RPCs) will hold two consecutive meetings on Friday, April 9, 2010. Beginning at 9:30 a.m., the 700 MHz RPC meeting will convene at the City of Austin Learning and Research Center Auditorium, located at 2800 Spirit of Texas Drive, Austin, Texas 78719.

The agenda for the 700 MHz meeting includes:

- Review and approve April 9, 2010 Agenda
- Review and approve January 18, 2007 Meeting Minutes, and January 24, 2009
   Conference Call Report
- Treasurer's Report
- Update and from the March 25-26, 2010 National Regional Planning Council training meeting held in Tampa, Florida
- Review, discuss, and vote to approve the final draft Region 49 700 MHz Plan<sup>2</sup>
- Old Business
- New Business
- Opportunity for public comment
- Adjourn

Following the 700 MHz RPC meeting, the 800 MHz NPSPAC RPC meeting will convene at the same location beginning at 1:00 p.m.

<sup>&</sup>lt;sup>1</sup> The Region 49 (Texas-Austin) regional planning area encompasses the following counties: Bastrop, Bell, Blanco, Bosque, Brazos, Burleson, Burnet, Caldwell, Coryell, Falls, Fayette, Freestone, Grimes, Hamilton, Hays, Hill, Lampasas, Lee, Leon, Limestone, Llano, Madison, McLennan, Milam, Mills, Robertson, San Saba, Travis, Washington, and Williamson.

<sup>&</sup>lt;sup>2</sup> A copy of the final draft of the Region 49 700 MHz plan is available through the Region 49 web site at http://www.Region49.org and on the Computer Assisted Pre-coordination Resource and Database (CAPRAD) system site at http://www.caprad.org (CAPRAD is a tool available to regional planning committees to pre-designate initial 700 MHz channel allotments in county-like area frequency pools).

The agenda for the 800 MHz NPSPAC meeting includes:

- Review and approve April 9, 2010 Agenda
- Review and approve the June 28, 2006 Meeting Minutes
- Review of the streamlined 800 MHz Plan Amendment filed on April 12, 2009 in FCC PR Docket No. 92-190
- Update from the March 25-26, 2010 National Regional Planning Council training meeting held in Tampa, Florida
- Status update on the 800 MHz rebanding progress in Region 49
- Consideration, and possible action regarding any NPSPAC applications received by the RPC Secretary more than 30 days prior to the April 9, 2010 meeting
- Old business
- New business
- Opportunity for public comments
- Adjourn

Both Region 49 Public Safety RPC meetings are open to the public. All eligible public safety providers in Region 49 may utilize these frequencies. It is essential that eligible public safety agencies in all areas of government, including state, municipality, county, and Native American Tribal 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 their agency's needs.

All interested parties wishing to participate in planning for the use of public safety spectrum in the 700 MHz and 800 MHz bands within Region 49 should plan to attend. For further information, please contact:

Ron Mayworm, Chairman Region 49 700 MHz and 800 MHz Public Safety RPCs 3708 E. 29<sup>th</sup> Street, #128 Bryan, TX 77802 (979) 595-2801, ext. 2045 ron@ktsignals.com

## Agenda

## Region 49 700 MHz Regional Planning Committee

## December 30, 2003 9:00 AM

- 1. Review and approve agenda
- 2. Determine if a quorum of voting members is present
- 3. Review and approve minutes of the October 29, 2001, meeting
- 4. Treasurer's Report Greg Petrey
- 5. Subcommittee reports
  - a. Bylaws Subcommittee Ron Mayworm
  - b. Plan Writing Subcommittee Ron Mayworm
  - c. Outreach Subcommittee Greg Petrey
- Discussion and possible action on adopting the interim bylaws as the permanent bylaws
- 7. Update on the CAPRAD 700 MHz database Ron Mayworm and Ken Yoder
- 8. Update on the Region 49 website and listserver Greg Petrey
- 9. Review and discussion of the draft Region 49 700 MHz plan
- 10. An overview of the 50 MHz of spectrum allocated to public safety in the 4.9 GHz band
- 11. A review of FCC Docket 00-32 and the parameters outlined for agencies to operate in the 4.9 GHz band
- 12. A review of the FCC's requirement for a plan to be developed within 12 months by the 700 MHz Regional Planning Committee for implementation of the 4.9 GHz spectrum in the region
- 13. Discussion and possible action regarding the committee's intent to coordinate frequency assignments in the new 4.9 GHz public safety band
- 14. Old business
- 15. New business
- 16. Receive public comments
- 17. Adjourn

## Region 49 700 MHz Regional Planning Committee

## **AGENDA**

June 28, 2006, 9:30 am
Waco McLennan County Public Health District Preparedness Training
Room, 225 W. Waco Drive, Waco, TX 76707

- 1. Introductions, quorum determination, review and approve agenda
- 2. Election of a new secretary
- 3. Review and approve minutes of the December 30, 2003, meeting
- 4. Treasurer's report
- Election of a new treasurer
- 6. Plan Writing Subcommittee Report
- 7. Appointment of a new chair for the Outreach Subcommittee
- 8. Update on the CAPRAD 700 MHz database
- 9. Update on the Region 49 web site and listserver
- Discussion and possible action regarding the committee's involvement in
   4.9 GHz planning
- Overview of recent activities regarding use of broadband technologies in the 700 MHz band
- 12. Review and discussion of the draft Region 49 700 MHz plan (dated 05-30-06)
- Old business
- New business
- 15. Receive public comment
- 16. Adjourn

## Region 49 700 MHz Regional Planning Committee

## **AGENDA**

# August 17, 2006, 9:30 a.m. City of Austin Learning Resource Center, 2800 Spirit of Texas Drive Austin, TX

- 1. Introduction, quorum determination, review and approve agenda
- 2. Review and approve minutes of the June 28, 2006, meeting
- 3. Treasurer's report
- Outreach activities
- 5. Update on the Region 49 web site and listserver
- Short reply comments filed with the FCC regarding use of broadband technologies in the 700 MHz band
- 7. Review and discussion of the draft Region 49 700 MHz plan (dated 08-14-06)
- Old business
- New business
- 10. Receive public comment
- 11. Adjourn

## Region 49 700 MHz Regional Planning Committee

## **AGENDA**

# October 19, 2006, 9:30 a.m. City of Austin Learning Resource Center, 2800 Spirit of Texas Drive Austin, TX

- 1. Introduction, quorum determination, review and approve agenda
- 2. Review and approve minutes of the August 17, 2006, meeting
- 3. Treasurer's report
- 4. Outreach activities
- 5. Update on the Region 49 web site and listserver
- 6. Review and discussion of the draft Region 49 700 MHz plan (dated 10-15-06)
- 7. Old business
- 8. New business
- 9. Schedule next meeting(s) DPS videoconferencing
- 10. Receive public comment
- 11. Adjourn

## Region 49 700 MHz Regional Planning Committee

#### **AGENDA**

January 18, 2007, 9:30 a.m.
Bell County Communications Center, 708 W. Avenue O
Belton, TX

- 1. Introductions, quorum determination, review and approve agenda
- 2. Review and approve minutes of the October 19, 2006, meeting
- 3. Treasury report
- 4. Outreach activities
- 5. Update on the Region 49 web site and listserver
- 6. Presentation, discussion, and possible action regarding the FCC's 9<sup>th</sup> Notice of Proposed Rule Making affecting broadband operations in the 700 MHz public safety band
- Review and discussion of the draft Region 49 700 MHz plan (dated 01-10-07)
- Old business
- New business
- 10. Schedule next meeting(s) DPS videoconferencing
- 11. Receive public comment
- 12. Adjourn



# REGION 49 (CENTRAL TEXAS) PLANNING COMMITTEE 700 MHz REGIONAL PUBLIC SAFETY PLANNING MEETING

April 9, 2009, 9:30 a.m.

City of Austin Learning and Research Center 2800 Spirit of Texas Drive, Austin, Texas

#### **AGENDA**

- 1. Review and approve agenda.
- 2. Review and approve minutes of the January 18, 2007 meeting, and of the January 24,2008 conference call.
- 3. Treasurer's report.
- 4. Update from the recent National Regional Planning Council (NRPC) meeting.
- 5. Review, discussion, and vote to approve the final draft of the Region 49 700 MHz plan.
- 6. Old Business.
- 7. New Business.
- 8. Receive public comments.
- 9. Adjourn.

A copy of the final draft of the Region 49 700 MHz plan is posted on both the Region 49 web site (www.Region49.org) and on the CAPRAD<sup>2</sup> system (www.caprad.org).

# Region 49

700 MHz Regional Planning Committee
Minutes of the December 30, 2003, meeting
Texas Criminal Law Enforcement Auditorium
Building E
6100 Guadalupe

Austin, Texas 78752

Chairman Ron Mayworm called the Region 49 Regional Planning Committee (RPC) to order at 9:12 am. The following individuals were present:

Ron Mayworm, Chairman Greg Petrey, Secretary/Treasurer Ken Yoder, APCO Coordinator Pat Worsham, TxDOT Lee Cox, Mexia PD Wayne Canaday, McLennan County Wil Geltmeier, TxDOT Bill Davis, City of Austin

Danny Hobby, Travis County Craig Covey, M/A-COM Aaron Slaughter, City of Lockhart Larry Blare, City of Waco Clint Bushacker, Winchester VFD Jim Sawyer, Dailey Wells Comm. Dave Sweet, Dailey Wells Comm. Gary Young, Copperas Cove FD

- **Item 1:** Review and approve agenda; introductions. The agenda was approved and introductions made.
- Item 2: Determine if a quorum is present. 26 separate entities were present at the October 31, 2001 meeting. Under the interim bylaws, a quorum is 30% of the entities present at the previous meeting, or, for this meeting, a minimum of 8. There were members from 9 separate entities present as this count was taken, thus meeting the quorum requirement.
- Item 3: Review and approve minutes of the October 31, 2001 meeting. Pat Worsham moved, and Danny Hobby seconded a motion that the location of the meeting be added to the minutes, and that they be approved. The motion passed.
- **Item 4:** Treasurer's Report. Treasurer Greg Petrey reported a balance of \$585.86 in the committee's account. Expenses since the last meeting have included bank charges, postage, reimbursable expenses for the Chairman to receive CAPRAD training before the annual APCO conference, and a share (with several other Texas RPCs) of the reimbursable expenses for Ken Yoder to also receive CAPRAD training before the APCO conference. Ron Mayworm reported that additional funds to cover the committee's expenses may be available on an as-needed basis. Danny Hobby moved, and Wil Geltmeier seconded, a motion to accept the treasurer's report. The motion passed.

Item 5: Subcommittee Reports. Bylaws Subcommittee. Ron Mayworm reported on behalf of Chairman Ken Biederman, who passed away during 2002. The subcommittee met on November 28, 2001, in College Station, Texas. Since there was significant concern shown at the last meeting that, at various times, participants on the committee may be very few, and that achieving a quorum of a certain fixed number of participants may prevent the committee from conducting necessary business, the subcommittee recommended that a quorum be defined as 30% of the number of entities present at the most previous meeting. The subcommittee also recommended that article 2.1A of the interim bylaws include Native American Tribes, forestry/conservation, emergency management, and homeland security as examples of entities eligible for membership on the RPC. Danny Hobby moved, and Pat Worsham seconded a motion to include these changes and adopt the bylaws as permanent. The motion passed.

**Plan Writing Subcommittee**. Ron Mayworm reported that the subcommittee met on November 28, 2001, in College Station, Texas. The plan was divided into 14 major sections, and several members had each agreed to be responsible for writing several of the sections. The draft plan to be reviewed today is organized slightly differently, since the need for rearrangement became apparent during the writing process.

**Outreach Subcommittee.** Greg Petrey reported that direct mail of meeting notices remains the most effective way to reach potential "interested parties." He has continued to update mailing lists of public safety agencies and government entities, mostly received from the regional councils of governments. More than 700 copies of the notice for this meeting, for example, were mailed since the issue of the new 4.9 GHz band is to be discussed.

- Item 6: Discussion and possible action to adopt permanent bylaws.

  This item had already been passed as part of the Bylaws Subcommittee report.
- Item 7: Update on the CAPRAD Database. Ron Mayworm gave some background and status information about the CAPRAD database program. He and Ken Yoder have received training for its use.
- Item 8: Update on the Region 49 website and listserver. Greg Petrey noted that, at the first meeting, this committee had chosen to use a Yahoo group and list to maintain the flow of information. A few items have been posted, but the group of participants is small. Since Yahoo is adopting more stringent requirements for use of their system, Greg volunteered to establish an independent Region 49 web site that can have separate areas for each frequency band. Pat Worsham moved, and Wil Geltmeier seconded, a motion that internet activities of Region 49 be moved from the Yahoo system. The motion passed.

Item 9: Review and discussion of the draft Region 49 700 MHz plan: Ron Mayworm noted that this draft borrowed heavily from the Region 24 plan, with specific modifications applicable to Region 49. Since producing this plan is the primary task of this committee, we have no choice but to take the time to review it in detail, paragraph by paragraph.

A short break was taken, from 10:13 am to 10:30 am.

Ron Mayworm led the review and discussion of the draft 700 MHz plan. The following main issues were discussed and decided by consensus:

- Future copies of the draft plan will include the word "DRAFT" and date on the header/footer of each page
- The words "allocation" and "allotment" will be differentiated, and defined in the plan
- For giveback frequencies, applicants must provide a list of all current frequencies and their uses, and justify use of any frequencies they wish to retain
- The application review process needs clarification. Should a review committee be established, as there is at 800 MHz?
- Applications for short-spacing of frequencies will be considered as allowed by FCC rules
- 120 days will be allowed for parties to resolve allocation disputes
- Parties who are in a pre-licensed status for a frequency on the CAPRAD database will have rights to protest other applications for that frequency
- The term "campus use" will be changed to "limited area;" the method for
  identifying "limited area" channels needs clarification; applications for a
  "limited area" channel may be protested by the same entities that are
  eligible to protest other allocations; however, the right to protest should be
  limited to those entities that could be harmed by an allocation

A lunch break was taken from 12:10 pm to 1:17 pm.

- The ERP listed in section 3.4 will be changed to agree with the FCC rules and will be the same in the region-controlled channels as they are on the FCC-controlled channels
- The priority matrix had the maximum points available for a multi-agency system increased to 35 points; the maximum points available for proof of financial commitment was reduced to 25 points; and the relative percentage of giveback frequencies from an applicant was to be given up to 10 points
- In section 6.3 the term "county area" was changed to "orphaned channel area" and was defined as the county area plus 10 miles in all directions
- In section 6.4 a request for extension of time to implement a system will be considered by the full Regional Planning Committee

Ron Mayworm indicated that these and some other minor changes would be incorporated in the next draft of the 700 MHz plan.

Item 10: An overview of the 4.9 GHz band

Item 11: A review of operational parameters for the 4.9 GHz band

Item 12: A review of the FCC requirement for development of a regional

4.9 GHz plan within 12 months

Item 13: Discussion and possible action regarding committee's intent

to coordinate 4.9 GHz in Region 49

In the interest of time, these issues were combined for discussion and action. It was specifically noted that the FCC has not given the regions any authority or mechanism to enforce any plan it may adopt for 4.9 GHz. It appears that the region could only function as a repository of information voluntarily given to it by licensees. Greg Petrey moved, and Pat Worsham seconded, a motion that the committee continue considering taking action to coordinate 4.9 GHz in Region 49, pending further information from the FCC, APCO, NPSTC, or any other source. The motion passed. Ron Mayworm asked for any volunteers to chair a regional 4.9 GHz committee. There were no volunteers.

Item 14: Old Business. There was no old business.

Item 15: New Business. There was no new business.

Item 16: Receive public comments. There were no public comments.

Item 17: Adjourn. Ron Mayworm adjourned the meeting at 2:58 pm.

Respectfully submitted:

Ron Mayworm, Chairman for the secretary

Subject: [RPC49] Bylaws subcommittee meeting information

Date: Wed, 12 Dec 2001 20:28:33 -0000 From: "rmayworm" <ron@ktsignals.com>

Reply-To: RPC49@yahoogroups.com To: RPC49@yahoogroups.com

On November 28, 2001, the Bylaws Subcommittee met in College Station with the following persons attending:

Ken Biederman, Chairman (Burleson County)
Troy Poehl (Burleson County)
Richard Herndon (TxDOT)
Ron Mayworm (City of College Station)

They reviewed the wording of the interim bylaws and agreed that the following wording of Section 3.5, Quorum, incorporated the changes requested by the full committee at the October 29th meeting:

"At any meeting of the members thirty (30) per cent of the voting members as of the close of the most previous Annual, Special, or Regular meeting shall constitute a quorum. . ."

They also agreed that the interim bylaws, with the above wording, were adequate for adoption as permanent bylaws. Accordingly, these interim bylaws will be presented for permanent adoption at the next meeting of the full committee.

I have posted the interim bylaws as a word file. The Bylaws Subcommittee welcomes any comments or suggestions to be posted to the group (another subcommittee meeting could be held if further changes are needed).

Ron Mayworm





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From: "rmayworm" <ron@ktsignals.com>

Date: Wed Dec 12, 2001 2:28 pm

**Subject:** Bylaws subcommittee meeting information

On November 28, 2001, the Bylaws Subcommittee met in College Station with the following persons attending:

Ken Biederman, Chairman (Burleson County) Troy Poehl (Burleson County) Richard Herndon (TxDOT)

Ron Mayworm (City of College Station)

They reviewed the wording of the interim bylaws and agreed that the following wording of Section 3.5, Quorum,

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Ron Mayworm



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Subject: [RPC49] Plan Writing Subcommittee meeting information

Date: Wed, 12 Dec 2001 20:58:54 -0000 From: "rmayworm" <ron@ktsignals.com>

Reply-To: RPC49@yahoogroups.com To: RPC49@yahoogroups.com

On November 28, 2001, the Plan Writing Subcommittee met in College Station with the following persons attending:

Ron Mayworm, Chairman (City of College Station)
Richard Herndon (TxDOT)
Ken Biederman (Burleson County)
Troy Poehl (Burleson County)

Ron suggested that writing the plan be divided into 14 sections that followed the format of the national template and guidelines. These 14 sections are:

- 1. Chairperson
- 2. RPC membership list
- 3. Description of the region
- 4. Notification process
- 5. Plan summary
- 6. Interoperability channel utilization
- 7. Additional interoperability spectrum
- 8. General use allocations
- 9. Competing applicant evaluation matrix/process
- 10. Application process
- 11. Adjacent region coordination
- 12. "Best possible use of the spectrum" explanation
- 13. Future planning process
- 14. "All meeting open to the public" certification

It was noted that sections 6 and 7 will not be required in the Region 49 plan since the State of Texas has chosen to manage the interoperability channels statewide.

It was also noted that sections 2 and 4 contain information currently being maintained by the Committee Secretary, Greg Petrey. It was agreed to ask him to draft these sections (and he subsequently agreed).

Richard Herndon volunteered to draft sections 3 and 9.

Ron Mayworm will draft sections 1, 5, 8, 10, 11, 12, 13, and 14 (noting that sections 1, 11, and 14 should each only be a single paragraph).

The subcommittee is willing to accept help from any other committee members who wish to volunteer.

Ron Mayworm

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From: @ "rmayworm" <ron@ktsignals.com>

Date: Wed Dec 12, 2001 2:58 pm

Subject: Plan Writing Subcommittee meeting information

On November 28, 2001, the Plan Writing Subcommittee met in College Station with the following persons attending:

Ron Mayworm, Chairman (City of College Station) Richard Herndon (TxDOT) Ken Biederman (Burleson County) Troy Poehl (Burleson County)

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It was noted that sections 6 and 7 will not be required in the Region 49 plan since the State of Texas has chosen to manage the interoperability channels statewide.

It was also noted that sections 2 and 4 contain information currently being maintained by the Committee Secretary, Greg Petrey. It was agreed to ask him to draft these sections (and he subsequently agreed).

Richard Herndon volunteered to draft sections 3 and 9.

Ron Mayworm will draft sections 1, 5, 8, 10, 11, 12, 13, and 14 (noting that sections 1, 11, and 14 should each only be a single paragraph).

The subcommittee is willing to accept help from any other committee members who wish to volunteer.

Ron Mayworm

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### Region 49 700 MHz Regional Planning Committee Minutes of the June 28, 2006, meeting

Waco McLennan County Public Health District Preparedness Training Room 225 W. Waco Drive, Waco, TX 76707

Chairman Ron Mayworm called the meeting to order at 9:30 a.m. The following members and guests were present:

Pat Worsham, Alexander Util. Eng.	
Bill Blowers, Bell County	
James Benton, Texas DPS	
Larry Blare, City of Waco	
Tim Driscoll, RCC Consultants	
Gilbert Paez, City of Austin	
Mike Simpson, City of Austin	
Bill Davis, City of Austin	
Aaron Slaughter, City of Lockhart	

Maureen Ganner, City of Round Ro	ock
Ray Ganner, Ganner Associates	
Brice Shelton, Motorola	
Wayne Canady, McLennan County	
Harold Ferguson, Waco Fire	
Bette Rinehart, Motorola	
Dalton Cross, Bell County	
Ron Mayworm, Chair, City of Bryar	1

- Item 1: Introductions, quorum determination, review and approve agenda.
- Item 2: Election of a new secretary: Chuck Brotherton of Travis County (not in attendance) was re-elected to the combined post of Secretary/Treasurer. Moved by Mike Simpson, seconded by (inaudible). Unanimous approval.
- Item 3: Review and approve minutes of 12/30, 2003, meeting. The minutes were approved. Motion: Larry Blare; Second: Aaron Slaughter. Unanimous approval.
- Item 4: Treasurer's report: The current treasurer (Ron Mayworm) reported a current balance of \$465.86 as of 6/28/2006. Bank charges of \$15/month are the most significant draw on this account. Motion by Mike Simpson to reimburse Ron his out-of-pocket expenses for tapes, batteries; seconded by Harold Ferguson. Unanimous approval. New balance after reimbursement to Ron will be \$271.82.
- Item 5: Election of a new treasurer: Discussion of legality, under RPC rules, of combining offices of Secretary and Treasurer. Discussion of access to RPC grant funds by Chuck Brotherton, Travis County (if elected).
- Item 6: Plan Writing Subcommittee report: Ron Mayworm chairs this committee. Last meeting was 2001 in College Station. Due to retirements and other attrition, plan-writing is now a one-man show.
- Item 7: Appointment of a new chair for the Outreach Subcommittee: FCC more concerned with process and documentation of the planning process than with content of the plan itself. So, need to get all local, regional, state and in-state feds involved in regional planning process.

Need a comprehensive direct-mail list. Previous list had 700+ addresses but this was lost. Needs to be rebuilt. Mike Simpson volunteers to commit his available resources to compiling a new list and doing the mail-out.

Item 8: Update on CAPRAD 700 MHz database at

<u>http://wireless.fcc.gov/publicsafety/700MHz/plans.html</u>: Check for status of regional plans. Still a viable planning tool.

Item 9: Update on the Region 49 web site and list server:

<u>http://www.region49.org</u> has links to 700 and 800 planning information pages. Draft 700 MHz plan is posted there. Need someone to keep it current. Volunteers? Mike Simpson and City of Austin CTM.

4.9 GHz planning: Rules say that if RPC chooses not to coordinate this spectrum, then the field is open to others. Licenses are easily available. (Ron introduces Bette Rinehart of Motorola as a valuable planning resource for 700 and 4.9 planning.) Motion from Mike Simpson to combine 4.9 GHz planning under the duties of the 700 MHz RPC. Seconded by (inaudible). Motion approved.

Item 11: Overview of recent activities re. use of broadband technologies in the 700 MHz band: Concern expressed over FCC "fast tracking" the initiative to add broadband channels to 700 MHz, before public safety agencies have had time to assess their needs and plan accordingly. Ron says the likely goal is to set broadband guidelines in place before frequencies are assigned nationwide. Narrow- and wide-band channeling cannot easily be undone once it's loaded.

Does this committee wish to file comments to the FCC recommending building flexibility into the channelization of 700 MHz, for a mix of narrow, wide-, and broad-band? Not an action item but Ron will see that it's done.

- Item 12: Review and discuss the draft Region 49 700 MHz Plan dated 5-30-06:
  - -- Ron goes through the draft plan page by page, section by section.
  - -- Question about the CAPRAD database and how it is accessed. Ron states that it is freely accessible. Signing on as "guest" allows general public to review published plans.
  - -- CAPRAD URL is http://caprad.nlectc.du.edu/cp/index.jsp.
  - -- Section 3.2, "Limited Area' Operations," borrowed from State of Missouri plan. Properly licensed limited area channels under the Region 49 plan would not count against a licensee's allotment of other general use channels.
  - -- Ron asks if he's going too fast. No objections to review thus far. Ron states he does not want this to be a "one man show."

- -- Section 3.4, Low Power Channels: Discussion of whether to modify language in this section. Ron notes that language here is common to other plans but he will consider modifying this section.
- -- Section 4: Priority Matrix: Discussion of points assignment for channel loading: Should a bullet be added to address this as a scoring criterion?
- -- Section 7.2: Brief discussion about the narrow-band deadline of 12/31/2016.
- -- Section 8, Interoperability Channels: Ron states that this section defers to the TSIEC guidelines.
- -- By-laws already approved. Attachments included in separate package.
- -- Ron states that we must now give others the opportunity to critique what's been generated so far by this committee. We need to have several more meetings to finalize this plan.
- Item 13: Old Business: None.
- **Item 14:** New Business: Discussion about next meetings, locations and schedule. -- Offer from Bell County to host an upcoming meeting -- around the new year?
  - -- October meeting set for City of Austin.
  - -- End of August meeting? Meeting set for August 17 in Austin.
- Item 15: Receive public comment:
- Item 16: Adjourn: Meeting adjourned at 12:30 p.m.

### Region 49 700 MHz Regional Planning Committee Minutes of the August 17, 2006, meeting

City of Austin Learning and Research Center 2800 Spirit of Texas Drive, Austin, Texas

Chairman Ron Mayworm called the meeting to order at 9:35 a.m. The following members and guests were present:

Chuck Brotherton, Travis Co. Emer. Ser	
Ted Young, Marble Falls PD	
Maureen Ganner, Round Rock PD	
Ken Graalum, Cedar Park/CWICS	
Larry Blare, City of Waco	
Pat Worsham, Alexander Util. Eng.	
Bill Blowers, Bell County	
Archie Hollingsworth, Burnet Co. SO	
Charlie Boyce, Burnet Co. SO	
Kenneth Yoder, Texas APCO	

Larry W. Keith, Leon Co. SO	
Aaron Slaughter, City of Lockhart	
Robert Pletcher, Texas DPS	
Michael Sevier, Brazos Valley COG	
Kyle Connor, M/A-Com	
James Benton, APCO/DPS	
Gilbert Paez, City of Austin	
Elizabeth Lindemann, City of Austin	
Arletha Guerrero, City of Austin	
Ron Mayworm, Chair, City of Bryan	

- Item 1: Introductions, quorum determination, review and approve agenda.
- Review and approve minutes of the June 28, 2006 meeting: Secretary noted that the vote on Item 10 was inaudible on the tape. (Secretary was not present on 6/28.) The Chairman stated that the motion had passed and that the minutes should be updated to reflect this result. Vote to approve 6/28 minutes was deferred pending this revision.
- Treasurer's Report: Treasurer reported a balance of \$256.82, pending reimbursing Chairman Ron Mayworm for \$98.86 in out-of-pocket expenses related to preparing materials for this meeting. Ron noted that future reimbursement money will have to be applied for based on a report of estimated needs. Bob Pletcher made motion to accept the Treasurer's report, seconded by Maureen Ganner, approved unanimously. Bob Pletcher made motion to reimburse Ron's expenses, seconded by Larry Blare, approved unanimously.
- Item 4: Outreach Activities: Discussion on requirement to broaden participation in reviewing and gathering support for the 700 MHz regional plan. Bob Pletcher volunteers DPS video conferencing services to allow remote participation at future meetings. Will require advance scheduling. The December meeting in Bell County is identified as a possible target for making this available.
- Item 5: Update on Region 49 web site and list server: Discussion of plan to move hosting service for the R49 web page from the present commercial host to City of Austin, as offered by Mike Simpson of City of Austin Wireless Communication Services Division. Further research is needed.

Item 6: Short reply comments filed with the FCC regarding use of broadband technologies in the 700 MHz band: Ron filed comments on 7/06/06, as follows:

"On June 28, 2006, the Region 49 700 MHz Regional Planning Committee met and discussed the issue of broadband and wide band needs in the 700 MHz public safety band.

We determined that the need for differing amounts of wide band and broadband spectrum varies just between the different counties in our 30-county region.

We strongly believe that a "one size fits all" distribution of wide band and broadband spectrum will result in the inefficient use of the spectrum in many regions.

Therefore, we agree with the comments of NPSTC and many others that selection of the appropriate mix of wide band and broadband spectrum should be made by the individual regional planning committees.

We also believe that rearranging the placement of the narrow band voice channels, after years of RPC planning has occurred, would be seriously counterproductive and costly."

- Item 7: Review and discussion of the draft Region 49 700 MHz plan (dated 08-14-06): (Full text with addenda may be found on the CAPRAD web site and on the R49 web site at <a href="https://www.region49.org">www.region49.org</a>.
  - Ron describes Regional Plan Template (available at <a href="http://www.npstc.org/documents/IM00017K-20010322-IM005-K.pdf">http://www.npstc.org/documents/IM00017K-20010322-IM005-K.pdf</a>), which details 14 areas that a successful plan must address.
  - Section 2.1: First inclusion of "Description of Region." Update "area" to say "square miles." Some county descriptions need changing Freestone, Lee, Washington.
  - Page 5, paragraph 5: Too particular to Austin. Change "Austin" to "metro areas."
  - Page 6: Verify that RPC meetings have been advertised on APCO web site.
  - **Section 2.5**: Leave State of Texas out of intra-regional dispute resolution, change to read "5 members from jurisdictions within Region 49," which could include State if needed.
  - Section 3.6, Procedure for Requesting Channel Assignments:"
    Discussion of filing window. All jurisdictions need same opportunity but should "first come, first served" be the guiding policy? Section stands as-

is. If scoring is needed, the 5-member committee defined in 2.5 will do the scoring.

**Section 4.0**, Priority Matrix: Third category of scoring added – 25 points for spectrum efficiency with channel loading. "Procedures outlined in Section 2.4" not a valid reference. Needs to be fixed. Matrix seems weighted to larger systems so rules need to be clarified. Add 10 points for first application submitted, marked with CAPRAD date stamp or certified mail postmark.

- Channel loading not addressed by FCC in its rules for 700 MHz; should we include loading criterion in R-49 rules? Minimum 75 per channel? Also need to support applications for system expansion (voice, not data). Decision is 50 units per 12.5 KHz channel (half the 800 MHz requirement of 100 units per 25 KHz channel). Will require 50-75 units to qualify for first channel, then 50 more for each subsequent. Conventional channel assignments will be dealt with case by case.
- **Trunked criteria:** If entity requests more than five 700 MHz channels, system must be trunked.
- Section 8, Interoperability: Bob Pletcher recommends adding words "Project 25 Common Air Interface" to define interoperability standard. Ron notes that FCC rules require P-25 CAI "compliance." Also, is mutual aid "required" or "a necessity?"

Item 8: Old business: None.

Item 9: New business: None.

Item 10: Receive public comment: None.

Item 11: Adjourn: Motion made by Pat Worsham, seconded by Larry Blare. Meeting adjourned at 1:00 p.m.

# Region 49 700 MHz Regional Planning Committee Minutes of the October 19, 2006, meeting

City of Austin Learning and Research Center 2800 Spirit of Texas Drive, Austin, Texas

Chairman Ron Mayworm called the meeting to order at 9:35 a.m. The following members and guests were present:

Bill Blowers, Bell County	
Pat Worsham, Alexander Util. Eng	•):
David Clawson, City of Taylor	
Rita Mooney, DPS	
Larry Blare, City of Waco	
Kenneth Yoder, Texas APCO	
Clay Cassard, Motorola	
John Wynn, Austin Community Co	llege
Rosanna Wisener, San Marcos PD	
Mark Minnick, San Marcos PD	

Gilbert Paez, City of Austin	
Elizabeth Lindemann, City of Austin	
Larry Swim, Fayette County	
Cristy Knapp, Llano County EMS	
Greg Knapp, Llano County EMS	
Ron Martin, Motorola	
James Benton, APCO/DPS	
Peter Scheets, City of Bryan PD	
Chuck Brotherton, Travis County	
Ron Mayworm, Chair, City of Bryan	

- Item 1: Introductions, quorum determination, review and approve agenda.
- Item 2: Review and approve minutes of the June 28, 2006, meeting and August 17, 2006, meeting:
  - Approve 6/28/06 minutes: Motion by Greg Knapp, second by Rita Mooney, unanimous approval.
  - Approve 8/17/06 minutes: Motion by Mark Minnick, second by Rita Mooney, unanimouse approval.
- Item 3: Treasurer's Report: Treasurer reported a balance of \$256.82, pending reimbursing Chairman Ron Mayworm for \$98.86 in out-of-pocket expenses related to preparing materials for this meeting. Ron noted that future reimbursement money will have to be applied for based on a report of estimated needs. Bob Pletcher made motion to accept the Treasurer's report, seconded by Maureen Ganner, approved unanimously. Bob Pletcher made motion to reimburse Ron's expenses, seconded by Larry Blare, approved unanimously.
- Item 4: Outreach Activities: Discussion on requirement to broaden participation in reviewing and gathering support for the 700 MHz regional plan. Bob Pletcher volunteers DPS video conferencing services to allow remote participation at future meetings. Will require advance scheduling. The December meeting in Bell County is identified as a possible target for making this available.
- Item 5: Update on Region 49 web site and list server: Discussion of plan to move hosting service for the R49 web page from the present commercial

host to City of Austin, as offered by Mike Simpson of City of Austin Wireless Communication Services Division. Further research is needed.

Item 6: Short reply comments filed with the FCC regarding use of broadband technologies in the 700 MHz band: Ron filed comments on 7/06/06, as follows:

"On June 28, 2006, the Region 49 700 MHz Regional Planning Committee met and discussed the issue of broadband and wide band needs in the 700 MHz public safety band.

We determined that the need for differing amounts of wide band and broadband spectrum varies just between the different counties in our 30-county region.

We strongly believe that a "one size fits all" distribution of wide band and broadband spectrum will result in the inefficient use of the spectrum in many regions.

Therefore, we agree with the comments of NPSTC and many others that selection of the appropriate mix of wide band and broadband spectrum should be made by the individual regional planning committees.

We also believe that rearranging the placement of the narrow band voice channels, after years of RPC planning has occurred, would be seriously counterproductive and costly."

- Item 7: Review and discussion of the draft Region 49 700 MHz plan (dated 08-14-06): (Full text with addenda may be found on the CAPRAD web site and on the R49 web site at www.region49.org.
  - Ron describes Regional Plan Template (available at <a href="http://www.npstc.org/documents/IM00017K-20010322-IM005-K.pdf">http://www.npstc.org/documents/IM00017K-20010322-IM005-K.pdf</a>), which details 14 areas that a successful plan must address.
  - **Section 2.1**: First inclusion of "Description of Region." Update "area" to say "square miles." Some county descriptions need changing Freestone, Lee, Washington.
  - Page 5, paragraph 5: Too particular to Austin. Change "Austin" to "metro areas."
  - Page 6: Verify that RPC meetings have been advertised on APCO web site
  - Section 2.5: Leave State of Texas out of intra-regional dispute resolution, change to read "5 members from jurisdictions within Region 49," which could include State if needed.

- Section 3.6, Procedure for Requesting Channel Assignments:"
Discussion of filing window. All jurisdictions need same opportunity but should "first come, first served" be the guiding policy? Section stands asis. If scoring is needed, the 5-member committee defined in 2.5 will do the scoring.

**Section 4.0**, Priority Matrix: Third category of scoring added – 25 points for spectrum efficiency with channel loading. "Procedures outlined in Section 2.4" not a valid reference. Needs to be fixed. Matrix seems weighted to larger systems so rules need to be clarified. Add 10 points for first application submitted, marked with CAPRAD date stamp or certified mail postmark.

- Channel loading not addressed by FCC in its rules for 700 MHz; should we include loading criterion in R-49 rules? Minimum 75 per channel? Also need to support applications for system expansion (voice, not data). Decision is 50 units per 12.5 KHz channel (half the 800 MHz requirement of 100 units per 25 KHz channel). Will require 50-75 units to qualify for first channel, then 50 more for each subsequent. Conventional channel assignments will be dealt with case by case.
- Trunked criteria: If entity requests more than five 700 MHz channels, system must be trunked.
- Section 8, Interoperability: Bob Pletcher recommends adding words "Project 25 Common Air Interface" to define interoperability standard. Ron notes that FCC rules require P-25 CAI "compliance." Also, is mutual aid "required" or "a necessity?"

Item 8: Old business: None.

Item 9: New business: None.

Item 10: Receive public comment: None.

**Item 11:** Adjourn: Motion made by Pat Worsham, seconded by Larry Blare. Meeting adjourned at 1:00 p.m.

### Region 49 700 MHz Regional Planning Committee Minutes of the January 18, 2007, meeting

Bell County Communications Center 708 West Avenue "O," Belton, Texas

Chairman Ron Mayworm called the meeting to order at 9:40 a.m. The following members and guests were present:

Richard Gruetzner, Travis County SO
Jim McLean, Pflugerville PD
Ted Young, Marble Falls PD
Clay Cassard, Motorola
Larry Blare, City of Waco
Pat Worsham, Alexander Utility Engrg.,
Inc.
Rusty Smith, Robinson PD
Alain Babin, Round Rock PD

Zeta Fail, College Station PD
Ben Roper, College Station, TX
Bill Blowers, Bell County
Wayne Cannaday, McLennan County
Wil Geltmeier, Hill County ESD 1
Terry Wright, Kyle FD, Hays County
Chuck Brotherton, Travis County
Ron Mayworm, Chair, City of Bryan

- Item 1: Introductions, quorum determination, review and approve agenda.
- Item 2: Review and approve minutes of the October 19, 2006, meeting:
   No motion to approve. Minutes stand.
- **Treasurer's Report:** Treasurer reported a balance of \$25.68, pending reimbursing Chairman Ron Mayworm for \$89.20 in out-of-pocket expenses related to preparing materials for this meeting. Ron stated that we have received approval from NPSTC to be reimbursed up to \$300 in mailing expenses and \$88 in copying expenses for our meetings. An additional grant of \$2500 for meeting expenses will be tapped when we print and mail copies of the final draft of the 700 MHz Regional Plan to everyone on the Region 49 mailing list approximately 400 pieces.

Larry Blare made motion to accept the Treasurer's report, seconded by Jim McLean, approved unanimously. Bill Blowers made motion to reimburse Ron's expenses, seconded by Larry Blare, approved unanimously.

- **Item 4:** Outreach Activities: Discussion on requirement to broaden participation in reviewing and gathering support for the 700 MHz regional plan.
- **Item 5:** Update on Region 49 web site and list server: Chuck Brotherton gave a brief update of items recently added to the web site.
- Item 6: Presentation, discussion, and possible action regarding the FCC's 9th Notice of Proposed Rule Making. This notice proposes establishing a single, national public safety broadband licensee to

oversee build-out of a national public safety broadband network utilizing 12 MHz of the 700 MHz public safety spectrum.

The notice can be reviewed in its entirety at <a href="http://hraunfoss.fcc.gov/edocs">http://hraunfoss.fcc.gov/edocs</a> public/attachmatch/FCC-06-181A1.pdf

The Chairman requested a motion to file comments from Region 49 with the FCC regarding this notice. No motion was made. The Chairman therefore urged all in attendance to review the notice and file their comments individually.

- Item 7: Review and discussion of the draft Region 49 700 MHz plan (dated 01-10-07): (Full text with addenda may be found on the CAPRAD web site and on the R49 web site at <a href="https://www.region49.org">www.region49.org</a>.
  - Section 3.6, page 18: Regarding the filing window, it was agreed that there should be 14 total filing windows, in successive 6-month periods, for a total filing period of 7 (seven) years.
  - **Section 7.4, page 25:** Change "dispute resolution" to "appeals" process, where this section refers to Section 2.4.
  - Section 8.2, page 27: Discussion of naming interoperability channels. Ron mentions that naming conventions will be discussed at the upcoming NPTSC meeting on Feb. 5, 2007. (Ron chairs the NPSTC subcommittee in charge of "common nomenclature.") Therefore, section 8.2 will be rewritten to follow the NPSTC guidelines, once they're set.

Item 8: Old business: None.

Item 9: New business: None.

**Item 10:** Receive public comment: None.

**Item 11:** Adjourn: Meeting adjourned by general consent at 12:05 p.m.

# Region 49 700 MHz Regional Planning Committee Minutes of the January 24, 2008, conference call

Meeting called to discuss the FCC allotment survey mailed to the RPC's on January 7, 2008, with a response due by January 31, 2008. Notice was sent by email to all who had attended a 700 MHz planning meeting in the past 3 years.

Chairman Ron Mayworm called the meeting to order at 10:04 a.m. The following members and guests were present via telephone conference bridge:

Ron Mayworm, Chair, City of Bryan	
Chuck Brotherton, Travis County	
Bill Blowers, Bell County	
James Benton, Texas DPS	
Larry Blare, City of Waco	
Elizabeth Lindemann, City of Austin	
Arletha Guerrero, City of Austin	

- Item 1: Introductions, review agenda.
- Review and discussion of the FCC allotment survey: Due to the tight deadline for responding to the survey (fewer than 30 days between receipt and required response), there was no time to call a formal meeting of the committee, therefore this phone conference was the best available means for getting the committee together.

Chairman Mayworm reviewed the survey. Syracuse Research Corporation, under contract to repack the CAPRAD database frequency allotments nationwide, has asked each region to decide how its allotment of 700 MHz frequencies should be repacked. Options are to go with the "default" sort, which would allot 700 MHz channels in 4-channel, 25 KHz blocks with 250 KHz combiner separation, or to repack the allotment in 12.5 KHz ("narrowband") blocks at the same or tighter spacing. Regions also have the option of varying their allotments by each "county-like entity" within the region depending upon need.

Chairman Mayworm stated that narrower channel packing would deliver more usable frequencies and provide for greater spectrum efficiency. He also noted that Cellwave is now delivering combiners capable of 150 KHz separation.

It was noted that the default, 25 KHz packing would tend to create more unusable "orphan" channels in regions with P25 systems optimized for narrowband frequencies. For example, at 25 KHz, Austin-Travis County would receive 22 channels it would then have to break out into narrowband frequencies for its P25 system. Some would not be usable. A

12.5 KHz sort, on the other hand, would provide 44 distinct channels that could be coordinated for maximum efficiency.

It was also noted that, under the new Statewide Communications Interoperability Plan, all grant funds allocated for interoperable communications are to be spent on P25 infrastructure and subscriber units. Therefore, to maximize spectrum efficiency and provide the greatest number of usable channels, it might make sense for most regions to opt for the 12.5 KHz packing.

Bill Blowers noted that Bell County is considering a M/ACom "Open Sky" system, which requires 25 KHz channels, so he would prefer the default channel plan.

It was then determined that, by chance, each of the four Councils of Governments in Region 49 were represented on the conference call. Chuck Brotherton stated that he felt comfortable speaking for the CAPCOG region in requesting a 12.5 KHz allotment at 150 KHz separation; Larry Blare requested the same for HOTCOG; Ron Mayworm did likewise for BVCOG. Bill Blowers elected to go with 25 KHz / 250 KHz for CTCOG.

Chairman Mayworm stated that he would complete the survey to reflect these choices and return it before the January 31st deadline.

**Item 4:** Other Business: There was brief discussion of 800 MHz rebanding and recent efforts by the Transition Administrator to schedule a regional planning meeting prior to the date established for Wave 2 submissions of waiver requests, which is March 17, 2008.

Larry Blare recommended that everyone review the latest changes (1/22/08 revision) to the Statewide Interoperability Channel Plan, available at the TSIEC web site at <a href="http://tsiec.region49.org/MOU+TSICP01-22-08.pdf">http://tsiec.region49.org/MOU+TSICP01-22-08.pdf</a>.

Chairman Mayworm stated that the CAPRAD resort will be available in February or March, and that a revised Region 49 700 MHz plan will be available for review shortly thereafter. A formal meeting of the Region 49 700 MHz Planning Committee will then be called to review and approve the regional plan.

**Item 4:** Adjourn: Meeting adjourned at 10:35 a.m.

**NOTE:** This meeting utilized a telephone conference bridge, toll-free dial-in number (877) 807-5706, ID number 173380.

Attachments: "Conf\_Call\_Announcement\_email\_1-18-08.pdf" "RCC Analysis CAPRAD Resort 1-11-2008.pdf"

"RPC49\_AllotmentSurveyRESPONSE\_01-28-08.pdf"

From: Charles Brotherton

To: Charles Brotherton; Region 49 700 MHz RPC

**Date:** 1/24/2008

Time: 10:00 AM - 11:00 AM

Subject: URGENT: Region 49 700 MHZ RPC Phone Conference
Place: Phone Bridge: (877) 807-5706, Conference ID 173380
Attachments: RPC49\_AllotmentSurvey.doc; CAPRAD Resort 1-11-2008.doc

The FCC has requested an immediate response from each planning region to the survey attached here, "RPC49 Allotment Survey." The response deadline is January 31st. A meeting of the Region 49 700 MHZ planning committee therefore is set for this coming Thursday, January 24th, from 10 a.m. to 11 a.m. CST (1 hour).

This meeting will be by telephone conference only. To join the conference, dial (877) 807-5706 and enter conference ID number 173380.

Prior to this telephone conference, please review the attached documents. During the meeting, we will discuss regional needs related to the 700 MHZ CAPRAD re-sort. Our goal for this meeting is to reach consensus for the region's response to the FCC survey. We have to consider whether to go with the "default" new CAPRAD sort, which will allot 700 MHZ frequencies in 4-channel, 25 KHz blocks with 250 KHz combiner separation, or to recommend 12.5 KHz allotments at the same, or tighter, spacing.

Two documents are attached: "RPC49\_AllotmentSurvey.doc" and "CAPRAD Resort 1-11-08.doc." Please review these documents and contact me or Region 49 Chairman Ron Mayworm (<a href="mayworm@bryantx.gov">mayworm@bryantx.gov</a>) with any questions you have prior to the telephone conference.

Thank you. Chuck

#### **Chuck Brotherton**

Emergency & Wireless Communications Manager Travis County Emergency Services

Contact info:
desk (512) 854-4895
cell (512) 636-6825
pager (512) 935-0007
fax (512) 854-4786
Charles.Brotherton@co.travis.tx.us

Mailing address: PO Box 1748 Austin, TX 78767 Street address: 5501 Airport Blvd., Ste. 203 Austin, TX 78751-1410 In July of 2007, the FCC ordered a new 700 MHz band plan for public safety that established revised channel frequencies. Before this change, the 700 MHz public safety frequencies had been separated into 3 MHz blocks. The new FCC-ordered 700 MHz band plan combined frequencies into contiguous channel blocks.

When the FCC established the original 700 MHz band plan for public safety, a database tool, the Computer Assisted Pre-Coordination Resource and Database System, also known as CAPRAD, performed an initial nationwide assignment of channels. The role of the Regional Planning Committees was very limited in the initial CAPRAD channel assignments.

A new CAPRAD sortation of 700 MHz "General" channels is about to be performed. Each Regional Planning Committee (RPC) Chairperson has been sent a listing of geographical areas within their RPC. Based upon the individual geographical areas within each RPC, the Chairs may assign certain channel sortation criterion as depicted in an example below in Figure 1.

County Name	Channel Block Size	Combiner Separation	Capacity Option
District of Columbia, DC	25 kHz	250 kHz ±	Minimum allotment
Allegany County, MD	12.5 kHz	0 kHz	Population model
Anne Arundel County, MD	25 kHz	25 kHz	Population model
Baltimore County, MD	12.5 kHz	50 kHz	Population model
Baltimore City, MD	25 kHz	75 kHz	Population model
Calvert County, MD	12.5 kHz	100 kHz	Population model
Caroline County, MD	25 kHz	125 kHz 150 kHz	Population model
Carroll County, MD	25 kHz	150 kHz	Population model
Cecil County, MD	25 kHz	200 kHz	Population model
Charles County, MD	25 kHz	225 kHz	Population model
Dorchester County, MD	25 kHz	250 kHz	Population model
Frederick County, MD	25 kHz	250 kHz	Population model

FIGURE 1 – EXAMPLE OF SORTATION CRITERION

#### It is very important to note that there is a short turn-around period for this sortation data.

RPC Chairpersons must specify the sortation criterion for each geographical area and return the data to the CAPRAD managers by January 31, 2008. If the sortation criterion is not modified by the deadline, the new 700 MHz channel sortation for the geographical areas will be based upon the original default values used for the first sort; channel block sizes of 25 KHz with contiguous assignments separated by at least 250 KHz. The population model will also be used.

If you wish that the 700 MHz sortation criterion be changed from the default values, please return this email as quickly as possible and before January 29, 2008 to the RPC Chairperson specifying the desired "Channel Block Size", "Combiner Separation", and "Capacity Option" for your geographical area. If you require additional information to assist in the understanding of the CAPRAD sortation criterion, please see the following pages.

-

<sup>&</sup>lt;sup>1</sup> See 47 CFR §90.531(b)(6)

#### **Background**

As indicated on the preceding page, the FCC ordered a new 700 MHz band plan for public safety as part of the Second Report and Order<sup>2</sup>. The old and new band plans are depicted below in Figures 2 and 3.

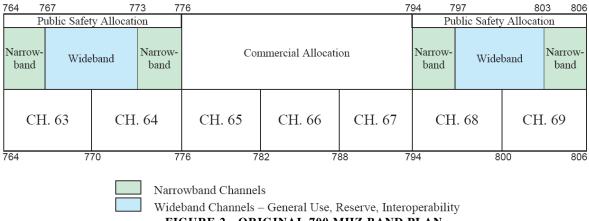


FIGURE 2 - ORIGINAL 700 MHZ BAND PLAN

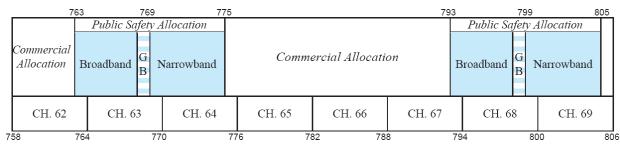


FIGURE 3 - REVISED 700 MHZ BAND PLAN

CAPRAD originally used a number of factors to assign the maximum number of General<sup>3</sup> channels to geographical areas while simultaneously providing co-channel and adjacent channel interference protection. The criterion used in the original CAPRAD sort of 700 MHz was based upon assignments in four (4) consecutive blocks of 6.25 KHz channels with the blocks separated by at least 250 KHz. Based upon these engineering factors as well as the population of the geographical area, generally defined as a county, CAPRAD attempted to assign the maximum number of channels available. This criterion was adopted as a strategy to be "technology neutral".

From a background perspective, the FCC established the 700 MHz frequency band with an acute sense of spectrum management. As such, the Commission's vision seems to favor digital multiuser trunked radio systems that promote interoperability and efficient spectrum management. From the perspective of the U.S. Department of Homeland Security (DHS), adoption of the P-25

<sup>&</sup>lt;sup>2</sup> See FCC 07-132 Released July 31, 2007 and published August 10, 2007

<sup>&</sup>lt;sup>3</sup> CAPRAD's General Pool channel assignments do not relate to State channels as defined in 47 CFR §90.531(b)(5)

standard is encouraged to promote the rudimentary interoperability of public safety products produced by different equipment manufacturers.

#### **Deciding Sortation Criterion**

In deciding the CAPRAD 700 MHz sortation criterion for the geographical area, the initial factor to be considered relates to fundamental questions.

#### Is this a planning exercise for a future system?

Does the jurisdiction have a technology defined as part of a Plan or specified by a RFP or actual vendor contract?

If the latter and the user has a contract with an equipment vendor, the user's consultant and/or vendor should be consulted to assist in the identification of the geographic sortation criterion. Conversely, if the channels may be used in the future for an undefined technology, the factors discussed below may be of value to the user.

Regardless of application or channel block size, it is critical that the geographical area understand the 700 MHz spectrum efficiency requirements of the FCC found in 47 CFR § 90.535. Those requirements are provided on the following pages.

#### <u>Channel Block Size – 12.5 KHz (two 6.25 KHz channel pairs)</u>

The DHS encourages the use of the P-25 standard. P-25 systems require 12.5 KHz frequencies. In P-25 Phase I, the 12.5 KHz frequency utilizes Frequency Division Multiple Access (FDMA) to achieve one (1) talkpath. In Phase II, the 12.5 KHz frequency will use Time Division Multiple Access (TDMA) and support two (2) talk paths.

Today, all of the major manufacturers of land mobile radio equipment support the P-25 standard. Motorola's current P-25 system is called ASTRO25® while M/A-COM offers its P-25 product under the name of P25<sup>IP®</sup>. Other equipment manufacturers sell mobile and portable radios that support the P-25 standard.

From the perspective of a RPC, 12.5 KHz frequencies (two channels) potentially result in a greater number of assignments without the need to manage "orphaned" channels.

#### Channel Block Size – 25 KHz (four 6.25 KHz channel pairs)

If the user has not made a technology decision for the future, some would recommend that 25 KHz channel blocks should be maintained for a geographical region as the default value to provide the greatest level of flexibility in the future. Through the assignment of 25 KHz blocks, P-25 systems can still be supported; however, the RPC has to deal with the issue of the remaining two unused channels also known as "orphaned" channels. The "orphaned" channels can be potentially reused in the RPC provided that adjacent channel interference does not result. Depending upon the location of the reassignment, it may be necessary to formally amend the

RPC Plan for 700 MHz and coordinate the plan's channel assignment revisions with the adjoining RPC's before re-filing the Plan with the FCC.

In addition to P-25, a 25 KHz channel block would permit the use of a wideband land mobile radio system that supports the goal of spectrum efficiency mandated by the FCC. An example of such a system is M/A-COM's OpenSky® technology that uses TDMA and permits four simultaneous talkpaths on a 25 KHz operating frequency.

From the perspective of data, a 25 KHz channel block also permits a rudimentary amount of bandwidth for data. To meet the efficiency requirements of the FCC, the channel must provide a minimum of 19.2 kbps. This may be helpful in situations where broadband capability is nonexistent or cost prohibitive.

25 KHz channel blocks are the default setting for Channel Block Size.

#### **Combiner Separation**

Through the selection of combiner separation requirements, a user may impact the number of channels assigned to a geographic area by CAPRAD. Again, if a user has a system under contract with a manufacturer, the user should consult with the vendor representative or project consultant for advice.

In a "simulcast" system, most vendors will request 250 KHz of separation as a strategy to minimize the cost of a combiner. In reality, some combiners can support more densely packed channels; however, the signal losses may be somewhat higher as well as the cost of the product. In a large system, multiple combiners may be used and through careful planning, smaller separation requirements may be possible even with the use of "standard" 250 KHz combiners.

Channel spacing of 250 kHz allows the use of a single combiner when all of the channels in a geographic area are licensed and used at the same site. When the channels are used by different licensees, this wide spacing doesn't provide any advantage. Even if all channels are used at the same site, reducing the spacing to 125 kHz may require two combiners, which is common in large systems anyway to provide antenna redundancy.

In a multicast system, the separation between channels may not be as critical. With tighter combiner spacing, the geographical area should receive a greater number of channel blocks.

250 KHz of combiner separation is the default value.

#### **Capacity Option**

Geographical areas may also receive channel blocks based upon the "Capacity Option" selected. The population model provides the greatest number of channel blocks while the "Minimum Allotment" method does not.

The default setting is Population Model.

#### 47 CFR § 90.535 Modulation and spectrum usage efficiency requirements

Transmitters designed to operate in 769–775 MHz and 799–805 MHz frequency bands must meet the following modulation standards:

- (a) All transmitters in the 769-775 MHz and 799-805 MHz frequency bands must use digital modulation. Mobile and portable transmitters may have analog modulation capability only as a secondary mode in addition to its primary digital mode. Mobile and portable transmitters that only operate on the low power channels designated in §§ 90.531(b)(3), 90.531(b)(4), are exempt from this digital modulation requirement.
- (b) Transmitters designed to operate in the narrowband segment using digital modulation must be capable of maintaining a minimum data (nonvoice) rate of 4.8 kbps per 6.25 kHz of bandwidth.
- (c) Transmitters designed to operate in the wideband segment using digital modulation must be capable of maintaining a minimum data (non-voice) rate of 384 kbps per 150 kHz of bandwidth.
- (d) The following provisions apply to licensees operating in the channels designated in §§ 90.531(b)(5) or 90.531(b)(6).
- (1) With the exception of licensees designated in paragraph (d)(2) of this section, after December 31, 2014, licensees may only operate in voice mode in these channels at a voice efficiency of at least one voice path per 6.25 kHz of spectrum bandwidth.
- (2) Licensees authorized to operate systems in the voice mode on these channels from applications filed on or before December 31, 2014, may continue operating in voice mode on these channels (including modification applications of such licenses granted after December 31, 2014, for expansion or maintenance of such systems) at a voice efficiency of at least one voice path per 12.5 kHz of spectrum bandwidth until December 31, 2016.
- (3) The licensees designated in paragraph (d)(2) of this section must, no later than January 31, 2017, file a declaration through the Universal Licensing System that they are operating these channels at a voice efficiency of at least one voice path per 6.25 kHz of spectrum bandwidth.

Region 49 Regional Planning Committee Ronald G. Mayworm City of Bryan, Texas P.O. Box 1585, Bryan, TX 77805-1585 January 7, 2007

#### Mr./Ms. Chairman,

In 2001, National Pool allotments were generated for the 700 MHz public safety general use spectrum allocation provided by the Federal Communications Commission (FCC) as a result of Docket 96-86. The documentation structure, as well as all techniques utilized for estimation of capacity needs, coverage and interference modeling, and other technical factors were presented, vetted, and agreed to by the national public safety community through the National Coordination Committee (NCC) and APCO National Plan Committees. The allotments were placed into the Computer Assisted Pre-Coordination Resource and Database System (CAPRAD) by early 2003, where they have served as the basis for nearly all of the 700 MHz Regional Plans in the United States, both submitted and under development.

In their SECOND REPORT AND ORDER (Adopted: July 31, 2007, Released: August 10, 2007), the FCC reconfigured the 700 MHz band, placing previously block-interleaved narrowband and broadband allocations into contiguous blocks in order to facilitate development and deployment of a National Broadband public safety network topology. The new band configuration mandated by this order adversely impacted the narrowband voice allotments in CAPRAD, causing constraint violations to 643 counties (about 20% of the counties within the US).

At a National Regional Planning Committee meeting in Texas in September 2007, it was decided that the best mitigation approach would be to repack the entire set of pool allotments and reset them within CAPRAD, rather than attempt to fix violations at the local level. Repacking the allotments would allow the RPCs to deal immediately with the newly configured band, as they did when the initial allotment pool was loaded into CAPRAD in 2003. In addition, the RPCs decided that a much more effective set of pool allotments could be developed by utilizing additional information not available at the time of the initial allotment generation. Syracuse Research Corporation has been contracted by the Sheriff's Association of Texas to accomplish the repacking effort.

The attached form is provided for collection of individual RPC and county information pertaining to local requirements and intended spectrum utilization. Each row identifies a county-like entity to receive pool allotments and provides channel-width and minimum antenna system combiner-separation options, with default values of 25-kHz and 250-kHz respectively. Each cell in the form is a drop-down list when this document is opened in Microsoft Word. Options may be selected by choosing from the drop-down lists and then

saving changes to the document. If system technology and spectrum use requirements are known and stable, specifying channel-width and minimum combiner-separation lower than the default values would contribute to spectral efficiency (avoiding wasted or unusable "orphan" channels) and allow tighter frequency packing within your Region, which may provide the opportunity for higher capacity pool allotments. If technology and spectrum use requirements are unknown or likely to change, the default values are recommended.

In addition, each county-like entity may specify that pool allotments reflect either the population-modeled capacity or the minimum capacity. The minimum capacity option generates a pool no larger than the nation-wide county minimum, and is given to accommodate counties or regions that either plan to independently pack their own pool allotments, or do not currently intend to implement 700 MHz narrowband technology.

All Regions are invited to participate in a WebEx Conference Call to be held on Monday, January 14 at 3:00 PM EST. During this call, moderators representing Syracuse Research Corporation, the National Regional Planning Executive Committee, and Texas Sheriffs' Association will be on hand to present information regarding the CAPRAD re-packing process and RPC input form, and to answer questions from the RPC's. It is anticipated that weekly conference calls will be held following this initial meeting to assist the RPC's with further questions. Dial-in information for the January 14 call will be forthcoming.

Please determine channel-width, combiner separation, and allotment capacity requirements for each county-like entity in your RPC, and return the attached form form and letter (with your choices selected and saved as described above) to Ms. Karla Jurrens at karla@txsheriffs.org by 5:00 PM EST on January 31, 2008.

In the case that the attached form is not received by 5:00 PM EST on January 31, 2008, all county-like entity requirements for your RPC will assume default values of 25-kHz channel-width, 250-kHz combiner-separation, and population-modeled capacity, as used in the original pool allotments.

Sincerely,
Margaret Daly, Systems Engineer and Program Manager
Syracuse Research Corporation
mdaly@syrres.com
c/o National Regional Planning Committee

<b>County Name</b>	Channel Block Size	Combiner Separation	Capacity Option
Bastrop County, TX	12.5 kHz	150 kHz	Population model
Bell County, TX	25 kHz	250 kHz	Population model
Blanco County, TX	12.5 kHz	150 kHz	Population model
Bosque County, TX	12.5 kHz	150 kHz	Population model
Brazos County, TX	12.5 kHz	150 kHz	Population model
Burleson County, TX	12.5 kHz	150 kHz	Population model
Burnet County, TX	12.5 kHz	150 kHz	Population model
Caldwell County, TX	12.5 kHz	150 kHz	Population model
Coryell County, TX	25 kHz	250 kHz	Population model
Falls County, TX	12.5 kHz	150 kHz	Population model
Fayette County, TX	12.5 kHz	150 kHz	Population model
Freestone County, TX	12.5 kHz	150 kHz	Population model
Grimes County, TX	12.5 kHz	150 kHz	Population model
Hamilton County, TX	25 kHz	250 kHz	Population model
Hays County, TX	12.5 kHz	150 kHz	Population model
Hill County, TX	12.5 kHz	150 kHz	Population model
Lampasas County, TX	25 kHz	250 kHz	Population model
Lee County, TX	12.5 kHz	150 kHz	Population model
Leon County, TX	12.5 kHz	150 kHz	Population model
Limestone County, TX	12.5 kHz	150 kHz	Population model
Llano County, TX	12.5 kHz	150 kHz	Population model
Madison County, TX	12.5 kHz	150 kHz	Population model
McLennan County, TX	12.5 kHz	150 kHz	Population model
Milam County, TX	25 kHz	250 kHz	Population model
Mills County, TX	25 kHz	250 kHz	Population model
Robertson County, TX	12.5 kHz	150 kHz	Population model
San Saba County, TX	25 kHz	250 kHz	Population model
Travis County, TX	12.5 kHz	150 kHz	Population model
Washington County, TX	12.5 kHz	150 kHz	Population model
Williamson County, TX	12.5 kHz	150 kHz	Population model

# Region 49 700 MHz Regional Planning Committee Minutes of the April 9, 2010, meeting

City of Austin Learning and Research Center 2800 Spirit of Texas Drive, Austin, Texas

Chairman Ron Mayworm called the meeting to order at 9:37 a.m. The following members and guests were present:

Rickey Lattie, Texas State Univ.
John Guerra, Texas State Univ.
Ken Yoder, Texas APCO
Bill Blowers, Bell County
Dalton Cross, Bell County
Glenn Shoemaker, Bell County
Brad Bearden, Texas DPS
Bette Rinehart, Motorola
David Childress, City of San Marcos
Saul Silva, LCRA
Delynn Peschke, Lee County EMC
Clay Cassard, Motorola
Chuck Brotherton, City of Austin
Aaron Slaughter, City of Lockhart
Lester Bashaw, Brazos Valley COG

Ron Mayworm, Brazos Valley COG
Larry Blare, City of Waco
Arletha Guerrero, City of Austin
Pat Worsham, Alexander Utility Eng.
Jim Parker, Caldwell County EMC
Tom Bonn, Caldwell County
Karla Jurrens, Texas DPS
Paul Gilbert, Texas DOT
Elizabeth Lindemann, City of Austin
Jason Ervin, LCRA
Robert Stluka, Harris Corp.
Perry Moose, Bell County S.O.
Robert Campbell, Texas State Univ.
Archie Hollingsworth, Burnet Co. S.O.
Peter Hicks, Bastrop County

- Item 1: Introductions, quorum determination, review and approve agenda.
- Item 2: Review and approve minutes of the January 18, 2007 meeting, and the January 24, 2008 Conference Call:
  - Approve 1/18/07 minutes: Motion by Ken Yoder, second by Jim Parker, unanimous approval.
  - Approve 1/24/08 minutes: Motion by Larry Blare, second by Rob Campbell, unanimous approval.
- Item 3: Treasurer's Report: No funds are available
- Item 4: Outreach Activities: Update on NRPC meeting held in Tampa, FL in March. CAPRAD database enhancements were discussed; the need to work across regional boundaries, and to improve user interface.
- Item 5: Region 49 700 MHz Plan Approval: Ron Mayworm provided a brief history of the development of the Region 49 700 MHz plan. A show of hands vote was held to only review the proposed changes to the draft plan presented previously, versus a section-by-section review.

#### Changes Discussed:

Section 2.3- Operations of the Regional Planning Committee: The need to align the meeting schedule with application filing windows, for a total of

14 meetings. The plan will call for one meeting every 6 months, over a 7 year period. The meeting schedule can be extended if necessary.

Section 2.4- Dispute Resolution: The process for dispute resolution was streamlined, and a diagram to be attached to the plan was developed. Motion to accept by: Rob Campbell, second by many, unanimous approval

Section 2.6- Future Planning: Change the title of this section to "Plan Amendments". Approved by consensus.

Section 3.6- Procedure for Requesting Channel Assignments: Align the number of meetings scheduled to coincide with Section 2.3.

Accept Changes and Approve the Region 49 700 MHz Plan: Motion by Tom Bonn, second by Peter Hicks; unanimous approval.

- Item 6: Old business: Larry Blare, City of Waco announced that an application for NPSPAC channels has been submitted to the FCC.
- Item 7: New business: Region 49 accepted the resignation of Secretary Chuck Brotherton. He was commended for his service, and efforts to complete the Region 49 planning process. A recommendation was made to nominate Karla Jurrens from the Texas Department of Public Safety to fill the position of Secretary. Motion by Rob Campbell, second by Aaron Slaughter; unanimous approval.
- Item 8: Receive public comment: None.
- **Item 9:** Adjourn: Following a motion and second, the meeting adjourned at 12:10 p.m.

Title	FirstName	LastName	County	Agency	BusinessStreet	BusinessCity	State	Zip
	ESD	President	Bastrop	Bastrop County ESD #1	PO Box 357	Red Rock	TX	78662
Sheriff	Richard	Hernandez	Bastrop	Bastrop County Sheriff's Office	200 Jackson St	Bastrop	TX	78602
	Fire	Chief	Bastrop	Bastrop Fire Dept	PO Box 1365	Bastrop	TX	78602
Chief	David	Board	Bastrop	Bastrop Police Dept	PO Box 427	Bastrop	TX	78602
	Fire	Chief	Bastrop	Bluebonnet Volunteer Fire Dept	313 Still Forest	Cedar Creek	TX	78612
	Fire	Chief	Bastrop	Circle D Volunteer Fire Dept	PO Box 271	Bastrop	TX	78602
	Fire	Chief	Bastrop	Elgin Fire Dept	111 N Avenue C	Elgin	TX	78621
	Mike	Fisher	Bastrop	Emergency Management Coordinator	804 Pecan St	Bastrop	TX	78602
	Police	Chief	Bastrop	Smithville Police Dept	105 West 4th St	Smithville	TX	78957
	Fire	Chief	Bastrop	Smithville Volunteer Fire Dept	PO Box 328	Smithville	TX	78957
Chief	Jerry	Glaeser	Bell	Bartlett Police Dept	300 W Bell St	Bartlett	TX	76511
	Bill	Blowers	Bell	Bell County 9-1-1 Communications	708 West Ave O	Belton	TX	76513
			Bell	Bell County Fire Chiefs Assoc	PO Box 95	Belton	TX	76513
Sheriff	Dan	Smith	Bell	Bell County Sheriff's Office	111 West Central Ave	Belton	TX	76513
Chief	Roy	Harmon	Bell	Belton Fire Dept	PO Box 120	Belton	TX	76513
	Police	Chief	Bell	Belton Police Dept	PO Box 120	Belton	TX	76513
	Police	Chief	Bell	Central Texas College Police	PO Box 1800	Killeen	TX	76540
	Fire	Chief	Bell	Harker Heights Fire Dept	401 Indian Trail	Harker Heights	TX	76548
Chief	Michael	Gentry	Bell	Harker Heights Police Dept	120 S Harley Dr	Harker Heights	TX	76548
	Fire	Chief	Bell	Holland Fire Dept	PO Box 326	Holland	TX	76534
	Police	Chief	Bell	Holland Police Dept	PO Box 157	Holland	TX	76534
	Fire	Chief	Bell	Killeen Fire Dept	201 N 28th St	Killeen	TX	76541
	Police	Chief	Bell	Killeen ISD Police Dept	902 N 10th St	Killeen	TX	76541
	Police	Chief	Bell	Killeen Police Dept	402 N 2nd St	Killeen	TX	76541
	Fire	Chief	Bell	Little River Fire Dept	PO Box 531	Little River	TX	76554
	Police	Chief	Bell	Little River Police Dept	PO Box 521	Little River	TX	76554
	Fire	Chief	Bell	Moffat Fire Dept	5660 Lakeaire Blvd	Temple	TX	76502
	Police	Chief	Bell	Morgan's Point Police Dept	8 Morgan's Point Blvd	Morgan's Point	TX	76513
	Fire	Chief	Bell	Nolanville Fire Dept	PO Box 128	Nolanville	TX	76559
	Police	Chief	Bell	Nolanville Police Dept	100 N. MAIN	Nolanville	TX	76559
Constable	Luis	Cortez	Bell	Pct 1 Constable, Bell County	101 East Central Ave	Belton	TX	76513
Constable	Roger	Laird	Bell	Pct 2 Constable, Bell County	101 East Central Ave	Belton	TX	76513
	Fire	Chief	Bell	Rogers Fire Dept	PO Box 250	Rogers	TX	76569
	Police	Chief	Bell	Rogers Police Dept	PO Box 250	Rogers	TX	76569
	Fire	Chief	Bell	S.W. Bell County Fire Dept	PO Box 10792	Killeen	TX	76547
	Fire	Chief	Bell	Salado Fire Dept	PO Box 503	Salado	TX	76571
	Police	Chief	Bell	Salado Police Dept	PO Box 219	Salado	TX	76571
	Police	Chief	Bell	Temple College Police Dept	2600 S 1st St	Temple	TX	76501
	Fire	Chief	Bell	Temple Fire & Rescue	505 N 3rd St	Temple	TX	76501
Chief	Gary	Smith	Bell	Temple Police Dept	105 S 5th St	Temple	TX	76501
	Fire	Chief	Bell	Troy Fire Dept	PO Box 1	Troy	TX	76579
	Police	Chief	Bell	Troy Police Dept	PO Box 389	Troy	TX	76579
Chief	Gary	Sargent	Bell	UMHB Police Dept	UMHB Box 8350	Belton	TX	76513
	ESD	President	Blanco	Blanco County ESD #1	PO Box 972	Blanco	TX	78606
	ESD	President	Blanco	Blanco County ESD #2	PO Box 494	Johnson City	TX	78636
Sheriff	William	Elsbury	Blanco	Blanco County Sheriff's Office	PO Box 365	Johnson City	TX	78636
	Police	Chief	Blanco	Blanco Police Dept	300 Pecan St	Blanco	TX	78606
	Fire	Chief	Blanco	Blanco Volunteer Fire Dept	PO Box 868	Blanco	TX	78606

Title	FirstName	LastName	County	Agency	BusinessStreet	BusinessCity	State	Zip
	Fire	Chief	Blanco	Johnson City Volunteer Fire Dept	PO Box 471	Johnson City	TX	78636
	Director		Blanco	North Blanco County EMS	PO Box 557	Johnson City	TX	78636
	Fire	Chief	Blanco	Round Mountain Volunteer Fire Dept	PO Box 5	Round Mountain	TX	78663
Coordinator	Dewey	Ratliff	Bosque	Bosque County Emergency Management	102 North Main	Meridian	TX	76665
Sheriff	Charlie	Jones	Bosque	Bosque County Sheriff's Office	PO Box 741	Meridian	TX	76665
	Fire	Chief	Bosque	Cranfills Gap Volunteer Fire Dept	Hwy 22	Cranfills Gap	TX	76637
	Fire	Chief	Bosque	Iredell Volunteer Fire Dept	Hwy 6	lredell .	TX	76649
	Fire	Chief	Bosque	Lakeside Village Volunteer Fire Dept	115 CR 1296	Morgan	TX	76671
	Police	Chief	Bosque	Meridian Police Dept	111 N Main	Meridian	TX	76665
	Thomas	Harris	Bosque	Meridian Volunteer Fire Dept	110 Bateman	Meridian	TX	76665
	Fire	Chief	Bosque	Morgan Volunteer Fire Dept	PO Box 305	Morgan	TX	76671
	Police	Chief	Bosque	Valley Mills Police Dept	401 5th St	Valley Mills	TX	76689
	Fire	Chief	Bosque	Walnut Springs Volunteer Fire Dept	122 E Norway St	Walnut Springs	TX	76690
	Fire	Chief	Bosque	Westshore Volunteer Fire Dept	PO Box 5417	Laguna Park	TX	76644
Exec Dir	Elizabeth	Godwin	Brazos	Brazos County 9-1-1 District	PO Box 911	Bryan	TX	77806
Coordinator	Emergency	Management	Brazos	Brazos County Emergency Management	101 Regent Ave, Ste 320	Bryan	TX	77803
	ESD	President	Brazos	Brazos County ESD #1	PO Box 244	Wellborn	TX	77881
	ESD	President	Brazos	Brazos County ESD #2	2105 Elmwood Dr	Bryan	TX	77802
	ESD	President	Brazos	Brazos County ESD #4	PO Box 6016	Bryan	TX	77805
	Fire	Chief	Brazos	Brazos County Pct #3 Volunteer Fire Dept	PO Box 5453	Bryan	TX	77805
	Fire	Chief	Brazos	Brazos County Pct #4 Volunteer Fire Dept	PO Box 4186	Bryan	TX	77805
	Michael	Sevier	Brazos	Brazos Valley Council of Governments	PO Drawer 4128	Bryan	TX	77805
	Fire	Chief	Brazos	Bryan Fire Dept	300 William Joel Bryan Pkwy	Bryan	TX	77803
Chief	Michael	Strope	Brazos	Bryan Police Dept	301 S Texas Ave	Bryan	TX	77803
	Peter	Scheets	Brazos	Bryan Police Dept	301 S Texas Ave	Bryan	TX	77803
Chief	R. B.	Alley	Brazos	College Station Fire Dept	PO Box 9960	College Station	TX	77842
Chief	Michael	Clancey	Brazos	College Station Police Dept	2611 Texas Ave South	College Station	TX	77840
	Fire	Chief	Burleson	Beaver Creek Volunteer Fire Dept	1580 Beaver Creek Drive	Caldwell	TX	77836
	Fire	Chief	Burleson	Black Jack Volunteer Fire Dept	11191 FM 908	Rockdale	TX	76567
Coordinator	Brian	Prescott	Burleson	Burleson County Emergency Management	100 W Buck, Ste 205	Caldwell	TX	77836
Sheriff	Dale	Stroud	Burleson	Burleson County Sheriff's Office	1334 Hwy 21 E	Caldwell	TX	77836
Chief	Tom	Cowan	Burleson	Burleson Police Dept	225 W Renfro	Burleson	TX	76028
	Police	Chief	Burleson	Caldwell Police Dept	1105 Commerce St	Caldwell	TX	77836
	Fire	Chief	Burleson	Cooks Point Volunteer Fire Dept	300 FM 1362 South	Caldwell	TX	77836
	Fire	Chief	Burleson	Deanville Volunteer Fire Dept	PO Box 71	Deanville	TX	77852
	Fire	Chief	Burleson	Snook Volunteer Fire Dept	PO Box 172	Snook	TX	77878
	Fire	Chief	Burleson	Somerville Volunteer Fire Dept	PO Box 537	Somerville	TX	77879
	Police	Chief	Burnet	Bertram Police Dept	PO Box 1604	Bertram	TX	78605
	Fire	Chief	Burnet	Bertram Volunteer Fire Dept	PO Box 248	Bertram	TX	78605
	Fire	Chief	Burnet	Briggs Volunteer Fire Dept	PO Box 7	Briggs	TX	78068
	ESD	President	Burnet	Burnet County ESD #1	PO Box 7765	Horseshoe Bay	TX	78657
Sheriff	Joe	Pollock	Burnet	Burnet County Sheriff's Office	1601 E Polk	Burnet	TX	78611
Sergeant	Archie	Hollingsworth	Burnet	Burnet County Sheriff's Office	PO Box 1249	Burnet	TX	78611
Captain	Charlie	Boyce	Burnet	Burnet County Sheriff's Office	PO Box 1249	Burnet	TX	78611
	Director		Burnet	Burnet EMS	PO Box 1369	Burnet	TX	78611
Chief	Bob	Watson	Burnet	Burnet Police Dept	PO Box 1369	Burnet	TX	78611
Chief	Roy	Hallmark	Burnet	Burnet Volunteer Fire Dept	PO Box 1369	Burnet	TX	78611
	Fire	Chief	Burnet	Cassie Volunteer Fire Dept	PO Box 184	Buchanan Dam	TX	78609

Title	FirstName	LastName	County	Agency	BusinessStreet	BusinessCity	State	Zip
	Fire	Chief	Burnet	East Lake Buchanan Volunteer Fire Dept	826 County Road 128	Burnet	TX	78611
	Fire	Chief	Burnet	Granite Shoals Area Volunteer Fire Dept	410 N Phillips Ranch Rd.	Granite Shoals	TX	78654
	Police	Chief	Burnet	Granite Shoals Police Dept	410 N Phillips Ranch Rd	Granite Shoals	TX	78654
	Fire	Chief	Burnet	Hoover Valley FD/FRO	303 CR 118B	Burnet	TX	78611
	Fire	Chief	Burnet	Hoover Valley Volunteer Fire Dept	303 Sherwood Dr.	Burnet	TX	78611
Ops Dir	Johnny	Campbell	Burnet	Marble Falls Area EMS	PO Box 296	Marble Falls	TX	78654
Chief	Ralph	Hendricks	Burnet	Marble Falls Fire Dept	700 Avenue N	Marble Falls	TX	78654
Chief	Mark	Whitacre	Burnet	Marble Falls Police Dept	209 Main St	Marble Falls	TX	78654
	Ted	Young	Burnet	Marble Falls Police Dept	209 Main St	Marble Falls	TX	78654
	Fire	Chief	Burnet	Oakalla Volunteer Fire Dept	29111 FM 963	Oakalla	TX	78608
	Fire	Chief	Burnet	Spicewood Volunteer Fire Dept	PO Box 2	Spicewood	TX	78669
Constable	Margarito, Jr.	Zapata	Caldwell	Caldwell County Pct 3 Constable	PO Box 145	Maxwell	TX	78644
Constable	Art	Villarreal	Caldwell	Caldwell County Pct 4 Constable	405 E Market	Lockhart	TX	78644
Sheriff	Daniel	Law	Caldwell	Caldwell County Sheriff's Office	1204 Reed Dr	Lockhart	TX	78644
	Fire	Chief	Caldwell	Chisolm Trail Fire Rescue	PO Box 360	Dale	TX	78616
	Aaron	Slaughter	Caldwell	City of Lockhart	201 W Market	Lockhart	TX	78644
	Fire	Chief	Caldwell	Dale Volunteer Fire Dept	PO Box 52	Dale	TX	78616
Director	Cheryl	Schneider	Caldwell	Lockhart Emergency Medical Services	214 Bufkin Ln	Lockhart	TX	78644
Chief	Jerry	Doyle	Caldwell	Lockhart Fire Dept	201 W Market	Lockhart	TX	78644
Chief	Michael	Lummus	Caldwell	Lockhart Police Dept	214 Bufkin Ln	Lockhart	TX	78644
	Fire	Chief	Caldwell	Luling Fire Dept	PO Box 70	Luling	TX	78648
Chief	John	Cochran	Caldwell	Luling Police Dept	1800 E Pierce	Luling	TX	78648
	Police	Chief	Caldwell	Martindale Police Dept	PO Box 365	Martindale	TX	78655
	Fire	Chief	Caldwell	Martindale Volunteer Fire Dept	PO Box 508	Martindale	TX	78655
	Fire	Chief	Caldwell	Maxwell Community Volunteer Fire Dept	PO Box 215	Maxwell	TX	78656
	Fire	Chief	Caldwell	McMahan Volunteer Fire Dept	294 Whizzerville Rd.	Dale	TX	78616
	Fire	Chief	Caldwell	Mid-County Volunteer Fire Dept	832 FM 671	Lockhart	TX	78644
	Fire	Chief	Caldwell	Tri Community Volunteer Fire Dept	PO Box 305	Fentress	TX	78622
Chief	Dennis	Haas	Coryell	Copperas Cove Fire Dept	415 S Main St	Copperas Cove	TX	76522
Chief	Tim	Molnes	Coryell	Copperas Cove Police Dept	202 S 4th St	Copperas Cove	TX	76522
Sheriff	John	Burks	Coryell	Coryell County Sheriff's Office	510 Leon St	Gatesville	TX	76528
	Fire	Chief	Coryell	Evant Fire Dept	PO Box 308	Evant	TX	76525
Chief	Billy	Vaden	Coryell	Gatesville Fire Dept	109 23rd St	Gatesville	TX	76528
Chief	Nathan	Gohlke	Coryell	Gatesville Police Dept	200 N 8th St	Gatesville	TX	76528
	Fire	Chief	Coryell	Jonesboro Volunteer Fire Dept	PO Box 6	Jonesboro	TX	76538
	Fire	Chief	Coryell	Oglesby Volunteer Fire Dept	PO Box 6	Oglesby	TX	76561
	Rita	Mooney	DPS	DPS Capitol	1500 N Congress Ave.	Austin	TX	78711
	Todd	Early	DPS	DPS Communications	PO Box 4087	Austin	TX	78733
	Robert	Pletcher	DPS	Texas Dept of Public Safety	5805 N Lamar, Mailstop 0259	Austin	TX	78752
	James	Benton	DPS	Texas Dept of Public Safety	5710 Guadalupe St	Austin	TX	78752
	Fire	Chief	Falls	Chilton Volunteer Fire Dept	PO Box 25	Chilton	TX	76632
	ESD	President	Falls	Falls County ESD #1	PO Box 172	Marlin	TX	76661
	ESD	President	Falls	Falls County ESD #2	PO Box 209	Lott	TX	76656
	ESD	President	Falls	Falls County ESD #3	PO Box 772	Rosebud	TX	76570
Sheriff	Ben	Kirk	Falls	Falls County Sheriff's Office	PO Box 401	Marlin	TX	76661
	Fire	Chief	Falls	Golinda Volunteer Fire Dept	RR 1, Box 113	Chilton	TX	76632
Chief	Larry	Honeycutt	Falls	Lott Police Dept	113 Gassaway St	Lott	TX	76656
	Fire	Chief	Falls	Lott Volunteer Fire Dept	PO Box 209	Lott	TX	76656

Title	FirstName	LastName	County	Agency	BusinessStreet	BusinessCity	State	Zip
	Fire	Chief	Falls	Marlin Fire Dept	101 Fortune St	Marlin	TX	76661
Chief	Tom	Hamilton	Falls	Marlin Police Dept	101 Fortune St	Marlin	TX	76661
Chief	James	Adams	Falls	Marlin Volunteer Fire Dept	PO Box 340	Marlin	TX	76661
Chief	Earl	Winebrenner	Falls	Rosebud Police Dept	PO Box 657	Rosebud	TX	76570
	Fire	Chief	Falls	Rosebud Volunteer Fire Dept	PO Box 552	Rosebud	TX	76570
	Fire	Chief	Falls	Westphalia Volunteer Fire Dept	104 County Road 3001	Lott	TX	76656
	Fire	Chief	Fayette	Carmine Volunteer Fire Dept	PO Box 46	Carmine	TX	78932
	Larry	Swim	Fayette	Carmine Volunteer Fire Dept	4141 Markwardt Rd	Round Top	TX	78954
	Fire	Chief	Fayette	Ellinger Volunteer Fire Dept	General Delivery	Ellinger	TX	78938
	Emer Mgmt	Coordinator	Fayette	Fayette County Emergency Management	171 S Main St	La Grange	TX	78945
Director	Aaron	Klause	Fayette	Fayette County EMS	750 E Camp St	La Grange	TX	78945
Sheriff	Keith	Korenek	Fayette	Fayette County Sheriff's Office	1646 N Jefferson	La Grange	TX	78945
	Fire	Chief	Fayette	Fayetteville Volunteer Fire Dept	PO Box 657	Fayetteville	TX	78940
Chief	Leonard	Cox	Fayette	Flatonia Police Dept	PO Box 329	Flatonia	TX	78941
	Fire	Chief	Fayette	Flatonia Volunteer Fire Dept	PO Box 95	Flatonia	TX	78941
Chief	Jackie	Skelton	Fayette	La Grange Police Dept	243 S College St	La Grange	TX	78945
	Fire	Chief	Fayette	La Grange Volunteer Fire Dept	244 N Franklin	La Grange	TX	78945
	Fire	Chief	Favette	Ledbetter Volunteer Fire Dept	PO Box 213	Ledbetter	TX	78954
	Fire	Chief	Fayette	Muldoon Volunteer Fire Dept	PO Box 133	Muldoon	TX	78949
	Fire	Chief	Fayette	Round Top-Warrenton Volunteer Fire Dept	PO Box 145	Round Top	TX	78954
Chief	Randy	Mican	Fayette	Schulenburg Police Dept	535 N Main St	Schulenburg	TX	78956
	Fire	Chief	Favette	Schulenburg Volunteer Fire Dept	812 Wolters Ave.	Schulenburg	TX	78956
	Fire	Chief	Fayette	Winchester Area Volunteer Fire Dept	8810 FM 153	Winchester	TX	78945
	Fire	Chief	Freestone	Dew Volunteer Fire Dept	RR 2, Box 66-C	Teague	TX	75860
	Fire	Chief	Freestone	Donie Volunteer Fire Dept	PO Box 84	Donie	TX	75838
Chief	Mike	Falkner	Freestone	Fairfield Police Dept	222 S Mount St	Fairfield	TX	75840
Chief	Bill	Brown	Freestone	Fairfield Volunteer Fire Dept	222 S Mount St	Fairfield	TX	75840
Sheriff	Ralph	Billings	Freestone	Freestone County Sheriff's Office	PO Drawer 47	Fairfield	TX	75840
	Fire	Chief	Freestone	Kirvin Volunteer Fire Dept	PO Box 164	Kirvin	TX	75848
	Fire	Chief	Freestone	Southern Oaks Volunteer Fire Dept	120 Southern Oaks Dr	Streetman	TX	75859
	Fire	Chief	Freestone	Streetman Fire Dept	PO Box 101	Streetman	TX	75859
	Police	Chief	Freestone	Teague Police Dept	105 South 4th Ave	Teague	TX	75860
	Fire	Chief	Freestone	Teague Volunteer Fire Dept	519 Main St	Teague	TX	75860
Chief	Kelly	Craig	Freestone	Wortham Police Dept	100 W Main St	Wortham	TX	76693
	Fire	Chief	Freestone	Wortham Volunteer Fire Dept	104 S 2nd St	Wortham	TX	76693
	Fire	Chief	Grimes	Bedias Volunteer Fire Dept	PO Box 294	Bedias	TX	77831
	Fire	Chief	Grimes	Central Grimes Anderson Volunteer Fire Dept	183 Cedar St	Anderson	TX	77830
Sheriff	Donald	Sowell	Grimes	Grimes County Sheriff's Office	382 FM 149 W	Anderson	TX	77830
	Fire	Chief	Grimes	Navasota Fire Dept	1500 S La Salle	Navasota	TX	77868
Chief	Shawn	Myatt	Grimes	Navasota Police Dept	204 E McAlpine	Navasota	TX	77868
00.	Fire	Chief	Grimes	Plantersville - Stoheham Volunteer Fire Dept	PO Box 123	Plantersville	TX	77363
	Fire	Chief	Grimes	Richards Volunteer Fire Dept	1136 FM 149 East	Richards	TX	77873
	Fire	Chief	Grimes	Shiro Volunteer Fire Dept	PO Box 173	Shiro	TX	77876
	Fire	Chief	Hamilton	Carlton Volunteer Fire Dept	PO Box 41	Carlton	TX	76436
Sheriff	W. R.	Murphree	Hamilton	Hamilton County Sherriff's Office	1108 S. Rice	Hamilton	TX	76531
2	Fire	Chief	Hamilton	Hamilton Volunteer Fire Dept	107 W Henry	Hamilton	TX	76531
	Police	Chief	Hamilton	Hico Police Dept	118 W 1st St	Hico	TX	76457
	Fire	Chief	Hamilton	Hico Volunteer Fire Dept	PO Box 383	Hico	TX	76457
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Title F	FirstName	LastName	County	Agency	BusinessStreet	BusinessCity	State	Zip
	Glenn	Surley	Hamilton	Pottsville Fire Dept	PO Box 213	Pottsville	TX	76565
Chief C	Clay	Huckaby	Hays	Buda Volunteer Fire Dept	PO Box 1159	Buda	TX	78610
F	Fire	Chief	Hays	Driftwood Volunteer Fire Dept	15850 FM 1826	Driftwood	TX	78737
E	ESD	President	Hays	Hays (Wimberley-Hays) County ESD	PO Box 474	Wimberley	TX	78676
E	ESD	President	Hays	Hays County ESD #1	PO Box 1604	Dripping Springs	TX	78620
E	ESD	President	Hays	Hays County ESD #2	PO Box 153	Buda	TX	78610
E	ESD	President	Hays	Hays County ESD #3	1401 W San Antonio St	San Marcos	TX	78676
E	ESD	President	Hays	Hays County ESD #4	125 Campfire Circle	Wimberley	TX	78676
E	ESD	President	Hays	Hays County ESD #5	PO Box 112	Dripping Springs	TX	78620
E	ESD	President	Hays	Hays County ESD #8	PO Box 1159	Buda	TX	78610
Coordinator Jo	leff	Turner	Hays	Hays County Office of Emergency Mgmt	102 N LBJ Dr, Ste 303	San Marcos	TX	78666
Sheriff A	Allen	Bridges	Hays	Hays County Sheriff's Office	1307 Uhland Rd	San Marcos	TX	78666
F	Fire	Chief	Hays	Henly Volunteer Fire Dept	7520 Creek Rd	Dripping Springs	TX	78620
Chief G	Glenn	Whitaker	Hays	Kyle Fire Dept	210 W Moore St	Kyle	TX	78640
Chief A	Alfred	Moore	Hays	Kyle Police Dept	PO Box 40	Kyle	TX	78640
F	Fire	Chief	Hays	North Hays County Volunteer Fire Dept	400 Sportsplex Dr	Dripping Springs	TX	78620
Director T	Гот	Partin	Hays	San Marcos / Hays County EMS	PO Box 641	San Marcos	TX	78667
Chief M	∕like	Baker	Hays	San Marcos Fire Dept	630 E Hopkins St	San Marcos	TX	78666
Chief H	Howard	Williams	Hays	San Marcos Police Dept	2300 S IH 35	San Marcos	TX	78666
R	Rosanna	Wisener	Hays	San Marcos Police Dept	2300 S IH 35	San Marcos	TX	78666
N	√lark	Minnick	Hays	San Marcos Police Dept	2300 S IH 35	San Marcos	TX	78666
F	Fire	Chief	Hays	South Hays County Fire Dept	1401 W San Antonio St	San Marcos	TX	78666
Р	Police	Chief	Hays	Texas State University Police Dept	601 University Dr	San Marcos	TX	78666
F	Fire	Chief	Hays	Wimberley Fire & Rescue	PO Box 675	Wimberley	TX	78676
D	Director		Hays	Wimberly Emergency Medical Services	PO Box 33	Wimberly	TX	78676
F	Fire	Chief	Hill	Aquilla Volunteer Fire Dept	PO Box 210	Aquilla	TX	76622
F	Fire	Chief	Hill	Blum Volunteer Fire Dept	PO Box 613	Blum	TX	76627
F	Fire	Chief	Hill	Bynum Volunteer Fire Dept	PO Box 8	Bynum	TX	76638
F	Fire	Chief	Hill	FM 2604 Volunteer Fire Dept	PO Box 1784	Whitney	TX	76692
E	ESD	President	Hill	Hill County ESD #2	PO Box 1578	Whitney	TX	76692
Sheriff B	Brent	Button	Hill	Hill County Sheriff	406 Hall St	Hillsboro	TX	76645
F	Fire	Chief	Hill	Hillsboro Fire/Rescue	110 W Franklin	Hillsboro	TX	76645
F	Fire	Chief	Hill	Hubbard Volunteer Fire Dept	118 Magnolia Ave	Hubbard	TX	76648
F	Fire	Chief	Hill	Itasca Volunteer Fire Dept	126 N Hill St	Itasca	TX	76055
F	Fire	Chief	Hill	Lakeview Volunteer Fire Dept	PO Box 1294	Whitney	TX	76692
F	Fire	Chief	Hill	Malone Volunteer Fire Dept	PO Box 33	Malone	TX	76660
F	Fire	Chief	Hill	Mertens Volunteer Fire Dept	200 W Front	Mertens	TX	76666
F	Fire	Chief	Hill	Mount Calm Volunteer Fire Dept	PO Box 146	Mount Calm	TX	76673
F	Fire	Chief	Hill	Penelope Volunteer Fire Dept	PO Box 114	Penelope	TX	76676
F	Fire	Chief	Hill	Peoria Volunteer Fire Dept	PO Box 1131	Hillsboro	TX	76645
F	Fire	Chief	Hill	West City Fire Dept	209 E Oak St	West	TX	76691
F	Fire	Chief	Hill	White Bluff Volunteer Fire Dept	16 Misty Valley Circle WD 65	Whitney	TX	76692
Р	Police	Chief	Hill	Whitney Police Dept	103 W Cleveland	Whitney	TX	76692
	Fire	Chief	Hill	Whitney Volunteer Fire Dept	PO Box 2050	Whitney	TX	76692
	Fire	Chief	Lampasas	Adamsville Fire Dept	HC3, Box 351	Lampasas	TX	76550
	ire	Chief	Lampasas	Kempner Fire Dept	PO Box 136	Kempner	TX	76539
Sheriff G	· ·	Marria	Lampaga	Lampasas County Sheriff's Office	PO Box 465	Lampasas	TX	76550
Chief T	Gordon	Morris	Lampasas	Lampasas Fire Dept	408 S Main St	Lampasas	TX	76550 76550

Chief         Lampassa         Lampassa         Lampassa         Lampassa         TX         76550           Fire         Chief         Lampassa         Lampassa         Lampassa         TX         76550           Fire         Chief         Lea         Dise Box Arth         PCD         CAD         Lampassa         TX         78581           Fire         Chief         Lea         Dise Box Volunteer Fire Dept         PCD Box 1599         Dime Box         TX         778947           Chief         Chief         Chief         Cee         Chief Dox Volunteer Fire Dept         PCD Box 559         Dime Box         TX         778947           Chief         Sandari         Lee         Caddings Volunteer Fire Dept         PCD Rox         Caddings         TX         78947           Chief         Lee         Caddings Volunteer Fire Dept         PCD Rox 58         Lexington         TX         78947           Fire         Chief         Lee         Lexington Volunteer Fire Dept         PCD Rox 58         Lexington         TX         78942           Fire         Chief         Lee         Lexington Volunteer Fire Dept         PCD Rox 52         Lexington         TX         78943           Fire         Chief	Title	FirstName	LastName	County	Agency	BusinessStreet	BusinessCity	State	Zip
Fire	Chief	Timothy	Angermann	Lampasas	Lampasas Police Dept	301 E 4th St	Lampasas		76550
Fire		Fire	Chief	Lampasas	Lometa Volunteer Fire Dept	PO Box 207	Lampasas	TX	76550
Fire		Fire	Chief	Lee	Blue Branch Volunteer Fire Dept	RR1, Box 265-P	Lexington	TX	78947
Chief         Spencer         Schneider         Lee         Gliddings Voltmerer Fire Dept         118 E Richmond St         Gliddings         TX         78942           Sheffiff         Joe         Goodson         Lee         Lee County Sherff's Office         PO Box 98         Gliddings         TX         78942           Sheffiff         Prolice         Chief         Lee         Lexington Police Dept         PO Box 98         Gliddings         TX         78942           Fire         Chief         Lee         Lexington Pollore         PO Box 36         Lexington         TX         78947           Fire         Chief         Lee         Liconon Volunteer Fire Dept         PO Box 327         Lincoin         TX         78947           Fire         Chief         Lee         Tanglewood Volunteer Fire Dept         PO Box 327         Lincoin         TX         78947           Fire         Chief         Leon         Buffalo Police Dept         1144 Awart St         Buffalo         TX         78947           Chief         Leon         Buffalo Police Dept         1144 Awart St         Buffalo         TX         78945           Chief         Leon         Buffalo Volunteer Fire Dept         PO Box 4411         Buffalo         PA		Fire	Chief	Lee	Dime Box Volunteer Fire Dept	PO Box 159	Dime Box	TX	77853
Chieff         Spencer         Schneider         Lee         Giddings Volunteer Fire Dept         118 E Richmond         Giddings         TX         788422           Sherifff         Joe         Goodson         Lee         Lee County Sheriffs Office         PO Box 98         Giddings         TX         78847           Fire         Chief         Lee         Lexington Police Dept         600 Main St         Lexington         TX         78847           Fire         Chief         Lee         Licenton Volunteer Fire Dept         PO Box 327         Lincoin         TX         78847           Fire         Chief         Lee         Lincoin Volunteer Fire Dept         RP 2, Box 719         Lexington         TX         78847           Police         Chief         Leo         Buffalo Police Dept         RP 2, Box 719         Lexington         TX         75845           Fire         Chief         Leo         Buffalo Volunteer Fire Dept         PO Box 441         Buffalo         TX         75831           Chief         Leo         Crawford         Leo         Buffalo Volunteer Fire Dept         PO Box 441         Buffalo         TX         75835           Fire         Chief         Leo         Centerville         PO Box 441         B		Fire	Chief	Lee	Fedor Volunteer Fire Dept	RR 2, Box 444-A	Lexington	TX	78947
Sheriff         Joe         Goodson         Lee         Lee County Sheriffs Office         PO Box 98         Gidings         TX         78842           Fire         Chief         Lee         Lexington Volunteer Fire Dept         PO Box 56         Lexington         TX         78847           Fire         Chief         Lee         Licenton Volunteer Fire Dept         PO Box 327         Lincoln         TX         78847           Fire         Chief         Lee         South Lee Country Volunteer Fire Dept         424 0FM 448         Giddings         TX         78842           Fire         Chief         Leo         South Lee Country Volunteer Fire Dept         424 0FM 448         Giddings         TX         78842           Fire         Chief         Leo         Buffalo Volunteer Fire Dept         144 Avant St         Buffalo         TX         75831           Chief         Leo         Chief Leo         Leo         Buffalo Volunteer Fire Dept         196 box 441         Buffalo         Avant TX         75831           Chief         Leo         Centerville Volunteer Fire Dept         196 box 441         Buffalo         Avant TX         75846           Fire         Chief         Leo         Centervilleer Fire Dept         PO Box 419         Quew	Chief	Nathan	Lapham	Lee	Giddings Police Dept	118 E Richmond St	Giddings	TX	78942
Police   Chief   Lee   Lexington Police Dept   650 Main St   Lexington TX   78947	Chief	Spencer	Schneider	Lee	Giddings Volunteer Fire Dept	118 E Richmond	Giddings	TX	78942
Fire	Sheriff	Joe	Goodson	Lee	Lee County Sheriff's Office	PO Box 98	Giddings	TX	78942
Fire		Police	Chief	Lee	Lexington Police Dept	650 Main St	Lexington	TX	78947
Fire   Chief   Lee   South Lee Country Volunteer Fire Dept   4240 FM 448   Gliddings   TX   78947   Fire   Chief   Leon   Buffalo Police Dept   144 Avant St   Buffalo   TX   75831   Fire   Chief   Leon   Buffalo Police Dept   144 Avant St   Buffalo   TX   75831   Fire   Chief   Leon   Buffalo Police Dept   PO Box 441   Buffalo   TX   75831   Fire   Chief   Leon   Buffalo Volunteer Fire Dept   PO Box 441   Buffalo   TX   75831   Fire   Chief   Leon   Buffalo Volunteer Fire Dept   PO Box 340   Centerville   TX   75833   Fire   Chief   Leon   Hilltop Lakes Volunteer Fire Dept   PO Box 340   Centerville   TX   75833   Fire   Chief   Leon   Jewett Police Dept   PO Box 1474   Hilltop Lakes   TX   77871   Fire   Chief   Leon   Jewett Police Dept   PO Box 389   Jewett   TX   75846   Fire   Chief   Leon   Leon County ESD #1   PO Box 583   Jewett   TX   75846   Fire   Chief   Leon   Leon County ESD #1   PO Box 601   Centerville   TX   75833   Fire   Chief   Leon   Leon County ESD #1   PO Box 601   Centerville   TX   75833   Fire   Chief   Leon   Leon County Sheriffs Office   PO Box 601   Centerville   TX   75833   Fire   Chief   Leon   Leon County Sheriffs Office   PO Box 601   Centerville   TX   75836   Fire   Chief   Leon   Leon Ovolunteer Fire Dept   PO Box 40   Leon   Centerville   TX   75836   Fire   Chief   Leon   Marquez Volunteer Fire Dept   PO Box 100   Marquez   TX   77857   Fire   Chief   Limestone   Coolidge Volunteer Fire Dept   PO Box 100   Marquez   TX   77857   Fire   Chief   Limestone   Coolidge Volunteer Fire Dept   PO Box 225   Coolidge   TX   77867   Fire   Chief   Limestone   Coolidge Volunteer Fire Dept   PO Box 225   Coolidge   TX   77867   Fire   Chief   Limestone   Limestone   Coolidge Volunteer Fire Dept   PO Box 225   Coolidge   TX   77867   Fire   Chief   Limestone   Mexia Police Dept   PO Box 2000   Mexia   TX   76667   Fire   Chief   Limestone   Mexia Police Dept   PO Box 2000   Mexia   TX   76667   Fire   Chief   Limestone   Mexia Police Dept   PO Box 2000   Mexia   TX   76687   Fire   Ch		Fire	Chief	Lee	Lexington Volunteer Fire Dept	PO Box 56	Lexington	TX	78947
Fire		Fire	Chief	Lee	Lincoln Volunteer Fire Dept	PO Box 327	Lincoln	TX	78948
Police		Fire	Chief	Lee	South Lee Country Volunteer Fire Dept	4240 FM 448	Giddings	TX	78942
Fire		Fire	Chief	Lee	Tanglewood Volunteer Fire Dept	RR 2, Box 719	Lexington	TX	78947
Chief         Bruce         Crawford         Leon         Butler Volunteer Fire Dept         PO Box 340         Centerville         TX         75855           Fire         Chief         Leon         Centerville Volunteer Fire Dept         PO Box 1474         Hillitop Lakes         TX         75837           Chief         Leon         Jewett Police Dept         PO Box 189         Jewett         TX         75846           Fire         Chief         Leon         Jewett Police Dept         PO Box 389         Jewett         TX         75846           Fire         Chief         Leon         Leon County ESD #1         PO Box 601         Centerville         TX         75833           Sheriff         Michael         Price         Leon         Leon County Sheriffs Office         606 E St. Mary's St         Centerville         TX         75833           Sheriff         Michael         Price         Leon         Leon County Sheriffs Office         PO Box 278         Centerville         TX         75833           Sheriff         Chief         Leon         Leon County Sheriffs Office         PO Box 278         Centerville         TX         75833           Fire         Chief         Leon         Leon Wolvinteer Fire Dept         PO Box 191		Police	Chief	Leon	Buffalo Police Dept	144 Avant St	Buffalo	TX	75831
Fire         Chief         Leon         Centerville Volunteer Fire Dept         PO Box 3440         Centerville         TX         78833           Chief         Leon         Hilltop Lakes Volunteer Fire Dept         PO Box 189         Jewett         TX         75846           ESD         President         Leon         Jewett Volunteer Fire Dept         PO Box 358         Jewett         TX         75846           ESD         President         Leon         Leon County ESD #1         PO Box 601         Centerville         TX         75843           Fire         Chief         Leon         Leon County Sheriffs Office         606 E St. Mary's St         Centerville         TX         75833           Sheriff         Michael         Price         Leon         Leon County Sheriffs Office         PO Box 278         Centerville         TX         75833           Fire         Chief         Leon         Leon County Sheriffs Office         PO Box 278         Centerville         TX         75833           Fire         Chief         Leon         Leon County Sheriffs Office         PO Box 278         Centerville         TX         75833           Fire         Chief         Leon         Mary 220         Mary 220         TX         75833		Fire	Chief	Leon	Buffalo Volunteer Fire Dept	PO Box 441	Buffallo	TX	75831
Chief         Leon         Hilltop Lakes Volunteer Fire Dept         PO Box 1474         Hiltop Lakes         TX         77871           Chief         Leon         Jewett Volunteer Fire Dept         PO Box 189         Jewett         TX         75846           ESD         President         Leon         Leon County ESD #1         PO Box 601         Centerville         TX         75843           Sheriff         Michael         Price         Leon         Leon County ESD #1         PO Box 601         Centerville         TX         75833           Sheriff         Michael         Price         Leon         Leon County Sheriffs Office         606 E St. Marys St         Centerville         TX         75833           Sheriff         Chief         Leon         Leon County Sheriffs Office         PO Box 278         Centerville         TX         75833           Fire         Chief         Leon         Marquez Volunteer Fire Dept         PO Box 100         Marquez         TX         77865           Fire         Chief         Limestone         Coolidge Volunteer Fire Dept         PO Box 225         Coolidge         TX         76632           Fire         Chief         Limestone         Kosse Volunteer Fire Dept         PO Box 225         Coolidge         <	Chief	Bruce	Crawford	Leon	Butler Volunteer Fire Dept	1354 E Hwy 84	Oakwood	TX	75855
Chief         Larry         Whittington         Leon         Jewett Volunteer Fire Dept         PO Box 388         Jewett         TX         75846           ESD         President         Leon         Jewett Volunteer Fire Dept         PO Box 358         Jewett         TX         75833           Sheriff         Chief         Leon         Leon County ESD #1         PO Box 601         Centerville         TX         75833           Sheriff         Michael         Price         Leon         Leon County Sheriffs Office         606 E St. Mary's St         Centerville         TX         75833           Fire         Chief         Leon         Leon County Sheriffs Office         PO Box 278         Centerville         TX         75833           Fire         Chief         Leon         Leon County Sheriffs Office         PO Box 100         Marquez         TX         75853           Fire         Chief         Leon         Marquez Volunteer Fire Dept         PO Box 100         Marquez         TX         75865           Fire         Chief         Limestone         Groesbeck Volunteer Fire Dept         PO Box 227         Groesbeck         TX         76662           Fire         Chief         Limestone         Limestone         Limestone		Fire	Chief	Leon	Centerville Volunteer Fire Dept	PO Box 340	Centerville	TX	75833
Fire         Chief         Leon         Jewett Outnateer Fire Dept         PO Box 358         Jewett         TX         75846           ESD         President         Leon         Leon County ESD #1         PO Box 601         Centerville         TX         75833           Sheriff         Michael         Price         Leon         Leon County Sheriffs Office         606 E St. Mary's St         Centerville         TX         75833           Sheriff         Michael         Price         Leon         Leon County Sheriffs Office         606 E St. Mary's St         Centerville         TX         75833           Fire         Chief         Leon         Leon County Sheriffs Office         PO Box 278         Centerville         TX         75833           Fire         Chief         Leon         Marquez Volunteer Fire Dept         PO Box 4         Leon         Marquez         TX         778855           Fire         Chief         Leon         Marquez Volunteer Fire Dept         PO Box 191         Normangee         TX         778871           Fire         Chief         Limestone         Coolidge Volunteer Fire Dept         PO Box 235         Coolidge         TX         76642           Fire         Chief         Limestone         Coolessbeck Volunteer		Fire	Chief	Leon	Hilltop Lakes Volunteer Fire Dept	PO Box 1474	Hilltop Lakes	TX	77871
Fig.	Chief	Larry	Whittington	Leon	Jewett Police Dept	PO Box 189	Jewett	TX	75846
Fire		Fire	Chief	Leon	Jewett Volunteer Fire Dept	PO Box 358	Jewett	TX	75846
Sheriff         Michael         Price         Leon         Leon County Sheriff's Office         606 E St. Mary's St         Centerville         TX         75833           Fire         Chief         Leon         Leona Vounteer Fire Dept         PO Box 278         Centerville         TX         75830           Fire         Chief         Leon         Leona Volunteer Fire Dept         PO Box 100         Marquez         TX         77865           Fire         Chief         Leon         Normangee Volunteer Fire Dept         PO Box 191         Normangee         TX         77865           Fire         Chief         Limestone         Coolidge Volunteer Fire Dept         PO Box 235         Coolidge         TX         76635           Fire         Chief         Limestone         Kosse Volunteer Fire Dept         PO Box 227         Groesbeck         TX         76642           Fire         Chief         Limestone         Kosse Volunteer Fire Dept         PO Box 207         Mexia         TX         76667           Sheriff         Eire         Chief         Limestone         Kosse Volunteer Fire Dept         PO Box 207         Mexia         TX         76667           Sheriff         Eire         Chief         Limestone         Mexia Fire Dept		ESD	President	Leon	Leon County ESD #1	PO Box 601	Centerville	TX	75833
Fire   Chief   Leon   Leon County Sheriff's Office   PO Box 278   Centerville   TX   75833		Fire	Chief	Leon	Leon County ESD #1	PO Box 601	Centerville	TX	75833
Fire Chief Leon Leona Volunteer Fire Dept PO Box 4 Leona TX 75850 Fire Chief Leon Marquez Volunteer Fire Dept PO Box 100 Marquez TX 778651 Fire Chief Leon Normangee Volunteer Fire Dept PO Box 191 Normangee TX 77871 Fire Pire Chief Limestone Coolidge Volunteer Fire Dept PO Box 235 Coolidge TX 76635 Fire Chief Limestone Groesbeck Volunteer Fire Dept PO Box 227 Groesbeck TX 76643 Fire Chief Limestone Kosse Volunteer Fire Dept PO Box 227 Groesbeck TX 766635 Fire Chief Limestone Lake Mexia Volunteer Fire Dept PO Box 116 Kosse TX 766635 Fire Chief Limestone Lake Mexia Volunteer Fire Dept RR 1, Box 620 Mexia TX 76667 Fire Dennis Wilson Limestone Limestone County Sheriff's Office 1221 E Yeaqua St Groesbeck TX 76667 Fire Chief Limestone Mexia Fire Dept PO Box 207 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Chief Limestone Prairie Hill Volunteer Fire Dept PO Box 2000 Mexia TX 76667 Fire Chief Limestone Tehuacana Volunteer Fire Dept PO Box 58 Coolidge TX 76686 Fire Chief Limestone Tehuacana Volunteer Fire Dept PO Box 97 Tehuacana TX 76686 Fire Chief Limestone Wake Irine Dept PO Box 97 Tehuacana TX 76686 Fire Chief Limestone Wake Irine Dept PO Box 414 Thornton TX 76687 Fire Chief Limestone Wake Irine Dept PO Box 143 Buchanan Dam TX 76687 Fire Chief Limestone Suchanan Dam Volunteer Fire Dept PO Box 350 Kingsland TX 76809 Fire Chief Liano Kingsland Volunteer Fire Dept PO Box 350 Kingsland TX 76831 Fire Chief Liano Lake LBJ FD PO Box 350 Kingsland TX 76643 Fire Fire Chief Liano Lake LBJ FD PO Box 350 Kingsland TX 78631 Fire Fire Chief Liano Lake LBJ FD PO Box 350 Kingsland TX 78643 Fire Fire Pote Chief Liano Lake LBJ FD PO Box 350 Kingsland TX 78643 Fire Fire Pote Chief Liano Lake LBJ FD PO Box 350 Kingsland TX 78643 Fire Fire Pote Chief Liano Lake LBJ FD PO Box 350 Kingsland TX 78643 Fire Fire Pote Chief Liano Lake LBJ FD PO Box 350 Kingsland TX 78643 Fire Fire Pote Chief L	Sheriff	Michael	Price	Leon	Leon County Sheriff's Office	606 E St. Mary's St	Centerville	TX	75833
Fire Chief Leon Marquez Volunteer Fire Dept PO Box 100 Marquez TX 77855 Fire Chief Leon Normangee Volunteer Fire Dept PO Box 191 Normangee TX 77871 Fire Pire Chief Limestone Coolidge Volunteer Fire Dept PO Box 235 Coolidge TX 76852 Fire Chief Limestone Groesbeck Volunteer Fire Dept PO Box 227 Groesbeck TX 76642 Fire Chief Limestone Kosse Volunteer Fire Dept PO Box 227 Groesbeck TX 76653 Fire Chief Limestone Lake Mexia Volunteer Fire Dept PO Box 116 Kosse TX 76663 Fire Dennis Wilson Limestone Lake Mexia Volunteer Fire Dept RR 1, Box 620 Mexia TX 76667 Mexia TX 76667 Mexia TX 76667 Mexia TX 76667 Mexia Fire Dept PO Box 207 Mexia TX 76667 Mexia SIX 76687 Mexia SIX		Larry	Keith	Leon	Leon County Sheriff's Office	PO Box 278	Centerville	TX	75833
Fire Chief Limestone Coolidge Volunteer Fire Dept PO Box 191 Normangee TX 77871 Fire Chief Limestone Coolidge Volunteer Fire Dept PO Box 235 Coolidge TX 76635 Fire Chief Limestone Groesbeck Volunteer Fire Dept PO Box 227 Groesbeck TX 76635 Fire Chief Limestone Kosse Volunteer Fire Dept PO Box 116 Kosse TX 76635 Fire Chief Limestone Lake Mexia Volunteer Fire Dept PO Box 116 Kosse TX 76667  Sheriff Dennis Wilson Limestone Lake Mexia Volunteer Fire Dept RR 1, Box 620 Mexia TX 76667 Fire Chief Limestone Limestone County Sheriffs Office 1221 E Yeagua St Groesbeck TX 76667  Chief Jess Whisler Limestone Mexia ISD Police Dept PO Box 207 Mexia TX 76667  Chief Richard Hawthorne Limestone Mexia ISD Police Dept PO Box 2000 Mexia TX 76667  Chief Fire Chief Limestone Prairie Hill Volunteer Fire Dept PO Box 58 Coolidge TX 76687  Fire Chief Limestone Prairie Hill Volunteer Fire Dept PO Box 97 Tehuacana TX 76687  Fire Chief Limestone Thornton Volunteer Fire Dept PO Box 97 Tehuacana TX 76687  Fire Chief Limestone W Lake Limestone Volunteer Fire Dept PO Box 1474 Thornton TX 76687  Fire Chief Limes W Lake Limestone Volunteer Fire Dept PO Box 1474 Thornton TX 76687  Fire Chief Liano Buchanan Dam Volunteer Fire Dept PO Box 143 Buchanan Dam TX 76809  Fire Chief Liano Castell Volunteer Fire Dept PO Box 143 Buchanan Dam TX 76809  Fire Chief Liano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78631  Fire Chief Liano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78643  Chief Liano County EMS 200 W Ollie Liano TX 78643  Fire Chief Liano County EMS 200 W Ollie Liano TX 78643  Fire Chief Liano Liano County EMS 200 W Ollie Liano TX 78643		Fire	Chief	Leon	Leona Volunteer Fire Dept	PO Box 4	Leona	TX	75850
Fire Chief Limestone Groesbeck Volunteer Fire Dept PO Box 235 Coolidge TX 76635 Fire Chief Limestone Groesbeck Volunteer Fire Dept PO Box 277 Groesbeck TX 76642 Fire Chief Limestone Kosse Volunteer Fire Dept PO Box 276 Groesbeck TX 76653 Fire Chief Limestone Lake Mexia Volunteer Fire Dept PO Box 276 Mexia TX 76667 Fire Chief Limestone Limestone County Sheriffs Office 1221 E Yeagua St Groesbeck TX 76667 Fire Chief Limestone Mexia Fire Dept PO Box 207 Mexia TX 76667 Mexia Fire Dept PO Box 207 Mexia TX 76667 Mexia Fire Dept PO Box 207 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76667 Mexia Fire Dept PO Box 2000 Mexia TX 76687 Fire Chief Limestone Tehuacana Volunteer Fire Dept PO Box 300 Trehuacana TX 76686 Fire Chief Limestone Tehuacana Volunteer Fire Dept PO Box 474 Thornton TX 76687 Fire Chief Liano Buchanan Dam Volunteer Fire Dept PO Box 143 Buchanan Dam TX 76609 Fire Chief Liano Castell Volunteer Fire Dept PO Box 300 Kingsland TX 76631 Fire Chief Liano Kingsland Volunteer Fire Dept PO Box 300 Kingsland TX 76631 Fire Po Chief Liano Liano County EMS PO Box 300 Wollie Liano TX 78643 Mexia Po Box 300 Wollie Liano TX 78643 Fire Chief Liano Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano County EMS 200 W Ollie Liano TX 78643 Fire Dept PO Box 422 Buchanan Dam TX 78643 Fire Dept PO Box 422 Buch		Fire	Chief	Leon	Marquez Volunteer Fire Dept	PO Box 100	Marquez	TX	77865
Fire Chief Limestone Kosse Volunteer Fire Dept PO Box 227 Groesbeck TX 76642 Fire Chief Limestone Kosse Volunteer Fire Dept PO Box 116 Kosse TX 76653 Fire Chief Limestone Lake Mexia Volunteer Fire Dept RR 1, Box 620 Mexia TX 76667 Sheriff Dennis Wilson Limestone Limestone County Sheriffs Office 1221 E Yeagua St Groesbeck TX 76642 Fire Chief Limestone Mexia Fire Dept PO Box 207 Mexia TX 76667 Chief Jess Whisler Limestone Mexia Fire Dept PO Box 200 Mexia TX 76667 Chief Richard Hawthorne Limestone Mexia SD Police Dept PO Box 200 Mexia TX 76667 Chief Richard Hawthorne Limestone Prairie Hill Volunteer Fire Dept PO Box 58 Coolidge TX 76687 Fire Chief Limestone Tehuacana Volunteer Fire Dept PO Box 97 Tehuacana TX 76686 Fire Chief Limestone Thornton Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Limestone We Lake Limestone Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Limestone We Lake Limestone Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Limestone We Lake Limestone Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Limestone We Lake Limestone Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Liano Buchanan Dam Volunteer Fire Dept RR 3, Box 63FD Thornton TX 76687 Fire Chief Liano Castell Volunteer Fire Dept PO Box 143 Buchanan Dam TX 76631 Fire Chief Liano Castell Volunteer Fire Dept PO Box 350 Kingsland TX 76631 Fire Chief Liano Lake LBJ FD PO Box 350 Kingsland TX 78631 Fire Chief Liano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78637 Fire Chief Liano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78643 Fire Chief Liano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78643 Fire Chief Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano County EMS 200 W Ollie Liano TX 78643		Fire	Chief	Leon	Normangee Volunteer Fire Dept	PO Box 191	Normangee	TX	77871
Fire Chief Limestone Kosse Volunteer Fire Dept RR 1, Box 620 Mexia TX 76653 Fire Chief Limestone Lake Mexia Volunteer Fire Dept RR 1, Box 620 Mexia TX 76667 Dennis Wilson Limestone County Sheriff's Office 1221 E Yeagua St Groesbeck TX 76667 Fire Chief Limestone Mexia ISD Police Dept PO Box 207 Mexia TX 76667 Chief Richard Hawthorne Limestone Mexia ISD Police Dept PO Box 2000 Mexia TX 76667 Chief Richard Hawthorne Limestone Mexia Police Dept PO Box 58 Coolidge TX 76667 Fire Chief Limestone Prairie Hill Volunteer Fire Dept PO Box 58 Coolidge TX 766867 Fire Chief Limestone Thornton Volunteer Fire Dept PO Box 97 Tehuacana TX 766867 Fire Chief Limestone Thornton Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Limestone W Lake Limestone Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Llano Buchanan Dam Volunteer Fire Dept PO Box 143 Buchanan Dam TX 76687 Fire Chief Llano Castell Volunteer Fire Dept PO Box 143 Buchanan Dam TX 76631 Fire Chief Llano Kingsland Volunteer Fire Dept PO Box 350 Kingsland TX 76631 Fire Chief Llano Lake LBJ FD PO Box 350 Kingsland TX 76639 Fire Chief Llano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78639 Fire Chief Llano Llano City Police 123 Robinson Dr Llano TX 78643 Chief Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643		Fire	Chief	Limestone	Coolidge Volunteer Fire Dept	PO Box 235	Coolidge	TX	76635
Fire   Chief   Limestone   Lake Mexia Volunteer Fire Dept   RR 1, Box 620   Mexia   TX   76667		Fire	Chief	Limestone	Groesbeck Volunteer Fire Dept	PO Box 227	Groesbeck	TX	76642
SheriffDennisWilsonLimestoneLimestone County Sheriff's Office1221 E Yeagua StGroesbeckTX76642FireChiefLimestoneMexia Fire DeptPO Box 207MexiaTX76667ChiefJessWhislerLimestoneMexia ISD Police DeptPO Box 2000MexiaTX76667ChiefHawthorneLimestoneMexia Police Dept101 S McKinneyMexiaTX76667FireChiefLimestonePrairie Hill Volunteer Fire DeptPO Box 58CoolidgeTX76635FireChiefLimestoneTehuacana Volunteer Fire DeptPO Box 97TehuacanaTX76686FireChiefLimestoneThornton Volunteer Fire DeptPO Box 1474ThorntonTX76687FireChiefLimestoneW Lake Limestone Volunteer Fire DeptRR 3, Box 63FDThorntonTX76687FireChiefLlanoBuchanan Dam Volunteer Fire DeptPO Box 143Buchanan Dam TX78609FireChiefLlanoCastell Volunteer Fire DeptHC 7, Box 92GCastellTX78631FireChiefLlanoKingsland Volunteer Fire DeptPO Box 7765Horseshoe BayTX78639ChiefLlanoLlano County EMS200 W OllieLlanoTX78643GregKnappLlanoLlano County EMS200 W OllieLlanoTX78643FireChiefLlanoLlano County EMS200 W O		Fire	Chief	Limestone	Kosse Volunteer Fire Dept	PO Box 116	Kosse	TX	76653
Fire Chief Limestone Mexia Fire Dept PO Box 207 Mexia TX 76667 Chief Jess Whisler Limestone Mexia ISD Police Dept PO Box 2000 Mexia TX 76667 Chief Richard Hawthorne Limestone Mexia Police Dept 101 S McKinney Mexia TX 76667 Fire Chief Limestone Prairie Hill Volunteer Fire Dept PO Box 58 Coolidge TX 76635 Fire Chief Limestone Tehuacana Volunteer Fire Dept PO Box 97 Tehuacana TX 76686 Fire Chief Limestone Thornton Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Limestone W Lake Limestone Volunteer Fire Dept RR 3, Box 63FD Thornton TX 76687 Fire Chief Llano Buchanan Dam Volunteer Fire Dept PO Box 143 Buchanan Dam TX 76837 Fire Chief Llano Castell Volunteer Fire Dept PO Box 350 Kingsland TX 78639 Fire Chief Llano Kingsland Volunteer Fire Dept PO Box 7765 Horseshoe Bay TX 78657 Fire Chief Llano Llano City Police 123 Robinson Dr Llano TX 78643 Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643		Fire	Chief	Limestone	Lake Mexia Volunteer Fire Dept	RR 1, Box 620	Mexia	TX	76667
ChiefJessWhislerLimestoneMexia ISD Police DeptPO Box 2000MexiaTX76667ChiefRichardHawthorneLimestoneMexia Police Dept101 S McKinneyMexiaTX76667FireChiefLimestonePrairie Hill Volunteer Fire DeptPO Box 58CoolidgeTX76635FireChiefLimestoneTehuacana Volunteer Fire DeptPO Box 97TehuacanaTX76687FireChiefLimestoneThornton Volunteer Fire DeptPO Box 1474ThorntonTX76687FireChiefLimestoneW Lake Limestone Volunteer Fire DeptRR 3, Box 63FDThorntonTX76687FireChiefLlanoBuchanan Dam Volunteer Fire DeptPO Box 143Buchanan DamTX78609FireChiefLlanoCastell Volunteer Fire DeptHC 7, Box 92GCastellTX76831FireChiefLlanoKingsland Volunteer Fire DeptPO Box 350KingslandTX78639ChiefLlanoLake LBJ FDPO Box 7765Horseshoe BayTX78657ChiefJamesSchillingLlanoLlano County EMS200 W OllieLlanoTX78643GregKnappLlanoLlano County EMS200 W OllieLlanoTX78643FireChiefLlanoLlano County EMS200 W OllieLlanoTX78643	Sheriff	Dennis	Wilson	Limestone	Limestone County Sheriff's Office	1221 E Yeagua St	Groesbeck	TX	76642
Chief Richard Hawthorne Limestone Mexia Police Dept 101 S McKinney Mexia TX 76667 Fire Chief Limestone Prairie Hill Volunteer Fire Dept PO Box 58 Coolidge TX 76635 Fire Chief Limestone Tehuacana Volunteer Fire Dept PO Box 97 Tehuacana TX 76686 Fire Chief Limestone Thornton Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Limestone W Lake Limestone Volunteer Fire Dept RR 3, Box 63FD Thornton TX 76687 Fire Chief Llano Buchanan Dam Volunteer Fire Dept PO Box 143 Buchanan Dam TX 78609 Fire Chief Llano Castell Volunteer Fire Dept PO Box 143 Buchanan Dam TX 78609 Fire Chief Llano Castell Volunteer Fire Dept HC 7, Box 92G Castell TX 76831 Fire Chief Llano Kingsland Volunteer Fire Dept PO Box 350 Kingsland TX 78639 Fire Chief Llano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78657 Chief James Schilling Llano Llano City Police 123 Robinson Dr Llano TX 78643 Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Greg Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643		Fire	Chief	Limestone	Mexia Fire Dept	PO Box 207	Mexia	TX	76667
Fire Chief Limestone Tehuacana Volunteer Fire Dept PO Box 58 Coolidge TX 76635 Fire Chief Limestone Tehuacana Volunteer Fire Dept PO Box 97 Tehuacana TX 76686 Fire Chief Limestone Thornton Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Limestone W Lake Limestone Volunteer Fire Dept RR 3, Box 63FD Thornton TX 76687 Fire Chief Llano Buchanan Dam Volunteer Fire Dept PO Box 143 Buchanan Dam TX 78609 Fire Chief Llano Castell Volunteer Fire Dept HC 7, Box 92G Castell TX 76831 Fire Chief Llano Kingsland Volunteer Fire Dept PO Box 350 Kingsland TX 78639 Fire Chief Llano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78657 Chief James Schilling Llano Llano City Police 123 Robinson Dr Llano TX 78643 Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643	Chief	Jess	Whisler	Limestone	Mexia ISD Police Dept	PO Box 2000	Mexia	TX	76667
Fire Chief Limestone Tehuacana Volunteer Fire Dept PO Box 97 Tehuacana TX 76686 Fire Chief Limestone Thornton Volunteer Fire Dept PO Box 1474 Thornton TX 76687 Fire Chief Limestone W Lake Limestone Volunteer Fire Dept RR 3, Box 63FD Thornton TX 76687 Fire Chief Llano Buchanan Dam Volunteer Fire Dept PO Box 143 Buchanan Dam TX 78609 Fire Chief Llano Castell Volunteer Fire Dept HC 7, Box 92G Castell TX 76831 Fire Chief Llano Kingsland Volunteer Fire Dept PO Box 350 Kingsland TX 78639 Fire Chief Llano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78657 Chief James Schilling Llano Llano City Police 123 Robinson Dr Llano TX 78643 Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643	Chief	Richard	Hawthorne	Limestone	Mexia Police Dept	101 S McKinney	Mexia	TX	76667
Fire Chief Limestone Thornton Volunteer Fire Dept RR 3, Box 63FD Thornton TX 76687 Fire Chief Limestone W Lake Limestone Volunteer Fire Dept RR 3, Box 63FD Thornton TX 76687 Fire Chief Llano Buchanan Dam Volunteer Fire Dept PO Box 143 Buchanan Dam TX 78609 Fire Chief Llano Castell Volunteer Fire Dept HC 7, Box 92G Castell TX 76831 Fire Chief Llano Kingsland Volunteer Fire Dept PO Box 350 Kingsland TX 78639 Fire Chief Llano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78657 Chief James Schilling Llano Llano City Police 123 Robinson Dr Llano TX 78643 Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Greg Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County EMS 200 W Ollie Llano TX 78643		Fire	Chief	Limestone	Prairie Hill Volunteer Fire Dept	PO Box 58	Coolidge	TX	76635
Fire Chief Liano Buchanan Dam Volunteer Fire Dept PO Box 143 Buchanan Dam TX 76687 Fire Chief Liano Castell Volunteer Fire Dept PO Box 143 Buchanan Dam TX 78609 Fire Chief Liano Castell Volunteer Fire Dept HC 7, Box 92G Castell TX 76831 Fire Chief Liano Kingsland Volunteer Fire Dept PO Box 350 Kingsland TX 78639 Fire Chief Liano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78657 Chief James Schilling Liano Liano City Police 123 Robinson Dr Liano TX 78643 Cristy Knapp Liano Liano County EMS 200 W Ollie Liano TX 78643 Greg Knapp Liano Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano Liano County EMS 200 W Ollie Liano TX 78643 Fire Chief Liano Liano County EMS 200 W Ollie Buchanan Dam TX 78643		Fire	Chief	Limestone	Tehuacana Volunteer Fire Dept	PO Box 97	Tehuacana	TX	76686
Fire Chief Llano Buchanan Dam Volunteer Fire Dept PO Box 143 Buchanan Dam TX 78609 Fire Chief Llano Castell Volunteer Fire Dept HC 7, Box 92G Castell TX 76831 Fire Chief Llano Kingsland Volunteer Fire Dept PO Box 350 Kingsland TX 78639 Fire Chief Llano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78657 Chief James Schilling Llano Llano City Police 123 Robinson Dr Llano TX 78643 Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Greg Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County ESD #1 PO Box 422 Buchanan Dam TX 78609		Fire	Chief	Limestone	Thornton Volunteer Fire Dept	PO Box 1474	Thornton	TX	76687
Fire Chief Llano Castell Volunteer Fire Dept HC 7, Box 92G Castell TX 76831 Fire Chief Llano Kingsland Volunteer Fire Dept PO Box 350 Kingsland TX 78639 Fire Chief Llano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78657 Chief James Schilling Llano Llano City Police 123 Robinson Dr Llano TX 78643 Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Greg Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County ESD #1 PO Box 422 Buchanan Dam TX 78609		Fire	Chief	Limestone	W Lake Limestone Volunteer Fire Dept	RR 3, Box 63FD	Thornton	TX	76687
Fire Chief Llano Kingsland Volunteer Fire Dept PO Box 350 Kingsland TX 78639 Fire Chief Llano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78657 Chief James Schilling Llano Llano City Police 123 Robinson Dr Llano TX 78643 Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Greg Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County ESD #1 PO Box 422 Buchanan Dam TX 78609		Fire	Chief	Llano	Buchanan Dam Volunteer Fire Dept	PO Box 143	Buchanan Dam	TX	78609
Fire Chief Llano Lake LBJ FD PO Box 7765 Horseshoe Bay TX 78657 Chief James Schilling Llano Llano City Police 123 Robinson Dr Llano TX 78643 Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Greg Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County ESD #1 PO Box 422 Buchanan Dam TX 78609		Fire	Chief	Llano	Castell Volunteer Fire Dept	HC 7, Box 92G	Castell	TX	76831
Chief James Schilling Llano Llano City Police 123 Robinson Dr Llano TX 78643 Cristy Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Greg Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County ESD #1 PO Box 422 Buchanan Dam TX 78609		Fire	Chief	Llano	Kingsland Volunteer Fire Dept	PO Box 350	Kingsland	TX	78639
CristyKnappLlanoLlano County EMS200 W OllieLlanoTX78643GregKnappLlanoLlano County EMS200 W OllieLlanoTX78643FireChiefLlanoLlano County ESD #1PO Box 422Buchanan DamTX78609		Fire	Chief	Llano	Lake LBJ FD	PO Box 7765	Horseshoe Bay	TX	78657
Greg Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County ESD #1 PO Box 422 Buchanan Dam TX 78609	Chief	James	Schilling	Llano	Llano City Police	123 Robinson Dr	Llano	TX	78643
Greg Knapp Llano Llano County EMS 200 W Ollie Llano TX 78643 Fire Chief Llano Llano County ESD #1 PO Box 422 Buchanan Dam TX 78609		Cristy	Knapp	Llano	Llano County EMS	200 W Ollie	Llano	TX	78643
,		Greg	Knapp	Llano		200 W Ollie	Llano	TX	78643
Fire Chief Llano Llano County FSD #3 1240 County Road 226 Llano TX 78643		Fire	Chief	Llano	Llano County ESD #1	PO Box 422	Buchanan Dam	TX	78609
12-10 County House Elano County Loss 10 12-10 County House 220 Liano 17 100-10		Fire	Chief	Llano	Llano County ESD #3	1240 County Road 226	Llano	TX	78643

Title	FirstName	LastName	County	Agency	BusinessStreet	BusinessCity	State	Zip
Sheriff	Nathan	Garrett	Llano	Llano County Sheriff's Office	2001 N. SH 16, Ste A	Llano	TX	78643
Chief	Richard	Jackson	Llano	Llano Volunteer Fire Dept	301 W Main St	Llano	TX	78643
	Fire	Chief	Llano	Sunrise Beach Volunteer Fire Dept	124 Sunrise Dr.	Sunrise Beach	TX	78643
	Fire	Chief	Llano	Tow Volunteer Fire Dept	PO Box 112	Tow	TX	78672
	Fire	Chief	Llano	Valley Springs Volunteer Fire Dept	PO Box 5663	Valley Springs	TX	76885
Director	Cecil	Neely	Madison	Madison County Emergency Management	101 W Main St, Room 110	Madisonville	TX	77864
Sheriff	Daniel	Douget	Madison	Madison County Sheriff's Office	2005 E. Main	Madisonville	TX	77864
Chief	George	Sweetin	Madison	Madisonville Police Dept	210 W Cottonwood	Madisonville	TX	77864
	Fire	Chief	Madison	Madisonville Volunteer Fire Dept	1617 E Main St	Madisonville	TX	77864
	Fire	Chief	Madison	Midway Volunteer Fire Dept	PO Box 555	Midway	TX	75852
	Fire	Chief	Madison	North Zulch Volunteer Fire Dept	PO Box 13	North Zulch	TX	77872
	Fire	Chief	McLennan	Bellmead Fire Dept	700 Kane St	Waco	TX	76705
	Fire	Chief	McLennan	Beverly Hills Volunteer DPS/FD	3418 Memorial Dr	Beverly Hills	TX	76711
	Blare	Larry	McLennan	City of Waco	PO Box 2570	Waco	TX	76702
	Police	Chief	McLennan	Mart Police Dept	112 N Commerce	Mart	TX	76664
	Police	Chief	McLennan	McGregor Police Dept	302 S. Madison	McGregor	TX	76657
Sheriff	Larry	Lynch	McLennan	McLennan County Sheriff's Office	219 N 6th St	Waco	TX	76701
	Police	Chief	McLennan	Moody Police Dept	606 Ave E	Moody	TX	76557
	Police	Chief	McLennan	Riesel Police Dept	104 N Hwy 6	Riesel	TX	76682
	Police	Chief	McLennan	Robinson Police Dept	111 W Lyndale	Robinson	TX	76706
	Fire	Chief	McLennan	Ross Volunteer Fire Dept	PO Box 107	Ross	TX	76684
Chief	John	Johnston	McLennan	Waco Fire Dept	PO Box 2570	Waco	TX	76702
Chief	Alberto	Melis	McLennan	Waco Police Dept	PO Box 2570	Waco	TX	76702
	Frank	Patterson	McLennan	Waco-McLennan County Emergency Mgmt	PO Box 2570	Waco	TX	76702
	Fire	Chief	McLennan	Washington Volunteer Fire Dept	PO Box 46	Washington	TX	77880
	Police	Chief	McLennan	West Police Dept	110 N Reagan	West	TX	76691
	Fire	Chief	Milam	Buckholts Fire Dept	PO Box 67	Buckholts	TX	76518
	Fire	Chief	Milam	Burlington Fire Dept	PO Box 77	Burlington	TX	76519
	Fire	Chief	Milam	Cameron Fire Dept	1505 N Travis	Cameron	TX	76520
	Police	Chief	Milam	Cameron Police Dept	308 S Houston Ave	Cameron	TX	76520
	Fire	Chief	Milam	Gause Volunteer Fire Dept	PO Box 203	Gause	TX	77857
Sheriff	Charlie	West	Milam	Milam County Sheriff's Office	512 N Jefferson, Ste A	Cameron	TX	76520
	Fire	Chief	Milam	Milano Fire Dept	PO Box 145	Milano	TX	76556
Chief	Johnnie	Demsky	Milam	Minerva Fire Dept	780 Los Ranchitos Rd	Cameron	TX	76520
	Police	Chief	Milam	Rockdale Police Dept	PO Box 586	Rockdale	TX	76567
	Fire	Chief	Milam	Rockdale Volunteer Fire Dept	PO Box 586	Rockdale	TX	76567
	Fire	Chief	Milam	Thorndale Fire Dept	PO Box 454	Thorndale	TX	76577
	Police	Chief	Milam	Thorndale Police Dept	114 N Main St	Thorndale	TX	76577
	Fire	Chief	Mills	Goldthwaite Fire Dept	PO Box 38	Goldthwaite	TX	76844
Sheriff	Douglas	Storey	Mills	Mills County Sheriff's Office	PO Box 1497	Goldthwaite	TX	76844
	Fire	Chief	Mills	Mills County Volunteer Fire Dept	PO Box 483	Goldthwaite	TX	76844
	Fire	Chief	Mills	Mullin Volunteer Fire Dept	PO Box 625	Mullin	TX	76864
	Fire	Chief	Mills	Priddy Volunteer Fire Dept	RR 4	Priddy	TX	76870
	Fire	Chief	Mills	Star Volunteer Fire Dept	PO Box 301	Star	TX	76880
	Police	Chief	Robertson	Bremond Police Dept	PO Box 567	Bremond	TX	76629
	Fire	Chief	Robertson	Bremond Volunteer Fire Dept	201 S Dallas St	Bremond	TX	76629
	Police	Chief	Robertson	Calvert Police Dept	600 Railroad St	Calvert	TX	77837
Chief	Joe	Jackson	Robertson	Calvert Volunteer Fire Dept	PO Box 911	Calvert	TX	77837

Title	FirstName	LastName	County	Agency	BusinessStreet	BusinessCity	State	Zip
	Police	Chief	Robertson	Franklin Police Dept	319 N Bremond St	Franklin	TX	77856
Chief	Bill	Huggins	Robertson	Franklin Volunteer Fire Dept	PO Box 428	Franklin	TX	77856
Chief	Robert	Parsley	Robertson	Hearne Police Dept	306 W 3rd St	Hearne	TX	77859
	Fire	Chief	Robertson	Hearne Volunteer Fire Dept	301 W 2nd St	Hearne	TX	77859
Sheriff	Gerald	Yezak	Robertson	Robertson County Sheriff's Office	PO Box 1109	Franklin	TX	77856
	Fire	Chief	San Saba	Elm Grove Volunteer Fire Dept	RR 1 Box 137	Rochelle	TX	76872
	Fire	Chief	San Saba	Richland Springs Volunteer Fire Dept	PO Box 68	Richland Springs	TX	76871
Sheriff	John	Wells	San Saba	San Saba County Sheriff's Office	500 E Wallace St	San Saba	TX	76877
	Police	Chief	San Saba	San Saba Police Dept	303 S Clear St	San Saba	TX	76877
	Fire	Chief	San Saba	San Saba Volunteer Fire Dept	303 S Clear St	San Saba	TX	76877
	John	Wynn	Travis	Austin Community College Police Dept	5930 Middle Fiskville Rd	Austin	TX	78752
Lt.	David	Belknap	Travis	Austin Fire Communications @ CTECC	PO Box 1088	Austin	TX	78767
	Wilks	Gary	Travis	Austin Fire Communications @ CTECC	PO Box 1088	Austin	TX	78767
	Hood	Robyn	Travis	Austin Police Dept Communications @ CTECC	PO Box 1088	Austin	TX	78767
	Commander	Communications	Travis	Austin/Travis County EMS @ CTECC	PO Box 1088	Austin	TX	78767
	Scott	Swearengin	Travis	City of Austin Emergency Mgmt @ CTECC	PO Box 1088	Austin	TX	78767
	Mike	Simpson	Travis	City of Austin Wireless Comm Services Division	1006 Smith Rd	Austin	TX	78721
Chief	John	Stetar	Travis	Jonestown Police Dept	18649 FM 1431, 4-A	Jonestown	TX	78645
Chief	Danny	Smith	Travis	Lago Vista Police Dept	7207 Bar K Ranch Rd.	Lago Vista	TX	78645
Chief	Gordon	Bowers	Travis	Lakeway Police Dept	104 Cross Creek	Austin	TX	78734
Chief	Robert	Snyder	Travis	Manor Police Dept	PO Box 317	Manor	TX	78653
Chief	Chuck	Hooker	Travis	Pflugerville Police Dept	PO Box 679	Pflugerville	TX	78691
Chief	Dayne	Pryor	Travis	Rollingwood Police Dept	403 Nixon Dr	Rollingwood	TX	78746
Chief	Ronald	Willis	Travis	St. Edwards Univ Police Dept	3001 S Congress Ave	Austin	TX	78704
Chief	Trisha	Houston	Travis	Sunset Valley Police Dept	3205 Jones Road	Sunset Valley	TX	78745
	Ken	Yoder	Travis	Texas APCO	2504 Piping Rock Trail	Austin	TX	78748
	Communications	Director	Travis	Texas Parks & Wildlife Dept	4200 Smith School Rd	Austin	TX	78744
Coordinator	Pete	Baldwin	Travis	Travis County Emergency Mgmt @ CTECC	PO Box 1088	Austin	TX	78767
Chief	Raymond	Tennison	Travis	Travis County ESD #1	18300 Park Dr	Jonestown	TX	78645
Chief	Buddy	Crain	Travis	Travis County ESD #10	353 S Commons Ford Rd	Austin	TX	78733
Chief	Ken	Bailey	Travis	Travis County ESD #11	PO Box 1043	Del Valle	TX	78617
Chief	David	Krause	Travis	Travis County ESD #12	PO Box 846	Manor	TX	78653
Chief	Fire	Chief	Travis	Travis County ESD #14	15406 FM 2769	Volente	TX	78641
Chief	Ron	Moellenberg	Travis	Travis County ESD #2	203 E Pecan St	Pflugerville	TX	78660
Chief	Fire	Chief	Travis	Travis County ESD #3	PO Box 90427	Austin	TX	78709
Chief	Don	Smith	Travis	Travis County ESD #4	11800 N Lamar, #4-B	Austin	TX	78753
Chief	Chris	Barron	Travis	Travis County ESD #5	PO Box 117	Manchaca	TX	78652
Asst. Chief	Fire	Chief	Travis	Travis County ESD #6	15516 General Williams Dr	Austin	TX	78734
Chief	Ken	Van Rens	Travis	Travis County ESD #8	801 Bee Cave Rd	Spicewood	TX	78669
Chief	Gary	Warren	Travis	Travis County ESD #9	1011 Westlake Dr	West Lake Hills	TX	78746
Sheriff	Greg	Hamilton	Travis	Travis County Sheriff's Office	PO Box 1748	Austin	TX	78767
Captain	Paul	Knight	Travis	Travis County Sheriff's Office	PO Box 1748	Austin	TX	78767
Chief	Robert	Dahlstrom	Travis	Univ of Texas Police Dept	PO Box 7787	Austin	TX	78713
	David	Cronk	Travis	Univ of Texas Police Dept	PO Box 7787	Austin	TX	78713
Chief	Cliff	Spratlan	Travis	West Lake Hills Police Dept	911 Westlake Dr	Austin	TX	78746
Chief	Ricky	Boeker	Washington	·	101 N Chappell Hill	Brenham	TX	77833
Chief	Glenn	Fowler	Washington	·	210 N Park	Brenham	TX	77834
	Fire	Chief		Burton Volunteer Fire Dept	PO Box 548	Burton	TX	77835
			-	·				

Title	FirstName	LastName	County	Agency	BusinessStreet	BusinessCity	State	Zip
	Fire	Chief	Washington	Chappell Hill Volunteer Fire Dept	PO Box 194	Chappel Hill	TX	77426
Chief	Alan	Pittman	Washington	Meyersville Volunteer Fire Dept	9952 Hwy 105	Brenham	TX	77833
	Fire	Chief	Washington	Prairie Hill - Rock Hill Volunteer Fire Dept	7559 FM 50	Brenham	TX	77835
	Fire	Chief	Washington	Rocky Creek Volunteer Fire Dept	RR 4 Box 294	Burton	TX	77833
	Fire	Chief	Washington	Salem Volunteer Fire Dept	PO Box 1974	Brenham	TX	77833
	Sheriff		Washington	Washington County Sheriff's Office	1206 Old Independence Road	Brenham	TX	77833
	Police	Chief	Williamson	Bartlett Police Dept	300 West Bell	Bartlett	TX	76511
Coordinator	James	Mallinger	Williamson	Cedar Park Emergency Mgmt	911 Quest Pkwy	Cedar Park	TX	78613
Chief	Chris	Connealy	Williamson	Cedar Park Fire Dept	911 Quest Pkwy	Cedar Park	TX	78613
Chief	Henry	Fluck	Williamson	Cedar Park Police Dept	911 Quest Pkwy	Cedar Park	TX	78613
	Ken	Graalum	Williamson	City of Cedar Park / CWICS	911 Quest Pkwy	Cedar Park	TX	78613
	David	Clawson	Williamson	City of Taylor	500 South Main	Taylor	TX	76574
	Fire	Chief	Williamson	Coupland Volunteer Fire Dept	PO Box 125	Coupland	TX	78615
	Fire	Chief	Williamson	Florence Fire Dept	PO Box 422	Florence	TX	76527
	Police	Chief	Williamson	Florence Police Dept	PO Box 430	Florence	TX	76527
Chief	Anthony	Lincoln	Williamson	Georgetown Fire Dept	103 W 9th St	Georgetown	TX	78626
Chief	David	Morgan	Williamson	Georgetown Police Dept	809 Martin Luther King, Jr. St	Georgetown	TX	78626
	Police	Chief	Williamson	Granger Police Dept	203 E Elm St	Granger	TX	76530
	Fire	Chief	Williamson	Granger Volunteer Fire Dept	PO Box 367	Granger	TX	76530
Chief	Mark	Moellenberg	Williamson	Hutto Fire & Rescue Dept	PO Box 175	Hutto	TX	78634
	Police	Chief	Williamson	Hutto Police Dept	PO Box 639	Hutto	TX	78634
	Fire	Chief	Williamson	Jarrell Volunteer Fire Dept	PO Box 415	Jarrell	TX	76537
Chief	John	Kiracofe	Williamson	Jollyville Fire Dept	9218 Anderson Mill Rd	Austin	TX	78729
Chief	Jerry	Williams	Williamson	Leander Fire Dept	PO Box 319	Leander	TX	78646
Chief	Don	Hatcher	Williamson	Leander Police Dept	PO Box 319	Leander	TX	78746
	Police	Chief	Williamson	Liberty Hill Police Dept	PO Box 1920	Liberty Hill	TX	78642
	Fire	Chief	Williamson	Liberty Hill Volunteer Fire Dept	PO Box 443	Liberty Hill	TX	78642
Chief	Larry	Hodge	Williamson	Round Rock Fire Dept	203 Commerce Blvd.	Round Rock	TX	78664
Chief	Bryan	Williams	Williamson	Round Rock Police Dept	615 E Palm Valley Blvd	Round Rock	TX	78664
	Maureen	Ganner	Williamson	Round Rock Police Dept	615 E Palm Valley Blvd	Round Rock	TX	78664
	Fire	Chief	Williamson	Sam Bass Fire Dept	16248 S Great Oaks Dr	Round Rock	TX	78681
Chief	Haywood	Stanford	Williamson	Taylor Fire Dept	400 Porter St	Taylor	TX	76574
Chief	Jeff	Straub	Williamson	Taylor Police Dept	500 South Main	Taylor	TX	76574
Comm Super	Collette	Prikryl	Williamson	Taylor Police Dept	500 South Main	Taylor	TX	76574
	Police	Chief	Williamson	Thrall Police Dept	PO Box 346	Thrall	TX	76578
	Fire	Chief	Williamson	Thrall Volunteer Fire Dept	PO Box 386	Thrall	TX	76578
	Fire	Chief	Williamson	Weir Volunteer Fire Dept	PO Box 266	Weir	TX	78674
Manager	Patrick	Cobb	Williamson	Williamson County Emergency Communications	321 W 8th St	Georgetown	TX	78626
Coordinator	John	Sneed	Williamson	Williamson County Emergency Management	303 Martin Luther King, Jr. St	Georgetown	TX	78627
Sheriff	James	Wilson	Williamson	Williamson County Sheriff's Office	508 South Rock	Georgetown	TX	78626
Director	Mitch	Hibbs		Central Texas Red Cross - Emergency Services	2218 Pershing Dr	Austin	TX	78723
	Jack	Colley		Governor's Division of Emergency Management	PO Box 4087	Austin	TX	78773
Director	Matt	Fix		Heart of Texas Red Cross - Emergency Services	4224 Cobbs Dr	Waco	TX	76710
Director	Emergency	Services		Red Cross - Pecan Valley Chapter	600 E Adams St	Brownwood	TX	76801

# **Appendix D**

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

Region 49 will follow the guidelines presented in the most current Texas Statewide Interoperability Channel Plan, found at the following website:

http://tsiec.region49.org/MOU+TSICP.pdf

The Texas State Interoperability Channel Plan for 700MHz at the time of Plan Submission is as follows:

# 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)

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

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.

# 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 dB $\mu$  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 dB $\mu$  interfering contour will be allowed to touch but not overlap the 40 dB $\mu$  service contour of the system being evaluated. All contours are (50,50).

For adjacent and alternate channels, the  $60 \text{ dB}\mu$  interfering contour will be allowed to touch but not overlap the  $40 \text{ dB}\mu$  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  $1\mu V/m$  (customarily denoted as 40 dB $\mu$ ). It is assumed that this limitation will be applied similar to the way it is applied in the 821-824/866-869 MHz band. That is, a 40 dB $\mu$  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 dB $\mu$  % the 700 MHz band corresponds to a signal of -92.7 dBm, received by a half-wavelength dipole ( $\lambda/2$ ) 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<sup>1</sup> 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.

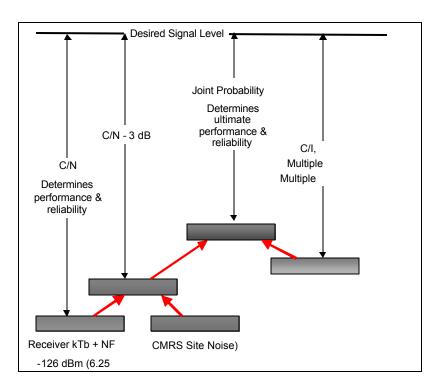


Figure 1 - Interfering Sources Create A "Noise" Level Influencing Reliability

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

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<sup>&</sup>lt;sup>1</sup> 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.<sup>2</sup>.

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	
l (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**

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<sup>&</sup>lt;sup>2</sup> 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 dB $\mu$  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 dB $\mu$  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 dB $\mu$  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.

<sup>&</sup>lt;sup>3</sup> 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	

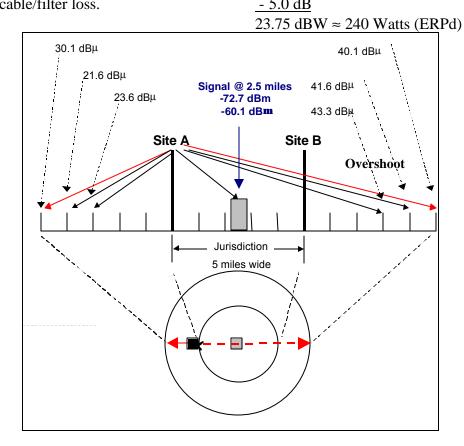


Figure 2 - Field Strength From Left Most Site.

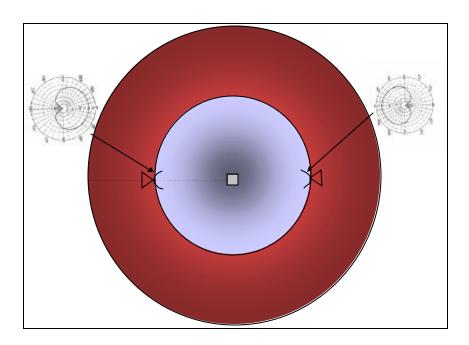


Figure 3 - Antenna Configuration Required To Limit Field Strength Off "Backside"

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 dB $\mu$ . 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 dB $\mu$  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<sup>4</sup>. 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

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<sup>&</sup>lt;sup>4</sup> 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	
Ζ	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	
Ζ	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	Site B
Direct Path	Back Side of
	20 dB F/B Antenna
Field Strength	Field Strength
$(dB\mu)$	(dBµ)
73.3	53.3
63.3	43.3
60.1	40.1
57.5	37.5
53.3	33.5
50.1	30.1
•••	
40.1	
38.4	
37.5	
36.0	
34.5	
33.0	
	Direct Path  Field Strength (dBμ)  73.3  63.3  60.1  57.5  53.3  50.1   40.1  38.4  37.5  36.0  34.5

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 dB $\mu$ . Signal level for Site A can be up to 40 dB $\mu$ , 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.

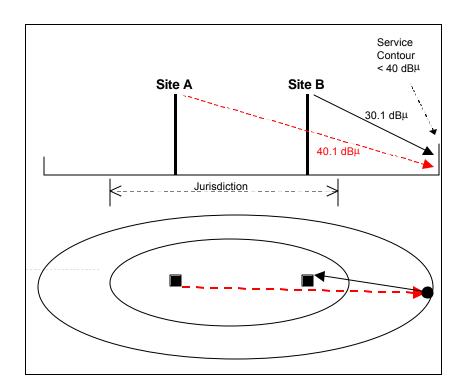


Figure 3a. Scenario 1 on Use of Table 5

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 dB $\mu$ . Signal level for Site A can be up to 38.4 dB $\mu$ . (See Attachment B for simple method to sum the powers of signals expressed in decibels.) The composite power level is 39.7 dB $\mu$ . 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 dB $\mu$ . Signal level for Site A can be up to 36.4 dB $\mu$ . (See Attachment B simple method to sum signals expressed in decibels.) The composite power level is 40.0 dB $\mu$ . 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  $40 \text{ dB}\mu$  service contour beyond the service area boundary is:

Type of Area	Extension (mi.)
Urban (20 dB Buildings)	5
Suburban (15 dB	4
Buildings)	
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 dB $\mu$  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.

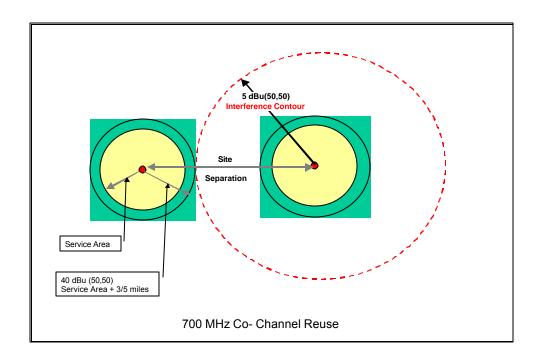


Figure 4 - Co-Channel Reuse Criterion

#### **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 dB $\mu$  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.

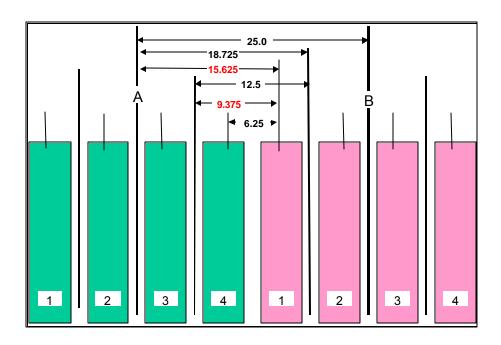


Figure 5, Potential Frequency Separations

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	12.5 kHz	65 dB
kHz		
12.5 kHz to 6.25	9.375 kHz	>40 dB
kHz		
6.25 kHz to 6.25	6.25 kHz	65 dB
kHz		

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 dB $\mu$  service contour, at 60 dB $\mu$ .

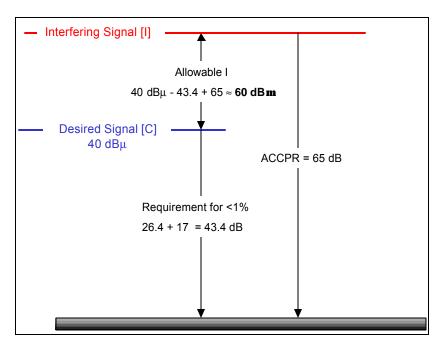


Figure 6 - Adjusted Adjacent 25 kHz Channel Interfering Contour Value

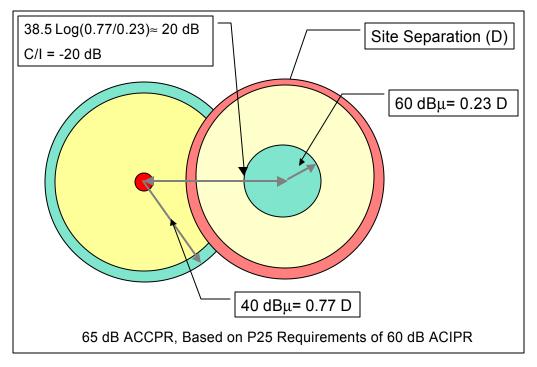


Figure 7 - Example Of Adjacent/Alternate Overlap Criterion

### **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.

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

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

$$\frac{C}{I}\% = Z \cdot \sqrt{2} \cdot \mathbf{s} \tag{2}$$

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.

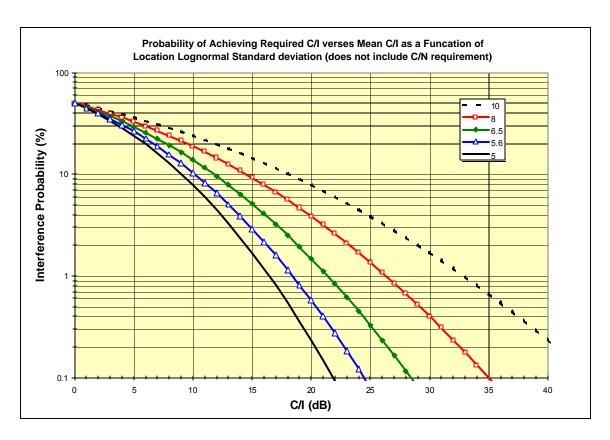


Figure A1, Probability Of Achieving Required C/I As A Function Of Location Standard Deviation

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%.

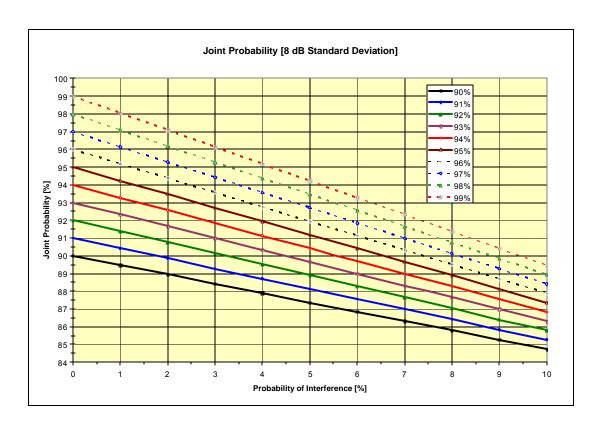
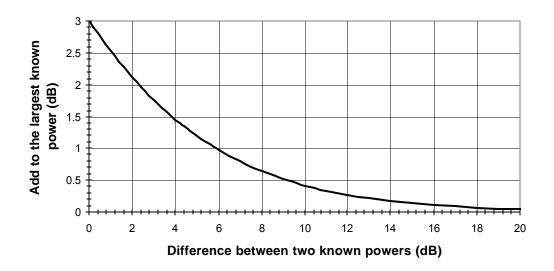


Figure A2 - Effect Of Joint Probability On The Composite Probability

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 dB $\mu$ , 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 dB $\mu$ .

The chart above provides simple method to sum two power levels expressed in dBm or dB $\mu$ . 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 dB $\mu$ . Signal B is 37.5 dB $\mu$ . Difference is 1.1 dB. Power delta is about 2.5 dB. Composite signal level is 37.5 dB $\mu$  + 2.5 dB = 40 dB $\mu$ .

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

The Region 49 Channel allocations have been established by the CAPRAD packing program. Region 49 anticipates an open filing window where applicants can apply for available channels in their county area. A "County Area" is defined as an area consisting of the area within the county as well as a distance of up to 10 miles outside of the county. It is anticipated this extended county area will enable Region 49 to maximize channel re-use of any "orphan" remainders.

# Appendix F

Region 49 - Texas - Central Texas Allotments by FCC Channel

FCC Channel	Bandwidth	Mobile Frequency	Base Frequency	County
13-14	12.50 KHz	799.081250 MHz	769.081250 MHz	Falls Travis
15-16	12.50 KHz	799.093750 MHz	769.093750 MHz	Brazos
17-20	25.00 KHz	799.112500 MHz	769.112500 MHz	Bell
19-20	12.50 KHz	799.118750 MHz	769.118750 MHz	Fayette
41-42	12.50 KHz	799.256250 MHz	769.256250 MHz	Robertson
41-44	25.00 KHz	799.262500 MHz	769.262500 MHz	Coryell
45-46	12.50 KHz	799.281250 MHz	769.281250 MHz	Hill Leon Williamson
47-48	12.50 KHz	799.293750 MHz	769.293750 MHz	Caldwell Falls
49-50	12.50 KHz	799.306250 MHz	769.306250 MHz	Freestone Lee
49-52	25.00 KHz	799.312500 MHz	769.312500 MHz	Lampasas
51-52	12.50 KHz	799.318750 MHz	769.318750 MHz	Brazos
53-54	12.50 KHz	799.331250 MHz	769.331250 MHz	McLennan Travis
57-58	12.50 KHz	799.356250 MHz	769.356250 MHz	Llano
57-60	25.00 KHz	799.362500 MHz	769.362500 MHz	Milam
81-82	12.50 KHz	799.506250 MHz	769.506250 MHz	Bastrop Limestone
81-84	25.00 KHz	799.512500 MHz	769.512500 MHz	Hamilton
83-84	12.50 KHz	799.518750 MHz	769.518750 MHz	Brazos
85-86	12.50 KHz	799.531250 MHz	769.531250 MHz	Hays
85-88	25.00 KHz	799.537500 MHz	769.537500 MHz	Bell
87-88	12.50 KHz	799.543750 MHz	769.543750 MHz	Madison

89-90	12.50 KHz	799.556250 MHz	769.556250 MHz	Lee
91-92	12.50 KHz	799.568750 MHz	769.568750 MHz	Hill Leon
93-94	12.50 KHz	799.581250 MHz	769.581250 MHz	Falls Travis
97-98	12.50 KHz	799.606250 MHz	769.606250 MHz	Burleson
97-100	25.00 KHz	799.612500 MHz	769.612500 MHz	Coryell
99-100	12.50 KHz	799.618750 MHz	769.618750 MHz	Grimes
121-122	12.50 KHz	799.756250 MHz	769.756250 MHz	Williamson
123-124	12.50 KHz	799.768750 MHz	769.768750 MHz	Brazos
125-126	12.50 KHz	799.781250 MHz	769.781250 MHz	Bastrop Burnet McLennan
129-130	12.50 KHz	799.806250 MHz	769.806250 MHz	Hays
129-132	25.00 KHz	799.812500 MHz	769.812500 MHz	Hamilton
131-132	12.50 KHz	799.818750 MHz	769.818750 MHz	Lee Limestone
133-136	25.00 KHz	799.837500 MHz	769.837500 MHz	Bell
135-136	12.50 KHz	799.843750 MHz	769.843750 MHz	Madison
137-138	12.50 KHz	799.856250 MHz	769.856250 MHz	Bosque Travis
139-140	12.50 KHz	799.868750 MHz	769.868750 MHz	Falls Fayette
161-162	12.50 KHz	800.006250 MHz	770.006250 MHz	Bastrop Burnet Limestone
163-164	12.50 KHz	800.018750 MHz	770.018750 MHz	Brazos
165-166	12.50 KHz	800.031250 MHz	770.031250 MHz	Hays Hill
165-168	25.00 KHz	800.037500 MHz	770.037500 MHz	Lampasas
169-170	12.50 KHz	800.056250 MHz	770.056250 MHz	Leon Williamson
173-174	12.50 KHz	800.081250 MHz	770.081250 MHz	Llano
173-176	25.00 KHz	800.087500 MHz	770.087500 MHz	Hamilton Milam

177-178	12.50 KHz	800.106250 MHz	770.106250	MHz	Madison McLennan Travis
179-180	12.50 KHz	800.118750 MHz	770.118750	MHz	Fayette
201-202	12.50 KHz	800.256250 MHz	770.256250	MHz	Bastrop Blanco Limestone
203-204	12.50 KHz	800.268750 MHz	770.268750	MHz	Washington
205-208	25.00 KHz	800.287500 MHz	770.287500	MHz	Bell
209-210	12.50 KHz	800.306250 MHz	770.306250	MHz	Hays Leon
211-212	12.50 KHz	800.318750 MHz	770.318750	MHz	Bosque Williamson
213-214	12.50 KHz	800.331250 MHz	770.331250	MHz	Caldwell Robertson
213-216	25.00 KHz	800.337500 MHz	770.337500	MHz	Lampasas
217-218	12.50 KHz	800.356250 MHz	770.356250	MHz	McLennan Travis
219-220	12.50 KHz	800.368750 MHz	770.368750	MHz	Grimes
241-242	12.50 KHz	800.506250 MHz	770.506250	MHz	Falls
243-244	12.50 KHz	800.518750 MHz	770.518750	MHz	Brazos
245-246	12.50 KHz	800.531250 MHz	770.531250	MHz	Bosque Williamson
247-248	12.50 KHz	800.543750 MHz	770.543750	MHz	Limestone Washington
249-250	12.50 KHz	800.556250 MHz	770.556250	MHz	Caldwell Madison
249-252	25.00 KHz	800.562500 MHz	770.562500	MHz	Bell
251-252	12.50 KHz	800.568750 MHz	770.568750	MHz	Freestone
253-254	12.50 KHz	800.581250 MHz	770.581250	MHz	Lee
253-256	25.00 KHz	800.587500 MHz	770.587500	MHz	Hamilton
255-256	12.50 KHz	800.593750 MHz	770.593750	MHz	Leon
257-258	12.50 KHz	800.606250 MHz	770.606250	MHz	McLennan Travis
259-260	12.50 KHz	800.618750 MHz	770.618750	MHz	Llano

				Robertson
281-282	12.50 KHz	800.756250 MHz	770.756250 MHz	Hays Leon
281-284	25.00 KHz	800.762500 MHz	770.762500 MHz	Coryell
283-284	12.50 KHz	800.768750 MHz	770.768750 MHz	Burleson
285-286	12.50 KHz	800.781250 MHz	770.781250 MHz	Bastrop Falls Grimes Llano
289-290	12.50 KHz	800.806250 MHz	770.806250 MHz	Williamson
291-292	12.50 KHz	800.818750 MHz	770.818750 MHz	Brazos Caldwell
293-294	12.50 KHz	800.831250 MHz	770.831250 MHz	Freestone
293-296	25.00 KHz	800.837500 MHz	770.837500 MHz	Lampasas
295-296	12.50 KHz	800.843750 MHz	770.843750 MHz	Fayette
297-298	12.50 KHz	800.856250 MHz	770.856250 MHz	McLennan Travis
299-300	12.50 KHz	800.868750 MHz	770.868750 MHz	Robertson
321-322	12.50 KHz	801.006250 MHz	771.006250 MHz	Bastrop Blanco Hill Leon
323-324	12.50 KHz	801.018750 MHz	771.018750 MHz	Washington
325-326	12.50 KHz	801.031250 MHz	771.031250 MHz	Falls
327-328	12.50 KHz	801.043750 MHz	771.043750 MHz	Brazos Llano
329-330	12.50 KHz	801.056250 MHz	771.056250 MHz	Freestone Williamson
329-332	25.00 KHz	801.062500 MHz	771.062500 MHz	Mills
333-336	25.00 KHz	801.087500 MHz	771.087500 MHz	Bell
335-336	12.50 KHz	801.093750 MHz	771.093750 MHz	Fayette
337-338	12.50 KHz	801.106250 MHz	771.106250 MHz	Bosque Robertson Travis
341-344	25.00 KHz	801.137500 MHz	771.137500 MHz	Milam

345-346	12.50 KHz	801.156250 MHz	771.156250 MHz	Burnet Caldwell Madison McLennan
347-348	12.50 KHz	801.168750 MHz	771.168750 MHz	Burleson
349-350	12.50 KHz	801.181250 MHz	771.181250 MHz	Bastrop Falls
351-352	12.50 KHz	801.193750 MHz	771.193750 MHz	Brazos
353-354	12.50 KHz	801.206250 MHz	771.206250 MHz	Hays
353-356	25.00 KHz	801.212500 MHz	771.212500 MHz	Coryell
357-358	12.50 KHz	801.231250 MHz	771.231250 MHz	Freestone Llano Washington
361-362	12.50 KHz	801.256250 MHz	771.256250 MHz	Travis
365-366	12.50 KHz	801.281250 MHz	771.281250 MHz	Blanco Robertson
369-370	12.50 KHz	801.306250 MHz	771.306250 MHz	Grimes Hill Williamson
371-372	12.50 KHz	801.318750 MHz	771.318750 MHz	Fayette
373-376	25.00 KHz	801.337500 MHz	771.337500 MHz	Hamilton
377-378	12.50 KHz	801.356250 MHz	771.356250 MHz	Bastrop Leon
377-380	25.00 KHz	801.362500 MHz	771.362500 MHz	San Saba
379-380	12.50 KHz	801.368750 MHz	771.368750 MHz	Burleson
381-382	12.50 KHz	801.381250 MHz	771.381250 MHz	Freestone
381-384	25.00 KHz	801.387500 MHz	771.387500 MHz	Bell
383-384	12.50 KHz	801.393750 MHz	771.393750 MHz	Madison
385-386	12.50 KHz	801.406250 MHz	771.406250 MHz	Limestone Travis
389-390	12.50 KHz	801.431250 MHz	771.431250 MHz	Burnet Robertson
393-394	12.50 KHz	801.456250 MHz	771.456250 MHz	Lee
393-396	25.00 KHz	801.462500 MHz	771.462500 MHz	Coryell
395-396	12.50 KHz	801.468750 MHz	771.468750 MHz	Brazos

397-398	12.50 KHz	801.481250 MHz	771.481250 MHz	Falls
399-400	12.50 KHz	801.493750 MHz	771.493750 MHz	Bosque Fayette Llano
401-402	12.50 KHz	801.506250 MHz	771.506250 MHz	Hays Leon
405-408	25.00 KHz	801.537500 MHz	771.537500 MHz	Lampasas Milam
407-408	12.50 KHz	801.543750 MHz	771.543750 MHz	Caldwell
409-410	12.50 KHz	801.556250 MHz	771.556250 MHz	Blanco Hill
413-414	12.50 KHz	801.581250 MHz	771.581250 MHz	Williamson
415-416	12.50 KHz	801.593750 MHz	771.593750 MHz	Robertson
417-418	12.50 KHz	801.606250 MHz	771.606250 MHz	Grimes McLennan
417-420	25.00 KHz	801.612500 MHz	771.612500 MHz	San Saba
419-420	12.50 KHz	801.618750 MHz	771.618750 MHz	Burleson
421-422	12.50 KHz	801.631250 MHz	771.631250 MHz	Bastrop Limestone
423-424	12.50 KHz	801.643750 MHz	771.643750 MHz	Brazos
425-426	12.50 KHz	801.656250 MHz	771.656250 MHz	Freestone Travis
427-428	12.50 KHz	801.668750 MHz	771.668750 MHz	Falls
429-430	12.50 KHz	801.681250 MHz	771.681250 MHz	Llano Madison
433-434	12.50 KHz	801.706250 MHz	771.706250 MHz	Washington
437-438	12.50 KHz	801.731250 MHz	771.731250 MHz	Burnet Caldwell Leon
439-440	12.50 KHz	801.743750 MHz	771.743750 MHz	Hill
441-442	12.50 KHz	801.756250 MHz	771.756250 MHz	Williamson
441-444	25.00 KHz	801.762500 MHz	771.762500 MHz	Mills
445-446	12.50 KHz	801.781250 MHz	771.781250 MHz	Bastrop Bosque Robertson

449-450	12.50 KHz	801.806250 MHz	771.806250 MHz	Blanco
449-452	25.00 KHz	801.812500 MHz	771.812500 MHz	Bell
451-452	12.50 KHz	801.818750 MHz	771.818750 MHz	Fayette
453-454	12.50 KHz	801.831250 MHz	771.831250 MHz	Limestone Travis
455-456	12.50 KHz	801.843750 MHz	771.843750 MHz	Madison
457-458	12.50 KHz	801.856250 MHz	771.856250 MHz	Hays
457-460	25.00 KHz	801.862500 MHz	771.862500 MHz	Coryell
461-462	12.50 KHz	801.881250 MHz	771.881250 MHz	Lee
463-464	12.50 KHz	801.893750 MHz	771.893750 MHz	Brazos
465-466	12.50 KHz	801.906250 MHz	771.906250 MHz	Burnet McLennan
467-468	12.50 KHz	801.918750 MHz	771.918750 MHz	Washington
469-470	12.50 KHz	801.931250 MHz	771.931250 MHz	Freestone Williamson
471-472	12.50 KHz	801.943750 MHz	771.943750 MHz	Burleson
473-474	12.50 KHz	801.956250 MHz	771.956250 MHz	Bastrop Grimes Hill
473-476	25.00 KHz	801.962500 MHz	771.962500 MHz	Lampasas
477-478	12.50 KHz	801.981250 MHz	771.981250 MHz	Falls Travis
479-480	12.50 KHz	801.993750 MHz	771.993750 MHz	Madison
481-484	25.00 KHz	802.012500 MHz	772.012500 MHz	Hamilton
483-484	12.50 KHz	802.018750 MHz	772.018750 MHz	Llano
485-486	12.50 KHz	802.031250 MHz	772.031250 MHz	Hays Leon
487-488	12.50 KHz	802.043750 MHz	772.043750 MHz	Lee
489-490	12.50 KHz	802.056250 MHz	772.056250 MHz	Blanco
489-492	25.00 KHz	802.062500 MHz	772.062500 MHz	Bell
493-494	12.50 KHz	802.081250 MHz	772.081250 MHz	Limestone
497-498	12.50 KHz	802.106250 MHz	772.106250 MHz	Hill

497-500	25.00 KHz	802.112500 MHz	772.112500 MHz	Milam San Saba
501-502	12.50 KHz	802.131250 MHz	772.131250 MHz	Bastrop McLennan
505-506	12.50 KHz	802.156250 MHz	772.156250 MHz	Bosque
507-508	12.50 KHz	802.168750 MHz	772.168750 MHz	Brazos
509-510	12.50 KHz	802.181250 MHz	772.181250 MHz	Falls Travis
511-512	12.50 KHz	802.193750 MHz	772.193750 MHz	Fayette Freestone Llano
513-514	12.50 KHz	802.206250 MHz	772.206250 MHz	Madison Williamson
513-516	25.00 KHz	802.212500 MHz	772.212500 MHz	Mills
517-518	12.50 KHz	802.231250 MHz	772.231250 MHz	Burnet Caldwell Leon
521-522	12.50 KHz	802.256250 MHz	772.256250 MHz	Hill Lee
523-524	12.50 KHz	802.268750 MHz	772.268750 MHz	Robertson
525-526	12.50 KHz	802.281250 MHz	772.281250 MHz	Hays
525-528	25.00 KHz	802.287500 MHz	772.287500 MHz	Hamilton
529-530	12.50 KHz	802.306250 MHz	772.306250 MHz	Grimes
529-532	25.00 KHz	802.312500 MHz	772.312500 MHz	Bell
533-534	12.50 KHz	802.331250 MHz	772.331250 MHz	Blanco Limestone
535-536	12.50 KHz	802.343750 MHz	772.343750 MHz	Bastrop Brazos
537-540	25.00 KHz	802.362500 MHz	772.362500 MHz	Coryell
541-542	12.50 KHz	802.381250 MHz	772.381250 MHz	Freestone Williamson
543-544	12.50 KHz	802.393750 MHz	772.393750 MHz	McLennan
545-546	12.50 KHz	802.406250 MHz	772.406250 MHz	Burleson
545-548	25.00 KHz	802.412500 MHz	772.412500 MHz	Lampasas

547-548	12.50 KHz	802.418750 MHz	772.418750 MHz	Madison
549-550	12.50 KHz	802.431250 MHz	772.431250 MHz	Travis
553-554	12.50 KHz	802.456250 MHz	772.456250 MHz	Llano
553-556	25.00 KHz	802.462500 MHz	772.462500 MHz	Milam
557-558	12.50 KHz	802.481250 MHz	772.481250 MHz	Bosque Leon
559-560	12.50 KHz	802.493750 MHz	772.493750 MHz	Falls Washington
561-562	12.50 KHz	802.506250 MHz	772.506250 MHz	Bastrop Burnet
569-570	12.50 KHz	802.556250 MHz	772.556250 MHz	Lee McLennan
569-572	25.00 KHz	802.562500 MHz	772.562500 MHz	Mills
573-574	12.50 KHz	802.581250 MHz	772.581250 MHz	Hays Robertson
575-576	12.50 KHz	802.593750 MHz	772.593750 MHz	Fayette
577-580	25.00 KHz	802.612500 MHz	772.612500 MHz	Coryell
581-582	12.50 KHz	802.631250 MHz	772.631250 MHz	Limestone Williamson
583-584	12.50 KHz	802.643750 MHz	772.643750 MHz	Burleson
585-586	12.50 KHz	802.656250 MHz	772.656250 MHz	Caldwell Falls
585-588	25.00 KHz	802.662500 MHz	772.662500 MHz	San Saba
587-588	12.50 KHz	802.668750 MHz	772.668750 MHz	Brazos Hill
589-590	12.50 KHz	802.681250 MHz	772.681250 MHz	Blanco
589-592	25.00 KHz	802.687500 MHz	772.687500 MHz	Bell
593-594	12.50 KHz	802.706250 MHz	772.706250 MHz	Leon Travis Washington
597-598	12.50 KHz	802.731250 MHz	772.731250 MHz	Bosque Freestone
597-600	25.00 KHz	802.737500 MHz	772.737500 MHz	Milam
601-602	12.50 KHz	802.756250 MHz	772.756250 MHz	Bastrop Llano

607-608	12.50 KHz	802.793750 MHz	772.793750 MHz	Burleson
609-610	12.50 KHz	802.806250 MHz	772.806250 MHz	Burnet McLennan
611-612	12.50 KHz	802.818750 MHz	772.818750 MHz	Lee
613-614	12.50 KHz	802.831250 MHz	772.831250 MHz	Madison
615-616	12.50 KHz	802.843750 MHz	772.843750 MHz	Falls Fayette
617-618	12.50 KHz	802.856250 MHz	772.856250 MHz	Hays Hill
617-620	25.00 KHz	802.862500 MHz	772.862500 MHz	Lampasas
621-622	12.50 KHz	802.881250 MHz	772.881250 MHz	Limestone Williamson
623-624	12.50 KHz	802.893750 MHz	772.893750 MHz	Brazos
625-626	12.50 KHz	802.906250 MHz	772.906250 MHz	Caldwell
625-628	25.00 KHz	802.912500 MHz	772.912500 MHz	San Saba
627-628	12.50 KHz	802.918750 MHz	772.918750 MHz	Robertson
629-632	25.00 KHz	802.937500 MHz	772.937500 MHz	Bell
629-632 633-634	25.00 KHz 12.50 KHz	802.937500 MHz 802.956250 MHz	772.937500 MHz 772.956250 MHz	Bell Freestone Travis
				Freestone
633-634	12.50 KHz	802.956250 MHz	772.956250 MHz	Freestone Travis
633-634	12.50 KHz	802.956250 MHz 802.968750 MHz	772.956250 MHz 772.968750 MHz	Freestone Travis Washington
633-634 635-636 637-638	12.50 KHz 12.50 KHz 12.50 KHz	802.956250 MHz 802.968750 MHz 802.981250 MHz	772.956250 MHz 772.968750 MHz 772.981250 MHz	Freestone Travis Washington Bosque
633-634 635-636 637-638 637-640	12.50 KHz 12.50 KHz 12.50 KHz 25.00 KHz	802.956250 MHz 802.968750 MHz 802.981250 MHz 802.987500 MHz	772.956250 MHz 772.968750 MHz 772.981250 MHz 772.987500 MHz	Freestone Travis Washington Bosque Milam Hill
633-634 635-636 637-638 637-640 661-662	12.50 KHz 12.50 KHz 12.50 KHz 25.00 KHz 12.50 KHz	802.956250 MHz 802.968750 MHz 802.981250 MHz 802.987500 MHz 803.131250 MHz	772.956250 MHz 772.968750 MHz 772.981250 MHz 772.987500 MHz 773.131250 MHz	Freestone Travis Washington Bosque Milam Hill Williamson
633-634 635-636 637-638 637-640 661-662	12.50 KHz 12.50 KHz 12.50 KHz 25.00 KHz 12.50 KHz	802.956250 MHz 802.968750 MHz 802.981250 MHz 802.987500 MHz 803.131250 MHz 803.137500 MHz	772.956250 MHz 772.968750 MHz 772.981250 MHz 772.987500 MHz 773.131250 MHz 773.137500 MHz	Freestone Travis Washington Bosque Milam Hill Williamson Mills
633-634 635-636 637-638 637-640 661-662 661-664 663-664	12.50 KHz 12.50 KHz 12.50 KHz 25.00 KHz 12.50 KHz 25.00 KHz 12.50 KHz	802.956250 MHz 802.968750 MHz 802.981250 MHz 802.987500 MHz 803.131250 MHz 803.137500 MHz 803.143750 MHz	772.956250 MHz 772.968750 MHz 772.981250 MHz 772.987500 MHz 773.131250 MHz 773.137500 MHz 773.143750 MHz	Freestone Travis Washington Bosque Milam Hill Williamson Mills Brazos Burnet Lee
633-634 635-636 637-638 637-640 661-662 661-664 663-664 665-666	12.50 KHz 12.50 KHz 12.50 KHz 25.00 KHz 12.50 KHz 25.00 KHz 12.50 KHz 12.50 KHz	802.956250 MHz 802.968750 MHz 802.981250 MHz 802.987500 MHz 803.131250 MHz 803.137500 MHz 803.143750 MHz 803.156250 MHz	772.956250 MHz 772.968750 MHz 772.981250 MHz 772.987500 MHz 773.131250 MHz 773.137500 MHz 773.143750 MHz 773.156250 MHz	Freestone Travis Washington Bosque Milam Hill Williamson Mills Brazos Burnet Lee McLennan

671-672	12.50 KHz	803.193750 MHz	773.193750 MHz	Leon Washington
673-676	25.00 KHz	803.212500 MHz	773.212500 MHz	Bell
677-678	12.50 KHz	803.231250 MHz	773.231250 MHz	Madison Travis
679-680	12.50 KHz	803.243750 MHz	773.243750 MHz	Fayette Limestone
701-702	12.50 KHz	803.381250 MHz	773.381250 MHz	Madison Williamson
703-704	12.50 KHz	803.393750 MHz	773.393750 MHz	Burleson Llano
705-706	12.50 KHz	803.406250 MHz	773.406250 MHz	Freestone Grimes Hays
705-708	25.00 KHz	803.412500 MHz	773.412500 MHz	Coryell
707-708	12.50 KHz	803.418750 MHz	773.418750 MHz	Fayette
709-712	25.00 KHz	803.437500 MHz	773.437500 MHz	Milam San Saba
713-714	12.50 KHz	803.456250 MHz	773.456250 MHz	McLennan
715-716	12.50 KHz	803.468750 MHz	773.468750 MHz	Brazos Caldwell
717-720	25.00 KHz	803.487500 MHz	773.487500 MHz	Bell
741-742	12.50 KHz	803.631250 MHz	773.631250 MHz	Bastrop Falls Llano
743-744	12.50 KHz	803.643750 MHz	773.643750 MHz	Burleson
745-746	12.50 KHz	803.656250 MHz	773.656250 MHz	Madison
747-748	12.50 KHz	803.668750 MHz	773.668750 MHz	Williamson
749-752	25.00 KHz	803.687500 MHz	773.687500 MHz	Coryell
751-752	12.50 KHz	803.693750 MHz	773.693750 MHz	Brazos
753-754	12.50 KHz	803.706250 MHz	773.706250 MHz	Lee
755-756	12.50 KHz	803.718750 MHz	773.718750 MHz	Hill Leon
757-758	12.50 KHz	803.731250 MHz	773.731250 MHz	Hays
757-760	25.00 KHz	803.737500 MHz	773.737500 MHz	Milam

781-782	12.50 KHz	803.881250 MHz	773.881250 MHz	Limestone Williamson
783-784	12.50 KHz	803.893750 MHz	773.893750 MHz	Brazos
785-786	12.50 KHz	803.906250 MHz	773.906250 MHz	Burnet Lee
787-788	12.50 KHz	803.918750 MHz	773.918750 MHz	Hill Madison
789-790	12.50 KHz	803.931250 MHz	773.931250 MHz	Freestone
789-792	25.00 KHz	803.937500 MHz	773.937500 MHz	Bell
793-794	12.50 KHz	803.956250 MHz	773.956250 MHz	Bastrop
793-796	25.00 KHz	803.962500 MHz	773.962500 MHz	Mills
795-796	12.50 KHz	803.968750 MHz	773.968750 MHz	Robertson
797-798	12.50 KHz	803.981250 MHz	773.981250 MHz	McLennan Travis
799-800	12.50 KHz	803.993750 MHz	773.993750 MHz	Fayette Llano
821-822	12.50 KHz	804.131250 MHz	774.131250 MHz	Bastrop Blanco
821-824	25.00 KHz	804.137500 MHz	774.137500 MHz	Coryell
825-826	12.50 KHz	804.156250 MHz	774.156250 MHz	Lee Limestone Llano
827-828	12.50 KHz	804.168750 MHz	774.168750 MHz	Brazos
829-830	12.50 KHz	804.181250 MHz	774.181250 MHz	Hill Williamson
833-834	12.50 KHz	804.206250 MHz	774.206250 MHz	Hays McLennan
837-838	12.50 KHz	804.231250 MHz	774.231250 MHz	Madison
837-840	25.00 KHz	804.237500 MHz	774.237500 MHz	Bell
861-862	12.50 KHz	804.381250 MHz	774.381250 MHz	Freestone
861-864	25.00 KHz	804.387500 MHz	774.387500 MHz	Lampasas
863-864	12.50 KHz	804.393750 MHz	774.393750 MHz	Brazos
865-866	12.50 KHz	804.406250 MHz	774.406250 MHz	McLennan Travis

869-870	12.50 KHz	804.431250 MHz	774.431250 MHz	Bastrop Falls
871-872	12.50 KHz	804.443750 MHz	774.443750 MHz	Hill Washington
873-874	12.50 KHz	804.456250 MHz	774.456250 MHz	Hays Robertson
873-876	25.00 KHz	804.462500 MHz	774.462500 MHz	Coryell
877-878	12.50 KHz	804.481250 MHz	774.481250 MHz	Madison Williamson
879-880	12.50 KHz	804.493750 MHz	774.493750 MHz	Caldwell Limestone
901-902	12.50 KHz	804.631250 MHz	774.631250 MHz	Freestone
902-904	25.00 KHz	804.637500 MHz	774.637500 MHz	Bell
905-906	12.50 KHz	804.656250 MHz	774.656250 MHz	Travis
909-910	12.50 KHz	804.681250 MHz	774.681250 MHz	Hays
909-912	25.00 KHz	804.687500 MHz	774.687500 MHz	Lampasas Milam
913-914	12.50 KHz	804.706250 MHz	774.706250 MHz	Bastrop McLennan
915-916	12.50 KHz	804.718750 MHz	774.718750 MHz	Robertson
917-918	12.50 KHz	804.731250 MHz	774.731250 MHz	Williamson
919-920	12.50 KHz	804.743750 MHz	774.743750 MHz	Limestone
941-944	25.00 KHz	804.887500 MHz	774.887500 MHz	Bell
945-946	12.50 KHz	804.906250 MHz	774.906250 MHz	Limestone Travis
947-948	12.50 KHz	804.918750 MHz	774.918750 MHz	Bosque

### Appendix F

Region 49 - Texas - Central Texas Detailed Channel Allotments by Area

Area Name	Channel	Class	Base Freq	Mobile Freq
Bastrop	81-82 125-126 161-162 201-202 285-286 321-322 349-350 377-378 421-422 445-446 473-474 501-502 535-536 561-562 601-602 669-670 741-742 793-794 821-822 869-870	Voice General Use	769.506250 769.781250 770.006250 770.256250 770.781250 771.006250 771.181250 771.631250 771.781250 771.956250 772.131250 772.343750 772.506250 772.756250 773.181250 773.631250 773.631250 773.956250 774.431250 774.431250	799.506250 799.781250 800.006250 800.256250 800.781250 801.006250 801.181250 801.356250 801.781250 801.781250 801.956250 802.131250 802.343750 802.343750 802.506250 802.756250 803.181250 803.631250 803.956250 804.131250 804.431250
	913-914	Voice General Use	774.706250	804.706250
Bell	17-20 85-88 133-136 205-208 249-252 333-336 381-384 449-452 489-492 529-532 589-592 629-632 673-676 717-720 789-792 837-840 901-904 941-944	Voice General Use	769.112500 769.537500 769.837500 770.287500 770.562500 771.087500 771.387500 771.812500 772.062500 772.312500 772.687500 772.937500 773.212500 773.487500 774.237500 774.887500 774.887500	799.112500 799.537500 799.837500 800.287500 801.087500 801.387500 801.812500 802.062500 802.312500 802.687500 802.937500 803.212500 803.487500 803.937500 804.237500 804.887500
Blanco	201-202 321-322 365-366 409-410	Voice General Use Voice General Use Voice General Use Voice General Use	770.256250 771.006250 771.281250 771.556250	800.256250 801.006250 801.281250 801.556250

	449-450 489-490 533-534 589-590 821-822	Voice General Use Voice General Use Voice General Use Voice General Use Voice General Use	771.806250 772.056250 772.331250 772.681250 774.131250	801.806250 802.056250 802.331250 802.681250 804.131250
Bosque	137-138 211-212 245-246 337-338 399-400 445-446 505-506 557-558 597-598 637-638 947-948	Voice General Use	769.856250 770.318750 770.531250 771.106250 771.493750 771.781250 772.156250 772.481250 772.731250 772.981250 774.918750	799.856250 800.318750 800.531250 801.106250 801.493750 801.781250 802.156250 802.481250 802.731250 802.981250 804.918750
Brazos	15-16 51-52 83-84 123-124 163-164 243-244 291-292 327-328 351-352 395-396 423-424 463-464 507-508 535-536 587-588 623-624 663-664 715-716 751-752 783-784 827-828 863-864	Voice General Use	769.093750 769.318750 769.518750 769.768750 770.018750 770.518750 770.818750 771.043750 771.468750 771.643750 771.893750 772.168750 772.343750 772.893750 772.893750 773.143750 773.468750 773.93750 773.93750 774.168750 774.393750	799.093750 799.318750 799.518750 799.768750 800.018750 800.518750 801.043750 801.193750 801.468750 801.643750 801.643750 802.168750 802.343750 802.343750 802.893750 802.893750 803.143750 803.468750 803.693750 803.893750 804.168750 804.393750
Burleson	97-98 283-284 347-348 379-380 419-420 471-472 545-546 583-584 607-608 703-704 743-744	Voice General Use	769.606250 770.768750 771.168750 771.368750 771.618750 771.943750 772.406250 772.643750 772.793750 773.393750 773.643750	799.606250 800.768750 801.168750 801.368750 801.618750 801.943750 802.406250 802.643750 802.793750 803.393750 803.643750

Burnet	125-126 161-162 345-346 389-390 437-438 465-466 517-518 561-562 609-610 665-666 785-786	Voice General Use	770.006250 771.156250 771.431250 771.731250 771.906250 772.231250 772.506250 772.806250 773.156250	799.781250 800.006250 801.156250 801.431250 801.731250 801.906250 802.231250 802.506250 802.806250 803.156250 803.906250
Caldwell	47-48 213-214 249-250 291-292 345-346 407-408 437-438 517-518 585-586 625-626 715-716 879-880	Voice General Use	770.331250 770.556250 770.818750 771.156250 771.543750 771.731250 772.231250 772.656250 772.906250 773.468750	799.293750 800.331250 800.556250 800.818750 801.156250 801.543750 801.731250 802.231250 802.656250 802.906250 803.468750 804.493750
Coryell	41-44 97-100 281-284 353-356 393-396 457-460 537-540 577-580 705-708 749-752 821-824 873-876	Voice General Use	769.612500 770.762500 771.212500 771.462500 771.862500 772.362500 772.612500 773.412500 773.687500 774.137500	799.262500 799.612500 800.212500 801.212500 801.462500 801.862500 802.362500 802.612500 803.412500 803.687500 804.137500 804.462500
Falls	13-14 47-48 93-94 139-140 241-242 285-286 325-326 349-350 397-398 427-428 477-478 509-510	Voice General Use	769.293750 769.581250 769.868750 770.506250 770.781250 771.031250 771.181250 771.481250 771.668750 771.981250	799.081250 799.293750 799.581250 799.868750 800.506250 800.781250 801.031250 801.181250 801.481250 801.668750 801.981250 802.181250

	559-560 585-586 615-616 741-742 869-870	Voice General Use Voice General Use Voice General Use Voice General Use Voice General Use	772.656250 772.843750 773.631250	802.493750 802.656250 802.843750 803.631250 804.431250
Fayette	19-20 139-140 179-180 295-296 335-336 371-372 399-400 451-452 511-512 575-576 615-616 679-680 707-708 799-800	Voice General Use	769.868750 770.118750 770.843750 771.093750 771.318750 771.493750 771.818750 772.193750 772.593750 772.843750 773.243750 773.418750	799.118750 799.868750 800.118750 800.843750 801.093750 801.318750 801.493750 801.818750 802.193750 802.593750 802.843750 803.243750 803.418750 803.993750
Freestone	49-50 251-252 293-294 329-330 357-358 381-382 425-426 469-470 511-512 541-542 597-598 633-634 705-706 789-790 861-862 901-902	Voice General Use	770.568750 770.831250 771.056250 771.231250 771.381250 771.656250 771.931250 772.193750 772.381250 772.731250 772.956250 773.406250 773.931250 774.381250	799.306250 800.568750 800.831250 801.056250 801.231250 801.381250 801.656250 801.931250 802.193750 802.381250 802.731250 802.956250 803.406250 803.931250 804.381250 804.631250
Grimes	99-100 219-220 285-286 369-370 417-418 473-474 529-530 705-706	Voice General Use Voice General Use	770.368750 770.781250 771.306250 771.606250 771.956250 772.306250	799.618750 800.368750 800.781250 801.306250 801.606250 801.956250 802.306250 803.406250
Hamilton	81-84 129-132 173-176	Voice General Use Voice General Use Voice General Use	769.812500	799.512500 799.812500 800.087500

	253-256 373-376 481-484 252-528	Voice General Use Voice General Use Voice General Use Voice General Use	770.587500 771.337500 772.012500 772.287500	800.587500 801.337500 802.012500 802.287500
Hays	85-86 129-130 165-166 209-210 281-282 353-354 401-402 457-458 485-486 525-526 573-574 617-618 705-706 757-758 833-834 873-874 909-910	Voice General Use	769.531250 769.806250 770.031250 770.306250 770.756250 771.206250 771.506250 771.856250 772.031250 772.281250 772.856250 772.856250 773.406250 773.731250 774.206250 774.681250	799.531250 799.806250 800.031250 800.306250 800.756250 801.206250 801.506250 802.031250 802.281250 802.581250 802.856250 803.406250 803.731250 804.206250 804.681250
Hill	45-46 91-92 165-166 321-322 369-370 409-410 439-440 473-474 497-498 521-522 587-588 617-618 661-662 755-756 787-788 829-830 871-872	Voice General Use	769.281250 769.568750 770.031250 771.006250 771.306250 771.556250 771.743750 771.956250 772.106250 772.256250 772.856250 772.856250 773.131250 773.718750 773.918750 774.181250 774.443750	799.281250 799.568750 800.031250 801.006250 801.306250 801.743750 801.956250 802.106250 802.256250 802.668750 802.856250 803.131250 803.718750 803.918750 804.181250 804.443750
Lampasas	49-52 165-168 213-216 293-296 405-408 473-476 545-548 617-620 861-864 909-912	Voice General Use	769.312500 770.037500 770.337500 770.837500 771.537500 771.962500 772.412500 772.862500 774.387500 774.687500	799.312500 800.037500 800.337500 800.837500 801.537500 801.962500 802.412500 802.862500 804.387500 804.687500

Lee	49-50 89-90 131-132 253-254 393-394 461-462 487-488 521-522 569-570 611-612 665-666 753-754 785-786 825-826	Voice General Use	769.306250 769.556250 769.818750 770.581250 771.456250 771.881250 772.043750 772.256250 772.556250 772.818750 773.156250 773.706250 773.906250 774.156250	799.306250 799.556250 799.818750 800.581250 801.456250 801.881250 802.043750 802.256250 802.556250 802.818750 803.156250 803.706250 803.906250 804.156250
Leon	45-46 91-92 169-170 209-210 255-256 281-282 321-322 377-378 401-402 437-438 485-486 517-518 557-558 593-594 671-672 755-756	Voice General Use	769.281250 769.568750 770.056250 770.306250 770.756250 771.006250 771.356250 771.506250 771.731250 772.031250 772.231250 772.481250 772.706250 773.193750 773.718750	799.281250 799.568750 800.056250 800.306250 800.756250 801.006250 801.356250 801.506250 801.731250 802.031250 802.231250 802.481250 802.706250 803.193750 803.718750
Limestone	81-82 131-132 161-162 201-202 247-248 385-386 421-422 453-454 493-494 533-534 581-582 621-622 679-680 781-782 825-826 879-880 919-920 945-946	Voice General Use	769.506250 769.818750 770.006250 770.256250 770.543750 771.406250 771.631250 772.081250 772.331250 772.631250 772.881250 773.243750 773.881250 774.156250 774.493750 774.743750 774.906250	799.506250 799.818750 800.006250 800.256250 800.543750 801.406250 801.631250 802.081250 802.331250 802.631250 802.881250 802.881250 803.243750 803.881250 804.156250 804.743750 804.906250
Llano	57-58	Voice General Use	769.356250	799.356250

	173-174 259-260 285-286 327-328 357-358 399-400 429-430 483-484 511-512 553-554 601-602 703-704 741-742 799-800 825-826	Voice General	Use	770.081250 770.618750 770.781250 771.043750 771.231250 771.493750 771.681250 772.018750 772.193750 772.456250 772.756250 773.393750 773.631250 773.993750 774.156250	800.081250 800.618750 800.781250 801.043750 801.231250 801.493750 801.681250 802.018750 802.193750 802.456250 802.756250 803.393750 803.631250 803.993750 804.156250
Madison	87-88 135-136 177-178 249-250 345-346 383-384 429-430 455-456 479-480 513-514 547-548 613-614 677-678 701-702 745-746 787-788 837-838 877-878	Voice General	Use	769.543750 769.843750 770.106250 770.556250 771.156250 771.681250 771.843750 771.993750 772.206250 772.418750 772.831250 773.231250 773.381250 773.656250 773.918750 774.231250 774.231250 774.231250 774.231250	799.543750 799.843750 800.106250 800.556250 801.156250 801.393750 801.681250 801.843750 801.993750 802.206250 802.418750 802.831250 803.231250 803.381250 803.656250 803.918750 804.231250 804.481250
McLennan	53-54 125-126 177-178 217-218 257-258 297-298 345-346 417-418 465-466 501-502 543-544 569-570 609-610 665-666 713-714 797-798 833-834 865-866	Voice General	Use	769.331250 769.781250 770.106250 770.356250 770.606250 771.156250 771.606250 771.906250 772.131250 772.393750 772.556250 773.156250 773.456250 773.981250 774.206250 774.406250	799.331250 799.781250 800.106250 800.356250 800.606250 801.156250 801.606250 801.906250 802.131250 802.393750 802.556250 802.806250 803.156250 803.456250 803.981250 804.206250 804.406250

	913-914	Voice General	Use	774.706250	804.706250
Milam	57-60 173-176 341-344 405-408 497-500 553-556 597-600 637-640 709-712 757-760 909-912	Voice General	Use Use Use Use Use Use Use Use	769.362500 770.087500 771.137500 771.537500 772.112500 772.462500 772.737500 772.987500 773.437500 773.737500 774.687500	799.362500 800.087500 801.137500 801.537500 802.112500 802.462500 802.737500 802.987500 803.427500 803.737500 804.687500
Mills	329-332 441-444 513-516 569-572 661-664 793-796	Voice General Voice General Voice General Voice General Voice General	Use Use Use Use	771.062500 771.762500 772.212500 772.562500 773.137500 773.962500	801.062500 801.762500 802.212500 802.562500 803.137500 803.962500
Robertson	41-42 213-214 259-260 299-300 337-338 365-366 389-390 415-416 445-446 523-524 573-574 627-628 667-668 795-796 873-874 915-916	Voice General	Use	769.256250 770.331250 770.618750 770.868750 771.106250 771.281250 771.593750 771.781250 772.268750 772.581250 772.918750 773.168750 773.968750 774.456250 774.718750	799.256250 800.331250 800.618750 800.868750 801.106250 801.281250 801.593750 801.781250 802.268750 802.268750 802.918750 803.168750 803.968750 804.456250 804.718750
San Saba	377-380 417-420 497-500 585-588 625-628 669-672 709-712	Voice General Voice General Voice General Voice General Voice General Voice General	Use Use Use Use Use	771.362500 771.612500 772.112500 772.662500 772.912500 773.187500 773.437500	801.362500 801.612500 802.112500 802.662500 802.912500 803.187500 803.437500
Travis	13-14 53-54 93-94	Voice General Voice General Voice General	Use	769.081250 769.331250 769.581250	799.081250 799.331250 799.581250

	137-138 177-178 217-218 257-258 297-298 337-338 361-362 385-386 425-426 453-454 477-478 509-510 549-550 593-594 633-634 677-678 797-798	Voice Voice Voice Voice Voice Voice Voice Voice Voice Voice Voice Voice Voice	General	Use	769.856250 770.106250 770.356250 770.606250 770.856250 771.106250 771.256250 771.406250 771.656250 771.831250 771.981250 772.181250 772.431250 772.706250 772.956250 773.231250 773.981250	799.856250 800.106250 800.356250 800.606250 800.856250 801.106250 801.256250 801.406250 801.656250 801.831250 801.981250 802.181250 802.431250 802.706250 802.956250 803.231250 803.981250
Washington	865-866 905-906 945-946 203-204 247-248 323-324 357-358 433-434 467-468	Voice Voice Voice Voice Voice Voice Voice	General General General General General General General General General	Use	774.406250 774.656250 774.906250 770.268750 770.543750 771.018750 771.231250 771.706250 771.918750	804.406250 804.656250 804.906250 800.268750 800.543750 801.018750 801.231250 801.706250 801.918750
	559-560 593-594 635-636 671-672 871-872	Voice Voice Voice	General General General General	Use Use Use	772.493750 772.706250 772.968750 773.193750 774.443750	802.493750 802.706250 802.968750 803.193750 804.443750

Williamson	45-46 121-122 169-170 211-212	Voice General Use Voice General Use Voice General Use Voice General Use	769.281250 769.756250 770.056250 770.318750	799.281250 799.756250 800.056250 800.318750
	245-246	Voice General Use	770.531250	800.531250
	289-290	Voice General Use	770.806250	800.806250
	329-330	Voice General Use	771.056250	801.056250
	369-370	Voice General Use	771.306250	801.306250
	413-414	Voice General Use	771.581250	801.581250
	441-442	Voice General Use	771.756250	801.756250
	469-470	Voice General Use	771.931250	801.931250
	513-514	Voice General Use	772.206250	802.206250
	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
	661-662	Voice General Use	773.131250	803.131250
	701-702	Voice General Use	773.381250	803.381250
	747-748	Voice General Use	773.668750	803.668750
	781-782	Voice General Use	773.881250	803.881250
	829-830	Voice General Use	774.181250	804.181250
	877-878	Voice General Use	774.481250	804.481250
	917-918	Voice General Use	774.731250	804.731250

#### Appendix G

The following form is an electronic copy of the signed versions accompanying the original of this document.

# Sample Form Inter-Regional Coordination Procedures And Procedures for Resolution of Disputes That May Arise Under FCC Approved Plans

#### I. INTRODUCTION

1. This is a mutually agreed upon Inter-Regional Coordination Procedures Agreement (Agreement) by and between the 700 MHz Regional Planning Committees of Regions 49, 40, 51 and 53.

#### II. INTER-REGIONAL COORDINATION AGREEMENT

- 1. The following is the specific procedure for inter-Regional coordination which has been agreed upon by Regions 49, 40, 51, and 53, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees.
- a. An application-filing window is opened or the Region announces that it is prepared to begin accepting applications on a first-come/first-served basis.
- b. Applications by eligible entities are accepted.
- c. An application-filing window (if this procedure is being used) is closed after appropriate time interval.
- d. Intra-Regional review and coordination takes place, including a technical review resulting in assignment of channels.
- e. After intra-Regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of proposed service area, shall then be forwarded to the adjacent Region(s) for review. This information will be sent to the adjacent Regional chairperson(s) using the CAPRAD database.
- f. The adjacent Region reviews the application. If the application is approved, a letter of concurrence shall be sent, via the CAPRAD database, to the initiating Regional chairperson within thirty (30) calendar days.

#### III. DISPUTE RESOLUTION

1. If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within 10 (Ten)-calendar days via email. If the applying Region cannot modify the application to satisfy

the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons email (CAPRAD database). Findings may include, but not be limited to:

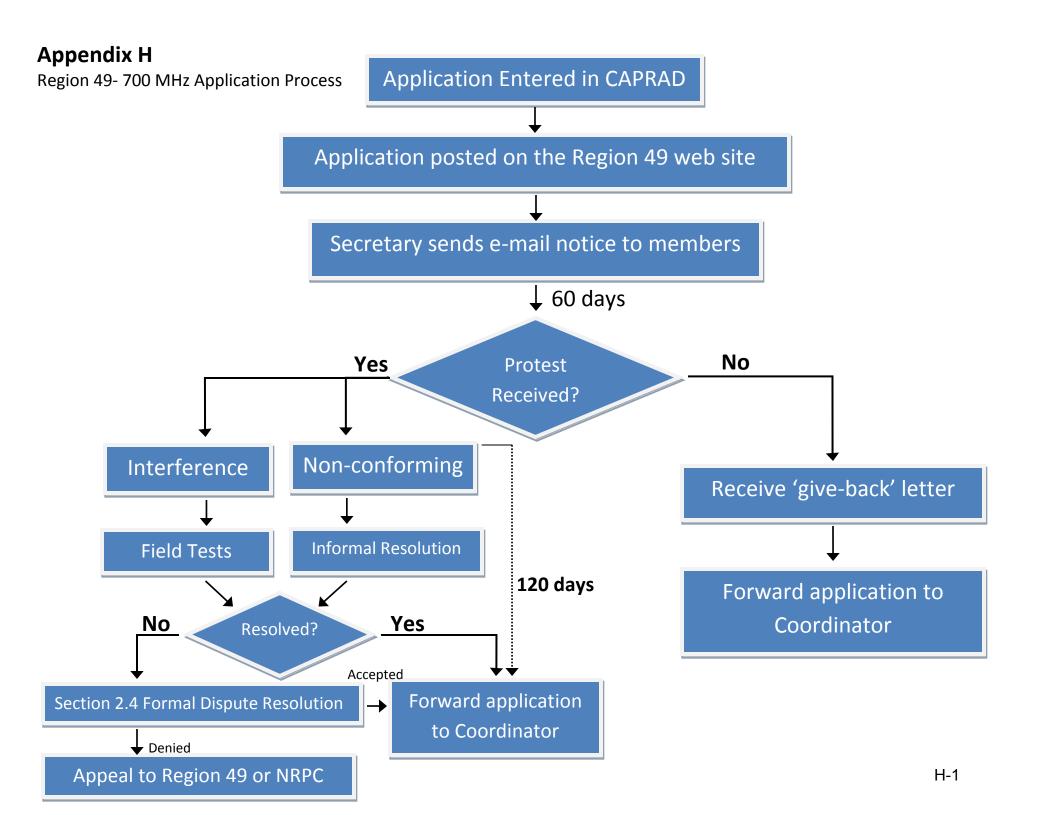
- (a) Unconditional concurrence;
- (b) Conditional concurrence contingent upon modification of Applicant's technical parameters; or
- (c) Partial or total denial of proposed frequencies due to inability to meet co-channel/adjacent channel interference free protection to existing licensees within the adjacent Region.
- 2. If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the appropriate subcommittee of the National Regional Planning Council (NRPC), or any subsequent oversight organization. Each Region involved in the dispute shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant. The NRPC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NRPC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.
- 3. Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.
- 4. Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).
- 5. Upon Commission issuance of an *Order* adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the *Order* to the adjacent Regional chairperson(s) and may then advise the applicant(s) that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

#### III. CONCLUSION

1. IN AGREEMENT HERETO, Regions 40, 50, 51, and 53 do hereunto set their signatures the day and year first above written.

Respectfully, [all signatories to agreement]	
Region 40	Date:
Region 50	Date:
Region 51	Date:
Region 53	Date:
Region 49	Date:

<sup>&</sup>lt;sup>2</sup> If an applicant's proposed service area extends into an adjacent Public Safety Region (s), the affected Region(s) must approve the application. Service area shall normally be defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Other definitions of service area shall be justified with an accompanying *Memorandum of Understanding (MOU)* or other application documentation between agencies, i.e. mutual aid agreements.



#### Attachment 1: Inter-Regional Agreements

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

#### I. Coordination Procedures

#### I. INTRODUCTION

1. This is a mutually agreed upon Inter-Regional Coordination Procedures
Agreement (Agreement) by and between the following 700 MHz Regional Planning
Committees, Region 49 and Region 40.

#### II. INTER-REGIONAL COORDINATION AGREEMENT

- 2. The following is the specific procedure for inter-regional coordination which has been agreed upon by Region 49 and 40, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees.
- a. An application filing window is opened or the Region announces that it is prepared to begin accepting applications on a first-come/first-served basis.
  - b. Applications by eligible entities are accepted.
- c. An application filing window (if this procedure is being used) is closed after appropriate time interval.
- d. Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.
- e. After intra-regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of proposed service area, shall then be forwarded to the adjacent Region(s) for review. <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> If an applicant's proposed service area <u>or interference contour</u> extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service area shall normally be

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

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

#### II. Dispute Resolution

- (1) If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within 10 (Ten) calendar days via email. If the applying Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons email (CAPRAD database). Findings may include, but not be limited to:
  - Unconditional concurrence;
  - (ii) conditional concurrence contingent upon modification of applicant's technical parameters; or
  - (iii) partial or total denial of proposed frequencies due to inability to meet co-channel/adjacent channel interference free protection to existing licensees within the adjacent Region.

defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Interference contour shall normally be defined as a 5 dBu co-channel contour or a 60 dBu adjacent channel contour. Other definitions of service area or interference shall be justified with an accompanying Memorandum of Understanding (MOU) or other application documentation between agencies, i.e. mutual aid agreements.

- (2) If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Plan Oversight Committee (NPOC)<sup>2</sup>, of the National Public Safety Telecommunications Council. Each Region involved in the dispute shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant. The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NPOC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.
- g. Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.
- h. Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).
- i. Upon Commission issuance of an *Order* adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy

<sup>&</sup>lt;sup>2</sup> The Regional Plan Oversight Committee (RPOC) is a committee within the National Public Safety Telecommunications Council (NPSTC) established to arbitrate disputes between 700 MHz Regions that cannot be resolved by the impacted Regions.

of the *Order* to the adjacent Regional chairperson(s) and may then advise the applicant(s) that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

#### III. CONCLUSION

3. IN AGREEMENT HERETO, Regions [49] do hereunto set their signatures the day and year first above written.

Respectfully,

[all signatories to agreement]

Date: 7/14/04

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

#### I. Coordination Procedures

#### I. INTRODUCTION

This is a mutually agreed upon Inter-Regional Coordination Procedures
 Agreement (Agreement) by and between the following 700 MHz Regional Planning Committees,
 Regions 49 and 50.

#### II. INTER-REGIONAL COORDINATION AGREEMENT

- The following is the specific procedure for inter-regional coordination which has been agreed upon by Regions 49 and 50, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees.
- a. An application filing window is opened or the Region announces that it is prepared to begin accepting applications on a first-come/first-served basis.
  - b. Applications by eligible entities are accepted.
- c. An application filing window (if this procedure is being used) is closed after appropriate time interval.
- d. Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.
- e. After intra-regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of proposed service area, shall then be forwarded to the adjacent Region(s) for review. <sup>1</sup> This information will be sent to the adjacent Regional chairperson(s) using the CAPRAD database.

<sup>&</sup>lt;sup>1</sup> If an applicant's proposed service area or interference contour extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service area shall normally be defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Interference contour shall normally be defined as a 5 dBu co-channel contour or a 60 dBu adjacent channel

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

#### II. Dispute Resolution

- (1) If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within 10 (Ten) calendar days via email. If the applying Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons email (CAPRAD database). Findings may include, but not be limited to:
  - (i) Unconditional concurrence;
  - (ii) conditional concurrence contingent upon modification of applicant's technical parameters; or
  - (iii) partial or total denial of proposed frequencies due to inability to meet co-channel/adjacent channel interference free protection to existing licensees within the adjacent Region.
- (2) If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Plan Oversight Committee (NPOC)<sup>2</sup>, of the National Public Safety Telecommunications Council, or any successor organization charged with handling such disputes Each Region involved in the dispute

contour. Other definitions of service area or interference shall be justified with an accompanying *Memorandum of Understanding (MOU)* or other application documentation between agencies, i.e. mutual aid agreements.

shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant. The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NPOC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.

- g. Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.
- h. Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).
- i. Upon Commission issuance of an *Order* adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the *Order* to the adjacent Regional chairperson(s) and may then advise the applicant(s) that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

#### III. CONCLUSION

3. IN AGREEMENT HERETO, Regions 49 and 50 do hereunto set their signatures the day and year first above written.

Respectfully,

<sup>&</sup>lt;sup>2</sup> The Regional Plan Oversight Committee (RPOC) is a committee within the National Public Safety Telecommunications Council (NPSTC) established to arbitrate disputes between 700 MHz Regions that cannot be resolved by the impacted Regions.

Chairman, Region 49

Chairman, Region 50

Date: 6/14/2010

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

#### I. Coordination Procedures

#### I. INTRODUCTION

This is a mutually agreed upon Inter-Regional Coordination Procedures
 Agreement (Agreement) by and between the following 700 MHz Regional Planning Committees,
 Region 51 and Region 49

#### II. INTER-REGIONAL COORDINATION AGREEMENT

- 2. The following is the specific procedure for inter-regional coordination which has been agreed upon by Region 51 and Region 49, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees.
- a. An application filing window is opened or the Region announces that it is prepared to begin accepting applications on a first-come/first-served basis.
  - b. Applications by eligible entities are accepted.
- c. An application filing window (if this procedure is being used) is closed after appropriate time interval.
- d. Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.
- e. After intra-regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of proposed service area, shall then be forwarded to the adjacent Region(s) for review. This information will be sent to the adjacent Regional chairperson(s) using the CAPRAD database.

<sup>&</sup>lt;sup>1</sup> If an applicant's proposed service area or interference contour extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service area shall normally be defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Interference contour shall normally be defined as a 5 dBu co-channel contour or a 60 dBu adjacent channel

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

#### **II.** Dispute Resolution

- shall document the reasons for partial or non-concurrence, and respond within 10 (Ten) calendar days via email. If the applying Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons email (CAPRAD database). Findings may include, but not be limited to:
  - (i) Unconditional concurrence;
  - (ii) conditional concurrence contingent upon modification of applicant's technical parameters; or
  - (iii) partial or total denial of proposed frequencies due to inability to meet co-channel/adjacent channel interference free protection to existing licensees within the adjacent Region.
- (2) If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Plan Oversight Committee (NPOC)<sup>2</sup>, of the National Public Safety Telecommunications Council. Each Region involved in the dispute shall include a detailed explanation of its position, including

contour. Other definitions of service area or interference shall be justified with an accompanying Memorandum of Understanding (MOU) or other application documentation between agencies, i.e. mutual aid agreements.

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

- g. Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.
- h. Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).
- i. Upon Commission issuance of an Order adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the Order to the adjacent Regional chairperson(s) and may then advise the applicant(s) that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

#### III. CONCLUSION

3. IN AGREEMENT HERETO, Region 51 and Region 49 do hereunto set their signatures the day and year first above written.

<sup>2</sup> The Regional Plan Oversight Committee (RPOC) is a committee within the National Public Safety Telecommunications Council (NPSTC) established to arbitrate disputes between 700 MHz Regions that cannot be resolved by the impacted Regions.

Respectfully,

[all signatories to agreement]

Date: 8/29/06

Regional Chairman Central Texas (Austin Area) Ronald G. Mayworm Radio System Engineer City of Bryan, Texas P.O. Box 1585 Bryan, TX 77805-1585 PH: 979-209-5475

FX: 979-209-5489 Email: ron@ktsignals.com

Regional Chairman
Texas- East
Ron Gillory
Houston Police Department
Communications Management Division
61 Reisner Street
Houston, TX 77002
PH: 713-247-5744
FX: 713-247-4368
Email: sezron@hic.net

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

#### I. Coordination Procedures

#### I, INTRODUCTION

This is a mutually agreed upon Inter-Regional Coordination Procedures
 Agreement (Agreement) by and between the following 700 MHz Regional Planning Committees,
 Regions 49 and 53.

#### II. INTER-REGIONAL COORDINATION AGREEMENT

- The following is the specific procedure for inter-regional coordination which has been agreed upon by Regions 49 and 53, and which will be used by the Regions to coordinate with adjacent Regional Planning Committees.
- a. An application filing window is opened or the Region announces that it is prepared to begin accepting applications on a first-come/first-served basis.
  - b. Applications by eligible entities are accepted.
- c. An application filing window (if this procedure is being used) is closed after appropriate time interval.
- d. Intra-regional review and coordination takes place, including a technical review resulting in assignment of channels.
- e. After intra-regional review, a copy of those frequency-specific applications requiring adjacent Region approval, including a definition statement of proposed service area, shall then be forwarded to the adjacent Region(s) for review. <sup>1</sup> This information will be sent to the adjacent Regional chairperson(s) using the CAPRAD database.

<sup>&</sup>lt;sup>1</sup> If an applicant's proposed service area or interference contour extends into an adjacent Public Safety Region(s), the application must be approved by the affected Region(s). Service area shall normally be defined as the area included within the geographical boundary of the applicant, plus three (3) miles. Interference contour shall normally be defined as a 5 dBu co-channel contour or a 60 dBu adjacent channel

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

#### II. Dispute Resolution

- (1) If the adjacent Region(s) cannot approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond within 10 (Ten) calendar days via email. If the applying Region cannot modify the application to satisfy the objections of the adjacent Region then, a working group comprised of representatives of the two Regions shall be convened within thirty (30) calendar days to attempt to resolve the dispute. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons email (CAPRAD database). Findings may include, but not be limited to:
  - (i) Unconditional concurrence;
  - (ii) conditional concurrence contingent upon modification of applicant's technical parameters; or
  - (iii) partial or total denial of proposed frequencies due to inability to meet co-channel/adjacent channel interference free protection to existing licensees within the adjacent Region.
- (2) If the Inter-Regional Working Group cannot resolve the dispute, then the matter shall be forwarded for evaluation to the National Plan Oversight Committee (NPOC)<sup>2</sup>, of the National Public Safety Telecommunications Council, or any successor organization charged with handling such disputes Each Region involved in the dispute

contour. Other definitions of service area or interference shall be justified with an accompanying *Memorandum of Understanding (MOU)* or other application documentation between agencies, i.e. mutual aid agreements.

shall include a detailed explanation of its position, including engineering studies and any other technical information deemed relevant. The NPOC will, within thirty (30) calendar days, report its recommendation(s) to the Regional chairpersons via the CAPRAD database. The NPOC's decision may support either of the disputing Regions or it may develop a proposal that it deems mutually advantageous to each disputing Region.

- g. Where adjacent Region concurrence has been secured, and the channel assignments would result in no change to the Region's currently Commission approved channel assignment matrix. The initiating Region may then advise the applicant(s) that their application may be forwarded to a frequency coordinator for processing and filing with the Commission.
- h. Where adjacent Region concurrence has been secured, and the channel assignments would result in a change to the Region's currently Commission approved channel assignment matrix, then the initiating Region shall file with the Commission a *Petition to Amend* their current Regional plan's frequency matrix, reflecting the new channel assignments, with a copy of the *Petition* sent to the adjacent Regional chairperson(s).
- i. Upon Commission issuance of an *Order* adopting the amended channel assignment matrix, the initiating Regional chairperson will send a courtesy copy of the *Order* to the adjacent Regional chairperson(s) and may then advise the applicant(s) that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

#### III. CONCLUSION

3. IN AGREEMENT HERETO, Regions 49 and 53 do hereunto set their signatures the day and year first above written.

Respectfully,

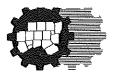
<sup>&</sup>lt;sup>2</sup> The Regional Plan Oversight Committee (RPOC) is a committee within the National Public Safety Telecommunications Council (NPSTC) established to arbitrate disputes between 700 MHz Regions that cannot be resolved by the impacted Regions.

Chairman Racion 19

Chairman, Region 49

Chairman, Region 53

Date: 7-8- 2010



North Central Texas Council Of Governments

## REGION 40 LETTER OF CONCURENCE WITH REGION 49 700 MHZ PLAN

Ronald G. Mayworm, Chairman Region 49 Regional Planning Committee 3708 E. 29<sup>th</sup> Street, # 128 Bryan, Texas 77802

Wah

Date: June15, 2010

Dear Chairman Mayworm,

The Region 40 Regional Review Committee and Region 40's staff are in receipt of Region 49's 700 MHz Regional Plan. The purpose of this letter is to inform you that Region 40's Regional Review Committee, the Region 40 staff, and I have reviewed the Plan and find it compliant with the guidelines. Further, we find that it does not conflict with Region 40's 700 MHz Plan.

Please let this letter serve as Region 40's official written concurrence of Region 49's 700 MHz Regional Plan.

Sincerely,

Gerard Eads

Region 40 Chairman

101 W. Abram

Arlington, Texas 76004

# REGION 50 LETTER OF CONCURRENCE WITH REGION 49 700 MHZ PLAN

Ronald G. Mayworm, Chairman Region 49 Regional Planning Committee 3708 E. 29<sup>th</sup> Street # 128 Bryan, TX 77802

Dear Chairman Mayworm,

Region 50 is in receipt of your proposed 700 MHz Regional Plan, submitted to this committee on June 1, 2010.

This letter serves as the official, written concurrence of Region 50 with your proposed 700 MHz Regional Plan.

Sincerely,

Frank Mendez, Chairman

Region 50 Regional Planning Committee

8600 Montana, Suite C El Paso, TX 779925

6/14/2010

Date

## REGION 51 LETTER OF CONCURRENCE

#### WITH REGION 49 700 MHZ PLAN

Ronald G. Mayworm, Chairman Region 49 Regional Planning Committee 3708 E. 29<sup>th</sup> Street # 128 Bryan, TX 77802

Dear Chairman Mayworm,

Region 51 is in receipt of your proposed 700 MHz Regional Plan, submitted to this committee on June 1, 2010.

This letter serves as the official, written concurrence of Region 51 with your proposed 700 MHz Regional Plan.

Sincerely

Douglas Frankhouser, Chairman Region 51 Regional Planning Committee 16930 John F Kennedy Blvd. Houston, TX 77032

Date

#### **REGION 53 LETTER OF CONCURRENCE**

#### WITH REGION 49 700 MHZ PLAN

Ronald G. Mayworm, Chairman Region 49 Regional Planning Committee 3708 E. 29<sup>th</sup> Street # 128 Bryan, TX 77802

Dear Chairman Mayworm,

Region 53 is in receipt of your proposed 700 MHz Regional Plan, submitted to this committee on June 1, 2010.

This letter serves as the official, written concurrence of Region 53 with your proposed 700 MHz Regional Plan.

Sincerely,

Richard Morales, Jr., Chairman

Region 53 Regional Planning Committee

515 S. Frio

San Antonio, TX 78207

Date