Region 8 700 MHz Regional Public Safety Planning Committee

Regional Planning Committee



Allen J. Demcoe Chairman

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October 30, 2015

Federal Communications Commission Office of the Secretary 445 12th Street, SW Washington, DC 20554

Attention: Chief, Public Safety and Homeland Security Bureau

Subject: WTB Docket No. 02-378, Region 8 - 700 MHz Regional Plan Amendment as Required by FCC 14-172

Dear Admiral Simpson:

Pursuant to the requirements of the Federal Communications Commission ("FCC") in FCC 14-172, Regional Planning Committee hereby submits necessary changes in the Region's 700 MHz Plan, previously approved by the FCC, to comply with the Report and Order. In accordance with 47 C.F.R. §90.527(b), the modifications have been coordinated with each of the adjoining Regional Planning Committees and their certifications are included in Appendix L of the Plan.

There are three main areas of change contained within this Plan. The first change is to allot those frequencies identified in 47 C.F.R. §90.531(b)(2), commonly known as the "reserve" channels, as required by FCC 14-172. The proposed allotments are identified in Appendix W. Region 8 will work to identify all reasonable spectrum requirements needed by any T-Band incumbents desiring 700 MHz frequencies.

Finally, the Plan contains certain ministerial updates and clarifications as requested by the membership or deletions of material based upon FCC 14-172; e.g. protection of television channels using the 700 MHz spectrum.

Respectfully submitted,

Morton Leifer

Regional Planning Committee

FCC Region 8 – 700-MHz

Public-Safety Communications Plan



Document Addition and Revision Log

Date of Revision	Revisions	Version
4/25/2006	 Initial version – excluding the following sections: In-building and underground system design and spectrum management parameters; Aeronautical use of the 700-MHz General Use channels; Region 8 Chair's signatures; Adjacent-region approvals and signatures; and FCC approval. 	1.0
5/04/2006	Verbiage and formatting changes implemented.	1.1
5/23/2006	Version 1.2 Release Notes: Talk-around interoperability channel tables corrected; and Appendix section implemented to include the tribal nation letters.	1.2
6/02/2006	Formatting and cross-reference revisions made throughout the document.	1.3
6/19/2006	 Version 1.4 – excluding the following sections: Region 8 Chair's signatures; Adjacent-region approvals and signatures; and FCC approval. Version 1.4 Release Notes: Tribal nation correspondence information included; and Formatting and cross-reference revisions made throughout the document. 	1.4
7/27/2006	 Version 1.5 – excluding the following sections: Adjacent-region approvals and signatures; FCC cover letter; FCC approval; In-building and underground system design and spectrum management parameters; and Aeronautical use of the 700-MHz General Use channels. 	1.5



Date of Revision	Revisions	Version
5/8/2007	 Version 1.6 – excluding the following sections: FCC cover letter; In-building and underground system design and spectrum management parameters; Adjacent-region approvals and signatures from RPC 28; and FCC approval letter. Version 1.6 Release Notes: Verbiage and formatting changes implemented; Orphan Channel verbiage included in Sections 5 and 9.5; Longley-Rice propagation model explanation implemented in Section 9.2; Included an adjacent-region definition in Section 13; Updated the URL in Section 13; Included an updated committee member contact list and RPC meeting attendance roster in Appendices A and B, respectively; Included the concurrence letter from RPC 30 in Appendix L; Included the RPC 30 Chairperson's signature to the adjacent-region concurrence letter in Appendix N; and Included an updated Tribal Nation Correspondence Log in Appendix V. 	1.6
5/21/2007	 Version 1.7 – excluding the following sections: FCC cover letter; In-building and underground system design and spectrum management parameters; Adjacent-region approvals and signatures from RPC 28; and FCC approval letter. Version 1.7 Release Notes: Public meeting notices and minutes included up to the 7/10/2007 meeting; Included an updated committee member contact list and RPC meeting attendance roster in Appendices A and B, respectively; and Included an updated Tribal Nation Correspondence Log in Appendix V. 	1.7

Date of Revision	Revisions	Version
4/24/2008	 Version 2.0 – excluding the following sections: In-building and underground system design and spectrum management; and FCC approval letter. Version 2.0 Release Notes: Revised the Plan to reflect the Second Report and Order (FCC 07-132), reconfiguring the 700-MHz public safety communications band; Revised the channel allotment tables to reflect the repacking of CAPRAD, as per the Second Report and Order, adopted on July 31, 2007, and this RPC's elections for channel block size, combiner separation, and capacity options; Included procedures to administer the Low-Power Interoperability Channels; Revised the Low-Power Interoperability Channels Subscriber Service Assignment Table; Revised Section 7.7, Channels Released, and Figures 8 and 9 to account for seven (7) to nine (9) channels released; Implemented verbiage, formatting, and cross-reference revisions throughout the document; Updated the Plan to include all public meeting notices, meeting minutes, and attendance rosters; Updated the Plan to reflect the new committee administration; and Uplifted the Plan into a revised document template. 	2.0
10/30/2015	 Version 5.0 Release Notes: Major Revision to Section 2 – Committee Administration Minor Revision to Section 3 – Bylaws Minor Revision to Section 5 – Procedure for Requesting Spectrum Allotments Minor Revision to Section 6– Application Requirements and Appendix E, Application Package Checklist Minor Revisions to Section 9 – Interference Protection Major Revision to Appendix O - Interregional Frequency-Coordination And Dispute-Resolution Creation of Appendix X – Former Reserve Channel Allocations 	5.0





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Compliance Matrix

Compliance Matrix

Regional Plan Element	Check	Rule Section	See Plan Section #
Cover letter referencing WT Docket No. 02-378, PSHS Docket No. 06-229, FCC Docket No. 07- 132, and identifying the document as the 700- MHz Regional Plan for the Region.	\checkmark	Public Notice DA-02-3497	Cover letter
Name, Title, address, phone number, agency affiliation, and email address of Chairperson.	\checkmark	90.527(a)(1)	Section 2
Names, agency affiliations, voting status, mailing addresses, phone numbers, email addresses (if available) of other RPC officers.	\checkmark	90.527(a)(1)	Appendix A
A statement that at least 60-days notice was given prior to the first meeting.	\checkmark	1st R&O, FN220	Section 1.1
A summary of the major elements of the plan and an explanation of how all eligible entities within the Region were given an opportunity to participate and have their positions heard and considered fairly.	\checkmark	90.527(a)(2)	Compliance Matrix, Section 1.2
Definition of the Region, its boundaries, and a list of the counties and cities within the boundaries.	\checkmark	90.527(a)(2)	Section 4
Overview of public safety entities (state agencies, federal agencies, etc.) that have jurisdiction within or over any or all portions of the Region.	\checkmark	90.527(a)(2)	Section 7.1
Description of the types of public safety, law enforcement, government, public service, or other entities (federal, county, regional, city, town, etc.) that are included in the Region.	\checkmark	90.527(a)(2)	Section 7.1
The dates and publications in which the meetings were announced.	\checkmark	90.527(a)(2)	Appendix V
The dates and websites on which the meetings were announced.	\checkmark	90.527(a)(2)	Appendix V
A description of the process by which comments were solicited from all eligible parties.	\checkmark	90.527(a)(2)	Section 1.2
Summary of all comments and submissions obtained through the process.	\checkmark	90.527(a)(2)	Appendix V
A description of the process used to consider comments submitted from concerned parties.	\checkmark	90.527(a)(2)	Section 1.2
The guidelines and procedures for operation of the RPC.	\checkmark	90.527(a)(2)	Section 3

Regional Plan Element	Check	Rule Section	See Plan Section #
The procedures for frequency coordination.	\checkmark	90.527(a)(2)	Section 12
Guidelines and procedures for protection of incumbent TV/DTV stations within the Region or near the Region's border during the DTV transition period.	\checkmark	90.527(a)(2)	Section 11
A copy of the RPC's bylaws.	\checkmark	90.527(a)(3)	Section 3
The technical procedures for requesting channels.	\checkmark	90.527(a)(3)	Section 5
An overview of the application process.	\checkmark	90.527(a)(3)	Section 5
An explanation of how the RPC decided between competing agencies when more requests for spectrum were received than could be filled. What criteria were used to evaluate competing applications to determine which request was granted?	\checkmark	90.527(a)(3)	Section 7
An explanation of how the RPC decided how the spectrum would be allocated (e.g., by population) and how applications were solicited (e.g., on a first-come, first-served basis or only during certain filing windows). An explanation of channel-recovery methods that will be applied within the Region.	V	90.527(a)(4)	Section 7
A description of how the applications are handled and reviewed, including an explanation of how the RPC applies the evaluation criteria listed in item 3.	\checkmark	90.527(a)(4)	Sections 6-9
Spectrum utilization agreements with other Regions.	\checkmark	90.527(a)(5)	Sections 12 and 13
If the State bears responsibility for administering the interoperability channels, the Regional Plan must indicate how the Region will interact with the SIEC or similar body. If the RPC is responsible for administering the interoperability channels, see the check points below the bold type.	V	90.525(b)	Appendix U
Description of the pre-coordination allotment method used at the Region's borders. ¹	\checkmark	90.527(a)(5)	Sections 5, 12, and 13

¹ The channel allotments provided in this Plan <u>reflect the repacking</u> of CAPRAD as per the Second Report and Order, adopted on July 31, 2007, and this RPC's elections for channel block size, combiner separation, and capacity options.

Regional Plan Element	Check	Rule Section	See Plan Section #
Concurrence from the Chairs of the adjacent Regions OR evidence that the RPC used the NCC Implementation Subcommittee's pre-planning proposal to reserve some portion of the 700- MHz spectrum at the RPC borders for the adjacent Region(s).	V	90.527(a)(5)	Appendix L, M, and N
If any of the adjacent Regions have not yet convened or selected a convener, the Plan must include a waiver of 90.527(a)(5).	\checkmark	90.527(a)(5)	NA
An explanation of how the RPC encouraged spectrum reuse and promoted spectrally efficient technologies to make the most efficient use of the spectrum.	\checkmark	90.527(a)(6)	Section 9
An explanation of how the RPC will maintain the pre-coordination database and provide opportunities for future modifications of the plan.	\checkmark	90.527(a)(7)	Section 12
Interregional dispute resolution agreements signed by the Chair(s) of the Adjacent Region(s).	\checkmark	90.527(a)(7)	Appendix O
A certification by the RPC Chair that all RPC meetings were open to the public.	\checkmark	90.527(a)(8)	Appendix V
Signature of the RPC Chair.	\checkmark	90.527(a)(8)	Cover Letter
The following items would constitute a Section that would be required only if the RPC had assumed responsibility for administering the 700-MHz Interoperability Channels.	NA	NA	NA
If the RPC bears responsibility for administering the interoperability channels, Section 9 of the Regional Plan must include: 1) a list of the interoperability channels; 2) a definition of when and where the two calling channels are to be used, including monitoring requirements; 3) a description of how the interoperability channels will be deployed and used in the Region, including procedures to extract interoperability channels being used in the trunked mode when necessary; channel nomenclature; minimum channel quantity; and channel-access parameters; and 4) priority access levels to be used on the interoperability channels.	NA	90.525(b)	NA
Description of existing interoperability contracts, compacts, mutual aid agreements, etc.	NA	90.525 (b)	NA



Regional Plan Element	Check	Rule Section	See Plan Section #
Description of the effect of the addition of 700- MHz channels and interoperability requirements on existing plans.	NA	90.525(b)	NA
Descriptions of the Region's interoperability plans and interoperability requirements.	NA	90.525(b)	NA



1. Authority of the Committee



1. AUTHORITY OF THE COMMITTEE

On August 6, 1998, in the First Report and Order (R&O) and Third Notice of Proposed Rule Making in WT Docket No. 96-86, the Federal Communications Commission (FCC) adopted service rules for the 24 MHz of spectrum in the 764-776/794-806 MHz frequency bands (collectively, the 700-MHz band). The FCC reallocated this spectrum from analog television broadcast services to public safety services. Please refer to Figure 1. The National Coordinating Committee (NCC), now decommissioned, recommended the Regional Planning Committee (RPC) process to administer the designated spectrum. The FCC adopted the NCC's recommendation and established the RPC process in the R&O. RPCs consist of representatives of public safety agencies at the State and local levels within each region.



Figure 1, 700-MHz Public Safety Band PRIOR to Reconfiguration

On July 31, 2007, the FCC adopted the Second R & O, reallocating the 700-MHz public safety spectrum to the 763- to 775-MHz band and the 793- to 805-MHz band. From this allocation, the bottom portion of the Band (763-768/793-798 MHz) has been designated as broadband spectrum licensed under the Public Safety Broadband Licensee (PSBL). Therefore, the principal 700-MHz spectrum resources under the jurisdiction of the RPCs are the 769- to 775-MHz and 799- to 805-MHz narrowband channels, which are further divided into General Use, Interoperability (voice, low-speed data, and national call), Secondary Trunking, State License, Low Power, and Reserve spectrum allotments. Please refer to Figure 2, which follows.



Figure 2, Reconfigured 700-MHz Public Safety Band



No allotments will be made in the General-Use category for the 769- to 775-MHz and 799- to 805-MHz bands until the plan has been approved by the FCC. The 700-MHz public safety spectrum will be made available for use after February 17, 2009² in accordance with the FCC's digital television transition schedule.

1.1 First Convening Meeting

The Region 8 700-MHz planning committee held its first convening meeting on Wednesday, January 23, 2002. A FCC Public Notice (PN) announcing this meeting was issued on November 23, 2001.

1.2 Notification and Committee Participation

All eligible parties³ were invited to participate in developing the Regional Plan. This notification was accomplished by the FCC issuing a Public Notice and by the "convener" directly notifying organizations representing eligible parties. Additionally, the mobile communications print media were contacted by the "convener" and made aware of the Committee's formulation. Also notified were state and local government agencies concerned with emergency management, as well as federal agencies responsible for National security and emergency preparedness.

In accordance with FCC's Code of Regulations (CFR) Title 47, Telecommunication, Chapter 1, Part 90, Private Land Mobile Radio Services, this Regional Plan includes the public meeting notices of each RPC meeting. Please refer to Appendix V for the meeting notices.

The RPC welcomed comments from all parties during the plan-development process. The plan's content was voted on for approval by the Committee in accordance with the Region 8 Bylaws.

² Date for television broadcasters to vacate the 700-MHz public-safety spectrum is February 17, 2009. Public safety entities may operate in the 700-MHz band prior to the transition date if they secure an FCC waiver.

³ CFR Title 47, Telecommunication, Chapter 1, Part 90 Private Land Mobile Radio Services: http://www.access.gpo.gov/



1.3 Acronyms Used in this Document

Acronym	Definition
ACCPR	Adjacent-Channel Coupled Power Ratio
APCO	Association of Public-Safety Communications Officials
ARD	Area Reliability Degradation
CAPRAD	Computer-Assisted Pre-coordination Resource and Database
CD	Compact Disk
CFR	Code of Federal Regulations
CPC	Channel Performance Criterion
dB	Decibel
dBµ	A decibel relative to one (1) microvolt/meter
dBm	A decibel relative to one (1) milliwatt
DTV	Digital Television
DVD	Digital Video Disk
EMS	Emergency Medical Services
FCC	Federal Communications Commission
FDMA	Frequency Division Multiple Access
GIS	Geographic Information System
GPO	Government Printing Office
kHz	kilohertz
LFA	Local Frequency Advisor
LSA	List of Sections Affected
MHz	Megahertz
MO&O	Memorandum Opinion & Order
MOU	Memorandum of Understanding
NCC	National Coordination Committee
NIJ	National Institute of Justice
NPSTC	National Public Safety Telecommunications Council
OFDM	Orthogonal Frequency Division Multiplexing
PN	Public Notice
PSA	Protected Service Area
PSBL	Public Safety Broadband Licensee
R&O	Report and Order
RF	Radio Frequency
RMS	Root Mean Square
ROM	Read-Only Memory
RPC	Regional Planning Committee

Table 1, Acronyms and their Definitions



Acronym	Definition
RPUC	Regional Plan Update Committee
SIEC	Statewide Interoperability Executive Committee
TDMA	Time Division Multiple Access
TSB	Telecommunications Systems Bulletin
UHF	Ultra High Frequency
URL	Uniform Resource Locator
VHF	Very High Frequency
WTB	Wireless Telecommunications Bureau



2. Committee Administration



2. REGION 8 – 700-MHz PLANNING COMMITTEE ADMINISTRATION

Membership in the Region 8 – 700-MHz Planning Committee shall be in accordance with the Region 8 Bylaws, Article 2. Please refer to Appendix A for a complete listing of committee members.

The officers of the Region 8 – 700-MHz Planning Committee are:

Alan Demcoe - FCC Region 8 Chairman

Middlesex County Department of Public Safety and Health 1001 Fire Academy Drive Sayreville, NJ 08872 Telephone: (732) 316-7183 Email: <u>allen.demcoe@co.middlesex.nj.us</u>

Morton Leifer PE - FCC Region 8 Vice Chairman

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David K. Stern - FCC Region 8 Secretary – (Non Voting)

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3. Bylaws



3. REGION 8 BYLAWS

Article I: Name & Purpose

1.1 Name and purpose. The name of this organization shall be the FCC Region 8 (New York-New Jersey) 700-MHz Regional Planning Committee. Its primary purpose is to foster cooperation, planning, development of regional plans, and implementation of these plans in the 700-MHz Public Safety Band.

Article II: Members

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

- 2.1 Number, Election, and Qualification. The RPC shall have two classes of members: "voting members" and "non-voting members." New members may be added at any official meeting.
 - a. Voting Members. Voting members shall consist of one representative from any single agency that is engaged in public safety and eligible to hold a license under the CFR Title 47, Telecommunication, Chapter 1, Part 90, (47 CFR 90.20, 90.523) and that has jurisdiction within the Region 8 geographic boundaries. However, any single agency shall be allowed no more than one vote for each distinct eligibility category (e.g., police, fire, EMS, highway) within the agency's organization or political jurisdiction. In voting on any issue, the individual must identify himself/herself and the agency and eligibility category that he or she represents. Voting members shall not vote on application scoring and approval matters that directly benefit themselves or the organization they represent.
 - b. Non-Voting Members. Non-voting members are all others interested in furthering the goals of public safety communications.
- 2.2 Tenure. In general, each member shall hold membership from the date of acceptance until resignation, permanent incapacity, removal, or no longer represent an eligible agency.
- 2.3 Duties. In addition to such duties as are vested in them by the FCC or these bylaws, the members shall have such other duties as the membership may from time to time determine by majority vote at any annual, special, or regular meeting.
- 2.4 Suspension and Removal. A representative may be suspended or removed for cause by vote of a majority of voting members after reasonable notice and opportunity to be heard. Failure to attend at least 50% of meetings held in a calendar year may be a specific cause for removal from the voting membership.
- 2.5 Resignation. A member may resign by delivering his or her written resignation to the chairman, vice-chairman, or secretary of the RPC or to a meeting of the members.



Article III: Meetings

An annual meeting of the membership shall be held at a time and place to be specified and published at least thirty (30) days prior to the day of the meeting. If a voting member is unable to attend the annual meeting, he or she shall so notify the Chairman in advance of the meeting.

- 3.1 Other Meetings. Meetings of the members may be held at any date and time, with at least thirty (30) days advance notice, and at any place within the RPC area. Meetings of the members may be called by 1) the chairman, or 2) the vice-chairman, or 3) any other officer in case of absence or incapacity of the chairman or vice-chairman, or 4) upon written application of two or more members.
- 3.2 Working Group Meetings. Working group meetings may be conducted in person or via electronic means for the purpose of developing consensus and making recommendations to an official meeting.
- 3.3 Meeting Notice. In addition to notification by public notice, each member shall be notified of the time and place of such meeting via his or her e-mail address or U.S. Postal Service address on file with the Committee. A tentative meeting agenda shall be included in this correspondence.
- 3.4 Continuation of Meetings. Any meeting may be adjourned to such date or dates not more than ninety (90) days after the first session of the meeting by a majority of the votes cast upon the question, by with quorum present. The meeting may resume on the adjourned-to date with as much notice as may be reasonably practicable under the circumstances.
- 3.5 Quorum. A quorum is defined as a majority of the voting members present and any members represented by proxies.
- 3.6 Action by Vote. Each voting member, as the official representative for a particular agency/entity shall have one (1) vote; non-voting members have no right to vote. A majority of the votes properly cast by voting members present shall decide any question, including election to any office, unless otherwise provided by law, rule, regulation, or these bylaws.
- 3.7 Action by Writing. Any action required or permitted to be taken at any meeting of the members may be taken without a meeting if all members entitled to vote on the matter have been given at least thirty (30) days notice and 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.
- 3.8 Proxies. In their absence, voting members may vote by written proxy dated not more than one month before the meeting named therein. Such proxies shall be filed before the meeting 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 their holders to vote at any resumed session of the meeting if it is adjourned to a future date. The proxy shall terminate after the final adjournment of the



meeting or upon attendance at the meeting by the voting member who issued the proxy.

3.9 Digital / Remote Attendance. The Regional Planning Committee will make, to the best of the Region's ability as resources are available, access available to members and interested parties via teleconference. All regular meetings will, whenever possible, be accessible via a teleconference bridge. Members present via teleconference will be recorded as being on-line as opposed to in-person and will have the right to vote, comment and participate as those members present.

Article IV: Officers

- 4.1 Number and qualification. The officers of the RPC shall be a chairman, vice-chairman, secretary, and treasurer. Only voting members of the RPC may serve as chairman and vice chairman.
- 4.2 Election. The officers shall be elected for a three-year term by the voting members beginning with the founding meeting and, thereafter, at an annual meeting of the voting members.
- 4.3 Chairman. The chairman shall be the chief executive officer of the RPC and, subject to the control of the voting members, shall have general charge and supervision of the affairs of the RPC. The chairman shall preside at all meetings of the RPC and appoint such subcommittees as may be necessary, and shall not vote unless to resolve a tie vote, as cast by the body.
- 4.4 Vice Chairman. The Vice Chairman shall have such duties and powers as the voting members shall determine. The vice-chairman shall have, and may exercise, all the powers and duties of the chairman during the absence of the chairman or in the event of the Chairman's inability to act.
- 4.5 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. Such file or files shall be open at all reasonable times to the inspection of any member. Such file or files shall not only contain records of all meetings, but also the original, or attested copies, of bylaws and the names of each member 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 secretary shall also be responsible to keep and maintain all documents, including but not limited to the Regional Plan and channel allotments.
- 4.6 Treasurer. The treasurer shall be the chief financial officer and the chief accounting officer of the RPC. The treasurer shall be in charge of its financial affairs, funds, and valuable financial papers, and shall keep full and accurate records of such activities and products.



4.7 Tenure. An officer shall hold office until his/her successor is chosen, he or she sooner resigns, becomes permanently incapacitated or disqualified, is removed from office, or no longer represents an eligible agency.

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

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

c) Vacancies. If the office of any officer becomes vacant, the voting members may elect a successor. Each such successor shall hold office for the remainder of the vacated term.

Article V: Subcommittees

5.1 Regional Plan Update Committee

With the approval of the RPC, the Chairman shall appoint a Regional Plan Update Committee (RPUC). Upon approval of the Region 8 700-MHz Plan by the FCC, this Committee will remain in place to recommend changes in the Regional Plan, to evaluate applications for channel allotment(s), and to provide a mechanism for interregional concurrence and resolution for any problems that arise.

The standing membership of the RPUC shall consist of the FCC-certified public safety frequency coordinator(s) or their representatives (i.e., APCO Local Frequency Advisor for the Regional Planning Area; one member each (two total) representing the States of New Jersey and New York; three members representing Public Safety Radio Services; and two members representing Special Emergency Radio Service). From time to time, the RPUC Chairman may appoint one or more members–at-large. Subsequent to the initial RPUC appointments, all future RPUC appointments will be subject to majority approval of the current RPUC membership. In no case shall any radio service have voting membership greater than 49%.

Subject to majority approval, other individuals may serve on the RPUC in only a nonvoting status. The RPUC Chairman may exclude the presence of such members at any RPUC executive session.

With the approval of the Chair, one member of the RPUC shall serve as the Region 8 Computer-Assisted Pre-coordination Resource and Database (CAPRAD) Manager.

5.2 Technical Subcommittee

With the approval of the RPC, the Chairman shall appoint a Technical Evaluation Committee. This Committee will evaluate all 700-MHz applications that are submitted to


the RPC. Upon receiving results from the Technical Evaluation Committee, the RPC Committee will approve, by consensus, the evaluation(s).

5.3 Interference Resolution Committee

With the approval of the RPC, the Chairman shall appoint an Interference Resolution Committee. This Committee will review interference-allegation reports and determine whether the alleged interfering system's operations comply with that station's license. If the system is deemed noncompliant with the license parameters, the Committee will decide what appropriate action(s) to take. If the system complies with the station license, the Committee will assist the impacted parties in devising an interferenceresolution.

Article VI: Correspondence

6.1 The RPC's primary correspondence channel with Committee members and applicants shall be via electronic mail with read receipt. Committee members who do not have electronic mail will be corresponded with via U.S. certified mail with return receipt requested to confirm delivery.

Article VII: Amendments

7.1 These bylaws may be altered, amended, or repealed in whole or in part by an appropriate vote after thirty (30) days advance notice to the members. The voting members may, by a two-thirds votes of the quorum, alter, amend, or repeal any bylaws adopted by the RPC members or otherwise adopt, alter, amend, or repeal any provision on which FCC regulations or these bylaws require action by the voting members.

Article VIII: Dissolution

8.1 This RPC may be dissolved by the consent of two-thirds of the voting members at a special meeting called for such purpose. The FCC and adjacent regions shall be notified if dissolution is approved.

Article IX: Rules of Procedures

9.1 The Conduct of Regional Meetings — including without limitation, debate and voting — shall be governed by the most recent edition of Robert's Rules of Order unless otherwise specified by the Bylaws.



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4. Region Description

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4. REGION 8, REGION DEFINED

A region is a geographic area that is designated a region for some noteworthy purpose. In the New York Metropolitan area, for public safety communications purposes, it is that area having significant population and multiple administrative jurisdictions. The communities within that area intermingle so acutely that many abutting boundaries coalesce, forming one massive region — Region 8, as shown in Figure 3.



Figure 3, Mapping of Region 8

The total population of Region 8 is estimated to be more than 20,000,000 people — approximately 8% of the nation's population (U.S. Census Bureau, 2000). Please refer to Appendix C, Region 8 Population Data. Within this region are a large number of jurisdictions — which range from state governments to quasi-municipal organizations that cross state lines, and include counties, cities, townships, villages, water districts, fire districts, etc. —many of which are involved in public safety. Their involvement extends from search and rescue during crises to providing immediate response to replenish and repair roadways, lights, power, etc.



The New Jersey and New York State portions of Region 8 each have a primary zone, and New York State also has a secondary zone. A primary zone contains jurisdictions that are severely impacted as a result of an excess demand for scarce spectrum. The requirements for system implementation in a primary zone will be more restrictive than in a secondary zone. The jurisdictions located in a secondary zone will be under the general requirements of the Regional Plan, but will not be required to adhere to the more stringent requirements of the primary zone jurisdictions.

The New York primary zone consists of: 1) the counties of Orange, Putnam, Rockland, Westchester, the five counties of New York City, and Nassau, and 2) the portion of Suffolk County that is west of the town of Riverhead on the north shore and of Southampton on the south shore of Long Island.

The secondary zone in New York State consists of: 1) the counties of Dutchess, Sullivan, and Ulster and 2) the portion of Suffolk County that is east of the Town of Riverhead on the north shore and of the Town of Southampton on the south shore.

The counties in New Jersey within Region 8 are Sussex, Warren, Hunterdon, Mercer, Monmouth, Passaic, Bergen, Hudson, Essex, Union, Morris, Somerset, and Middlesex. The Region line follows the northern border of Burlington County and the southern border of Monmouth County. All counties in the New Jersey portion of the Region lie within the primary (most stringently controlled) zone.



5. Spectrum Allotment Procedure

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5. PROCEDURE FOR REQUESTING SPECTRUM ALLOTMENTS

Within three (3) months of the date on which the Regional Plan has been accepted and approved by the FCC, the RPC will announce the opening of an initial filing window. The filing window shall represent a period of time during which the RPC will accept site-specific applications for 700-MHz public safety usage for filing and review.

For a period of five (5) years, the National Pool allotments developed and stored in CAPRAD⁴ will represent the base allotment plan for Region 8. Furthermore, in order to accommodate flexibility in the utilization of orphaned channels⁵, the Region 8 allotment plan will also consider the CAPRAD allotments valid for application within a thirty (30) mile boundary of their pool-assigned county as long as the following conditions are met:

- 1) Such application and use meets the interference criteria for out-of-pool allotments set in Section 9.5 of this plan, and
- 2) Such use has been approved by the Regional Chairperson after the RPC is permitted no less than thirty (30) days to comment on the terms of the application.

The term for frequency-pool allotments in Region 8 shall be five (5) years after the transition date to digital television⁶. If, after five (5) years, applicants who were granted channel allotments have not applied for station licenses, those allotments shall be returned to the allotment pool and become available again for application.

5.1 Window Procedure

The RPC will hold three (3) application-filing windows per year:

- 1) January 1 through January 31,
- 2) May 1 through May 31, and

September 1 through September 30.

A PN announcing an allotment application filing window shall be sent to all RPC members via email, as well as to the following media resources for further dissemination:

⁴ The channel allotments provided in this Plan reflect the repacking of CAPRAD as per the Second Report and Order, adopted on July 31, 2007, and this RPC's elections for channel block size, combiner separation, and capacity options.

 $^{^{5}}$ A channel remaining from a 25-kHz bandwidth when a 12.5 or 6.25 kHz portion of the full channel is allotted for operation. Channels allotted that are less than 25-kHz wide are taken from the top-edge or the bottom edge of the 25-kHz channel block.

⁶ Digital Television transition date: February 17, 2009.



- FCC Daily Digest,
- National Public Safety Telecommunications Council (NPSTC) Web Forum,
- CAPRAD, and the
- APCO Communicator.

The filing window shall commence not less than thirty (30) calendar days from the PN. Included in the filing window notice shall be the start and end dates of the filing window, any rules or requirements for filing outlined in the Regional Plan, and any other special instructions. Also included shall be a list of Technical Subcommittee members who can provide additional information to prospective applicants.

5.2 Transition to an Open Timeline

The RPC reserves the right to transition to a process by which narrowband applications may be accepted either at any point or on a structured schedule. If the RPUC decides by majority vote to change to an ad-hoc, periodic, or other type of filing window schedule, the effective date of such a schedule change may not commence until thirty (30) days have passed since these changes were announced through the process defined in Section 5.1 of this document.



6. Application Requirements

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6. APPLICATION REQUIREMENTS

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

6.1 Application Contents Summary

A complete application package must include the following items:

- 1) Completed FCC 601 form(s);
- 2) Completed supplemental application requirements. Please refer to Appendix F, Supplemental Application Requirements;
- Completed Region 8 Antenna Pattern Information Form for each antenna configuration employed (with azimuth and elevation patterns). Please refer to Appendix G, Antenna Pattern Information Form;
- 4) Completed Region 8 Service Area Boundary Form. Please refer to Appendix H, Service Area Boundary Form;
- 5) Signed Memorandum of Understanding (MOU) agreeing to implement system as proposed. Please refer to Appendix Q, Intraregional Memorandum of Understanding; and
- 6) Coverage- and interference-prediction exhibits using Longley-Rice, and adhering to the guidelines in the Telecommunications Systems Bulletin (TSB)-88 (latest edition). Please refer to Section 9 for further details.

The Regional Plan contains an application checklist for use by applicants. Please refer to Appendix E, Application Package Checklist

6.2 Application Submission Format

All material provided as part of the application package must be submitted to RPC8 via CAPRAD. Additionally, one (1) hard copy and one (1) electronic copy (CD ROM, DVD ROM, USB Flash Drive, etc.) shall be provided to the secretary.

6.3 Grounds for Dismissal

At the discretion of the application review committee, applicants may be afforded the opportunity to provide any essential missing application information so that their applications can continue to undergo the evaluation process. The RPC shall notify the applicant via written



or electronic mail if the application package does not meet the requirements stated in this Plan⁷. Applications may be dismissed and returned to the applicant if required information is not provided. The applicant will then have the option to complete and resubmit the application during the next filing-window period.

⁷ Please refer to the Region 8 Bylaws, Article VI, for details addressing correspondences between the Committee and the Applicant.



7. Application Scoring Matrix

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7. APPLICATION SCORING MATRIX

Implementing an evaluation matrix enables assigning each application a score that is the total number of the points awarded in seven categories. A maximum total score of 1000 points can be awarded, based on the Application Review Flowchart replicated in Figures 4 through 11. This flowchart details the sequence of events followed to determine an applicant's score and is discussed in the paragraphs that follow. Its symbols are defined in Appendix J.

First, the allocation is placed in the frequency pool (Block #1 in Figure 4). If frequencies are available in the pool (a second iteration of the evaluation matrix could occur if all frequencies are not allocated in the first iteration), a window-opening announcement is made (Block #2 in Figure 4). The window period will be thirty days (Block #3). Next, the Region 8 Technical Subcommittee reviews the received applications for completeness (Block #4). After the thirty days have passed, the window closes (Block #5). Late or incomplete applications are rejected (Block #6). Applications received during the open-window period are reviewed (Block #7) by the RPUC and the Region 8 Technical Subcommittee.

The Technical Subcommittee will consult with State communications-planning administrators, if any such positions are staffed, to determine if the application complies with state plans (Block #8). An application that does not comply with an existing State plan will be rejected at this point (Block #9) and returned to the applicant, along with an explanation of the reason(s) for rejection. When an application has passed the test of State plan compliance, the Technical Subcommittee will apply the evaluation matrix (as shown Block #10, at the top of Figure 5).

Prior to allocating points for the seven categories, the evaluators conduct a needs-assessment review (Block #11) of the statement of needs for the requested frequencies provided by the applicant. This statement of need serves as an overview of the proposed system.

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

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

Each of the eligible services has a predetermined point value as seen in Table 2, which follows Figures 4 and 5. Entities eligible to utilize spectrum in the 769- to 775-MHz and 799- to 805-MHz bands are defined in the FCC Code of Federal Regulations (47CFR90.523) and (47CFR90.20) Title 47, Volume 5, Subpart R. The point value assigned in this category is a factor of the number of subscriber units per service category, operating in a multi-agency system. An applicant with multiple services will be scored on a basis of the percentage that each service comprises of its total system. For example, a system that is 50% police and 50% local government (school administration) would be awarded the total of 50% of the point value



for police plus 50% of the point value for school administration. Please refer to Table 2, Evaluation Matrix Point Values for Service⁸.

⁸ Reference: FCC Code of Regulations (47CFR90.523 and 47CFR90.20), Title 47, Volume 5, Subpart R.







Figure 4, Application Review Flowchart - Page 1 of 8







Figure 5, Application Review Flowchart - Page 2 of 8 Table 2, Evaluation Matrix Point Values for Service

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



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

The application (Block 13 in Figure 5) is scored — with a range of points from 0 to 100 — based on the degree of interoperability that is demonstrated. This category rates the application on the interoperability capabilities of the proposed system, the inclusion of the common interoperability channels, and the ability to communicate with different levels of government and services during times of emergency. Points are awarded based on the criteria weights in Table 3.

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

Table 3, Intersystem Communications Criteria and Weights

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

As shown with Block #14 in Figure 6, applicants are scored on the number of subscriber units that will operate on each radio channel (the loading). The applicant shall receive a maximum score of 150 points in this category. For example, a proposed system that 1) has loading greater than or equal to 250 subscriber units, and 2) is an expansion of an existing 700-MHz and/or an 800-MHz system shall be awarded 150 points (sum of first and third lines in Table 4).

Loading and Expansion Factors	Point Value	
System loading is \geq 250 subscriber units per radio channel	100	
System loading is \geq 200 but less than 250 subscriber units per radio channel	50	
Expansion of an existing 700-MHz and/or 800-MHz radio system	50	
System loading is \geq 100 but less than 200 subscriber units per radio channel	10	

Table 4, Loading Criteria and Weights

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

Category IV (Block #15 in Figure 7) scores the applicant on the degree of spectrum-efficient technology the system demonstrates. A point-value range of 0 to 100 points can be awarded for this category. A trunked system, an integrated voice and data system, and a system utilizing 6.25-kHz spectral efficiency are all considered to utilize spectrum-efficient technologies.



The spectral efficiency for a voice or data channel is based on the throughput divided by the channel bandwidth.

Applicants shall be awarded a maximum of 100 points in this scoring category as per Table 5, which follows.

Table 5, Voice and Narrowband Data Technology Criteria and Weights	
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Technology Utilized	Point Value
Trunked system design	50
6.25-kHz effective spectral efficiency	50
Integrated voice and data system - voice system that integrates mobile data on the same channel(s)	50







Figure 6, Application Review Flowchart - Page 3 of 8







Figure 7, Application Review Flowchart - Page 4 of 8

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

Category V (Block #16, Figure 7) scores the applicant on two factors — budgetary commitment and planning completeness. The degree of budgetary commitment is scored on a range of 0 to 50 points (first line in Table 6). An applicant that demonstrates a high degree of commitment in funding the proposed system will receive a higher score. Each applicant will also be scored on the degree of planning completeness, with a scoring range of from 0 to 50 points (second line in Table 6). Applicants are required to submit evidence of financial and budgetary commitment and a timetable for implementing the communications system or systems.

Table 6, Planning for Implementation Criteria and Weights

Implementation Status	Point Value
Degree of budgetary commitment	0-50
Degree of planning completeness	0-50

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

Category VI (Block #17 in Figure 8) scores applicants on the level of geographic efficiency. Scoring in this category is based upon two subcategories: the ratio of subscriber units to area covered, and the channel reuse factor. The ratio of subscriber units to area covered measures the level of efficient coverage that a system demonstrates. The higher the ratio (subscriber units divided by square miles of coverage), the more efficient the use of the frequencies. For each application filing window, the ratio of the number of subscriber units to jurisdictional area covered shall be normalized to a maximum of fifty (50) points (as per the first line in Table 7). This will be done by applying the Normalization Equation that follows Table 7.

The channel reuse factor is defined as the number of times a channel is reused divided by the jurisdictional area covered. For each application filing window, as per the second line in Table 7, the channel reuse shall also be normalized to fifty (50) points. This will be done by applying the Normalization Equation that follows Table 7.

Table 7, Geographic Efficiency Criteria and Weights

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

Normalization Equation

A = Minimum point score = 0; B = Maximum point score = 50; x = Raw score;

Max(x) = Maximum raw score in the application filing window

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



Normalized score (x) = $A + [(B-A)/(Max(x)-Min(x))] \cdot [x-Min(x)]$ Equation for normalization = $0 + [(50-0)/(Max(x)-Min(x))] \cdot [x-Min(x)]$







Figure 8, Application Review Flowchart - Page 5 of 8

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

Category VII (Block #18 in Figure 8) evaluates the applicant on the number of radio channels² released if the 700-MHz application is granted to it. As demonstrated in Table 8, the greater the number of channels released, the higher the score that applicant shall be awarded.

The usability of the released radio channels will also be considered in the form of a multiplier ranging from 0.0 to 1.0. Radio channels with greater usability potential will earn the applicant higher points. The FCC-certified frequency coordinators or their representatives (i.e., APCO Local Frequency Advisor for southern New York and New Jersey) shall be responsible for evaluating the usability of any channel(s) released. Please refer to Appendix S, Spectrum Usability Map for Channels Released.

Table 8, Channe	l Criteria a	and Weights
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Number and Usability	Point Value
Ten (10) or more channels given back	100
Seven (7) to nine (9) channels given back	70-90
Four (4) to six (6) channels given back	40-60
One (1) to three (3) channels given back	10-30
Usability of the channels by others (i.e., levels of interference, intermodulation, etc.)	0 - 1 (multiplier)

7.8 Final Processing Steps

As shown in Block #19 in Figure 9, points are totaled for each application.

Next, as per Block #20, the applicant's current frequency holdings (if any) are reviewed by the Committee.

Then, as per Block #21, the approved application scores are reviewed by the Committee to determine the proper application prioritization order.

Next, the frequency pool is allotted (Block #22 in Figure 10), and interregional concurrence occurs as necessary (Block #23, also in Figure 10). The Plan is then sent to the FCC for review and approval (Block #24). Upon acceptance by the FCC (Block #25), the RPC notifies (Block

² Released radio frequencies eligible for points:

VHF Low Band 25-50 MHz,

VHF High Band
 150-174 MHz,

 UHF Band
 450-470 MHz/470-512 MHz (T-Band),

 800 Band
 806-821 MHz/851-866 MHz, and

 NPSPAC Band
 821-824 MHz/866-869 MHz.



#26) the applicant of its channel allotment(s). The applicant shall file the station license(s) with its preferred frequency coordinator (Block #27), who coordinates with the FCC (Block #28).

Simultaneously, the applicant shall send a copy of its application to the RPC. Upon confirming that the application for license matches the application for channel allotment, the RPC shall submit a Regional Plan Control Number to the coordinator; and the Regional Plan, RPUC, and CAPRAD databases are updated. Finally, the FCC grants the license(s) to the successful applicant (Block #29 in Figure 10).





Figure 9, Application Review Flowchart - Page 6 of 8







Figure 10, Application Review Flowchart - Page 7 of 8

7.9 Follow-up after Initial Approval

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

System implementation is monitored by the Region 8 Technical Subcommittee to determine if progress is being made (see Block #30 in Figure 11). Monitoring of system implementation by the Region 8 Technical Subcommittee will take place at a minimum of six-month intervals until implementation is complete. If progress is being made, the system is ultimately implemented (Block #32). If progress is not made, the applicant/licensee is warned of the potential consequences of its lack of progress (Block #31).

The Region 8 Technical Subcommittee continues to monitor progress on the implementation of the system. If monitoring indicates that progress is still not being made, the applicant/licensee is notified (Block #33) of pending action to withdraw the channel allotment(s). The notified applicant/licensee can request an extension (Block #34) of time from the RPC to complete its slow-growth plan or can allow the application to be cancelled (Block #35). If the applicant/licensee requests an extension, and the RPC agrees, a concurrence letter acknowledging the applicant's request will be produced by the RPC and sent to the FCC.

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

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





Figure 11, Application Review Flowchart - Page 8 of 8






8. Technical Evaluation



8. TECHNICAL EVALUATION OF APPLICATIONS

Complete application packages shall undergo technical review according to the procedures described in this section. Figure 12, which follows, provides an overview of the technical evaluation process, which considers numerous characteristics of each application. In order for an application package to pass the technical evaluation process, it must adhere to the following conditions:

- 1) The application package supplies the required technical parameters,
- The application package is consistent with the repacked CAPRAD⁹ 700-MHz National preallotment channel pool for Region 8 and/or an alternative approach acceptable to the RPC ¹⁰ (see Appendix I), and
- 3) The application package must protect licensed assignments (incumbents) and unlicensed allotments under past filing windows.

8.1 Stage I: Is the Application Complete?

All technical parameters must be populated to be processed. The RPC Secretary shall notify the applicant by U.S. certified mail with return receipt if the application package does not meet the requirements stated in this Plan.

8.2 Stage II: Consistent with the CAPRAD¹⁰ 700-MHz National Pre-allotment Channel Pool?

Each application must be checked by the RPC 8 Technical Subcommittee to ensure that its acceptance would not cause harmful interference to existing licensed systems and allotments.

Where applicable, the Adjacent-Channel Coupled Power Ratio (ACCPR) will be computed for each application, compared to each incumbent.

Each application must be consistent with the CAPRAD 700-MHz National pre-allotment channel pool for Region 8. Any application packages that do not provide the appropriate pool protection as required in Section 9 will be returned to the applicant with information regarding other impacting applications. The applicant will be allowed thirty (30) days to respond.

⁹ The channel allotments provided in this Plan reflect the repacking of CAPRAD as per the Second Report and Order, adopted on July 31, 2007, and this RPC's elections for channel block size, combiner separation, and capacity options.

¹⁰ During the term that such pool allotments are in effect. Please refer to Section 5, Procedure for Requesting Spectrum Allotments.



8.3 Stage III: Are there any Conflicts with Other Applications?

All application packages shall be evaluated and prioritized using the application-scoring matrix. If two or more applications are assigned identical scores, the RPUC shall — by consensus — order this group of applications relative to each other based upon subjective evaluation of the merits of each.



Figure 12, Overview of Technical Review Process



9. Interference Evaluation Procedure



9. INTERFERENCE-PROTECTION CRITERIA AND SYSTEM-DESIGN SPECIFICATIONS

This section defines the interference-protection criteria, system deployment constraints, and assumptions that Region 8 employs in its application-evaluation process.

9.1 Recommended System Reliability

It is recommended that proposed facilities in Region 8 be designed to provide 50 dB μ (-82 dBm) received-power levels for reliable portable-coverage operations, and 40 dB μ (-92 dBm) received-power levels for reliable outdoor mobile-coverage operations.

9.2 Coverage- and Interference-Prediction Methodology

Both TSB-88 (latest edition) and the Longley-Rice propagation model in median mode (50/50/50) shall be used to evaluate coverage and interference for proposed systems in Region 8. The Longley-Rice model is used because it is freely available in the public domain and has consistent implementations across propagation-modeling programs of different sources, unlike the Okumura-Hata-Davidson model. All radiated- and received-power levels are referenced to a dipole antenna. Please see Appendix G, Antenna Pattern Information Form.

9.3 Responsible Radiation Control and System Design

In order to promote responsible use of 700-MHz spectrum resources, all applicants are required to control unnecessary radio-frequency (RF) radiation. Therefore, for all proposed facilities within the Region, 80% of the 50 dB μ (-82 dBm) Protected Service Area (PSA) must lie within the jurisdictional boundary plus an eight-kilometer buffer zone. The 50 dB μ (-82 dBm) PSA shall be assessed using Longley-Rice analyses.

9.4 Pool-to-Pool Reliability Degradation Threshold

Applications for facilities that have been pre-allotted within the National Pool (in-pool assignments) are required to provide co- and adjacent-channel interference protection to other in-pool assignments.

Each in-pool application (which may consist of multiple facilities) must pose no more than 2.5% Area Reliability Degradation (ARD) at 90% reliability levels to any incumbent's protected service area. All facilities (including licensees and all approved allotments) in aggregate must pose no more than 5.0% cumulative area reliability degradation at 90% reliability levels to any incumbent's protected service area.

The process for determining ARD is as follows:

 Compute the baseline Longley-Rice 3-second (minimum) tile coverage for each incumbent (victim) co- and adjacent-channel licensee within its jurisdictional area.



- If any co- or adjacent-channel pool assignment remains unused, treat its jurisdiction/county as having ubiquitous 40 dBµ (-92 dBm) service levels.
- Co- or adjacent-channel pool licenses and or previously accepted facilities shall be protected based upon their facility-specific parameters.
- Evaluate the baseline total number of tiles within the victim jurisdiction that achieve 90% or greater reliability levels using TSB-88 (latest edition) in conjunction with parameters for Channel Performance Criterion (CPC), receiver noise floor, and lognormal standard deviation (σ). If any co- or adjacent-channel pool assignment remains unused, use the following as its deployed parameters:
 - Receiver Noise Floor = -124 dBm,
 - $CPC_f = 18 \text{ dB}$, and
 - $-\sigma = 7 \text{ dB}.$
 - These, along with the 40 dB μ (-93 dBm at 800 MHz), give the following reliability throughout the service area:
 - $R^{11} = 1 Q^{12}[(-93 \ dBm (-124 \ dBm) 18 \ dB)/7 \ dB)] \sim = 97\%$
 - Once a facility-specific application has been granted, the baseline area reliability for co- or adjacent-channel pool licenses and or previously accepted facilities shall be evaluated based upon these facility-specific parameters.
- Evaluate the received-power levels of all proposed facilities at all tiles within the victim jurisdictional area. Combine these into an equivalent interferer using the process outlined in TSB-88 (latest edition).
- Re-evaluate the total number of tiles within each victim jurisdiction that achieve 90% or greater reliability levels, considering the effects of all proposed facilities.
- The ARD is defined as one minus the ratio of the number of tiles at 90% reliability (or greater) considering proposed facilities and the baseline number of tiles at 90% reliability (or greater).

9.5 Outside-to-Pool Reliability Degradation Threshold

Applications for facilities that have not been pre-allotted within the National Pool (outside-pool assignments) are also required to provide co- and adjacent-channel interference protection to other in-pool assignments.

Each outside-pool application (which may consist of multiple facilities) must pose 0% ARD at 90% reliability levels to any incumbent's protected service area. ARD is computed as was outlined in Section 9.4.

$$Q_{1}(a,b) = \int_{b}^{\infty} x \cdot exp\left[\frac{-\left(x^{2} + a^{2}\right)}{2}\right] \cdot I0(a \cdot x) dx$$

¹¹ R = Reliability in decimal, converted to percent.

¹² Marcum's Q-function represents the cumulative area under a Gaussian distribution curve:



This reliability degradation threshold also applies to Region 8 in-pool assignments that are proposed outside of their National Pool county area which indicates FCC licenses and RPC approved applications. ARD is computed as was outlined in Section 9.4.

9.6 Evaluation of Adjacent-Channel Effects

The evaluation of adjacent-channel interference will follow Sections 9.1 through 9.5, except that the effective radiated power of the proposed stations shall be de-rated to account for Adjacent-Channel Coupled Power Ratio (ACCPR) effects. Please refer to Table 9, Adjacent-Channel Coupled Power Ratio Values, for the appropriate ACCPR values; note that the channel bandwidth should be larger than the technology-specific emissions bandwidth.



Figure 13, Potential Frequency Separations¹³

Case	Spacing	ACCPR
25 kHz to 25 kHz	25 kHz	65 dB
25 kHz to 12.5 kHz	18.75 kHz	65 dB
25 kHz to 6.25 kHz	15.625 kHz	40 dB
12.5 kHz to 12.5 kHz	12.5 kHz	65 dB
12.5 kHz to 6.25 kHz	9.375 kHz	40 dB
6.25 kHz to 6.25 kHz	6.25 kHz	65 dB

Table 9, Adjacent-Channel Coupled Power Ratio Values¹⁴

¹³ Adopted from the National Coordination Committee, "Pre –Assignment Rules and Recommendations," July 2002.





10. Administration of the Low-Power Interoperability Channels



10. Administration of the Low-Power Interoperability Channels Subject to Regional Planning

<u>Purpose</u>

The purpose of this section is to provide guidelines relative to the use of the Low-Power 700- MHz^{14} Interoperability Channels under the authority of the RPC as defined by 47 CFR §90.531(b)(3).

Eligibility

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

- (a) State or local government entities Any territory, possession, state, city, county, town, or similar state or local governmental entity is eligible to hold authorizations in the 769-775-MHz and 799-805 MHz frequency bands.
- (b) Nongovernmental organizations A nongovernmental organization (NGO) that provides services, the sole or principal purpose of which is to protect the safety of life, health, or property, is eligible to hold an authorization for a system operating in the 769-775-MHz and 799-805 MHz frequency bands for transmission or reception of communications essential to providing such services if (and only for so long as) the NGO applicant/licensee:
 - Has the ongoing support (to operate such system) of a state or local governmental entity whose mission is the oversight of or provision of services, the sole or principal purpose of which is to protect the safety of life, health, or property;
 - Operates such authorized system solely for transmission of communication essential to providing services the sole or principal purpose of which is to protect the safety of life, health, or property; and
 - Accompanies all applications it submits with a new, written certification of support (for the NGO applicant to operate the applied-for system) by the state or local governmental entity referenced in paragraph (b)(1) of this section.

Low-Power 700-MHz Channel Use

Frequencies will be used in a simplex or repeater mode as specified within this provision of the Region's Plan for 700-MHz channels. The Plan will combine two (2) channels as contained in 47 CFR §90.531(b)(3) to yield a 12.5-kHz simplex operating frequency. In the repeater mode, four (4) 700-MHz channels shall be combined to yield a 12.5-kHz transmit and a 12.5-kHz receive frequency.

¹⁴ On July 31, 2007, the FCC adopted the Second Report and Order (FCC 07-132) relocating the narrowband portion of the 700-MHz public-safety communications band to 769-775-MHz and 799-805 MHz.



Use within the Region

The low-power 700-MHz interoperability frequencies are limited to transmissions with effective radiated power (ERP) of no more than two (2) watts. These frequencies can be used at the broad discretion of first responders in one of two methodologies — direct radio-to-radio or simplex operation or as an Incident Area Network (IAN) or other low-power technology requiring a repeater capability. The use of these frequencies for official public safety or public service communications is permitted by a single public safety agency prior to the actual invocation of interoperable communications between two or more public safety agencies. Communications of a personal, non-official purpose are prohibited.

Assignment of Frequencies

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

Modulation

Pursuant to 47 CFR §90.525(a), operation on these channels may utilize digital or analog modulation. Analog operations will utilize the 11K0F3E emission type.

Programming of Frequencies

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

Service Assignments

Tables of repeater, subscriber, and direct or simplex assignments follows as Tables 10, 11, and 12. These assignments notate specific frequencies reserved for EMS, fire, and law-enforcement users. For all other users, Generic Public-Safety/Public-Service frequencies exist that can be used by any eligible licensee as defined by 47 CFR §90.523.

Repeater/Incident Area Network Operation

From the Department of Homeland Security SAFECOM Statement of Requirements^{15,} "An incident area network (IAN) is a network created for a specific incident." "This network is temporary in nature." For the IAN or other repeater operation, the Region will follow the national deployment model; i.e., the lower frequency shall be used for the Repeater transmitter frequency, while the upper channel is employed for mobile/portable transmissions. Repeater

¹⁵ SAFECOM Statement of Requirements, March 10, 2004, Page 6



operation is identified by the "2" (2-channel) behind the service name, e.g. "7TAC21 meaning 700 MHz (7) Tactical (TAC) Frequency with Repeater (2) frequency 1 (1).

Frequency Identifier	Repeater Transmitter Channels	Repeater Receiver Channels	Applicable Service
7TAC21	1-2	961-962	Generic Public Safety/Public Service
7TAC22	3-4	963-964	Generic Public Safety/Public Service
7TAC23	957-958	1917-1918	Generic Public Safety/Public Service
7FIRE21	5-6	965-966	Fire
7FIRE22	7-8	967-968	Fire
7MED21	949-950	1909-1910	EMS
7MED22	951-952	1911-1912	EMS
7LAW21	953-954	1913-1914	Law Enforcement
7LAW22	955-956	1915-1916	Law Enforcement

Table 10, Repeater Service Assignments

Table 11, Subscriber Service Assignments

Frequency Identifier	Subscriber Transmitter Channels	Subscriber Receiver Channels	Applicable Service
7TAC21	961-962	1-2	Generic Public Safety/Public Service
7TAC22	963-964	3-4	Generic Public Safety/Public Service
7TAC23	1917-1918	957-958	Generic Public Safety/Public Service
7FIRE21	965-966	5-6	Fire
7FIRE22	967-968	7-8	Fire
7MED21	1909-1910	949-950	EMS
7MED22	1911-1912	951-952	EMS
7LAW21	1913-1914	953-954	Law Enforcement
7LAW22	1915-1916	955-956	Law Enforcement

Direct Radio-to Radio or Simplex Operation

Direct or simplex operation is identified by the "1" (1-channel) behind the service name, e.g. "7TAC11 meaning 700 MHz (7) Tactical (TAC) Frequency with "Direct" or simplex communications (1) on frequency 1 (1). Please refer to Table 12, which follows.



Applicable Service	Channels	Frequency Identifier
Generic Public Safety/Service	1-2	7TAC11D
Generic Public Safety/Service	3-4	7TAC12D
Generic Public Safety/Service	961-962	7TAC13D
Generic Public Safety/Service	963-964	7TAC14D
Generic Public Safety/Service	957-958	7TAC15D
Generic Public Safety/Service	1917-1918	7TAC16D
Fire Incident Management	5-6	7FIRE11D
Fire Incident Management	7-8	7FIRE12D
Fire Incident Management	965-966	7FIRE13D
Fire Incident Management	967-968	7FIRE14D
EMS	949-950	7MED11D
EMS	951-952	7MED12D
EMS	1909-1910	7EMS13D
EMS	1911-1912	7MED14D
Law Enforcement	953-954	7LAW11D
Law Enforcement	955-956	7LAW12D
Law Enforcement	1913-1914	7LAW13D
Law Enforcement	1915-1916	7LAW14D

Table 12, Simplex Communications Service Assignments



11. TV/DTV Interference Protection



11. TV/DTV INTERFERENCE PROTECTION

All references to the protection of television stations operating in the public safety 700 MHz spectrum were removed in FCC 14-172





12. Frequency Coordination



12. PROCEDURE FOR FREQUENCY COORDINATION

Region 8 adheres to the 700-MHz General Use channel-allotment pool and shall process all applications and allocate General Use spectrum using the CAPRAD system.¹⁶ Please refer to Appendix I, 700-MHz Channel Allotment Pool as defined in CAPRAD.

After the application is approved by the Committee using the application-scoring matrix and technical-review procedures, the Region 8 CAPRAD manager shall enter and save the applicant's FCC 601 form(s) into the system. Please see Figure 14, which follows.

Next, CAPRAD will electronically send the application to the applicant's preferred FCC-certified Local Frequency Advisor (LFA). At this time, the CAPRAD system will change the status of the frequency allotments to "pre-license." The licensing process will then follow the application-scoring matrix flowchart beginning with block #24.

¹⁶ The channel allotments provided in this Plan reflect the repacking of CAPRAD as per the Second Report and Order, adopted on July 31, 2007, and this RPC's elections for channel block size, combiner separation, and capacity options.



CAPRAD Activities NO Validate Electronic Assign Fill out YES CAPRAD OK? Frequency Batch File Application Coordinator (.ebf) YES Revised application is stored in CAPRAD NO OK? after each external action **External Activities** Application To Coordinator NO OK? YES **Coordination Complete** Electronic Batch File (.ebf) FCC Action Electronic Batch File (.ebf)

Figure 14, Frequency-Coordination Process¹⁷

¹⁷ Adopted from the CAPRAD 700-MHz Users Guide, version 1.4.



13. Adjacent Region Coordination



13. Adjacent-Region Coordination

Regional Planning Committee 8 shall contact the chairpersons of the adjacent regions¹⁸ to coordinate the status of their respective plans. Before submitting the Region 8 - 700-MHz Plan to the FCC, Region 8 shall gain the concurrence of each adjacent region.

Proposed facilities that may cause interference to radio systems in regions adjacent to Region 8 shall be coordinated with the applicable adjacent region(s). Regions adjacent to Region 8 are Regions 19, 28, and 30. Region 19 is comprised of the New England States; Region 28 is comprised of Eastern Pennsylvania, Delaware, and southern New Jersey; and Region 30 is comprised of central and northern New York State. The contacts for these regions appear on the FCC Public Safety and Homeland Security Bureau at:

http://www.fcc.gov/pshs/

¹⁸ An adjacent region is defined as an FCC RPC that physically borders RPC 8 and/or those RPCs within seventy (70) miles of a RPC 8 border.





APPENDIX A, COMMITTEE MEMBERS CONTACT LIST

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Henderson, William	Sr. Staff Eng.	Motorola	cegr34@email.mot.com	85 Harristown Road, Glenrock NY 07452	(201) 447-7674	(201) 447-7800	\checkmark



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Herman, Lisa		New York State Office for Technology, Statewide Wireless Network (SWN)	lisa.herman@oft.state.ny.us	NYS Office for Technology - SWN Project Office, 74 North Pearl Street, Kenmore Building, 2nd Floor Albany NY 12207-2721	(518) 474-7838	(518) 474-7529	
Hibbard, Rich	Senior Account Executive	TekTron	rich.hibbard @tektroncorp.com	118 Pennsylvania R.R. Avenue, Linden NJ 07036	(865) 665-4400 x 230	(856) 665-5303	\checkmark
Hoffman, Ron		South Brunswick Inc.	rhoffman@sbtnj.net		(732) 382-1528		\checkmark
Horace, Edmund	Deputy C.O. Communications Bureau	Nassau County Police Department	ehorace@pdcn.org	1490 Franklin Avenue, Mineola NY 11501	(516) 573-7600	(516) 573-7007	
Horst, John	FCC License Coordinator	New York City Police Department - Electronics Section	jhorst@nypd.org	50-16 59 th Place Room C-23 Woodside NY 11377	(718) 476-7554	(718) 476-0205	
Hughes, Brian	Vice President	Eastern Communications	bh@easterncommunications. com	48-14 36th Street, Long Island City, NY 11101	(718) 729-2044	(718) 729-2241	\checkmark
Hunter, Michael		RCC	mhunter@rcc.com		(732) 404-2424		\checkmark
Jacobowitz, Neli	Project Manage Intern	MTA/NYCT	neli.jacobowitz@nyct.com	2 Broadway, New York NY 10004	(646) 252-4474		
Johnson, Lance	Director - Spectrum Resources	Sprint Nextel	lance.johnson@sprint.com	2001 Edmund Valley Drive, Reston VA 20175	(703) 433-4476		\checkmark
Johnson, Peter	Radio Project Coordinator	Westchester County	Paj5@westchestergov.com	148 Maritine Avenue Room 214 White Plains, NY 10601	(914) 995-3402		



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Karmarkar, Radhika	Senior Counsel	NYC Department of Information Technology and Telecommunications	rkarmarkar@doitt.nyc.gov		(212) 788-6565		
Kerr, Doug	Public-Safety Marketing Director	Carlson Wireless Technologies	dkerr@carlsonwireless.com		(707) 433-2477		\checkmark
Kersch, Kenneth E.	Information Manager - Station Manager	SBTV-3	kkersch@sbtnj.net	Township of South Brunswick, PO Box 190, Monmouth Junction NJ 08852	(732) 329-4000 x 7317	(732) 274-8864	\checkmark
Kim, Stephen		Invertix Corporation	skim@invertix.com		(703) 813-2195		\checkmark
Klug, Karl W	Deputy Chief, Operations	Suffolk County Health Services Department Div of EMS	Karl.klug @suffolkcountyny.gov	PO Box 6100, Hauppauge NY 11788-0009	(631) 853-8309	(631) 853-8307	
Krader, David	Project Manager	Sprint Nextel	david.krader@sprint.com	6575 The Corners Parkway Norcross, LA 30092	(678) 405-8816		\checkmark
Kratzer, Lieutenant John		New Jersey State Police Commu- nications Bureau	lpp4193@gw.njsp.org	PO Box 7068, West Trenton NJ 08628	(609) 882-2000		
Kurtz, Jack	Project Engineer	New York City Transit	jakurtz@nyct.com	2 Broadway B3.120 New York NY 10004	(646) 252-3798	(646) 252-3476	
Kuttle, Steve		New England Com- munications Systems, Incorporated	steve@necommsys.com		(860) 632-2678 x 102		\checkmark
Kuzma, Scott	Captain	Woodbridge Police Department	scott.kuzma @twp.woodbridge.nj.us		(732) 726-2314		



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Lawrence, Victor	Associate Dean & Professor	Stevens Institute of Technology	Victor.lawrence @stevens.edu	Department of ECE Castle Point on Hudson Hoboken NJ 07030	(732) 407-9500	(201) 216-5636	\checkmark
Leifer, Morton, P.E.	Electronics Communications Specialist	Clarkstown Police Department	m_leifer @town.clarkstown.ny.us	20 Maple Avenue, New City NY 10956	(345) 406-0729		
Leonard, Tom	Radio Engineer	New York State Police	Tleonard @troopers.state.ny.us	NYSP Communications 1220 Washington Avenue, Building 22 Albany NY 12226-2252	(518) 372-5392	(518) 372-5733	
LePage, Travis	Project Engineer, MBA, PMP	NYSTEC	lepage@nystec.com	500 Avery Lane, Suite A Griffiss Business and Technology Park Rome NY 13441	(315) 334-7822	(315) 338-6124	\checkmark
Lepinski, Mark	Lieutenant	Bergen County Police Department	lepinski@bcpd.org	66 Zabriskie Street Hackensack, NJ 07601	(201) 646-2700 x 450	(201) 336-7777	
Link, Kenneth J.	Communications Systems Analyst	Morris County Department of Law and Public Safety	klink@co.morris.nj.us		(973) 829-8053		
Lombardo, Kevin	Senior Engineering Mgr	800 Transition Administrator	kevin.lombardo @bearingpoint.com		(312) 287-7788		
Louit, Gerard	Project Administrator	New York City Transit	gelouit@nyct.com	2 Broadway C3.26, New York NY 10004	(646) 252-3277	(646) 252-3476	
Lucido, Paul	Communications Department	NYPD	paul.lucido@nypd.org	50 16 59 th Place Woodside, NY 11377	(718) 565-4403		
Lyons, Margaret	Director	RCC Consultants	mlyons@rcc.com	100 Woodbridge Center, Woodbridge NJ 07095	(732) 404-2476	(732) 404-2580	\checkmark



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Madsen, Peter J.	Project Manager	Port Authority of New York/New Jersey	pmadsen@panynj.gov		(201) 216-2152		
Magee, Jim	ASM	Tyco Electronics	mageeji@tycoelectronics.com	25 Rountree Drive Sicklerville, NJ 08081	(609) 841-4090		\checkmark
Manion, Robert	Project Manager	NYSTEC	manion@nystec.com	500 Avery Lane, Suite A Griffiss Business and Technology Park Rome NY 13441	(315) 334-7823	(315) 338-6124	\checkmark
Martinez- Bradwell, Maribel	President	R&J Telecom, Inc.	mmartinez5@nycap.rr.com	38 Dussault Drive, Latham NY 12110	(518) 785-1703	(518) 218-9268	\checkmark
Masciadrelli, John	Telecommuni- cations Engineer	Connecticut DPS	john.masciadrelli @po.state.ct.us	1111 County Club Road, Middletown CT	(860) 685-8106		
Matson, Mark		Connecticut State Police	mark.matson@po.state.ct.us		(860) 685-8280		
Maugeu, Ron	Consultant	Fleetalk Management	rjm730@ombargmail.com	31 Fox Hill Drive Franklin, NJ 07416	(973) 827-0483		\checkmark
McArthur, Donald	Lieutenant	Westchester County Police	dfm9@westchestergov.com	1 Sawmill River Parkway, Hawthorne NY	(914) 864-7674	(914) 741-4444	
McDonald, D/Chief Stephen J.	CO Support- Technical	Nassau County Police Department	smcdonald@pdcn.org	1490 Franklin Avenue, Mineola NY 11501	(516) 573-7500	(516) 573-7596	
Mead, Barbara	Account Executive	M/A-COM	Barbara.mead @tycoelectronics.com	432 Clubway, Hackensack, NJ 07601	(201) 410-4675		\checkmark
Meade, Mr. Peter W	Assistant Fire Marshal	Nassau County Fire Commission	Pmeade @nassaucountyny.gov	140 15th Street, Mineola NY 11501	(516) 571-6400	(516) 571-6407	



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Meagher, Scott	Engineer	NYSTEC	smeagher@nystec.com	500 Avery Lane, Suite A, Griffiss Business and Technology Park Rome, NY 13441	(315) 271-3169		\checkmark
Melendez, Felix	Director - Citywide Radio Network Operations and FCC Licensing Support	NYC Department of Information Technology and Telecommunications	fmelendez@doitt.nyc.gov	11 Metrotech 3rd Floor Brooklyn NY 11201	(718) 403-8278	(718) 403-8220	
Melia, Lt. Anthony	Communications Officer & APCO frequency advisor	Essex County Sheriff's Dept, Office of the Chief	meliaa@apco911.org	50 Nelson Place, Newark NJ 07102	(973) 621-4170	(973) 621-4073	
Mihlbauer, Bret	Program Manager	Motorola	bret.mihlbauer@motorola.co m	335 Adams Street Suite 700 Brooklyn, NY 11201	(201) 447-7615		\checkmark
Miranda, Oscar		Celplan/WCA	oscar@celplan.com				\checkmark
Mitchell, Lawrence	Radio Engineer	New York State Emergency Management Office	Communications @semo.state.ny.us	Building 22, 1220 Washington Avenue, Suite 101 Albany NY 12226	(518) 292-2266		
Mitchell, Walt		Alcatel	walt.mitchell@alcatel.com		(856) 464-6707		\checkmark
Mojica, Aristides	Captain	Suffolk County Police Department		30 Yaphank Avenue, Yaphank NY 11980	(631) 852-6170	(631) 852-6418	
Morton, Leifer	Project Engineer - Electronic Communication Specialist	Clarkstown Police Department	m_leifer @town.clarkstown.ny.us	20 Maple Avenue, New City NY 10956	(845) 406-0729		



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Moy, Philip	Systems Engineer	Motorola	philip.moy@motorola.com	85 Harristown Road Glen Rock, NJ 07627	(201) 447-7615		\checkmark
Mui, Ping	Radio Technician	NYC Department Of Transportation			(718) 417-2079		
Muller, Karl	Communications Coordinator	Clarkstown Police Department	K_muller@town.clarkstown.n y.us	20 Maple Avenue New Cityh, NY 10956	(845) 639-5872		
Murphy, D/I William	CO Communications Bureau	Suffolk County Police Department	murphywil@co.suffolk.ny.us	30 Yaphank Avenue, Yaphank NY 11980	(631) 852-6440	(631) 852-6418	
Napolitano, Jerry	Market Specialist	Motorola	C40077@motorola.com	335 Adam Street, Suite 700, Brooklyn NY 11201	(914) 447-2703		\checkmark
Nestor, Jody	Interoperability Coordinator	Public-Safety Communications Office	jody.nestor@lps.state.nj.us	200 Riverview Plaza Trenton, NJ 08625-0081	(609) 633-0287		
NG, Nan	Project Engineer	New York City Transit	nang@nyct.com		(646) 252-6773		
O'Hara Sean	Business Area Manager - Analysis, Communications, and Collections Systems	Syracuse Research Corporation (SRC)	ohara@syrres.com	6225 Running Ridge Road, North Syracuse NY 13212	(315) 452-8152	(315) 452-8180	~
Opee, Beatrice	Engineer	NYSTEC	opee@nystec.com	500 Avery Lane, Suite A Griffiss Business and Technology Park Rome NY 13441	(518) 431-7034	(315) 338-6124	\checkmark
Oza, Miraj	System Engineer	Motorola	miraj@motorola.com	85 Harristown Road, Glenrock NY 07452	(201) 447-7716	(201) 447-7800	\checkmark



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Padilla, Juan	Solutions Architect	Motorola	juan.padilla@motorola.com		(201) 447-7540		\checkmark
Pair, Steven		CBS-TV	stevepair@cbs.com		(212) 975-8083		\checkmark
Peterson, John		New York State Department of Health	jrp07@health.state.ny.us		(518) 408-5163		
Pohorilak, George	Director	DPS Office of Statewide Emergency Telecommunications	george.pohorilak @po.state.ct.us	1111 Country Club Road, PO Box 2794 Middletown CT 06457- 9294	(860) 685-8108	(860) 685-8363	
Pollak, Richard	Sr. Sales Engineer	Motorola	rick.pollak@motorola.com	92 Oak Hill Road, Westford MA 01886	(978) 692-4986	(978) 692-3810	\checkmark
Quinn, Myles P.	Chief of Operations	Suffolk County Fire Rescue	myles.quinn@co.suffolk.ny.us	PO Box 127, Yaphank NY 11980	(631) 852-4818	(631) 852-4814	
Raffaelli, Thomas	Project Coordinator Radio	Westchester County	trr1@westchestergov.com	148 Martine Avenue, Room 242, White Plains NY 10601	(914) 995-5912	(914) 813-4154	
Raghunandan, Krishnamurthy	Construction Administrator - Wireless	New York City Transit	krraghu@nyct.com	2 Broadway, New York NY 10004	(646)252-4526		
Ramadan, Nagah	Executive Vice President	RCC Consultants	nramadan@rcc.com	100 Woodbridge Center, Drive #201, Woodbridge NJ 07095	(732) 404-2490		\checkmark
Ramos, Pablo	9-1-1 Coordinator	Rockland County	ramosp@co.rockland.ny.us	35 Firemen's Memorial Drive, Pomona NY 10970	845) 364-8908		
Redding, Robert	Director of Intelligent Trans- portation Systems	MTA Bridges and Tunnels	rredding@mtabt.org	2 Broadway, New York NY 10004	(646) 252-7122		



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Reiner, Craig A.	Director	State of New Jersey Office of Information Technology	craig.reiner@oit.state.nj.us	P.O. Box 212, Trenton, NJ	(609) 777-3698		
Revankar, Vijay	Project Engineer	Port Authority of New York/New Jersey	vrevanka@panynj.gov	2 Gateway Center, 16th Floor, Newark NJ 07102	(973) 792-4455	(973) 792-4302	
Revis, Mark	Associate Director	RCC Consultants	mrevis@rcc.com	100 Woodbridge Center, Woodbridge NJ 07095	(732) 404-2462	(732) 404-2556	\checkmark
Rhodes, Yorke		IBM	yrhodes@us.ibm.com		(212) 745-4040		\checkmark
Rinehart, Bette		Motorola	c18923@email.mot.com	28 Twin Lakes Drive, Gettysburg PA 17325	(717) 334-0654		\checkmark
Rivera, Darlene	Project Engineer	NYCTA Communications Engineering	darlnene.rivera@nyct.com	2 Broadway 3rd Floor D384, New York NY 10004	(646) 252-4178	(646) 252-2666	
Robertson, John	Director	NYC Department of Information Technology and Telecommunications	jrobertson@doitt.nyc.gov	DoITT City Wide Radio Operations, 1 Centre Street, 22nd Floor, Room 2217, New York NY 10007	(212) 669-2100	(212) 669-2277	
Rocco, John	Sr. Account Manager	Motorola	john.rocco@motorola.com	28 Wood Avenue, Patchogue NY 11772	(631) 654-2058	(631) 447-6609	\checkmark
Rodriguez, Francis	Senior Consultant	RCC Consultants	frodriguez@rcc.com	100 Woodbridge Center, Woodbridge NJ 07095	(732) 404-2477		\checkmark
Romano, Mark	Project Manager	NYSTEC	romano@nystec.com	500 Avery Lane, Suite A Griffiss Business and Technology Park Rome NY 13441	(315) 334-7851	(315) 338-6124	\checkmark



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Santaniello, John	Senior Account Manager	Motorola	j.santaniello@motorola.com	85 Harristown Road, Glenrock NY 07452	(201) 447-7583	(201) 447-7700	\checkmark
Schlieman, Robert F	Assistant Director - Engineering	New York State Office for Technology Statewide Wireless Network (SWN)	robert.schlieman@oft.state.n y.us	NYS Office for Technology - SWN Project Office, 74 North Pearl Street, Kenmore Building, 2nd Floor Albany NY 12207-2721	(518) 474-9700	(518) 474-7529	
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Scotto, Ron	Engineer	Island Broadcasting	Islandbroadcasting @myway.com	4 Hunters Lane, Roslyn NY	(516) 627-5103		\checkmark
Sena, Kevin		MCM Technology	ksena@mcmtechnology.com		(205) 655-8749		\checkmark
Shakarjian, Mikel	Project Manager	New York State Office for Technology, Statewide Wireless Network (SWN)	mikel.shakarjian@oft.state.ny .us	NYS Office for Technology - SWN Project Office, 74 North Pearl Street, Kenmore Building, 2nd Floor, Albany NY 12207-2721	(518) 474-9491	(518) 474-7529	
Sheehan, James		Paramus Police Department	jsheehan@paramuspolice.org		(201) 262-3400 x 507		
Shuler, Thomas H	Managing Consultant	SSI Services, Inc Eastern Region Office	tom.shuler@vanatium.com	826 North Lewis Rd, Suite 3, Limerick PA 19468	(610) 495-0844	(610) 495-0846	\checkmark
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Simonetti, Raymond	Manager of Communications	Port Authority of NY/NJ Public Safety Department	rsimonet@panynj.gov	241 Erie Street, Room 302, Jersey City NJ 07310	(201) 239-3738	(201) 239-3884	



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
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Snyder, David		Snyder & Snyder, L.L.P.	dsnyder@snyderlaw.net		(914) 335-0700		\checkmark
Speidel, Robert J.	Manager Regulatory Programs	Tyco Electronics	Speidelbo @tycoelectronics.com	PO Box 2000, 221 Jefferson Ridge Pkwy, Lynchburg VA 24501	(434) 455-9465	(434) 455-6764	\checkmark
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Stemmer, Mike		Connecticut State Police	mike.stemmer @po.state.ct.us				
Stern, David	Vice President	V-Comm	david.stern @vcomm-eng.com		(609) 655-1200 x 323		\checkmark
Stile, Vincent R.	Project Assistant	New York State Office for Technology Statewide Wireless Network (SWN)	stilevin@nvbb.net	44 Kent Lane, Centerbeach NY 11720	(631) 846-3686	(631) 852-6418	
Stogner, Warren		Eastern Communications	warren@stogner.ws	48-14 36th Street, Long Island City NY 11101	(718) 729-2044	(718) 729-2241	\checkmark
Tedona, John	Senior Account Manager	Motorola	jtedona@motorola.com		(201) 841-6237		\checkmark



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Tedona, John		Motorola	john.tedona@motorola.com		(201) 447-7811		\checkmark
Tenney, Richard		Invertix Corporation	rtenney@invertix.com		(703) 813-2159		\checkmark
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Thornton, Michael	AM	Flarion Technologies	m.thornton@flarion.com	135 Route 202/206, South Bedminster NJ 07921	(201) 788-6957		\checkmark
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Touroonjian, Richard	Director	RCC Consultants	rtouroonjian@rcc.com	100 Woodbridge Center, Woodbridge NJ 07095	(732) 404-2428	(732) 404-2556	\checkmark
Tuttle, Chris	Emergency Operations Manager	Port Authority of New York/New Jersey OEM	ctuttle@panynj.gov		(201) 595-4696		
Valatkavage, John	Engineering Group Leader	Motorola	john.valatkavage @motorola.com	85 Harristown Road, Glenrock NY 07452	(201) 447-7541	(201) 447-7800	\checkmark
Vallarelli, John M.	Lieutenant - Project Manager	MTA Police Department	john.vallarelli@nyct.com	2 Broadway, A8.99, New York NY 10014	(646) 252-2692		
Varghese, Mariam	System Engineer	Motorola	mariam.varghese @motorola.com	85 Harristown Road, Glenrock NY 07452	(201) 447-7790	(201) 447-7800	\checkmark
Vaughan, Corey	Consultant	NYSTEC	coreyvaughan@gmail.com				\checkmark
Vaughan, Don	Senior Engineer	NYSTEC	dvaughan@nystec.com	1209 Turf Drive, Oceanport NJ 07757	(732) 542-8033	(732) 542-2912	\checkmark



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
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Vogel, Emil T.	Principal Engineer	Vogel Consulting Group, Incorporated	Vogelconsulting @optonline.com	105 Deer Trail, Ramsey NJ 07446	(201) 327-8083	(201) 327-0846	\checkmark
Volk, Michael	Chief, EMS Communications	Westchester County Department of Emergency Services	mkv1@westchestergov.com	4 Dana Road, Vahalla NY 10595	(914) 231-1684		
Walsh, Lt. Neil		NYC Police Department	nwalsh@nypd.org	1 Police Plaza Room 900, New York NY 10038	(212) 374-5545	(212) 374-2477	
Walsh, Mike	Director	NYSTEC	mwalsh@nystec.com	100 State Street, Albany NY 12267	(212) 599-4599	(518) 431-7037	\checkmark
Walsh, Stephanie		Motorola	stephanie.walsh @motorola.com	85 Harristown Road, Glenrock NY 07452	(201) 447-7525	(201) 447-7800	\checkmark
Warhol, Dan	Lieutenant	Union County OEM	dwarhol@ucnj.org	300 North Avenue Westfield, NJ 07090	(908) 654-9883		
Weinberg, Capt Kenneth		Motorola	ken.weinberg @motorola.com	85 Harristown Road, Glenrock NY 07452	(201) 447-7559	201) 447-7800	\checkmark
Westmoreland, Doug	Consultant	NYSTEC	dwestmoreland@nystec.com	100 State Street, Albany NY 12267	(518) 431-7036	(518) 431-7037	\checkmark
Williams, Doug	Regional Manager	Tyco Electronics	Williamdo @tycoelectronics.com	One Executive Centre Drive, Suite 205, Albany NY 12203	(518) 869-2211	(518) 869-3710	\checkmark
Williams, Ilse		NYC Department of Transportation			(718) 417-2078		
Williams, Tom	Consultant	Fleettalk/Sprint	panthers1965@msn.com		(973) 477-8435		\checkmark
Withington, Paul		Lockheed Martin	paul.withington@lmco.com				\checkmark



Name	Title	Organization	E-Mail Address	Work Address	Phone	Fax	Non- Voting Member
Wolfe, Michael	Technical Services	Warren County	mwolfe@co.warren.nj.us		(908) 835-2049		
Wright, Scott	Telecommunica- tions Engineer	Connecticut DPS	scott.wright@do.state.ct.us	1111 Country Club Road PO Box 2794, Middletown CT 06457- 9294	(860) 685-8280		
Yurman, Joseph	Principal Engineer	NYC Transit Authority	joseph.yurman@nyct.com	2 Broadway, 3rd Floor D3.84, New York NY 10004	(646) 252-3231	(646) 252-2666	
Zarwanski, Jerry	Telecommunica- tions Engineer	DPS Office of Statewide Emergency Telecommunications	jerry.zarwanski @po.state.ct.us	1111 Country Club Road PO Box 2794, Middletown CT 06457- 9294	(860) 685-8157	(860) 685-8363	
Zito, Paul	Telecommunica- tions Engineer	Connecticut DPS	paul.zito@do.state.ct.us	1111 Country Club Road PO Box 2794, Middletown CT 06457- 9294	(860) 685-8280		



APPENDIX B, COMMITTEE MEMBERS MEETING ATTENDANCE ROSTER

Name	Title	Organization	5/1/ 2002	11/6/2002	5 2003	5 2003	0 2003	1/6 2003	/8 2004	1/6 2004	5/22 2004	1/3 2004	2005	/11/2005	5/21/2005	3/9/2005	20/2005	1/14/2005	22/2005	2/2006		:/2006		2	11	6]		/2007	0/2007	8/2007	13/2007	5/2008	8/2008
			5 /1	11/	2/25	6/25	9/10	11/	1 /8	4/6	6/2	11/	3/2	571	6/2	8/8	6/6	11/	12/	2/02/	3/23	5/2	6/20/	8/15	10/17	12/	2/2]	5/1	7/1	9/1	11/	1/1	3/1
Allen, Ted	Consultant	Booz Allen Hamilton																			\checkmark												
Aron, Carl	Executive Vice President	RCC Consultants																									\checkmark						
Barsuglia, Jim	Telecom Analyst	New Jersey State Police						\checkmark	\checkmark				\checkmark																				
Bartholetti, Thomas	RF Design Consultant	Systra Consulting																			\checkmark	\checkmark									\checkmark		
Bater, Andrew	Manager RF Projects Engineering	Tribune Broadcasting							\checkmark	\checkmark																							
Belliard, Juan		New York City Transit															\checkmark																
Benson, Sean	Communications Coordinator	Paramus Police Department											\checkmark	\checkmark		\checkmark																\checkmark	
Bianculli, Tony		NYC Department of Sanitation	\checkmark									\checkmark																					
Birrittella, James	Director Project Development	Westchester County Probation						\checkmark	\checkmark	\checkmark																							
Bishop, Paul Jr.		Dayton T. Brown																							\checkmark								
Bohmer, Rich	Business Analyst	Motorola					T							\checkmark			T	T	T	\checkmark		\checkmark											

Table 14, Attendance Roster



Name	Title	Organization	5/1/ 2002	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Bradshaw, Hugh	Communications Coordinator	New York City OEM	\checkmark				\checkmark					\checkmark																					
Brandy, Dane	Sergeant	New Jersey State Police																									\checkmark						
Buchanan, James	Program Manager	Port Authority of New York/New Jersey																									\checkmark	\checkmark				\checkmark	
Burlew, Joseph	Communications Manager	UMDNJ-EMS NJ TF1 USAR																														\checkmark	\checkmark
Burns, Michael		Warren County											\checkmark				\checkmark																
Byrne, John		CBS-TV																\checkmark															
Carbonell, George	Transportation Radio Supervisor	Connecticut DOT															V										\checkmark						
Caronia, Gregory	Division Supervisor	Nassau County OEM																															
Catan, Dan	CEO	MCM Technology																										\checkmark					
Cerulli, Matthew	Radio Technician	NYS Office for Technology, Statewide Wireless Network											V																				
Chafin, Keith	Regional Account Exec, Government Markets	Dataradio							\checkmark	\checkmark				\checkmark						\checkmark	V												
Chapeton, Lt. Gregory		Yonkers Fire Depart- ment, Communications					\checkmark	\checkmark	\checkmark		\checkmark																						
Cherian, Emil	Engineer	FCC																												\checkmark			



Name	Title	Organization	5/1/ 2002	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Cimo, Anthony	Engineer	Syracuse Research Corporation																												\checkmark	\checkmark		
Clampet, Mark	Deputy Director	City of New York Office Emergency Management	V									\checkmark		~						\checkmark			\checkmark					\checkmark		\checkmark			
Clarson, Mike	Director	RCC Consultants, Inc.																							\checkmark								
Clay, Larry	Senior Principal Engineer	Raython																														\checkmark	\checkmark
Clinton, Chuck	Program Manager	Port Authority of NY/NJ						\checkmark	\checkmark				\checkmark	\checkmark	\checkmark					\checkmark				\checkmark	\checkmark		\checkmark			\checkmark			\checkmark
Cloke, Wayne	Regional Sales Manager, Public- Safety	Recom Wireless, Inc.																				\checkmark										\checkmark	\checkmark
Collins, Denis	Systems Analyst	BAE Systems, Incor- porated at DOJ WMO																					\checkmark										
Colsey, Alan		Rockland County																	\checkmark														
Coltri, Norm	Associate Director	RCC Consultants						\checkmark	\checkmark						\checkmark																		
Cook, David A.	Chief, East Greenbush Fire Company & FCC Region 30 Chairman	East Greenbush Fire Company							\checkmark	\checkmark																							
Cracolic, John	Public-Safety Communications Division	Cisco																							\checkmark								



Name	Title	Organization	5/1/ JOOJ	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Cuva, Paul	Senior Communi- cations Technician	County of Union, New Jersey																												\checkmark	\checkmark	\checkmark	
DeFalco, Carmine	Program Manager	New Jersey Transit Authority											\checkmark			\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark			\checkmark				\checkmark	\checkmark			\checkmark
DeFazio, Frank	Sr. Staff Eng.	Motorola									\checkmark		\checkmark			\checkmark																	
Degenshein, Britta	Consultant	Motorola																						\checkmark	\checkmark								
Delaney, Matthew	Radio Engineer	NYS Office for Technology, Statewide Wireless Network											\checkmark																				
Demcoe, Allen	County Radio Sys- tems Coordinator	Middlesex County																													\checkmark	\checkmark	
DeSio, Frances	Captain	Port Authority Police																									\square			\checkmark			
Devereaux, Jack		Motorola																									\square						
Diegnan, Kevin	Project Manager	NYC Department of Sanitation Office of Waste Management	\checkmark																														
DiRaimo, Salvatore	Principal Engineer	NYSTEC						\checkmark	V	\checkmark	V			\checkmark																			
Donato, Peter	System Sales & Design	TekTron														\checkmark	\checkmark																
Doyle, Thomas		Motorola																															
Dzissah, Kwasi	Engineer	NYSTEC																						\checkmark									
Eierman, David	Engineer	Motorola																			\checkmark			\checkmark						\checkmark			



Name	Title	Organization	5/1/ 2002	11/6/2002	2/75 2003	E123 2003				400C 3/ F	4/02 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Epstein, Adam	Radio Project Coordinator	Westchester County																															\checkmark
Esposito, PO Frank		Nassau County Police Department																															
Everett, Charles		Union City Police Department														\checkmark																	
Feuer, Adam		Rockland County																	\checkmark														
Fielbig, Edward	Communications Specialist	MTA PD															\checkmark																
Finnegan, Bill	Engagement Manager	New Jersey Attorney General's Office					\checkmark	′√	ν ν	/	v	,	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark									
Fishman, Douglas	Director - Northeast Region	RCC Consultants													\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark			\checkmark		\checkmark	\checkmark	
Gamba, Mark	Senior Engineer	Port Authority of New York New Jersey																														\checkmark	
Gardner, William	Director - Police Communications	Suffolk County Police Department	\checkmark	\checkmark	\checkmark	V	\checkmark	′ √	ν ν	/	V	,	\checkmark	\checkmark					\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark		\checkmark
George, Bill		Systra Consulting																		\checkmark		\checkmark											
Getsinger, Mark	Telecomm Analyst I	New Jersey State Police REMU	\checkmark							V	′√		\checkmark	\checkmark		V	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		V	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark
Gioia, John	Engineer	NYSTEC																	\checkmark	\checkmark		\checkmark											
Golder, Sgt. Tom		Nassau County Police Department Radio Office	\checkmark		\checkmark	V	V	′√	ν ν	/	v	,	\checkmark	\checkmark					\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark		\checkmark	\checkmark	\checkmark	\checkmark



Name	Title	Organization	5/1/ 2002	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Gosch, Edward	Radio Engineer	NYS Office for Technology, Statewide Wireless Network																				V											
Greenfeld, Michael	Senior Staff Engineer	Motorola	\checkmark			\checkmark																											
Guingon, Rommel		Alcatel												\checkmark																			
Harte, Steve	Assoc Commissioner - Wireless Technologies	DoITT											\checkmark	V	V	\checkmark				\checkmark	\checkmark	V				\checkmark			\checkmark		V		
Hassett, Jim	Manager Radio Repair OPS	NYC Police Department		\checkmark	\checkmark		\checkmark		\checkmark		\checkmark		\checkmark	\checkmark	\checkmark					\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	V	\checkmark			\checkmark			\checkmark
Hayling II, Raymond	Chief, Public-Safety Communications & Deputy Chief Technology Officer	New Jersey Attorney General's Office & NJ Office of Information Technology					\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark		\checkmark		\checkmark			\checkmark	\checkmark	v		\checkmark	\checkmark						
Heck, Steve	Engineering Manager	Motorola	\checkmark		\checkmark	\checkmark						\checkmark																					
Heinzelman, William	Director of Communications	Woodbridge Police																														\checkmark	
Heinzelman, William	Director of Communications	Woodbridge Police																														\checkmark	
Henderson William	Sr. Staff Eng.	Motorola			\checkmark		\checkmark	\checkmark								\checkmark																	



Name	Title	Organization	5/1/ 2002	11/6/2002	2/25 2003	6/25 2003		9/10 2003 11/6 2003		1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Herman, Lisa		NYS Office for Technology, Statewide Wireless Network																	\checkmark		\checkmark													
Hibbard, Rich	Senior Account Executive	TekTron															\checkmark																	
Hoffman, Ron		South Brunswick Inc.															\checkmark																	
Horace, Edmund	Deputy C.O. Com- munications Bureau	Nassau County Police Department				\checkmark	v	⁄ √	,		١	/		V	V	\checkmark					\checkmark													
Horst, John	FCC License Coordinator	New York City Police Department - Electronics Section							ν	/		١	V		V	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	V		V	V		\checkmark		\checkmark			V
Hughes, Brian	Vice President	Eastern Communications		\checkmark		\checkmark		\checkmark	ν	/				V	√	\checkmark	\checkmark					\checkmark	\checkmark	\checkmark	\checkmark			V	\checkmark		\checkmark			\checkmark
Jacobowitz, Neli	Project Manage Intern	MTA/NYCT																															\checkmark	
Johnson, Lance	Director - Spectrum Resources	Sprint Nextel																													\checkmark	\checkmark	\checkmark	
Johnson, Peter	Radio Project Coordinator	Westchester County																																\checkmark
Karmarkar, Radhika	Senior Counsel	NYC Department of Information Technology and Telecommu- nications																						\checkmark										
Kerr, Doug	Public-Safety Marketing Director	Carlson Wireless Technologies																						\checkmark										



Name	Title	Organization	5/1/ JUNJ	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Kersch, Kenneth E.	Information Manager - Station Manager	SBTV-3														\checkmark																	
Kim, Stephen		Invertix Corporation												\checkmark																			
Klug, Karl W.	Deputy Chief, Operations	Suffolk County Health Services Department Div of EMS		\checkmark																													
Krader, David	Project Manager	Sprint Nextel																														\checkmark	
Krader, David	Project Manager	Sprint Nextel																														\checkmark	
Kratzer, Lieutenant John		New Jersey State Police Communications Bureau											\checkmark			\checkmark			\checkmark								\checkmark						
Kurtz, Jack	Project Engineer	NYC Transit					\checkmark															\checkmark											
Kuttle, Steve		New England Communications Systems, Incorporated																			V												
Kuzma, Scott	Captain	Woodbridge Police Department																												\checkmark			
Lawrence, Victor	Associate Dean & Professor	Stevens Institute of Technology																									\checkmark						
Leifer, Morton, P.E.	Electronics Communications Specialist	Clarkstown Police Department																								\checkmark			\checkmark	\checkmark		\checkmark	\checkmark
Leonard, Tom	Radio Engineer	New York State Police	\checkmark		\checkmark		\checkmark	\checkmark				\checkmark																					\checkmark
LePage, Travis	Project Engineer	NYSTEC											\checkmark		\checkmark	\checkmark	\checkmark																



Name	Title	Organization	5/1/ JUNJ	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004			+002 27 /0				6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	0) 23/ 2000 E / 7 / 7 0 0 E	0002/2/c	6/20/2006	8/15/2006	10/17/2006	9007/ET/ZT		200C/01/2	/002/0T//		1/15/200/	0007/CT/T	3/18/2008
Lepinski, Mark	Lieutenant	Bergen County Police Department											ν	/ ν	/	٦	/															ν	/	
Link, Kenneth J.	Communications Systems Analyst	Morris County Department of Law and Public Safety			\checkmark	\checkmark	\checkmark	V	\checkmark	′√	,																							
Lombardo, Kevin	Senior Engineering Manager	800 Transition Administrator																												١	/			
Louit, Gerard	Project Administrator	NYC Transit					\checkmark	\checkmark	\checkmark	′√	,		ν	/ \	/ ' '	/				-	/	ν	/ -	\checkmark			١	/						
Lucido, Paul	Communications Department	NYPD																														ν	/	
Lyons, Margaret	Director	RCC Consultants					\checkmark			\checkmark	′ √	·																						
Madsen, Peter J.	Project Manager	Port Authority of NY/NJ											ν	/ ν	/	٦	ר /	/		-	/ \	/ ν	/ ''	\checkmark		V	۱	/ \	/					
Magee, Jim	ASM	Tyco Electronics											ν	/ ν	/																	ν	/	
Manion, Robert	Project Manager	NYSTEC	\checkmark	″ √	′ √				١	\checkmark																								
Martinez- Bradwell, Maribel	President	R&J Telecom, Inc.						V	\checkmark	′√	′ √	,					٦	/ -	V		/ \	/				V			v	/				
Masciadrelli, John	Telecommunications Engineer	Connecticut DPS																									١	/	ν	/ \	/	ν	/ \	/
Matson, Mark		Connecticut State Police															٦	/																
Maugeu, Ron	Consultant	Fleetalk Management																														ν	/	
McArthur, Donald	Lieutenant	Westchester County Police	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	′ √	′ √																							



Name	Title	Organization	5/1/ 2002	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
McDonald, D/Chief Stephen J.	CO Support - Technical	Nassau County Police Department	\checkmark						\checkmark																								
Mead, Barbara	Account Executive	M/A-COM																											\checkmark			\checkmark	\checkmark
Meade, Mr. Peter W.	Assistant Fire Marshal	Nassau County Fire Commission	\checkmark	\checkmark															\checkmark	\checkmark			\checkmark	\checkmark	\checkmark		\checkmark	\checkmark			\checkmark		
Meagher, Scott	Engineer	NYSTEC																											\checkmark				
Melendez, Felix	Director -Citywide Radio Network Operations and FCC Licensing Support	New York City Department of Information Technology and Telecommu- nications	V	\checkmark	V	V	V		\checkmark		V		V	V	V	V	V			V		V	\checkmark			\checkmark	V	V					\checkmark
Melia, Lt. Anthony	Communications Officer & APCO frequency advisor	Essex County Sheriff's Dept Office of the Chief	V		V	V		V	V	\checkmark	\checkmark		\checkmark	V		V	\checkmark			\checkmark		\checkmark			\checkmark		\checkmark		\checkmark			V	
Mihlbauer, Bret	Program Manager	Motorola																														\checkmark	\checkmark
Miranda, Oscar		Celplan/WCA											\checkmark																				
Mitchell, Lawrence	Radio Engineer	New York State Emergency Management Office														\checkmark																	
Mitchell, Walt		Alcatel												\checkmark																			
Mojica, Aristides	Captain	Suffolk County Police Department					\checkmark																										



Name	Title	Organization	5/1/ JUNJ	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Morton, Leifer	Project Engineer - Electronic Commu- nication Specialist	Clarkstown Police Department																								\checkmark							
Moy, Philip	Systems Engineer	Motorola																														\checkmark	\checkmark
Mui, Ping	Radio Technician	NYC Department Of Transportation																															1
Muller, Karl	Communications Coordinator	Clarkstown Police Department																															\checkmark
Murphy, D/I William	CO Communications Bureau	Suffolk County Police Department																															
Napolitano, Jerry	Market Specialist	Motorola																									\checkmark	\checkmark					\checkmark
Nestor, Jody	Interoperability Coordinator	Public-Safety Communications Office																												\checkmark		\checkmark	\checkmark
NG, Nan	Project Engineer	New York City Transit																					\checkmark										
O'Hara, Sean	Research and Communications Engineer	Syracuse Research Corporation (NYS)	V	\checkmark	\checkmark	\checkmark	V		V	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		V	\checkmark		\checkmark						
Opee, Beatrice	Engineer	NYSTEC										\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark		\checkmark	\checkmark	\checkmark							
Oza, Miraj	System Engineer	Motorola					\checkmark	\checkmark						\checkmark																			
Padilla, Juan	Solutions Architect	Motorola																			\checkmark	\checkmark		\checkmark									
Pair, Steven		CBS-TV																\checkmark															
Peterson, John		New York State Department of Health												\checkmark																			



Name	Title	Organization	5/1/ 2002	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003			4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Pohorilak, George	Director	DPS Office of Statewide Emergency Telecommunications	\checkmark			V	V								V		V						\checkmark				V							
Pollak, Richard	Sr. Sales Engineer	Motorola																					\checkmark											
Quinn, Myles P.	Chief of Operations	Suffolk County Fire Rescue	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	√ √	/	١	/									\checkmark		V	\checkmark		\checkmark						\checkmark		\checkmark
Raffaelli, Thomas	Project Coordinator Radio	Westchester County			\checkmark	\checkmark				ν	/ \	/				\checkmark	\checkmark														\checkmark			
Raghunandan, Krishnamurthy	Construction Administrator - Wireless	NYC Transit												V		V		\checkmark					\checkmark							\checkmark			\checkmark	
Ramadan, Nagah	Executive Vice President	RCC Consultants																										\checkmark		\checkmark				
Ramos, Pablo	9-1-1 Coordinator	Rockland County																		\checkmark							\checkmark		\checkmark	\checkmark				
Redding, Robert	Director of Intelligent Transportation Systems	MTA Bridges and Tunnels																											\checkmark					
Reiner, Craig A.	Director	State of New Jersey Office of Information Technology																													\checkmark			\checkmark
Reitz, Ken		Motorola																																
Revankar, Vijay	Project Engineer	Port Authority of NY/NJ									١	/									\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark			\checkmark		\checkmark	
Revis, Mark	Associate Director	RCC Consultants							\checkmark	/																								



Name	Title	Organization	5/1/ JUNJ	11/6/2002	2/25 2003	6/25 2003	2002 01/0	11/6 2003			4/07 CC/3	11/3 2004				2002/12/8	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Rhodes, Yorke		IBM											\checkmark	'	ν	1						\checkmark											
Rinehart, Bette		Motorola					\checkmark		ν	/										\checkmark													
Rivera, Darlene	Project Engineer	NYCTA Communications Engineering																								\checkmark							
Robertson, John	Director	New York City Depart- ment of Information Technology and Telecommunications			\checkmark	\checkmark	\checkmark		ν	/	V		V	′ √	′ √	′√	V										V						
Rocco, John	Sr. Account Manager	Motorola		\checkmark	\checkmark		\checkmark	,																									
Rodriguez, Francis	Senior Consultant	RCC Consultants						V	′ v	/						\checkmark	\checkmark									\checkmark							
Romano, Mark	Project Manager	NYSTEC															\checkmark												\checkmark				
Santaniello, John	Senior Account Manager	Motorola	\checkmark				\checkmark	T			v	√	r	\mathbf{v}	'																		
Schlieman, Robert F.	Assistant Director - Engineering	NYS Office for Technology, Statewide Wireless Network	V	\checkmark		\checkmark	V		ν	/ √	′ √	V	√	′ √	′ v	′√	V	V	\checkmark	V	V	\checkmark		\checkmark		V			\checkmark		V		
Schram, Phil		Motorola																\checkmark															
Schwartz, Andy	Director	New Jersey Transit															\checkmark				\checkmark	\checkmark								\checkmark			
Scotto, Ron	Engineer	Island Broadcasting							ν	/ /	'																						
Sena, Kevin		MCM Technology																										\checkmark					
Shakarjian, Mikel	Project Manager	NYS OFT Statewide Wireless Network															\checkmark																



Name	Title	Organization	5/1/ JUNJ	11/6/2002	2/25 2003	6/25 2003		5002 01 (6 11 /6 2003	1 /8 2004		4/02 2004	11 / 2 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Sheehan, James		Paramus Police Department														\checkmark		\checkmark															
Shuler, Thomas H.	Managing Consultant	SSI Services, Inc., Eastern Region Office	\checkmark	\checkmark																				\checkmark									
Simmons, Leon		NYC DOT																															
Simonetti, Raymond	Manager of Communications	Port Authority of NY/NJ Public Safety Department									V	,	V	V	V		\checkmark			\checkmark		\checkmark	\checkmark	\checkmark									
Smith, Conroy	Project Engineer	New York City Depart- ment of Information Technology and Telecommunications									V									\checkmark	\checkmark	\checkmark	\checkmark	v	\checkmark	\checkmark	v	\checkmark	\checkmark				\checkmark
Smith, Sgt. Donald	Technical Services	Westchester County Correctional Depart- ment Technical Services	\checkmark						V	,																							
Snyder, David		Snyder & Snyder, L.L.P.												\checkmark																			
Speidel, Robert J.	Manager Regulatory Programs	Tyco Electronics				\checkmark														\checkmark													
Stanford, Annemarie	DSM	Tyco Electronics							\checkmark	′√	'		\checkmark		\checkmark	\checkmark					\checkmark	\checkmark	\checkmark	\checkmark					\checkmark				\checkmark
Stemmer, Mike		Connecticut State Police															\checkmark						\checkmark										
Stern, David	Vice President	V-Comm													\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark										
Stile, Vincent R.	Project Assistant	NYS Office for Technology, Statewide Wireless Network		\checkmark	\checkmark	\checkmark	\checkmark			V	,		V													\checkmark	\checkmark	V	\checkmark			\checkmark	



Name	Title	Organization	5/1/2002	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Stogner, Warren		Eastern Communications				\checkmark																											
Tedona, John	Senior Account Manager	Motorola																				\checkmark											
Tedona, John		Motorola																		\checkmark													
Tenney, Richard		Invertix Corporation												\checkmark																			
Testa, Anthony		IBM											\checkmark																				
Thornton, Michael	АМ	Flarion Technologies								V	\checkmark																						
Thorpe, Stephen	Supervising Communications Technician (Ret.), Bureau of Telecommunications	County of Union														\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark			\checkmark				\checkmark	V		
Touroonjian, Richard	Director	RCC Consultants							\checkmark																								
Tuttle, Chris	Emergency Operations Manager	Port Authority of New York/New Jersey OEM												\checkmark																			
Valatkavage, John	Engineering Group Leader	Motorola	\checkmark																														
Vallarelli, John M.	Lieutenant - Project Manager	MTA Police Department											\checkmark																\checkmark				
Varghese, Mariam	System Engineer	Motorola					\checkmark	\checkmark																									



Name	Title	Organization	2/1/ 2002	11/6/2002	2/25 2003	6/25 2003	2/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Vaughan, Corey	Consultant	NYSTEC	_										√	V		√	√							~				-/		0,			
Vaughan, Don	Senior Engineer	NYSTEC					\checkmark	,					\checkmark	\checkmark		\checkmark	\checkmark			\checkmark	\checkmark			\checkmark			\checkmark	\checkmark	\checkmark				
Velez, Ed	Manager of Radio Systems	New Jersey Transit																											\checkmark			\checkmark	\checkmark
Vogel, Emil T.	Principal Engineer	Vogel Consulting Group, Incorporated	\checkmark		\checkmark		\checkmark	√ √			\checkmark		V	\checkmark	\checkmark	V		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark				V	\checkmark	\checkmark	\checkmark	\checkmark		
Volk, Michael	Chief, EMS Communications	Westchester County Department of Emergency Services																												\checkmark			
Walsh, Lt. Neil		NYC Police Department		\checkmark	\checkmark																												
Walsh, Mike	Director	NYSTEC							\checkmark		\checkmark				\checkmark		\checkmark	\checkmark		\checkmark	\checkmark												
Walsh, Stephanie		Motorola		\checkmark					\checkmark	,	\checkmark		\checkmark							\checkmark								\checkmark		\checkmark			
Warhol, Dan	Lieutenant	Union County OEM																														\checkmark	
Weinberg, Capt. Kenneth		Motorola																															
Westmoreland, Doug	Consultant	NYSTEC														V																	
Williams, Doug	Regional Manager	Tyco Electronics				\checkmark													\checkmark			\checkmark											
Williams, Ilse		NYC Department Of Transportation																															
Williams, Tom	Consultant	Fleettalk/Sprint																												\checkmark			
Withington, Paul		Lockheed Martin											\checkmark																				



Name	Title	Organization	5/1/ 2002	11/6/2002	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	<i>21</i>	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	2/19/2	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Wolfe, Michael	Technical Services	Warren County											\checkmark				\checkmark	\checkmark	\checkmark	\checkmark	\checkmark												
Wright, Scott	Telecommunications Engineer	State of Connecticut DPS																						\checkmark	\checkmark							\checkmark	
Yurman, Joseph	Principal Engineer	NYC Transit Authority			\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark																		
Zarwanski, Jerry	Telecommunications Engineer	DPS Office of Statewide Emergency Telecom- munications		\checkmark		\checkmark	\checkmark	\checkmark		\checkmark	V			\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark
Zito, Paul	Telecommunications Engineer	Connecticut DPS																						\checkmark	\checkmark							\checkmark	\checkmark



APPENDIX C, REGION 8 POPULATION DATA

New York State Counties¹⁹

County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Bronx County	New York	1,354,068	1,343,698	10,370	0.8
New York city (pt.)	New York	1,354,068	1,343,698	10,370	0.8
Dutchess County	New York	287,752	284,270	3,482	1.2
Beacon city	New York	13,954	13,875	79	0.6
Fishkill village	New York	1,753	1,750	3	0.2
Millbrook village	New York	1,498	1,473	25	1.7
Millerton village	New York	935	935	-	-
Pawling village	New York	2,253	2,242	11	0.5
Poughkeepsie city	New York	30,073	29,959	114	0.4
Red Hook village	New York	1,822	1,819	3	0.2
Rhinebeck village	New York	3,105	3,097	8	0.3
Tivoli village	New York	1,175	1,172	3	0.3
Wappingers Falls village	New York	4,983	4,956	27	0.5
Balance of Dutchess County	New York	226,201	222,992	3,209	1.4
Kings County	New York	2,488,194	2,479,923	8,271	0.3
New York city (pt.)	New York	2,488,194	2,479,923	8,271	0.3
Nassau County	New York	1,344,892	1,339,301	5,591	0.4
Atlantic Beach village	New York	1,993	1,988	5	0.3
Baxter Estates village	New York	1,009	1,008	1	0.1
Bayville village	New York	7,172	7,154	18	0.3
Bellerose village	New York	1,171	1,170	1	0.1
Brookville village	New York	3,392	3,373	19	0.6
Cedarhurst village	New York	6,165	6,156	9	0.1
Centre Island village	New York	446	443	3	0.7

¹⁹ Note: Dash (-) represents zero or rounds to zero. (X) represents blank values.
Data Source: Population Division, U.S. Census Bureau - Release Date: July 10, 2003
Table SUB-EST2002-11-36-New York Incorporated Place Population Estimates and Population Change, Sorted within County: July 1, 2001 to July 1, 2002



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Cove Neck village	New York	302	299	3	1.0
East Hills village	New York	6,860	6,842	18	0.3
East Rockaway village	New York	10,397	10,378	19	0.2
East Williston village	New York	2,505	2,501	4	0.2
Farmingdale village	New York	8,531	8,440	91	1.1
Floral Park village	New York	15,974	15,939	35	0.2
Flower Hill village	New York	4,538	4,517	21	0.5
Freeport village	New York	43,978	43,772	206	0.5
Garden City village	New York	21,700	21,660	40	0.2
Glen Cove city	New York	26,886	26,760	126	0.5
Great Neck village	New York	9,640	9,590	50	0.5
Great Neck Estates village	New York	2,766	2,755	11	0.4
Great Neck Plaza village	New York	6,787	6,619	168	2.5
Hempstead village	New York	53,474	53,342	132	0.2
Hewlett Bay Park village	New York	492	488	4	0.8
Hewlett Harbor village	New York	1,277	1,274	3	0.2
Hewlett Neck village	New York	515	511	4	0.8
Island Park village	New York	4,774	4,748	26	0.5
Kensington village	New York	1,209	1,207	2	0.2
Kings Point village	New York	5,169	5,127	42	0.8
Lake Success village	New York	2,835	2,818	17	0.6
Lattingtown village	New York	1,872	1,858	14	0.8
Laurel Hollow village	New York	1,971	1,952	19	1.0
Lawrence village	New York	6,555	6,529	26	0.4
Long Beach city	New York	35,593	35,482	111	0.3
Lynbrook village	New York	19,933	19,895	38	0.2
Malverne village	New York	8,942	8,927	15	0.2
Manorhaven village	New York	6,253	6,197	56	0.9
Massapequa Park village	New York	17,555	17,505	50	0.3
Matinecock village	New York	850	838	12	1.4
Mill Neck village	New York	839	830	9	1.1
Mineola village	New York	19,283	19,235	48	0.2
Munsey Park village	New York	2,637	2,632	5	0.2
Muttontown village	New York	3,508	3,480	28	0.8



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
New Hyde Park village	New York	9,563	9,542	21	0.2
North Hills village	New York	4,347	4,336	11	0.3
Old Brookville village	New York	2,205	2,187	18	0.8
Old Westbury village	New York	4,412	4,354	58	1.3
Oyster Bay Cove village	New York	2,279	2,270	9	0.4
Plandome village	New York	1,282	1,277	5	0.4
Plandome Heights village	New York	971	970	1	0.1
Plandome Manor village	New York	854	841	13	1.5
Port Washington North village	New York	2,709	2,703	6	0.2
Rockville Centre village	New York	24,573	24,537	36	0.1
Roslyn village	New York	2,593	2,586	7	0.3
Roslyn Estates village	New York	1,221	1,216	5	0.4
Roslyn Harbor village	New York	1,048	1,040	8	0.8
Russell Gardens village	New York	1,074	1,073	1	0.1
Saddle Rock village	New York	801	799	2	0.3
Sands Point village	New York	2,844	2,818	26	0.9
Sea Cliff village	New York	5,073	5,056	17	0.3
South Floral Park village	New York	1,584	1,577	7	0.4
Stewart Manor village	New York	1,934	1,932	2	0.1
Thomaston village	New York	2,613	2,604	9	0.3
Upper Brookville village	New York	1,862	1,829	33	1.8
Valley Stream village	New York	36,433	36,351	82	0.2
Westbury village	New York	14,370	14,323	47	0.3
Williston Park village	New York	7,260	7,250	10	0.1
Woodsburgh village	New York	829	829	-	-
Balance of Nassau County	New York	832,410	828,762	3,648	0.4
New York County	New York	1,546,856	1,549,009	-2,153	-0.1
New York city (pt.)	New York	1,546,856	1,549,009	-2,153	-0.1
Orange County	New York	356,773	349,480	7,293	2.1
Chester village	New York	3,501	3,474	27	0.8
Cornwall on Hudson village	New York	3,109	3,086	23	0.7
Florida village	New York	2,691	2,625	66	2.5
Goshen village	New York	5,801	5,769	32	0.6
Greenwood Lake village	New York	3,443	3,422	21	0.6



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Harriman village	New York	2,277	2,265	12	0.5
Highland Falls village	New York	3,759	3,741	18	0.5
Kiryas Joel village	New York	14,904	13,799	1,105	8.0
Maybrook village	New York	3,976	3,731	245	6.6
Middletown city	New York	25,775	25,553	222	0.9
Monroe village	New York	8,033	7,988	45	0.6
Montgomery village	New York	3,903	3,803	100	2.6
Newburgh city	New York	28,382	28,288	94	0.3
Otisville village	New York	1,014	997	17	1.7
Port Jervis city	New York	9,100	8,866	234	2.6
Tuxedo Park village	New York	733	731	2	0.3
Unionville village	New York	548	538	10	1.9
Walden village	New York	6,528	6,290	238	3.8
Warwick village	New York	6,531	6,466	65	1.0
Washingtonville village	New York	6,226	6,063	163	2.7
Balance of Orange County	New York	216,539	211,985	4,554	2.1
Putnam County	New York	98,257	97,125	1,132	1.2
Brewster village	New York	2,170	2,167	3	0.1
Cold Spring village	New York	1,991	1,990	1	0.1
Nelsonville village	New York	573	568	5	0.9
Balance of Putnam County	New York	93,523	92,400	1,123	1.2
Queens County	New York	2,237,815	2,238,024	-209	-
New York city (pt.)	New York	2,237,815	2,238,024	-209	-
Richmond County	New York	457,383	451,373	6,010	1.3
New York city (pt.)	New York	457,383	451,373	6,010	1.3
Rockland County	New York	291,835	289,430	2,405	0.8
Airmont village	New York	8,319	7,832	487	6.2
Chestnut Ridge village	New York	7,883	7,857	26	0.3
Grand View-on-Hudson village	New York	290	288	2	0.7
Haverstraw village	New York	10,153	10,131	22	0.2
Hillburn village	New York	885	881	4	0.5
Kaser village	New York	3,453	3,444	9	0.3
Montebello village	New York	3,710	3,701	9	0.2
New Hempstead village	New York	4,796	4,784	12	0.3



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
New Square village	New York	5,305	4,977	328	6.6
Nyack village	New York	6,768	6,749	19	0.3
Piermont village	New York	2,621	2,609	12	0.5
Pomona village	New York	2,841	2,766	75	2.7
Sloatsburg village	New York	3,140	3,128	12	0.4
South Nyack village	New York	3,507	3,497	10	0.3
Spring Valley village	New York	25,573	25,515	58	0.2
Suffern village	New York	11,046	11,023	23	0.2
Upper Nyack village	New York	1,891	1,883	8	0.4
Wesley Hills village	New York	5,000	4,937	63	1.3
West Haverstraw village	New York	10,318	10,260	58	0.6
Balance of Rockland County	New York	174,336	173,168	1,168	0.7
Suffolk County	New York	1,458,655	1,443,299	15,356	1.1
Amityville village	New York	9,559	9,497	62	0.7
Asharoken village	New York	640	635	5	0.8
Babylon village	New York	12,713	12,679	34	0.3
Belle Terre village	New York	837	836	1	0.1
Bellport village	New York	2,382	2,378	4	0.2
Brightwaters village	New York	3,291	3,283	8	0.2
Dering Harbor village	New York	13	13	-	-
East Hampton village	New York	1,354	1,347	7	0.5
Greenport village	New York	2,063	2,057	6	0.3
Head of the Harbor village	New York	1,501	1,493	8	0.5
Huntington Bay village	New York	1,504	1,502	2	0.1
Islandia village	New York	3,109	3,096	13	0.4
Lake Grove village	New York	10,591	10,423	168	1.6
Lindenhurst village	New York	28,048	27,969	79	0.3
Lloyd Harbor village	New York	3,734	3,717	17	0.5
Nissequogue village	New York	1,572	1,568	4	0.3
North Haven village	New York	821	797	24	3.0
Northport village	New York	7,685	7,651	34	0.4
Ocean Beach village	New York	140	140	-	-
Old Field village	New York	989	971	18	1.9
Patchogue village	New York	12,026	11,983	43	0.4


County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Poquott village	New York	990	986	4	0.4
Port Jefferson village	New York	7,964	7,932	32	0.4
Quogue village	New York	1,058	1,040	18	1.7
Sag Harbor village	New York	2,362	2,340	22	0.9
Saltaire village	New York	44	44	-	-
Shoreham village	New York	422	419	3	0.7
Southampton village	New York	4,055	4,031	24	0.6
Village of the Branch village	New York	1,968	1,929	39	2.0
Westhampton Beach village	New York	1,943	1,931	12	0.6
West Hampton Dunes village	New York	15	14	1	7.1
Balance of Suffolk County	New York	1,333,262	1,318,598	14,664	1.1
Sullivan County	New York	74,273	74,048	225	0.3
Bloomingburg village	New York	352	353	-1	-0.3
Jeffersonville village	New York	415	417	-2	-0.5
Liberty village	New York	3,931	3,951	-20	-0.5
Monticello village	New York	6,455	6,482	-27	-0.4
Woodridge village	New York	939	922	17	1.8
Wurtsboro village	New York	1,234	1,237	-3	-0.2
Balance of Sullivan County	New York	60,947	60,686	261	0.4
Ulster County	New York	179,986	178,372	1,614	0.9
Ellenville village	New York	4,118	4,106	12	0.3
Kingston city	New York	23,347	23,289	58	0.2
New Paltz village	New York	6,419	6,372	47	0.7
Saugerties village	New York	3,915	3,889	26	0.7
Balance of Ulster County	New York	142,187	140,716	1,471	1.0
Westchester County	New York	937,279	932,748	4,531	0.5
Ardsley village	New York	4,315	4,292	23	0.5
Briarcliff Manor village	New York	7,814	7,738	76	1.0
Bronxville village	New York	6,546	6,552	-6	-0.1
Buchanan village	New York	2,217	2,217	-	-
Croton-on-Hudson village	New York	7,696	7,684	12	0.2
Dobbs Ferry village	New York	10,956	10,843	113	1.0
Elmsford village	New York	4,722	4,703	19	0.4
Harrison village	New York	24,951	24,671	280	1.1



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Hastings-on-Hudson village	New York	7,735	7,739	-4	-0.1
Irvington village	New York	6,675	6,665	10	0.2
Larchmont village	New York	6,488	6,494	-6	-0.1
Mamaroneck village	New York	18,833	18,827	6	-
Mount Kisco village	New York	10,064	10,039	25	0.2
Mount Vernon city	New York	68,615	68,621	-6	-
New Rochelle city	New York	72,472	72,483	-11	-
Ossining village	New York	24,138	24,097	41	0.2
Peekskill city	New York	23,077	22,857	220	1.0
Pelham village	New York	6,421	6,421	-	-
Pelham Manor village	New York	5,475	5,483	-8	-0.1
Pleasantville village	New York	7,202	7,203	-1	-
Port Chester village	New York	27,949	27,961	-12	-
Rye city	New York	15,092	15,041	51	0.3
Rye Brook village	New York	9,043	8,867	176	2.0
Scarsdale village	New York	17,958	17,920	38	0.2
Sleepy Hollow village	New York	9,283	9,265	18	0.2
Tarrytown village	New York	11,447	11,342	105	0.9
Tuckahoe village	New York	6,235	6,227	8	0.1
White Plains city	New York	55,394	54,116	1,278	2.4
Yonkers city	New York	197,234	197,181	53	-
Balance of Westchester County	New York	261,232	259,199	2,033	0.8

New Jersey Counties²⁰

County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Bergen County	New Jersey	895,091	890,756	4,335	0.5
Allendale borough	New Jersey	6,788	6,785	3	-

²⁰ Note: Dash (-) represents zero or rounds to zero. (X) represents blank values.

Data Source: Population Division, U.S. Census Bureau - Release Date: July 10, 2003

Table SUB-EST2002-11-36-New York Incorporated Place Population Estimates and Population Change, Sorted within County: July 1, 2001 to July 1, 2002



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Alpine borough	New Jersey	2,268	2,232	36	1.6
Bergenfield borough	New Jersey	26,215	26,212	3	-
Bogota borough	New Jersey	8,210	8,222	-12	-0.1
Carlstadt borough	New Jersey	5,973	5,948	25	0.4
Cliffside Park borough	New Jersey	22,954	22,968	-14	-0.1
Closter borough	New Jersey	8,484	8,437	47	0.6
Cresskill borough	New Jersey	7,861	7,824	37	0.5
Demarest borough	New Jersey	4,901	4,870	31	0.6
Dumont borough	New Jersey	17,533	17,508	25	0.1
East Rutherford borough	New Jersey	8,713	8,707	6	0.1
Edgewater borough	New Jersey	9,220	8,894	326	3.7
Elmwood Park borough	New Jersey	18,961	18,926	35	0.2
Emerson borough	New Jersey	7,265	7,219	46	0.6
Englewood city	New Jersey	26,159	26,148	11	-
Englewood Cliffs borough	New Jersey	5,475	5,423	52	1.0
Fair Lawn borough	New Jersey	31,631	31,626	5	-
Fairview borough	New Jersey	13,363	13,308	55	0.4
Fort Lee borough	New Jersey	36,963	36,841	122	0.3
Franklin Lakes borough	New Jersey	11,055	10,575	480	4.5
Garfield city	New Jersey	29,765	29,761	4	-
Glen Rock borough	New Jersey	11,527	11,521	6	0.1
Hackensack city	New Jersey	43,525	43,463	62	0.1
Harrington Park borough	New Jersey	4,757	4,750	7	0.1
Hasbrouck Heights borough	New Jersey	11,647	11,649	-2	-
Haworth borough	New Jersey	3,407	3,391	16	0.5
Hillsdale borough	New Jersey	10,099	10,094	5	-
Ho-Ho-Kus borough	New Jersey	4,076	4,076	-	-
Leonia borough	New Jersey	8,888	8,893	-5	-0.1
Little Ferry borough	New Jersey	10,805	10,802	3	-
Lodi borough	New Jersey	24,141	24,013	128	0.5
Maywood borough	New Jersey	9,511	9,508	3	-
Midland Park borough	New Jersey	6,932	6,933	-1	-
Montvale borough	New Jersey	7,277	7,157	120	1.7
Moonachie borough	New Jersey	2,810	2,772	38	1.4



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
New Milford borough	New Jersey	16,386	16,381	5	-
North Arlington borough	New Jersey	15,220	15,202	18	0.1
Northvale borough	New Jersey	4,530	4,498	32	0.7
Norwood borough	New Jersey	6,131	6,107	24	0.4
Oakland borough	New Jersey	13,282	12,928	354	2.7
Old Tappan borough	New Jersey	5,694	5,587	107	1.9
Oradell borough	New Jersey	8,044	8,036	8	0.1
Palisades Park borough	New Jersey	17,801	17,502	299	1.7
Paramus borough	New Jersey	26,275	25,915	360	1.4
Park Ridge borough	New Jersey	8,808	8,713	95	1.1
Ramsey borough	New Jersey	14,498	14,398	100	0.7
Ridgefield borough	New Jersey	10,929	10,885	44	0.4
Ridgefield Park village	New Jersey	12,823	12,839	-16	-0.1
Ridgewood village	New Jersey	24,877	24,885	-8	-
River Edge borough	New Jersey	10,988	10,971	17	0.2
Rockleigh borough	New Jersey	397	394	3	0.8
Rutherford borough	New Jersey	18,047	18,059	-12	-0.1
Saddle River borough	New Jersey	3,610	3,532	78	2.2
Tenafly borough	New Jersey	13,951	13,881	70	0.5
Teterboro borough	New Jersey	18	18	-	-
Upper Saddle River borough	New Jersey	8,096	7,761	335	4.3
Waldwick borough	New Jersey	9,608	9,608	-	-
Wallington borough	New Jersey	11,553	11,559	-6	-0.1
Westwood borough	New Jersey	11,016	11,011	5	-
Woodcliff Lake borough	New Jersey	5,840	5,804	36	0.6
Wood-Ridge borough	New Jersey	7,638	7,633	5	0.1
Balance of Bergen County	New Jersey	139,872	139,193	679	0.5
Essex County	New Jersey	798,301	795,573	2,728	0.3
Caldwell borough	New Jersey	7,667	7,611	56	0.7
East Orange city	New Jersey	69,750	69,702	48	0.1
Essex Fells borough	New Jersey	2,164	2,165	-1	-
Glen Ridge borough	New Jersey	7,230	7,247	-17	-0.2
Newark city	New Jersey	277,000	274,788	2,212	0.8
North Caldwell borough	New Jersey	7,403	7,395	8	0.1



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Roseland borough	New Jersey	5,317	5,309	8	0.2
Balance of Essex County	New Jersey	421,770	421,356	414	0.1
Hudson County	New Jersey	611,439	614,061	-2,622	-0.4
Bayonne city	New Jersey	61,605	62,065	-460	-0.7
East Newark borough	New Jersey	2,362	2,382	-20	-0.8
Guttenberg town	New Jersey	11,075	11,099	-24	-0.2
Harrison town	New Jersey	14,378	14,490	-112	-0.8
Hoboken city	New Jersey	39,507	39,362	145	0.4
Jersey City city	New Jersey	240,100	240,999	-899	-0.4
Kearny town	New Jersey	40,300	40,605	-305	-0.8
Secaucus town	New Jersey	15,882	15,980	-98	-0.6
Union City city	New Jersey	66,902	67,214	-312	-0.5
West New York town	New Jersey	46,884	47,094	-210	-0.4
Balance of Hudson County	New Jersey	72,444	72,771	-327	-0.4
Hunterdon County	New Jersey	125,795	123,989	1,806	1.5
Bloomsbury borough	New Jersey	886	885	1	0.1
Califon borough	New Jersey	1,053	1,054	-1	-0.1
Clinton town	New Jersey	2,630	2,632	-2	-0.1
Flemington borough	New Jersey	4,203	4,198	5	0.1
Frenchtown borough	New Jersey	1,501	1,497	4	0.3
Glen Gardner borough	New Jersey	1,956	1,932	24	1.2
Hampton borough	New Jersey	1,567	1,555	12	0.8
High Bridge borough	New Jersey	3,785	3,786	-1	-
Lambertville city	New Jersey	3,852	3,859	-7	-0.2
Lebanon borough	New Jersey	1,125	1,097	28	2.6
Milford borough	New Jersey	1,193	1,194	-1	-0.1
Stockton borough	New Jersey	561	559	2	0.4
Balance of Hunterdon Co.	New Jersey	101,483	99,741	1,742	1.7
Mercer County	New Jersey	359,463	355,432	4,031	1.1
Hightstown borough	New Jersey	5,299	5,278	21	0.4
Hopewell borough	New Jersey	2,049	2,040	9	0.4
Pennington borough	New Jersey	2,716	2,709	7	0.3
Princeton borough	New Jersey	14,235	14,215	20	0.1
Trenton city	New Jersey	85,650	85,566	84	0.1



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Balance of Mercer County	New Jersey	249,514	245,624	3,890	1.6
Middlesex County	New Jersey	775,549	764,971	10,578	1.4
Carteret borough	New Jersey	21,640	21,470	170	0.8
Dunellen borough	New Jersey	6,947	6,887	60	0.9
Helmetta borough	New Jersey	1,905	1,882	23	1.2
Highland Park borough	New Jersey	14,225	14,123	102	0.7
Jamesburg borough	New Jersey	6,391	6,253	138	2.2
Metuchen borough	New Jersey	13,242	13,133	109	0.8
Middlesex borough	New Jersey	13,974	13,861	113	0.8
Milltown borough	New Jersey	7,172	7,101	71	1.0
New Brunswick city	New Jersey	49,397	49,078	319	0.6
Perth Amboy city	New Jersey	48,143	47,732	411	0.9
Sayreville borough	New Jersey	41,768	41,186	582	1.4
South Amboy city	New Jersey	8,032	7,979	53	0.7
South Plainfield borough	New Jersey	22,896	22,129	767	3.5
South River borough	New Jersey	15,829	15,705	124	0.8
Spotswood borough	New Jersey	8,165	8,009	156	1.9
Balance of Middlesex County	New Jersey	495,823	488,443	7,380	1.5
Monmouth County	New Jersey	629,836	623,212	6,624	1.1
Allenhurst borough	New Jersey	709	709	-	-
Allentown borough	New Jersey	1,869	1,867	2	0.1
Asbury Park city	New Jersey	16,795	16,787	8	-
Atlantic Highlands borough	New Jersey	4,667	4,666	1	-
Avon-by-the-Sea borough	New Jersey	2,240	2,233	7	0.3
Belmar borough	New Jersey	6,005	5,995	10	0.2
Bradley Beach borough	New Jersey	4,792	4,776	16	0.3
Brielle borough	New Jersey	4,956	4,916	40	0.8
Deal borough	New Jersey	1,073	1,066	7	0.7
Eatontown borough	New Jersey	14,086	13,975	111	0.8
Englishtown borough	New Jersey	1,785	1,778	7	0.4
Fair Haven borough	New Jersey	5,963	5,924	39	0.7
Farmingdale borough	New Jersey	1,584	1,580	4	0.3
Freehold borough	New Jersey	11,507	11,485	22	0.2
Highlands borough	New Jersey	5,167	5,115	52	1.0



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Interlaken borough	New Jersey	900	896	4	0.4
Keansburg borough	New Jersey	10,812	10,799	13	0.1
Keyport borough	New Jersey	7,519	7,514	5	0.1
Little Silver borough	New Jersey	6,153	6,134	19	0.3
Loch Arbour village	New Jersey	277	277	-	-
Long Branch city	New Jersey	31,571	31,343	228	0.7
Manasquan borough	New Jersey	6,364	6,316	48	0.8
Matawan borough	New Jersey	8,912	8,891	21	0.2
Monmouth Beach borough	New Jersey	3,614	3,596	18	0.5
Neptune City borough	New Jersey	5,205	5,196	9	0.2
Oceanport borough	New Jersey	5,931	5,869	62	1.1
Red Bank borough	New Jersey	11,839	11,802	37	0.3
Roosevelt borough	New Jersey	937	930	7	0.8
Rumson borough	New Jersey	7,268	7,182	86	1.2
Sea Bright borough	New Jersey	1,804	1,803	1	0.1
Sea Girt borough	New Jersey	2,179	2,153	26	1.2
Shrewsbury borough	New Jersey	3,686	3,669	17	0.5
South Belmar borough	New Jersey	1,805	1,796	9	0.5
Spring Lake borough	New Jersey	3,658	3,611	47	1.3
Spring Lake Heights borough	New Jersey	5,252	5,225	27	0.5
Tinton Falls borough	New Jersey	15,709	15,595	114	0.7
Union Beach borough	New Jersey	6,773	6,746	27	0.4
West Long Branch borough	New Jersey	8,248	8,230	18	0.2
Balance of Monmouth Co.	New Jersey	390,222	384,767	5,455	1.4
Morris County	New Jersey	478,730	473,973	4,757	1.0
Boonton town	New Jersey	8,424	8,410	14	0.2
Butler borough	New Jersey	8,102	7,921	181	2.3
Chatham borough	New Jersey	8,436	8,414	22	0.3
Chester borough	New Jersey	1,654	1,641	13	0.8
Dover town	New Jersey	18,108	18,043	65	0.4
Florham Park borough	New Jersey	12,247	12,222	25	0.2
Kinnelon borough	New Jersey	9,447	9,363	84	0.9
Lincoln Park borough	New Jersey	10,867	10,853	14	0.1
Madison borough	New Jersey	15,356	15,318	38	0.2



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Mendham borough	New Jersey	5,111	5,078	33	0.6
Morris Plains borough	New Jersey	5,221	5,211	10	0.2
Morristown town	New Jersey	18,831	18,766	65	0.3
Mountain Lakes borough	New Jersey	4,280	4,256	24	0.6
Mount Arlington borough	New Jersey	4,978	4,847	131	2.7
Netcong borough	New Jersey	3,282	3,194	88	2.8
Riverdale borough	New Jersey	2,537	2,499	38	1.5
Rockaway borough	New Jersey	6,431	6,418	13	0.2
Victory Gardens borough	New Jersey	1,533	1,530	3	0.2
Wharton borough	New Jersey	6,235	6,231	4	0.1
Balance of Morris County	New Jersey	327,650	323,758	3,892	1.2
Passaic County	New Jersey	496,646	494,094	2,552	0.5
Bloomingdale borough	New Jersey	7,688	7,660	28	0.4
Clifton city	New Jersey	79,626	79,417	209	0.3
Haledon borough	New Jersey	8,377	8,330	47	0.6
Hawthorne borough	New Jersey	18,349	18,315	34	0.2
North Haledon borough	New Jersey	8,033	7,990	43	0.5
Passaic city	New Jersey	68,445	68,253	192	0.3
Paterson city	New Jersey	150,750	150,106	644	0.4
Pompton Lakes borough	New Jersey	10,897	10,694	203	1.9
Prospect Park borough	New Jersey	5,800	5,797	3	0.1
Ringwood borough	New Jersey	12,625	12,525	100	0.8
Totowa borough	New Jersey	10,010	9,959	51	0.5
Wanaque borough	New Jersey	10,368	10,335	33	0.3
West Paterson borough	New Jersey	11,200	11,114	86	0.8
Balance of Passaic County	New Jersey	94,478	93,599	879	0.9
Somerset County	New Jersey	309,886	304,737	5,149	1.7
Bernardsville borough	New Jersey	7,558	7,481	77	1.0
Bound Brook borough	New Jersey	10,195	10,151	44	0.4
Far Hills borough	New Jersey	899	880	19	2.2
Manville borough	New Jersey	10,449	10,362	87	0.8
Millstone borough	New Jersey	420	417	3	0.7
North Plainfield borough	New Jersey	21,189	21,094	95	0.5



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Peapack and Gladstone borough	New Jersey	2,466	2,449	17	0.7
Raritan borough	New Jersey	6,379	6,347	32	0.5
Rocky Hill borough	New Jersey	666	661	5	0.8
Somerville borough	New Jersey	12,460	12,410	50	0.4
South Bound Brook borough	New Jersey	4,516	4,493	23	0.5
Watchung borough	New Jersey	5,913	5,677	236	4.2
Balance of Somerset County	New Jersey	226,776	222,315	4,461	2.0
Sussex County	New Jersey	148,680	146,522	2,158	1.5
Andover borough	New Jersey	660	658	2	0.3
Branchville borough	New Jersey	845	845	-	-
Franklin borough	New Jersey	5,207	5,185	22	0.4
Hamburg borough	New Jersey	3,386	3,314	72	2.2
Hopatcong borough	New Jersey	15,980	15,941	39	0.2
Newton town	New Jersey	8,338	8,295	43	0.5
Ogdensburg borough	New Jersey	2,641	2,639	2	0.1
Stanhope borough	New Jersey	3,626	3,614	12	0.3
Sussex borough	New Jersey	2,158	2,150	8	0.4
Balance of Sussex County	New Jersey	105,839	103,881	1,958	1.9
Union County	New Jersey	530,763	527,479	3,284	0.6
Elizabeth city	New Jersey	123,279	122,223	1,056	0.9
Fanwood borough	New Jersey	7,283	7,229	54	0.7
Garwood borough	New Jersey	4,185	4,171	14	0.3
Kenilworth borough	New Jersey	7,769	7,728	41	0.5
Linden city	New Jersey	40,002	39,794	208	0.5
Mountainside borough	New Jersey	6,687	6,645	42	0.6
New Providence borough	New Jersey	12,045	11,989	56	0.5
Plainfield city	New Jersey	48,273	48,085	188	0.4
Rahway city	New Jersey	26,909	26,722	187	0.7
Roselle borough	New Jersey	21,539	21,457	82	0.4
Roselle Park borough	New Jersey	13,388	13,341	47	0.4
Summit city	New Jersey	21,335	21,239	96	0.5
Westfield town	New Jersey	30,028	29,851	177	0.6
Balance of Union County	New Jersey	168,041	167,005	1,036	0.6



County and Local	State	July 1, 2002 Population	July 1, 2001 Population	Numerical Population Change	Percent Population Change
Warren County	New Jersey	107,537	105,644	1,893	1.8
Alpha borough	New Jersey	2,498	2,493	5	0.2
Belvidere town	New Jersey	2,792	2,783	9	0.3
Hackettstown town	New Jersey	10,760	10,758	2	-
Phillipsburg town	New Jersey	15,245	15,244	1	-
Washington borough	New Jersey	6,777	6,736	41	0.6
Balance of Warren County	New Jersey	69,465	67,630	1,835	2.7



FCC Region 8 – 700-MHz Plan APPENDIX D, REGION 8 POPULATION MAPS



Figure 15, Region 8 Population in Thousands²¹

²¹ Data Source: Population Division, U.S. Census Bureau - Release Date: July 10, 2003





Figure 16, Region 8 Population Densities²²

²² Data Source: Population Division, U.S. Census Bureau - Release Date: July 10, 2003



APPENDIX E, APPLICATION PACKAGE CHECKLIST

As described in Section 6, Application Requirements, it is the applicant's responsibility to submit a complete application package to the RPC for evaluation. Applications may be dismissed and returned to the applicant if required information is not provided. The applicant will then have the option to complete and resubmit the application during the next filing window period.

Please refer to Table 15 for the items that constitute a complete application package.

 Item
Completed FCC 601 form(s).
Completed supplemental application requirements. Please refer to Appendix F, Supplemental Application Requirements.
Completed Antenna Pattern Information Form for each antenna configuration employed (with azimuth and elevation patterns). Please refer to Appendix G.
Completed Service Area Boundary Form. Please refer Appendix H.
Signed Memorandum of Understanding (MOU) agreeing to implement system as proposed. Please refer to Appendix Q, Memorandum of Understanding.
Coverage and interference prediction exhibits using Longley-Rice and adhering to the guidelines in TSB-88 (latest edition). Please refer to Section 9 for further details.
Technical data import spreadsheet in a format of "dot csv" file, with the details of each site and channel. Please refer to Section 6.
One (1) hard copy of the complete application package. Please refer to Section 6.
One (1) electronic $copy^{23}$ of the complete application package. Please refer to Section 6.

Table 15, Application Package Checklist

²³ Unless otherwise specified, the acceptable format will be CD-ROM, or DVD-ROM or USB "thumb drive". Other formats may be accepted upon written approval of the RPUC Chair.



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APPENDIX F, SUPPLEMENTAL APPLICATION REQUIREMENTS

Applicants must complete and provide the following supplemental information as part of their application package. In their responses, applicants should ensure that they address each of these questions in sufficient detail to allow for a matrix evaluation as detailed Section 7, Application Scoring Matrix. Incomplete responses shall directly result in a loss of points during the matrix-scoring process.

- 1) Explain why the 700-MHz General Use spectrum is needed and what public safety service(s) is (are) supported by the system(s).
- 2) Indicate the proposed system's degree of interoperability.
- 3) Indicate the system's loading capacity (the number of subscriber units per radio channel). This explanation shall include proposed system loading, including an inventory by service category. The applicant shall also specify the anticipated subscriber unit growth.
- 4) Specify the system configuration/design (simulcast, multicast, or stand alone/repeater).²⁴
- 5) Indicate the spectral efficiency and gross data throughput vis-à-vis the channel bandwidth (if applicable) of the technology (trunking, 6.25 kHz, integrated voice and data system).
- 6) Explain any budgetary commitment and provide documentation indicating agency funding is sufficient to fund the development of the proposed system(s).
- 7) Explain the level of planning completed for the proposed system(s) and provide a timetable for implementing the communications system or systems.
- 8) Indicate the geographic efficiency of the proposed system(s) (ratio of subscriber units to area covered and level of channel reuse).
- 9) Indicate if any current channel holdings will be released if the application is granted and justify the retention of any presently licensed frequencies.
- 10) Explain how the system will interface with long-distance radio communications such as Amateur Radio, satellite communications, and/or long-range emergency preparedness communications systems.²⁶
- 11) Indicate the transmit location (above ground, underground, or in-building).²⁶
- 12) Indicate the system modulation type (FDMA, TDMA, OFDM).²⁶
- 13) Provide details of all existing channels used by the applicant within 70 miles of the proposed system.²⁶

²⁴ Not assigned a point value in the application-scoring-matrix evaluation.



14) If spectrum identified by the applicant does not conform to the CAPRAD²⁵ preallotment channel plan, supply engineering exhibits demonstrating that the preallotment channels can be preserved if the application is granted by the Committee.

²⁵ The channel allotments provided in this Plan reflect the repacking of CAPRAD as per the Second Report and Order, adopted on July 31, 2007, and this RPC's elections for channel block size, combiner separation, and capacity options.



APPENDIX G, ANTENNA PATTERN INFORMATION FORM

This form must be completed using the Region 8 Antenna Pattern Information Form (refer to Table 16, Horizontal Antenna Pattern and Table 17, Vertical Antenna Pattern). Please visit the RPC 8 website²⁶ or contact the Region 8 Secretary to obtain an electronic version of the form.

Instructions:

Please complete this form in full for each unique fixed-facility transmit antenna configuration (Antenna Number on the Form 601 Schedule-H) employed within the application. Be sure to include both the vertical and horizontal patterns with all gain units in dB and normalized to zero dBd at the main lobe.

This information supersedes the Schedule-H antenna information fields: Azimuth, Beam width, Polarization, and Gain.

Horizontal Antenna Pattern:

Horizontal antenna pattern from 0° to 360° degrees, with 0° and 360° referenced at true North, and numbered clockwise (CW).

Vertical Antenna Pattern:

Elevation antenna pattern from -180° to $+180^{\circ}$ with 0° referenced at the horizon.

Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
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Table 16, Horizontal Antenna Pattern

²⁶ http://www.nys-rpc.org/



Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
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Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
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Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
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Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
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Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
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Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
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Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
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Pattern Reference	Normalized Horizontal Antenna
(degrees)	Pattern (dBd)
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Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
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Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
309	
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315	
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318	
319	
320	
321	
322	
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Pattern Reference (degrees)	Normalized Horizontal Antenna Pattern (dBd)
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Table 17, Vertical Antenna Pattern

Pattern Reference (degrees)	Normalized Vertical Antenna Pattern (dBd)
-180	
-179	
-178	
-177	
-176	
-175	
-174	
-173	
-172	



Pattern Reference (degrees)	Normalized Vertical Antenna Pattern (dBd)
-171	
-170	
-169	
-168	
-167	
-166	
-165	
-164	
-163	
-162	
-161	
-160	
-159	
-158	
-157	
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-155	
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-149	
-148	
-147	
-146	
-145	
-144	
-143	
-142	
-141	
-140	
-139	



Pattern Reference	Normalized Vertical Antenna
(degrees)	Pattern (dBd)
-138	
-137	
-136	
-135	
-134	
-133	
-132	
-131	
-130	
-129	
-128	
-127	
-126	
-125	
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-122	
-121	
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-106	



Pattern Reference (degrees)	Normalized Vertical Antenna Pattern (dBd)
-105	
-104	
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-102	
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-100	
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-97	
-96	
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Detterm	Name
Pattern Reference	Normalized Vertical Antenna
(degrees)	Pattern (dBd)
-72	
-71	
-70	
-69	
-68	
-67	
-66	
-65	
-64	
-63	
-62	
-61	
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-42	
-41	
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Pattern Reference (degrees)	Normalized Vertical Antenna Pattern (dBd)
-39	
-38	
-37	
-36	
-35	
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-33	
-32	
-31	
-30	
-29	
-28	
-27	
-26	
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-14	
-13	
-12	
-11	
-10	
-9	
-8	
-7	



Pattern	Normalized
Reference	Vertical Antenna
(degrees)	Pattern (dBd)
-6	
-5	
-4	
-3	
-2	
-1	
0	
1	
2	
3	
4	
5	
6	
7	
8	
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23	
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Pattern Reference (degrees)	Normalized Vertical Antenna Pattern (dBd)
27	
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Pattern Reference	Normalized Vertical Antenna
(degrees)	Pattern (dBd)
60	
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Pattern Reference (degrees)	Normalized Vertical Antenna Pattern (dBd)
93	
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Pattern Reference (degrees)	Normalized Vertical Antenna Pattern (dBd)
126	Pattern (ubu)
120	
127	
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Pattern Reference (degrees)	Normalized Vertical Antenna Pattern (dBd)
159	
160	
161	
162	
163	
164	
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APPENDIX H, SERVICE AREA BOUNDARY FORM

This form must be completed using the Region 8 Service Area Boundary Form (please refer to Table 18, Service Area Boundary Form). Please visit the RPC 8 website²⁷ or contact the Region 8 Secretary to obtain an electronic version of the form.

Instructions:

This worksheet provides the service area boundary information required by the RPC for all applications for 700-MHz utilization. The applicant should select EITHER a county (or state) boundary from the drop-down list OR enter latitude and longitude values in decimal degrees corresponding to the boundary. These points can be taken off a map or exported by most mapping and/or Geographic Information System (GIS) programs.

This information supersedes the Form 601 Schedule-D information for Radius of Operation (Line 18). Region 8 shall define radius of operation as the service area boundary plus an additional 5-mile (8-km) buffer region.

Select Boundary Input Type				
NJ/NY Counties or States	Click to Select County or State			
Other Boundary (N	AD-83 Coordinates)			
Latitude (dd)	Longitude (dd)			

Table 18, Service Area Boundary Form

²⁷ http://www.nys-rpc.org/



Select Boundary Input Type							
NJ/NY Counties or States	Click to Select County or State						
Other Boundary (NAD-83 Coordinates)							
Latitude (dd)	Longitude (dd)						



Select Boundary Input Type						
NJ/NY Counties or States	Click to Select County or State					
Other Boundary (NAD-83 Coordinates)						
Latitude (dd)	Longitude (dd)					



Select Boundary Input Type						
NJ/NY Counties or States	Click to Select County or State					
Other Boundary (NAD-83 Coordinates)						
Latitude (dd)	Longitude (dd)					



Select Boundary Input Type						
NJ/NY Counties or States	Click to Select County or State					
Other Boundary (NAD-83 Coordinates)						
Latitude (dd)	Longitude (dd)					



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APPENDIX I, 700-MHz CHANNEL ALLOTMENT POOL AS DEFINED IN CAPRAD²⁸

As previously cited, the channel allotments provided in this Plan reflect the repacking of CAPRAD as per the Second Report and Order, adopted on July 31, 2007, and this RPC's elections for channel block size, combiner separation, and capacity options. Please refer to Table 19, which follows, for the channel block size, combiner spacing, and capacity options RPC 30 chose to employ for the repacked channel allotments.

Table 19, Channel F	Repacking Parameters
---------------------	----------------------

Channel Block Size	Combiner Separation	Capacity Option
25-kHz	125-kHz	Population Model

County	Class	Band Width	Center Frequency (MHz)	FCC Channel Number
	General Use	25-kHz	770.61250	257-260
	General Use	25-kHz	771.56250	409-412
	General Use	25-kHz	772.43750	549-552
Bergen	General Use	25-kHz	772.98750	637-640
	General Use	25-kHz	773.23750	677-680
	General Use	25-kHz	774.38750	861-864
	General Use	25-kHz	774.73750	917-920
	General Use	25-kHz	770.03750	165-168
Essex	General Use	25-kHz	771.21250	353-356
	General Use	25-kHz	771.71250	433-436
ESSEX	General Use	25-kHz	772.08750	493-496
	General Use	25-kHz	772.88750	621-624
	General Use	25-kHz	773.91250	785-788
Hudson	General Use	25-kHz	769.76250	121-124
	General Use	25-kHz	770.76250	281-284
nuuson	General Use	25-kHz	771.88750	461-464
	General Use	25-kHz	772.26250	521-524

Table 20, Region 8 Channel Allotment Pool for New Jersey Counties

²⁸ http://caprad.nlectc.du.edu/cp/index.jsp



County	Class	Band Width	Center Frequency (MHz)	FCC Channel Number
	General Use	25-kHz	774.63750	901-904
	General Use	25-kHz	770.28750	205-208
	General Use	25-kHz	771.38750	381-384
Hunterdon	General Use	25-kHz	772.53750	565-568
	General Use	25-kHz	72.91250	625-628
	General Use	25-kHz	773.38750	701-704
	General Use	25-kHz	771.03750	325-328
	General Use	25-kHz	771.31250	369-372
	General Use	25-kHz	771.58750	413-416
Mercer	General Use	25-kHz	772.03750	485-488
	General Use	25-kHz	772.41250	545-548
	General Use	25-kHz	773.68750	749-752
	General Use	25-kHz	774.71250	913-916
	General Use	25-kHz	769.53750	85-88
	General Use	25-kHz	770.08750	173-176
	General Use	25-kHz	770.58750	253-256
Middlesex	General Use	25-kHz	771.16250	345-348
MiduleSex	General Use	25-kHz	771.78750	445-448
	General Use	25-kHz	772.18750	509-512
	General Use	25-kHz	772.68750	589-592
	General Use	25-kHz	774.46250	873-876
	General Use	25-kHz	769.78750	125-128
	General Use	25-kHz	771.23750	357-360
	General Use	25-kHz	771.53750	405-408
Monmouth	General Use	25-kHz	772.46250	553-556
	General Use	25-kHz	773.43750	709-712
	General Use	25-kHz	773.96250	793-796
	General Use	25-kHz	774.21250	833-836
	General Use	25-kHz	769.28750	45-48
	General Use	25-kHz	770.78750	285-288
Morris	General Use	25-kHz	771.28750	365-368
	General Use	25-kHz	772.01250	481-484
	General Use	25-kHz	772.38750	541-544
Passaic	General Use	25-kHz	769.08750	13-16



County	Class	Band Width	Center Frequency (MHz)	FCC Channel Number
	General Use	25-kHz	770.53750	245-248
	General Use	25-kHz	771.46250	393-396
	General Use	25-kHz	772.33750	533-536
	General Use	25-kHz	772.76250	601-604
	General Use	25-kHz	769.58750	93-96
	General Use	25-kHz	770.83750	293-296
Somerset	General Use	25-kHz	771.86250	457-460
Somerset	General Use	25-kHz	772.23750	517-520
	General Use	25-kHz	772.96250	633-636
	General Use	25-kHz	774.41250	865-868
	General Use	25-kHz	769.33750	53-56
	General Use	25-kHz	772.13750	501-504
Sussex	General Use	25-kHz	772.63750	581-584
	General Use	25-kHz	773.21250	673-676
	General Use	25-kHz	773.71250	753-756
	General Use	25-kHz	770.26250	201-204
	General Use	25-kHz	771.41250	385-388
Union	General Use	25-kHz	772.73750	597-600
	General Use	25-kHz	773.46250	713-716
	General Use	25-kHz	774.68750	909-912
Warren	General Use	25-kHz	769.81250	129-132
	General Use	25-kHz	770.86250	297-300
	General Use	25-kHz	771.33750	373-376
	General Use	25-kHz	771.61250	417-420
	General Use	25-kHz	773.13750	661-664

Table 21, Region 8 Channel Allotment Pool for New York State Counties

County	Class	Band Width	Center Frequency (MHz)	FCC Channel Number
Bronx	General Use	25-kHz	769.26250	41-44
	General Use	25-kHz	769.81250	129-132
	General Use	25-kHz	770.28750	205-208



County	Class	Band Width	Center Frequency (MHz)	FCC Channel Number
	General Use	25-kHz	771.31250	369-372
	General Use	25-kHz	771.81250	449-452
	General Use	25-kHz	772.21250	513-516
	General Use	25-kHz	772.71250	593-596
	General Use	25-kHz	773.48750	717-720
	General Use	25-kHz	773.93750	789-792
	General Use	25-kHz	774.18750	829-832
	General Use	25-kHz	769.31250	49-52
	General Use	25-kHz	770.78750	285-288
	General Use	25-kHz	771.28750	365-368
Dutchess	General Use	25-kHz	772.46250	553-556
Dutchess	General Use	25-kHz	772.81250	609-612
	General Use	25-kHz	773.18750	669-672
	General Use	25-kHz	773.63750	741-744
	General Use	25-kHz	774.68750	909-912
	General Use	25-kHz	769.31250	49-52
	General Use	25-kHz	769.56250	89-92
	General Use	25-kHz	770.11250	177-180
	General Use	25-kHz	770.56250	249-252
	General Use	25-kHz	770.81250	289-292
	General Use	25-kHz	771.01250	321-324
	General Use	25-kHz	771.26250	361-364
Kings	General Use	25-kHz	771.51250	401-404
KIIIYS	General Use	25-kHz	771.76250	441-444
	General Use	25-kHz	772.31250	529-532
	General Use	25-kHz	772.56250	569-572
	General Use	25-kHz	772.81250	609-612
	General Use	25-kHz	773.18750	669-672
	General Use	25-kHz	773.63750	741-744
	General Use	25-kHz	773.98750	797-800
	General Use	25-kHz	774.43750	869-872
	General Use	25-kHz	770.36250	217-220
Nassau	General Use	25-kHz	771.13750	341-344
	General Use	25-kHz	771.38750	381-384



County	Class	Band Width	Center Frequency (MHz)	FCC Channel Number
	General Use	25-kHz	771.63750	421-424
	General Use	25-kHz	771.91250	465-468
	General Use	25-kHz	772.03750	485-488
	General Use	25-kHz	772.41250	545-548
	General Use	25-kHz	773.41250	705-708
	General Use	25-kHz	774.66250	905-908
	General Use	25-kHz	774.91250	945-948
	General Use	25-kHz	769.51250	81-84
	General Use	25-kHz	770.33750	213-216
	General Use	25-kHz	771.11250	337-340
	General Use	25-kHz	771.36250	377-380
	General Use	25-kHz	771.61250	417-420
	General Use	25-kHz	771.93750	469-472
New York	General Use	25-kHz	772.16250	505-508
	General Use	25-kHz	772.66250	585-588
	General Use	25-kHz	773.13750	661-664
	General Use	25-kHz	773.38750	701-704
	General Use	25-kHz	773.73750	757-760
	General Use	25-kHz	774.23750	837-840
	General Use	25-kHz	774.88750	941-944
	General Use	25-kHz	769.78750	125-128
	General Use	25-kHz	771.16250	345-348
Orange	General Use	25-kHz	772.18750	509-512
	General Use	25-kHz	772.68750	589-592
	General Use	25-kHz	774.46250	873-876
	General Use	25-kHz	770.83750	293-296
Putnam	General Use	25-kHz	771.86250	457-460
	General Use	25-kHz	772.23750	517-520
	General Use	25-kHz	772.96250	633-636
	General Use	25-kHz	773.43750	709-712
	General Use	25-kHz	769.11250	17-20
Queens	General Use	25-kHz	769.36250	57-60
Queens	General Use	25-kHz	769.61250	97-100
	General Use	25-kHz	769.86250	137-140



County	Class	Band Width	Center Frequency (MHz)	FCC Channel Number
	General Use	25-kHz	770.06250	169-172
	General Use	25-kHz	770.86250	297-300
	General Use	25-kHz	771.18750	349-352
	General Use	25-kHz	771.43750	389-392
	General Use	25-kHz	771.68750	429-432
	General Use	25-kHz	771.98750	477-480
	General Use	25-kHz	772.36250	537-540
	General Use	25-kHz	772.61250	577-580
	General Use	25-kHz	772.86250	617-620
	General Use	25-kHz	773.88750	781-784
	General Use	25-kHz	774.48750	877-880
	General Use	25-kHz	771.06250	329-332
	General Use	25-kHz	771.83750	453-456
Richmond	General Use	25-kHz	772.51250	561-564
	General Use	25-kHz	772.93750	629-632
	General Use	25-kHz	774.13750	821-824
Rockland	General Use	25-kHz	771.66250	425-428
	General Use	25-kHz	772.06250	489-492
	General Use	25-kHz	772.58750	573-576
	General Use	25-kHz	772.83750	613-616
	General Use	25-kHz	773.16250	665-668
	General Use	25-kHz	769.83750	133-136
	General Use	25-kHz	770.31250	209-212
	General Use	25-kHz	770.51250	241-244
	General Use	25-kHz	771.08750	333-336
	General Use	25-kHz	771.33750	373-376
	General Use	25-kHz	771.58750	413-416
Suffolk	General Use	25-kHz	771.96250	473-476
	General Use	25-kHz	772.28750	525-528
	General Use	25-kHz	772.53750	565-568
	General Use	25-kHz	772.91250	625-628
	General Use	25-kHz	773.66250	745-748
	General Use	25-kHz	774.16250	825-828
	General Use	25-kHz	774.71250	913-916



County	Class	Band Width	Center Frequency (MHz)	FCC Channel Number
	General Use	25-kHz	769.26250	41-44
	General Use	25-kHz	769.51250	81-84
	General Use	25-kHz	769.83750	133-136
	General Use	25-kHz	770.51250	241-244
Sullivan	General Use	25-kHz	771.06250	329-332
Sullivali	General Use	25-kHz	771.31250	369-372
	General Use	25-kHz	771.88750	461-464
	General Use	25-kHz	772.73750	597-600
	General Use	25-kHz	773.91250	785-788
	General Use	25-kHz	774.71250	913-916
	General Use	25-kHz	769.36250	57-60
	General Use	25-kHz	769.61250	97-100
	General Use	25-kHz	770.03750	165-168
	General Use	25-kHz	770.36250	217-220
	General Use	25-kHz	771.01250	321-324
	General Use	25-kHz	771.43750	389-392
	General Use	25-kHz	771.58750	413-416
Ulster	General Use	25-kHz	771.83750	453-456
	General Use	25-kHz	772.03750	485-488
	General Use	25-kHz	772.28750	525-528
	General Use	25-kHz	772.53750	565-568
	General Use	25-kHz	772.86250	617-620
	General Use	25-kHz	773.48750	717-720
	General Use	25-kHz	774.23750	837-840
	General Use	25-kHz	774.91250	945-948
Westchester	General Use	25-kHz	770.01250	161-164
	General Use	25-kHz	771.03750	325-328
	General Use	25-kHz	771.48750	397-400
	General Use	25-kHz	771.73750	437-440
	General Use	25-kHz	772.11250	497-500
	General Use	25-kHz	772.48750	557-560
	General Use	25-kHz	772.78750	605-608
	General Use	25-kHz	773.68750	749-752





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APPENDIX J, FLOWCHART SYMBOL LEGEND

Table 22, Symbol Legend²⁹ for Application Review Flowchart

Symbol	Use
	The Connector symbol represents the exit to, or entry from, another part of the same flow chart. It is used to break a flow line that will be continued elsewhere.
	The Manual Operation symbol in this flowchart indicates the first event in the process.
	The Preparation symbol represents a modification or instance of a process.
	The Process symbol represents any process, function, or calculation.
\bigcirc	The Decision symbol is a junction at which decision must be made. A single entry may have any number of alternative solutions, but only one can be chosen.
	The Off-page connector symbols are used to indicate the flow chart continues on another page.
	The Activity symbol represents an action taken by the RPC or the FCC.
	The Stored Data symbol indicates the assigned point values that are summed to determine the total service point value the applicant shall receive.

²⁹ Reference: Patton & Patton Software Corporation – *Basic Flowchart Symbols*



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APPENDIX K, ADJACENT REGION CONCURRENCE APPROVAL REQUESTS³⁰

Region 19, New England

NEW YORK/NEW JERSEY FCC Region 8 700-MHz REGIONAL PLANNING COMMITTEE



FCC N.J. N.Y.

Peter Meade, Chairman Assistant Fire Marshal Fire & Rescue Services Nassau County Fire Commission 140 15th Street Mineola, NY 11501

February 12, 2007

Mr. George J. Pohorilak Chairman - Region 19 700- & 800-MHz Planning Committees Office of Statewide Emergency Telecommunications 1111 Country Club Road Middletown, Connecticut 06457-9294 PH: 860-685-8108 FX: 860-685-8363 Email: george.pohorilak@po.state.ct.us

WTB Docket 02-378: Interregional Concurrence Request for the Region¹ 8 700-MHz Public-Safety Communications Plan

Dear Mr. Pohorilak:

On July 27, 2006 the Region 8 Committee submitted its proposed 700-MHz Public-Safety Communications Plan for the General Use channels in the 764-776/794-806 MHz frequency band to Region 19 for concurrence in accordance with the FCC rules.

In addition to the contents of the Plan, Region 8 hereby submits the following addenda for concurrence:

- · A revised Interregional Frequency-Coordination and Dispute-Resolution Procedure;
- A methodology to manage "Orphan Channels²;" and
- An explanation of why Region 8 proposes to use the Longley-Rice propagation model for coverage and interference-prediction.

Enclosures PWM/TCL Page 1 of 2

¹ Region 8, the New York – Metropolitan area, consists not only of Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Dutchess, and Westchester Counties in New York, but also of Bergen, Essex, Hudson, Morris, Passaic, Sussex, Union, Warren, Middlesex, Somerset, Hunterdon, Mercer, and Monmouth Counties in New Jersey.

² A channel remaining from a 25-kHz bandwidth when a 12.5 or 6.25 kHz portion of the full channel is allotted for operation. Channels allotted that are less than 25-kHz wide are taken from the top-edge or the bottom edge of the 25-kHz channel block.

³⁰ At the time the adjacent-region concurrence process commenced, Mr. Peter W. Meade served as the RPC Chairperson.



Enclosed herewith please find the above mentioned addenda. The Regional Plan and addenda may also be retrieved electronically from the New York State Regional Planning Committee Website by following the steps below:

Instructions for electronically retrieving the Region 8 Plan and Addenda

1. Set your web browser to the following URL:

http://www.nys-rpc.org/

- 2. Locate the "Region 8" toolbar;
- 3. Select the "700-MHz Document Library" option;
- 4. Download the Regional Plan and addenda; and
- 5. Print the documents if desired.

Alternatively, members of the Computer Assisted Pre-coordination Resource and Database (CAPRAD) may download the Plan and Addenda from the CAPRAD website.

Region 8 would like to expedite your approval of the Regional Plan. Should Region 19 have questions, comments, and concerns regarding specific areas of the Plan, please notify me at your earliest possible convenience. We could arrange for representatives from Region 8 to attend the next Region 19 meeting to walk you through the Plan and to address your concerns.

Region 8 greatly appreciates your effort in expediting this process.

Respectfully submitted,

Peter Meade, Chairman Region 8 700 & 800-MHz Planning Committees Assistant Fire Marshal Fire and Rescue Services Nassau County Fire Commission 140 15th Street Mineola NY 11501 PH: 516-571-6400 FX: 516-571-6407 Email: pmeade@nassaucountyny.gov

Enclosures PWM/TCL Page 2 of 2



Region 28, Eastern Pennsylvania (East of Harrisburg, Southern NJ & DE)

NEW YORK/NEW JERSEY FCC Region 8 700-MHz REGIONAL PLANNING COMMITTEE



Peter Meade, Chairman Assistant Fire Marshal Fire & Rescue Services Nassau County Fire Commission 140 15th Street Mineola, NY 11501

February 12, 2007

Mr. Richard R. Reynolds Chairman - Region 28 700 & 800-MHz Planning Committees Department of Technology and Information 801 Silver Lake Boulevard Dover, Delaware 19904-2407 PH: 302-739-9648 FX: 302-739-7243 Email: Richard.Reynolds@state.de.us

Regarding: WTB Docket 02-378: Interregional Concurrence Request for the Region¹ 8 700-MHz Public-Safety Communications Plan

Dear Mr. Reynolds:

On July 27, 2006 the Region 8 Committee submitted its proposed 700-MHz Public-Safety Communications Plan for the General Use channels in the 764-776/794-806 MHz frequency band to Region 28 for concurrence in accordance with the FCC rules.

In addition to the contents of the Plan, Region 8 hereby submits the following addenda for concurrence:

- · A revised Interregional Frequency-Coordination and Dispute-Resolution Procedure;
- A methodology to manage "Orphan Channels²," and
- An explanation of why Region 8 proposes to use the Longley-Rice propagation model for coverage and interference-prediction.

¹ Region 8, the New York – Metropolitan area, consists not only of Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Dutchess, and Westchester Counties in New York, but also of Bergen, Essex, Hudson, Morris, Passaic, Sussex, Union, Warren, Middlesex, Somerset, Hunterdon, Mercer, and Monmouth Counties in New Jersey.

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Alternatively, members of the Computer Assisted Pre-coordination Resource and Database (CAPRAD) may download the Plan and Addenda from the CAPRAD website.

Region 8 would like to expedite your approval of the Regional Plan. Should Region 28 have questions, comments, and concerns regarding specific areas of the Plan, please notify me at your earliest possible convenience. We could arrange for representatives from Region 8 to attend the next Region 28 meeting to walk you through the Plan and to address your concerns.

Region 8 greatly appreciates your effort in expediting this process.

Respectfully submitted,

Peter Meade, Chairman Region 8 700 & 800-MHz Planning Committees Assistant Fire Marshal Fire and Rescue Services Nassau County Fire Commission 140 15th Street Mineola NY 11501 PH: 516-571-6400 FX: 516-571-6407 Email: pmeade@nassaucountyny.gov

Enclosures PWM/TCL Page 2 of 2



Region 30, Eastern Upstate New York

NEW YORK/NEW JERSEY FCC Region 8 700-MHz REGIONAL PLANNING COMMITTEE



Peter Meade, Chairman Assistant Fire Marshal Fire & Rescue Services Nassau County Fire Commission 140 15th Street Mineola, NY 11501

February 12, 2007

David A. Cook Chairman - Region 30 700 & 800-MHz Planning Committees NYS Office for Technology - SWN Project Office 74 North Pearl Street Kenmore Building, 2nd Floor Albany, New York 12207-2721 Telephone: (518) 486-1035 FAX: (518) 474-7529 Email: david.cook@oft.state.ny.us

WTB Docket 02-378: Interregional Concurrence Request for the Region¹ 8 700-MHz Public-Safety Communications Plan

Dear Mr. Cook:

On July 27, 2006 the Region 8 Committee submitted its proposed 700-MHz Public-Safety Communications Plan for the General Use channels in the 764-776/794-806 MHz frequency band to Region 30 for concurrence in accordance with the FCC rules.

In addition to the contents of the Plan, Region 8 hereby submits the following addenda for concurrence:

- A revised Interregional Frequency-Coordination and Dispute-Resolution Procedure;
- A methodology to manage "Orphan Channels²;" and
- An explanation of why Region 8 proposes to use the Longley-Rice propagation model for coverage and interference-prediction.

Page 1 of 2

¹ Region 8, the New York – Metropolitan area, consists not only of Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Dutchess, and Westchester Counties in New York, but also of Bergen, Essex, Hudson, Morris, Passaic, Sussex, Union, Warren, Middlesex, Somerset, Hunterdon, Mercer, and Monmouth Counties in New Jersey.

² A channel remaining from a 25-kHz bandwidth when a 12.5 or 6.25 kHz portion of the full channel is allotted for operation. Channels allotted that are less than 25-kHz wide are taken from the top-edge or the bottom edge of the 25-kHz channel block.



Enclosed herewith please find the above mentioned addenda. The Regional Plan and addenda may also be retrieved electronically from the New York State Regional Planning Committee Website by following the steps below:

Instructions for electronically retrieving the Region 8 Plan and Addenda

1. Set your web browser to the following URL:

http://www.nys-rpc.org/

- 2. Locate the "Region 8" toolbar;
- 3. Select the "700-MHz Document Library" option;
- 4. Download the Regional Plan and addenda; and
- 5. Print the documents if desired.

Alternatively, members of the Computer Assisted Pre-coordination Resource and Database (CAPRAD) may download the Plan and Addenda from the CAPRAD website.

Region 8 would like to expedite your approval of the Regional Plan Addenda. Should Region 30 have questions, comments, and concerns regarding specific areas of the Plan, please notify me at your earliest possible convenience. We could arrange for representatives from Region 8 to attend the next Region 30 meeting to walk you through the Plan and to address your concerns.

Region 8 greatly appreciates your effort in expediting this process.

Respectfully submitted,

Peter Meade, Chairman Region 8 700 & 800-MHz Planning Committees Assistant Fire Marshal Fire and Rescue Services Nassau County Fire Commission 140 15th Street Mineola NY 11501 PH: 516-571-6400 FX: 516-571-6407 Email: pmeade@nassaucountyny.gov

Enclosures PWM/TCL Page 2 of 2



APPENDIX L, ADJACENT-REGION CONCURRENCE APPROVALS³¹

Region 19, New England



May 1, 2007

Mr. Peter W. Meade, Region 8 700MHz Chairman Nassau County Fire Commission 140 15th Street Mineola, NY 11501

Dear Chairman Meade:

File: D.12

On March 13, 2007 the New England Region 19 700MHz Committee identified as an Agenda item Region 8 and Region 30 request for concurrence of its modified 700MHz plans. The changes to the plan were presented to members of the Region 19 700MHz Committee and questions were addressed by members of your committee, Mr. Sean O'Hara and Mr. Travis LePage. At the conclusion of discussion, a motion was raised to accept the changes to your plan and approve your Region's 700MHz Plan as modified. The motion was passed unanimously.

By this letter, the New England Region 19 700MHz Committee concurs with your Region's 700MHz Plan as modified.

Should you have any questions, please call me at 860-685-8108.

Sincerely, George Pohorilak Chairman, Region 19 700MHz co Office of Statewide Emergency Telecommunications P. O. Box 2794 1111 Country Club Road

Middletown, CT 06457-9294 Phone: (860) 685-8080 E-mail: oset/gpo.state.ct.us Website: http://www.NER700MHz.org

³¹ At the time the adjacent-region concurrence process commenced, Mr. Peter W. Meade served as the RPC Chairperson.



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Region 28, Eastern Pennsylvania (East of Harrisburg, Southern NJ & DE)



June 14, 2007

Regional Planning Committee 08 Mr. Peter W. Meade, Chairperson Assistant Fire Marshal Fire and rescue Services Nassau County Fire Commission 140 15th Street Mineola, NY 11501

RE: Region 28 concurrence with Region 08's 700 MHz plan

Dear Mr. Meade,

I am writing you in my capacity as the Chairman for Regional 28 Planning Committee.

Region 28 (Eastern PA, Southern NJ and Delaware) concurs with the Region 08 (New York & Northern New Jersey) 700 MHz plan. Region 28 has reviewed the 700 MHz Plan submitted by Region 08, and is satisfied that the plan was based on the CAPRAD Channel Assignment Model, which takes into account the necessary considerations to coordinate with adjacent regions.

Region 28 looks forward to working with Region 08 in coordination of 700 MHz and other spectrum issues in the future. Please contact me if you have any questions on this concurrence.

Sincerely,

solow Richard R. Reynolds, Chairman

Richard R. Reynolds, Chairma Region 28 – 700 MHz RPC

RRR/self

Cc: Maribel Martinez-Bradwell Secretary - Region 08 700 and 800 MHz Planning Committee 38 Dussault Drive Latham, NY 12110



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Region 30, Eastern Upstate New York

NEW YORK - ALBANY FCC Region 30 700-MHz REGIONAL PLANNING COMMITTEE



David A. Cook, Chairman

Region 30 700 and 800 MHz Planning Committees Associate Director NYS Office for Technology - SWN Project Office 74 North Pearl Street, 2nd Floor Albany, New York 12207-2721 Telephone: (518) 486-1035 FAX: (518) 474-7529 eFax: (408) 580-8496

March 5, 2007

Peter W. Meade, Chairman

Region 8 700 and 800 MHz Planning Committees Assistant Fire Marshal - Fire and Rescue Services Nassau County Fire Commission 140 15th Street Mineola New York 11501 Telephone: (516) 571-6400 FAX: (516) 571-6407 Email: pmeade@nassaucountyny.gov

WTB Docket 02-378: Interregional Concurrence for the Region 8¹ 700-MHz Public-Safety Communications Plan and Addenda

Dear Mr. Meade: Regional Planning Committee (RPC) 30 is in receipt of the proposed RPC 8 700-MHz Regional Plan and Addenda for the General Use Channels in the 764-776/794-806 MHz frequency band.

RPC 30, having fully reviewed the RPC 8 700-MHz Public-Safety Communications Plan and Addenda sends this letter to serve as the official, written concurrence for your proposed Plan.

Best Regards,

David A. Cook, Chairman Region 30 700 and 800 MHz Planning Committees

March 5, 2007 Date

cc: file

¹ Region 8, the New York – Metropolitan area, consists not only of Bronx, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, Dutchess, and Westchester Counties in New York, but also of Bergen, Essex, Hudson, Morris, Passaic, Sussex, Union, Warren, Middlesex, Somerset, Hunterdon, Mercer, and Monmouth Counties in New Jersey.





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APPENDIX M, ADJACENT-REGION CONCURRENCE OF PLAN REVISIONS





REGION 28 – 700/800 MHz REGIONAL PLANNING COMMITTEE EASTERN PENNSYLVANIA, SOUTHERN NEW JERSEY, and DELAWARE

Department of Safety and Homeland Security Division of Communications 3050 Upper King Road Dover, DE 19904-6410

William D. Carrow, Chairman Morris J. Groce, III Vice Chairman Thomas Kadunce, Secretary
 Ph:
 (302)
 698-8220
 E-Mail: bill.d.carrow@state.de.us

 Ph:
 (610)
 888-4528
 E-Mail: jay.groce@acdtelecom.com

 Ph:
 (302)697-4486
 E-Mail: tom.kadunce@state.de.us

October 27, 2015

Mr. Allen J. Demcoe Chairperson, Regional Planning Committee 8 Chief, Office of Emergency Communications Middlesex County Department of Public Safety and Health 1001 Fire Academy Drive Sayreville, NJ 08872

Dear Chairman Demcoe:

Regional Planning Committee 28 (700 MHz) has reviewed the proposed changes in the Region 8 700 MHz Plan for the use of 700 MHz and agrees that all changes are administrative in nature and do not have any adverse impact on our Committee.

Accordingly, Regional Planning Committee 28 (700 MHz) concurs with the proposed 700 MHz frequency changes and reserve channel allotments as proposed by Region 30 as well as the Region's modified Plan for 700 MHz.

Sincerely,

William D Canor

William D. Carrow, Chairman Regional Planning Committee 28

cc: Morton Leifer, Region 8 Vice Chair David Stern, Region 8 Secretary Jay Groce – Region 28 Vice Chair Tom Kadunce – Region 28 Secretary

1 Page


FCC PUBLIC SAFETY REGION 30 (NEW YORK - ALBANY)

Lee Shurtleff, Chairman Tompkins County 92 Brown Road Ithaca, New York 14850 Phone: 607.257.3888 | E-Mail: LShurtleff@Tompkins-Co.org



October 28th, 2015

Allen J. Demcoe Chief, Office of Emergency Communications Middlesex County Dept. of Public Safety & Health 101 Fire Academy Drive Sayreville, New Jersey 08872

Re: PSR8 700 MHz Regional Planning Committee Interregional Concurrence of Plan Amendment

Dear Chairman Carrow:

Region 30 has completed its review of Region 8's Amended 700 MHz Plan submitted via CAPRAD on October 20th, 2015. I am pleased to report that Region 30 CONCURS with the Region 8 700 MHz Plan, as amended.

Region 30 appreciates and empathizes with the effort required of the Regional Planning Committee and applauds your expedience and professionalism. We look forward to our continued, mutual cooperation in serving our constituents.

If you have any questions please do not hesitate to contact me (my contact information is in the title block) or the Region's Secretary, Robert Isby, Jr. via phone at (518) 389-8876 or E-Mail at Robert.Isby@Harris.com

Sincerely,

Lee Shurtleff FCC Region 30 Chairman

Vice Chair, Larissa Guedko Larissa.Guedko@dhses.ny.gov Secretary, Robert Isby, Jr. Robert.Isby@Harris.com

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FCC Region 8 – 700-MHz Plan

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The New England 700MHz Committee Region 19

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October 29, 2015.

Mr. Allen Demeoe, Chairman Region 8 RPC Chief, Olfice of Emergency Communications Middlesex County Department of Public Safety & Health 1001 Fire Academy Drive Sayreville, NJ 08872

·· .

Re: Region & 700MHz Plan Amendment - Interregional Concurrence of Plan Amendment

Dear Chairman Demone,

Region 19 Regional Planning Technical Committee has reviewed the Region 8 700MHz Plan Amendment, Version 5.0 available on CAPRAD on October 21, 2015. Tam pleased to inform you that the Region 19 700MHz Technical Committee concurs with the Region 8 700MHz Plan Amendment.

I applaud you and the Region 8 Planning Committee in meeting the FCC's aggressive time table in completing this requirement. We look forward to our continued mutual cooperation between Regions and serving our constituents.

If you have any questions, please call me at 860-685-8157, email me at jory.zaryapsjoj<u>@cf.gov</u> or the Region's Vice-Chairman, Stephen Verbil at 860-685-8127, email at stephen.verbil@cot.gov

Sincerely,

Jerry Concerns he George Tarwelliski

Region 19 Chairman

Cc: Mr. Morton Leifer , Region 8 Vice- Chain

Mr. Joseph Yurman, Region 8 Technical Subcommittee Chair

Mr. David Stem, Region 8 Secretary

C's Divelon of Siskawide Emergency Teleconhowicsions 1999 Country Cleb Road Middlesown, Cri Cod 7/19294



APPENDIX N, REMOVED

Region 19, New England



APPENDIX O, REMOVED



APPENDIX P, INTERREGIONAL FREQUENCY-COORDINATION AND DISPUTE-RESOLUTION APPROVALS



Annex -- Interregional Memorandum of Understanding

COORDINATION AND DISPUTE RESOLUTION PROCEDURES

BETWEEN 700 MHZ REGIONAL PLANNING COMMITTEES OF

REGION 8, REGION 19, REGION 28, REGION 30, REGION 20, REGION 36 AND REGION 55

I. Introduction

This is a mutually agreed upon Inter-Regional Coordination Procedures and Dispute Resolution Procedures Agreement by and between the 700 MHz Regional Planning Committees of:

- Southern New York State and New Jersey State Region Region 8 (hereinafter Region 8), and
- New England States Region Region 19 (hereinafter Region 19), and
- Northern New York State Region Region 30 (hereinafter Region 30)
- Eastern Commonwealth of Pennsylvania, Southern New Jersey State and Delaware State Region Region 28 (hereinafter Region 28).
- Northern Virginia State, District of Columbia and Maryland State Region Region 20 (hereinafter Region 20).
- Western Commonwealth of Pennsylvania Region Region 36 (hereinafter Region 36).
- Western New York State Region Region 55 (hereinafter Region 55).

Responsible Radiation

For all proposed facilities within the region, 80% of the 50 dB μ (-82 dBm) Protected Service Area (PSA) must lie within the jurisdictional boundary plus an 8 km buffer zone. The 50 dB μ (-82 dBm) PSA shall be assessed using Longley- Rice analyses.

Interference Protection – Co-Channel

The co-channel 15 dB μ (-119 dBm) interfering signal, assessed using Longley-Rice analyses, will be allowed to touch but not overlap the incumbent's 40 dB μ (-93 dBm) predicted coverage area of the system being evaluated, assessed using Longley-Rice analyses.

Interference Protection - Adjacent Channel

The evaluation of adjacent-channel interference will follow the co-channel procedure above, except that the effective radiated power of the proposed stations shall be de-rated to account for Adjacent- Channel Coupled Power Ratio (ACCPR) effects, e.g. -119dBm less the ACCPR for the respective case. Please refer to the table below for the appropriate ACCPR values; note that the channel bandwidth should be larger than the technologyspecific emissions bandwidth.

Regions 8, 19, 28, 30, 20, 36 and 55 700MHz Amended Plan October 2015 Page 1 of 1



Annex - Interregional Memorandum of Understanding

Potential Frequency Separations

Case	Spacing	ACCPR
25 kHz to 25 kHz	25 kHz	65 dB
25 kHz to 12.5 kHz	18.750 kHz	65 dB
25 kHz to 6.25 kHz	15.625 kHz	>40 dB
12.5 kHz to 12.5 kHz	12.5 kHz	65 dB
12.5 kHz to 6.25 kHz	9.375 kHz	>40 dB
6.25 kHz to 6.25 kHz	6.25 kHz	65 dB

ACCPR Values For Potential Frequency Separations

These procedures will be used when an applicant for 700 MHz spectrum has a proposed interference prediction which extends into an adjacent Public Safety Region(s) of the Region receiving the application. Such applications will be reviewed for approval by the affected Region. Service area shall normally be defined as the area included within the jurisdictional boundary of the applicant, plus 8 km.

Interference shall normally be defined as the case when:

• a 15 dBu (-119dBm) co-channel Longley-Rice analysis overlaps an incumbent's 40dBu (-93dBm) Longley-Rice analysis

• the ACCPR derated adjacent channel Longley-Rice analysis overlaps an incumbent's 40dBu (-93dBm) Longley-Rice analysis

In the case where a frequency/channel has not yet been applied for nor allocated to an entity, the incumbent's protection area shall be the CAPRAD allocated county borders plus an 8km buffer.

Regions 8, 19, 28, 30, 20, 36 and 55 700MHz Amended Plan October 2015 Page 2 of 2

or





Annex - Interregional Memorandum of Understanding

In the case where a frequency/channel has been applied for and allocated to an entity but not yet licensed, that incumbent shall be afforded protection as if licensed.

Other definitions of service area or interference may be justified with an accompanying Memorandum of Understanding (MOU) or other application documentation between involved agencies. Each Region retains the right to accept or reject other definitions on a case by case basis.

II. COORDINATION PROCEDURES

The following are the guidelines for inter-regional coordination which are accepted by Region 8, Region 19 and Region 30.

- a. Each Region will announce when it is accepting applications and the parameters that it has established filing applications.
- b. Applications by eligible entities will be accepted within each Region's parameters.
- c. Regional review and coordination of applications will be conducted. The review will include a technical review resulting in assignment of channels.
- d. After 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.
- e. The adjacent Region will review the application. If the application is approved, this Region will send a letter of concurrence, via the CAPRAD database, to the initiating Regional chairperson within thirty (30) calendar days of receipt of the application by the adjacent Region.

III. DISPUTE RESOLUTION

A. If the adjacent Region(s) does not approve the request, the adjacent Region shall document the reasons for partial or non-concurrence, and respond, via email, to the initiating Region. Response will be sent within thirty (30) calendar days of receipt of the application by the adjacent Region. The initiating Region will attempt to modify the application to satisfy the objections of the adjacent Region.

B. 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 to attempt to resolve the dispute. The working group will be convened within thirty (30) calendar days of the date that the initiating Region received notice from the adjacent Region. The working group shall then report its findings within thirty (30) calendar days to the Regional chairpersons via email through the CAPRAD database. Findings may include, but not be limited to:

Regions 8, 19, 28, 30, 20, 36 and 55 700MHz Amended Plan October 2015 Page 3 of 3



Annex - Interregional Memorandum of Understanding

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

C. If the working group does not resolve the dispute, then the matter shall be forwarded for evaluation to the National Plan Oversight Committee (NPOC), 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.

D. When adjacent Region concurrence has been secured, and the channel assignments do not change the Region's current Federal Communications Commission (FCC) 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 FCC.

E. Where adjacent Region concurrence has been secured, and the channel assignments changes the Region's current FCC approved channel assignment matrix, then the initiating Region shall file with the FCC a *Petition to Amend* its current frequency matrix, to reflect the new channel assignments. The initiating Region will send a copy of the *Petition* to the adjacent Regional chairperson(s).

F. Upon the FCC's 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). The initiating Region then advises the applicant(s) that they may forward their applications to the frequency coordinator for processing and filing with the Commission.

Regions 8, 19, 28, 30, 20, 36 and 55 700MHz Amended Plan October 2015 Page 4 of 4



Annex - Interregional Memorandum of Understanding

IV. CONCLUSION

A. This agreement contains the entire understanding among Region 8, Region 19 and Region 30 and supersedes any and all prior understandings, negotiations and agreements, whether written or oral, among them respecting subject matter herein.

B. The parties each bind themselves, successors, assigns and legal representatives with respect to all covenants of this Agreement.

C. This Agreement becomes effective upon the date of the last signatory's signature.

Morton Leifer

Region 8 Authorized Representative

Jury Zoresonster

Region 19 Authorized Representative

uthorized Re sentative flin D Canor

Region 28 Authorized Representative

Wayne a McBride

Region 20 Authorized Representative

Region 36 Authorized Representative

Steven Sharpe

Region 55 Authorized Representative

27-October 2015 Date

Regions 8, 19, 28, 30, 20, 36 and 55 700MHz Amended Plan October 2015

Page 5 of 5

27-October 2015 Date

26-October 2015 Date

26-October-2015 Date

27-October 2015 Date

27-October 2015

27-October 2015

Date

Date



APPENDIX Q, INTRAREGIONAL MEMORANDUM OF UNDERSTANDING

MEMORANDUM OF UNDERSTANDING

MEMORANDUM OF UNDERSTANDING between THE REGION 8 700-MHz APPLICANT (the "Applicant") and the FEDERAL COMMUNICATIONS COMMISSION REGION 8 700-MHz PLANNING COMMITTEE (RPC 8).

WHEREAS, on August 6, 1998, the Federal Communications Commission ("FCC") issued the First Report and Order (R&O) and Third Notice of Proposed Rule Making in WT Docket No. 96-86, adopting service rules for the 24 megahertz of spectrum in the 769- to 775-MHz and 799-to 805-MHz bands (collectively, the 700-MHz band).

NOW, THEREFORE, the parties here to agree upon the following understandings:

- 1. The Applicant agrees to design, implement, operate, and maintain its radio communications system according to the criteria set forth in the FCC station license.
- 2. The Applicant agrees to notify the FCC and RPC 8 of changes in system configuration or operations that impact geographic areas beyond its jurisdiction or protected service area.
- 3. The Applicant agrees to return unused pool allotment(s) and/or RPC channel assignments to the RPC for reassignment within five (5) years after the date the license is issued.
- 4. The effective date of the Memorandum of Understanding is ______. Each party reserves the right to terminate this MOU by withdrawing/returning the channel allotments and providing thirty (30) days advance written notice to the other. The advanced written notice shall include an explanation describing why either party desires to terminate the agreement.

WHEREFORE, THE PARTIES TO THIS INSTRUMENT HAVE AFFIXED THEIR SIGNATURES:

THE APPLICANT	RPC 8
Ву:	Ву:
Printed Name:	Printed Name:
Title:	Title:
Date:	Date:



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APPENDIX R, 700-MHz NARROWBAND CHANNEL PLAN

700 MHz BAND PLAN per Second R&O in PS Docket 06-229
960 Narrowband Base Channels (6.25 kHz each, aggregate to 25 kHz)
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Narrowband Channels Genaral Use • Two may be combined provided that the lower channel number is odd (e.g., 1, 3, 5) Interoperability • Four may be combined provide that the lower channel number is 1 + 4n, n = 0 to 479 (e.g., 1, 5, 1917) Interoperability • Channel numbers for combined channels are designated by the lowest and highest channel numbers separated by a hyphen, e.g., "1-2" and "1-3". State License • Narrowband channels must maintain a data throughput efficiency of not less than 4.8 kbps for each 6.25 kHz of bandwidth Zadary Trunking
I/O Nationwide Call I/O Low Speed Data

Figure 17, 700-MHz Narrowband Channel Plan (Downlink)





Narrowband Channels

- ٠
- Two may be combined provided that the lower channel number is odd (e.g., 1, 3, 5) Four may be combined provide that the lower channel number is 1 + 4n, n = 0 to 479 (e.g., 1, 5, 1917) Channel numbers for combined channels are designated by the lowest and highest channel numbers separated by a hyphen, e.g., "1-2" and "1-3".

- Narrowband channels must maintain a data throughput efficiency of not less than 4.8 kbps for each 6.25 kHz of bandwidth

General Use
Interoperability
Reserve
State License
Low Power
2ndary Tranking
I/O Nationwide Call
1/O Low Speed Data

Figure 18, 700-MHz Narrowband Channel Plan (Uplink)



APPENDIX S, SPECTRUM USABILITY MAP FOR CHANNELS RELEASED

New York State Counties



Figure 19, VHF - Low Band (25-50 MHz)

Regional Planning Committee





Figure 20, VHF - High Band (150-174 MHz)

Regional Planning Committee





Figure 21, UHF Band (450-470 MHz)





Figure 22, UHF T-Band (470-512 MHz)

Regional Planning Committee





Figure 23, 800-MHz Band (806-824/851-869 MHz)



New Jersey Counties



Figure 24, VHF - Low Band (25-50 MHz)

Regional Planning Committee



Figure 25, VHF - High Band (150-174 MHz)





Figure 26, UHF Band (450-470 MHz)





Figure 27, UHF T-Band (470-512 MHz)³²

³² 500-MHz TV channels 19 and 20 may be employed in some areas in the western portion of New Jersey





Figure 28, 800-MHz Band (806-824/851-869 MHz)



APPENDIX T, CFR TITLE, 47, TELECOMMUNICATION, PART 90 QUICK-REFERENCE GUIDE

This section provides a quick-reference guide to the Code of Federal Regulations (CFR), in which general and permanent rules and regulations issued by a variety of executive departments are codified. CFRs are initially published in the Federal Register, after which the United States Government Printing Office (GPO)³³ is responsible for updating and maintaining them.

As discussed below, Title 47 is updated annually, on October 1. This quick-reference guide is intended to serve as a vehicle to familiarize public safety personnel with CFRs and is provided for <u>reference purposes only</u>. The Committee highly encourages everyone to review the latest edition of the Title 47 CFR.

The emphasis of this quick-reference guide is on Title 47, Telecommunication, Chapter 1, Part 90, Private Land Mobile Radio Services, issued by the Federal Communications Commission (FCC).

Each title in the CFR is divided into chapters and parts, while large parts may be divided into subparts. Further, each part is organized as a section. Please refer to Figure 29, CFR Structure.



³³ U.S. Government Print Office: http://www.gpo.gov/



The CFRs are segmented into fifty (50) titles that address areas subject to Federal regulation. Each CFR title is updated once each calendar year and is issued on a quarterly basis:

Titles 1-16 are updated as of January 1,

Titles 17-27 are updated as of April 1,

Titles 28-41 are updated as of July 1, and

Titles 42-50 are updated as of October 1.

Further, the GPO provides a comprehensive List of Sections Affected (LSA) by the scheduled updates³⁴.

Quick-Reference Guide

Title 47, Telecommunication, Chapter 1, Part 90, Private Land Mobile Radio Services, is currently³⁵ comprised of 289 sections. Table 23 lists these sections and summarizes their contents.

Part/Section	Contents
90.1	Basis and purpose.
90.5	Other applicable rule parts.
90.7	Definitions.
90.15	Scope - Defines radio communications licensing for governmental and public-safety entities.
90.16	Public Safety National Plan.
90.20	Public Safety Pool.
90.22	Paging operations.
90.31	Scope - Defines radio communications licensing for commercial entities.
90.33	General eligibility.
90.35	Industrial/Business Pool.
90.101	Scope - Eligibility and specifications for licensing radiolocation services.
90.103	Radiolocation Service.
90.111	Scope - Defines the requirements and conditions for licensing and operating commercial and private radio stations.
90.115	Foreign government and alien eligibility.
90.119	Application requirements.

Table 23, CFR 47, Chapter 1, Part 90 Contents

³⁴ U.S. Government Print Office CFR Updates: http://www.gpoaccess.gov/lsa/index.html

³⁵ As of October 1, 2005



Part/Section	Contents
90.121	Canadian registration.
90.127	Submission and filing of applications.
90.129	Supplemental information to be routinely submitted with applications.
90.135	Modification of license.
90.137	Applications for operation at temporary locations.
90.138	Applications for itinerant frequencies.
90.149	License term.
90.155	Time in which station must be placed in operation.
90.157	Discontinuance of station operation.
90.159	Temporary and conditional permits.
90.165	Procedures for mutually exclusive applications.
90.168	Equal employment opportunities.
90.169	Construction prior to grant of application.
90.171	Scope - Specifies how the FCC assigns frequency allocations, discusses coordination procedures, and indicates which radio licenses may cooperatively share radio facilities.
90.173	Policies governing the assignment of frequencies.
90.175	Frequency coordinator requirements.
90.176	Coordinator notification requirements on frequencies below 512 MHz or at 769-775/799-805 MHz.
90.179	Shared use of radio stations.
90.185	Multiple licensing of radio transmitting equipment in the mobile radio service.
90.187	Trunking in the bands between 150 and 512 MHz.
90.201	Scope - Defines the functional (technical) specifications for frequency and equipment usage for radio services governed by this part (frequency tolerance, modulation, emissions, power, bandwidths).
90.203	Certification required.
90.205	Power and antenna height limits.
90.207	Types of emissions.
90.209	Bandwidth limitations.
90.210	Emission masks.
90.212	Provisions relating to the use of scrambling devices and digital voice modulation.
90.213	Frequency stability.
90.214	Transient frequency behavior.
90.215	Transmitter measurements.



Part/Section	Contents
90.217	Exemption from technical standards.
90.219	Use of signal boosters.
90.231	Scope - Defines the requirements and standards for the licensing and operation of non-voice and other specialized radio uses (other than radiolocation).
90.233	Base/mobile non-voice operations.
90.235	Secondary fixed signaling operations.
90.237	Interim provisions for operation of radioteleprinter and radiofacsimile devices.
90.238	Telemetry operations.
90.241	Radio call box operations.
90.242	Travelers' information stations.
90.243	Mobile relay stations.
90.245	Fixed relay stations.
90.247	Mobile repeater stations.
90.248	Wildlife and ocean buoy tracking.
90.249	Control stations.
90.250	Meteor burst communications.
90.251	Scope - Identifies special requirements applicable to the use of certain frequencies or frequency bands.
90.253	Use of frequency 5167.5 kHz.
90.257	Assignment and use of frequencies in the band 72-76 MHz.
90.259	Assignment and use of frequencies in the bands 216-220 MHz and 1427-1432 MHz.
90.261	Assignment and use of the frequencies in the band 450-470 MHz for fixed operations.
90.263	Substitution of frequencies below 25 MHz.
90.264	Disaster communications between 2 and 10 MHz.
90.265	Assignment and use of frequencies in the bands allocated for Federal use.
90.266	Long distance communications on frequencies below 25 MHz.
90.267	Assignment and use of frequencies in the 450-470 MHz band for low-power use.
90.269	Use of frequencies for self-powered vehicle detectors.
90.273	Availability and use of frequencies in the 421-430 MHz band.
90.275	Selection and assignment of frequencies in the 421-430 MHz band.
90.279	Power limitations applicable to the 421-430 MHz band.
90.281	Restrictions on operational fixed stations in the 421-430 MHz band.



Part/Section	Contents
90.301	Scope - Specifies the authorization and use of frequencies by land mobile stations in the 470-512 MHz band on a geographically shared basis with analog television Broadcast facilities.
90.303	Availability of frequencies.
90.305	Location of stations.
90.307	Protection criteria.
90.309	Tables and figures.
90.311	Frequencies.
90.313	Frequency loading criteria.
90.315	Special provisions governing use of frequencies in the 476-494 MHz band (TV Channels 15, 16, 17) in the Southern Louisiana-Texas Offshore Zone.
90.317	Fixed ancillary signaling and data transmissions.
90.350	Scope - Specifies how radio-based technologies can be integrated with transportation infrastructure to develop intelligent transportation systems (i.e. Location and Monitoring Service and Dedicated Short-Range Communications Service).
90.351	Location and Monitoring Service.
90.353	LMS operations in the 902-928 MHz band.
90.355	LMS operations below 512 MHz.
90.357	Frequencies for LMS systems in the 902-928 MHz band.
90.359	Field strength limits for EA-licensed LMS systems.
90.361	Interference from part 15 and Amateur operations.
90.363	Grandfathering provisions for existing AVM licensees.
90.365	Partitioned licenses and disaggregated spectrum.
90.371	Dedicated short-range communications service.
90.373	Eligibility in the DSRCS.
90.375	RSU license areas, communication zones and registrations.
90.377	Frequencies available; maximum EIRP and antenna height, and priority communications.
90.379	ASTM E2213-03 DSRC Standard (ASTM-DSRC Standard).
90.383	RSU sites near the U.S./Canada or U.S./Mexico border.
90.401	Scope - Defines the operating requirements for stations licensed under this part (station operating procedures, points of communications, station identification, et cetera).
90.403	General operating requirements.
90.405	Permissible communications.

Part/Section	Contents
90.407	Emergency communications.
90.411	Civil defense communications.
90.415	Prohibited uses.
90.417	Interstation communication.
90.419	Points of communication.
90.421	Operation of mobile station units not under the control of the licensee.
90.423	Operation on board aircraft.
90.425	Station identification.
90.427	Precautions against unauthorized operation.
90.429	Control point and dispatch point requirements.
90.431	Unattended operation.
90.433	Operator requirements.
90.437	Posting station licenses.
90.439	Inspection of stations.
90.441	Inspection and maintenance of antenna structure marking and associated control equipment.
90.443	Content of station records.
90.445	Form of station records.
90.447	Retention of station records.
90.460	Scope - Defines acceptable transmitter control and interconnection.
90.461	Direct and remote control of transmitters.
90.463	Transmitter control points.
90.465	Control of systems of communication.
90.467	Dispatch points.
90.469	Unattended operation.
90.471	Points of operation in internal transmitter control systems.
90.473	Operation of internal transmitter control systems through licensed fixed control points.
90.475	Operation of internal transmitter control systems in specially equipped systems.
90.476	Interconnection of fixed stations and certain mobile stations.
90.477	Interconnected systems.
90.483	Permissible methods and requirements of interconnecting private and public systems of communications.
90.490	One-way paging operations in the private services.



Part/Section	Contents
90.492	One-way paging operations in the 806-824/851-869 MHz and 896-901/935-940 MHz bands.
90.493	Paging operations on exclusive channels in the 929-930 MHz band.
90.494	Paging operations on shared channels in the 929-930 MHz band.
90.501	Scope - Specifies additional requirements for filing developmental license applications, including special requirements regarding developmental operation, restrictions on operations, et cetera.
90.503	Eligibility.
90.505	Showing required.
90.507	Limitations on use.
90.509	Frequencies available for assignment.
90.511	Interference.
90.513	Special provisions.
90.515	Change or cancellation of authorization without hearing.
90.517	Report of operation.
90.521 Subpart R	Scope - Specifies the regulations governing the licensing and operations of all systems operating in the <u>763-775 MHz and 793-805 MHz frequency</u> <u>bands</u> , including eligibility, operational, planning and licensing requirements and technical standards for stations licensed in these bands.
90.523	Eligibility.
90.525	Administration of Interoperability channels.
90.527	Regional plan requirements.
90.529	State License.
90.531	Band plan.
90.533	Transmitting sites near the U.S./Canada or U.S./Mexico border.
90.535	Modulation and spectrum usage efficiency requirements.
90.537	Trunking requirement.
90.539	Frequency stability.
90.541	Transmitting power limits.
90.543	Emission limitations.
90.545	TV/DTV interference protection criteria.
90.547	Narrowband Interoperability channel capability requirement.
90.548	Interoperability Technical Standards.
90.549	Transmitter certification.
90.551	Construction requirements.



Part/Section	Contents
90.553	Encryption.
90.601 Subpart S	Scope - Specifies the regulations governing the licensing and operations of all systems operating in <u>the 806-824/851-869 MHz and 896-901/935-940</u> <u>MHz</u> bands, including eligibility, operational, planning and licensing requirements and technical standards for stations licensed in these bands.
90.603	Eligibility.
90.605	Forms to be used.
90.607	Supplemental information to be furnished by applicants for facilities under this subpart.
90.609	Special limitations on amendment of applications for assignment or transfer of authorizations for radio systems above 800 MHz.
90.613	Frequencies available.
90.614	Cellular and non-cellular portions of 806-824/851-869 MHz band for non-border areas.
90.615	Individual channels available in the General Category in 806-824/851-869 MHz band.
90.617	Frequencies in the 809.750-824/854.750-869 MHz, and 896-901/935-940 MHz bands available for trunked, conventional or cellular system use in non-border areas.
90.619	Operations within the U.S./Mexico and U.S./Canada border areas.
90.621	Selection and assignment of frequencies.
90.623	Limitations on the number of frequencies assignable for conventional systems.
90.625	Other criteria to be applied in assigning channels for use in conventional systems of communication.
90.627	Limitation on the number of frequency pairs that may be assignable for trunked systems and on the number of trunked systems.
90.629	Extended implementation period.
90.631	Trunked systems loading, construction and authorization requirements.
90.633	Conventional systems loading requirements.
90.635	Limitations on power and antenna height.
90.637	Restrictions on operational fixed stations.
90.645	Permissible operations.
90.647	Station identification.
90.651	Supplemental reports required of licensees authorized under this subpart.
90.653	Number of systems authorized in a geographical area.
90.655	Special licensing requirements for Specialized Mobile Radio systems.
90.656	Responsibilities of base station licensees of Specialized Mobile Radio systems.



Part/Section	Contents
90.658	Loading data required for base station licensees of trunked Specialized Mobile Radio systems to acquire additional channels or to renew trunked systems licensed before June 1, 1993.
90.661	MTA-based SMR service areas.
90.663	MTA-based SMR system operations.
90.665	Authorization, construction, and implementation of MTA licenses.
90.667	Grandfathering provisions for incumbent licensees.
90.669	Emission limits.
90.671	Field strength limits.
90.672	Unacceptable interference to non-cellular 800-MHz licensees from ESMR or Part 22 Cellular Radiotelephone systems.
90.673	Obligation to abate unacceptable interference.
90.674	Interference resolution procedures before, during, and after band reconfiguration.
90.675	Information exchange.
90.676	Transition administrator for reconfiguration of the 806-824/851-869 MHz band in order to separate cellular systems from non-cellular systems.
90.677	Reconfiguration of the 806-824/851-869 MHz band in order to separate cellular systems from non-cellular systems.
90.681	EA-based SMR service areas.
90.683	EA-based SMR system operations.
90.685	Authorization, construction, and implementation of EA licenses.
90.687	Special provisions regarding assignments and transfers of authorizations for incumbent SMR licensees in the 809-824/854-869 MHz band.
90.689	Field strength limits.
90.691	Emission mask requirements for EA-based systems.
90.693	Grandfathering provisions for incumbent licensees.
90.699	Transition of the upper 200 channels in the 800-MHz band to EA licensing.
90.701	Scope - Specifies frequency usage in the 220-222 MHz band for land mobile and fixed use radio services (government and non-government operations).
90.703	Eligibility.
90.705	Forms to be used.
90.709	Special limitations on amendment of applications and on assignment or transfer of authorizations licensed under this subpart.
90.711	Processing of Phase II applications.
90.713	Entry criteria.



Part/Section	Contents
90.715	Frequencies available.
90.717	Channels available for nationwide systems in the 220-222 MHz band.
90.719	Individual channels available for assignment in the 220-222 MHz band.
90.720	Channels available for public safety/mutual aid.
90.721	Other channels available for non-nationwide systems in the 220-222 MHz band.
90.723	Selection and assignment of frequencies.
90.725	Construction requirements for Phase I licensees.
90.727	Extended implementation schedules for Phase I licensees.
90.729	Limitations on power and antenna height.
90.733	Permissible operations.
90.735	Station identification.
90.737	Supplemental reports required of Phase I licensees.
90.739	Number of systems authorized in a geographical area.
90.741	Urban areas for Phase I nationwide systems.
90.743	Renewal expectancy.
90.745	Phase I licensee service areas.
90.751	Minor modifications of Phase I, non-nationwide licenses.
90.753	Conditions of license modification.
90.757	Construction requirements.
90.761	EA and Regional licenses.
90.763	EA, Regional and nationwide system operations.
90.765	Licenses term for Phase II licenses.
90.767	Construction and implementation of EA and Regional licenses.
90.769	Construction and implementation of Phase II nationwide licenses.
90.771	Field strength limits.
90.801	900-MHz SMR spectrum subject to competitive bidding.
90.804	Aggregation of 900-MHz SMR licenses.
90.807	Submission of upfront payments.
90.809	License grants.
90.810	Bidding credits for small businesses.
90.811	Reduced down payment for licenses won by small businesses.
90.813	Partitioned licenses and disaggregated spectrum.
90.814	Definitions.
90.815	Records maintenance and definitions.



Part/Section	Contents
90.816	Criteria for comparative 900-MHz SMR renewal proceedings.
90.901	800-MHz SMR spectrum subject to competitive bidding.
90.903	Competitive bidding mechanisms.
90.904	Aggregation of EA licenses.
90.909	License grants.
90.910	Bidding credits.
90.911	Partitioned licenses and disaggregated spectrum.
90.912	Definitions.
90.913	Record maintenance and definitions.
90.1001	220-MHz service subject to competitive bidding.
90.1017	Bidding credits for small businesses and very small businesses.
90.1019	Eligibility for partitioned licenses.
90.1021	Definitions concerning competitive bidding process.
90.1023	Records maintenance and definitions.
90.1025	Limitations on settlements.
90.1101	Location and Monitoring Service subject to competitive bidding.
90.1103	Designated entities.
90.1201 Subpart Z	Scope - Specifies regulations for use of the 4940-4990 MHz (4.9-GHz) band, including eligibility, and functional (technical) and operational standards.
90.1203	Eligibility.
90.1205	Permissible operations.
90.1207	Licensing.
90.1209	Policies governing the use of the 4940-4990 MHz band.
90.1211	Regional plan.
90.1213	Band plan.
90.1215	Power limits.
90.1217	RF Hazards.
90.1301	Scope - Specifies regulations for use of the 3650-3700 MHz band, including eligibility, and functional (technical) and operational standards.
90.1303	Eligibility.
90.1305	Permissible operations.
90.1307	Licensing.
90.1309	Regulatory status.
90.1311	License term.


Part/Section	Contents
90.1312	Assignment and transfer.
90.1319	Policies governing the use of the 3650-3700 MHz band.
90.1321	Power and antenna limits.
90.1323	Emission limits.
90.1331	Restrictions on the operation of base and fixed stations.
90.1333	Restrictions on the operation of mobile and portable stations.
90.1335	RF safety.
90.1337	Operation near Canadian and Mexican borders.



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FCC Region 8 – 700-MHz Plan APPENDIX U, SIEC CONVENING LETTER



STATE OF NEW YORK OFFICE FOR TECHNOLOGY STATE CAPITOL, ESP PO BOX 2062 ALBANY, NY 12220-0062 518-473-5622 518-473-3389 FAX

GEORGE E. PATAKI GOVERNOR JAMES G. NATOLI CHAIRPERSON

November 26, 2001

Ms. D'wana Terry, Chief Public Safety and Private Wireless Division Wireless Telecommunications Bureau Federal Communications Commission 445 12th Street, SW Washington, DC. 20554

Dear Ms. Terry:

In accordance with 47 C.F.R. §90.525 and the Fourth Report and Order in WT Docket 96-86, FCC 01-10, I hereby notify you that New York State will administer the FCC Designated Interoperability Channels in the 764-776/794-806 MHz frequency bands. Governor George E. Pataki has delegated the authority to me by the letter dated January 30, 2001, copy enclosed.

As part of this administration process, the New York State Office for Technology will establish and chair a Statewide Interoperability Committee and manage the responsibilities identified in the Fourth Report and Order.

Any correspondence should be directed to my office as follows:

Hanford C. Thomas, Jr. Project Director New York State Office for Technology Statewide Wireless Network 6C Executive Park Drive Stuyvesant Plaza Albany, New York 12203-3716 Tel: (518) 489-2400 Fax: (518) 489-3831 E-mail: Hanford,Thomas@oft.state.ny.us



Please contact me should you have any questions regarding this matter.

Sincerely,

l c

Hanford C. Thomas, Jr.

ce: William F. Pelgrin Enclosure



APPENDIX V, RPC PUBLIC MEETING NOTICES AND MINUTES³⁶

Certification

³⁶ Presentations given at the RPC meetings can be obtained by contacting the Region 8 Secretary.



14. APPENDIX W, TRIBAL NATION CORRESPONDENCE

Correspondence Template

NEW YORK/NEW JERSEY FCC Region 8 700-MHz REGIONAL PLANNING COMMITTEE



William Gardner, Chairman

Region 8 700 and 800 MHz Planning Committees Director of Police Communications Suffolk County Police Department 30 Yaphanik Avenue Yaphanik Avenue Yaphanik Swey York 11980 Telephone: (631) 852-6431 FAX: (631) 852-6994 Email: tigd:k@aol.com

Dear Tribal Nation Member:

I am writing this letter on behalf of Peter Meade, the Chairperson of the Region 8 Regional Planning Committee (RPC).

The RPC invites you to participate in the next Region 8 meeting.

The Federal Communications Commission (FCC) introduced the concept of RPCs to help it (the FCC) identify regional issues that need addressing in the process of designating utilization of the 700-MHz public safety spectrum.

RPC Region 8, covering the New York Metropolitan area, consists of

Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, and Westchester Counties in New York; and of Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, and Warren Counties in New Jersey.

The RPC is committed to addressing the needs of both state and local governments by supporting creative use of the spectrum, accommodating new and unanticipated developments in technology equipments, and creating and managing regional plans. Section §90.523 of the Commission's Rules encourage representation of all public safety providers that have as their sole purpose protecting the safety of life, health, or property.

Agency representation is very important in ensuring that the needs of specific agencies are taken into consideration during the spectrum-allocation process. The meeting announcement and proposed agenda are included with this mailing. If you are not the correct point of contact, please forward this letter to the appropriate person.

We ask that you or the appropriate individual contact either Ms. Maribel Martinez at (518) 506-4373 or me, Ms. Beatrice Opee, at (518) 431-7034 to advise us of your availability and plans to attend.

Thank you in advance for your attention to this matter.

Please contact me with any questions or concerns you may have.

Respectfully submitted,

/s/

Beatrice Opee

CC: RPC 8 Chairperson RPC 8 Secretary



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Correspondence Log

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														Me	eeti	ng	Da	tes													
Tribal Nations Contacted within Region 8	5/1/ 2002	11/6/2002	2/25 2003	6/25 2003	10	/6	1/8 2004	4/6 2004	6/22 2004		3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006		8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Adams, Michael Chairman Powhatan Renape Nation P.O. Box 225 Rancocas, NJ 08073	V	V	V	V	V	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	V	\checkmark	V	\checkmark	\checkmark	V	V	V	V	V	V	V	V	v	V	V	V	\checkmark
Brown, Thomas Jr. Esq Powhatan Renape Nation P.O. Box 225 Rancocas, NJ 08073	\checkmark	\checkmark	V	\checkmark	\checkmark	V		\checkmark	V	\checkmark	\checkmark	v	\checkmark	\checkmark																	
Collins, Paula Chair Shinnecock Indian Nation Tribal Office P.O. Box 5006 Southhampton, NY 11969	V	V	V	V	√	V		\checkmark	V	\checkmark	V	V	\checkmark																		

Table 24, Tribal Nation Contact Log



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Tribal Nations Contacted within Region 8	5/1/2002		2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	8/9/2005	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Diggs, Cutis W. Secretary Powhatan Renape Nation P.O. Box 225 Rancocas, NJ 08073	V	V	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	v	v	V	v	V	V	\checkmark
Doe, Marchal Powhatan Renape Nation P.O. Box 225 Rancocas, NJ 08073	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	V	\checkmark	V	\checkmark	\checkmark																		
Forbes, Jack Ph.D Elder Powhatan Renape Nation P.O. Box 225 Rancocas, NJ, 08073	V	V	V	V	\checkmark	V		\checkmark	V	V	\checkmark	V	V	V	V	V	V	V	V	v	V	v	V	V	\checkmark						
Green, Lorraine Parker Powhatan Renape Nation P.O. Box 225 Rancocas, NJ 08073	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark		\checkmark	V	V	\checkmark	V	V	\checkmark	\checkmark	\checkmark															
Harman, Edgar Powhatan Renape Nation P.O. Box 225 Rancocas, NJ 08073	V	V	V	\checkmark	\checkmark	V		V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	V	\checkmark	V	V	\checkmark	\checkmark	\checkmark									



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Tribal Nations Contacted within Region 8	5/1/2002	/6	2/25 2003	6/25 2003	9/10 2003	11/6 2003	1/8 2004	4/6 2004	6/22 2004	11/3 2004	3/2 2005	5/11/2005	6/21/2005	<u>8/9/2005</u>	9/20/2005	11/14/2005	12/22/2005	2/02/2006	3/23/2006	5/2/2006	6/20/2006	8/15/2006	10/17/2006	12/19/2006	2/27/2007	5/1/2007	7/10/2007	9/18/2007	11/13/2007	1/15/2008	3/18/2008
Hawkins, Joanne Bundy Powhatan Renape Nation P.O. Box 225 Rancocas, NJ 08073	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark		V	V	V	\checkmark	\checkmark	\checkmark	V	\checkmark	V	V	V	\checkmark	V	v	V	V	V	V	v	v	V	V	V	\checkmark
Juancinto, Elder Charles Powhatan Renape Nation P.O. Box 225 Rancocas, NJ 08073	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	V	V	\checkmark	V	V	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Pace, Tracey Treasurer Shinnecock Indian Nation Tribal Office P.O. Box 5006 Southhampton, NY 11969	\checkmark	V	\checkmark	V	V	V		\checkmark	V	\checkmark	V	V	\checkmark	V	V	\checkmark	\checkmark	V	\checkmark	V	V	V	\checkmark	\checkmark	\checkmark	V	V	V	V	V	\checkmark
Wallace, Harry B. Tribal Chairperson Poospatuck Tribe, Long Island P.O. Box 86 Mastic, NY 11950	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	V	\checkmark	V	\checkmark	V	\checkmark																	



APPENDIX X, FORMER RESERVED CHANNEL ALLOCATIONS

Pursuant to the FCC Report and Order 14-172, dated October 24, 2014 and the 47 CFR Part 90.531(b)(2)(i), Region 8 will allocate all twenty-four (24) reserved channels to T-Band Replacement within 80 miles of the center of New York, NY, for a five year period starting from the date the FCC releases a Public Notice announcing the availability of the reserved channels licensing, after which the FCC may revisit extending the five year priority access period. The FCC delegated to the Chief of the Public Safety and Homeland Security Bureau the authority to issue such a Public Notice. In addition, where T-Band incumbents have obtained waivers to exceed the 128 km radius, Region 8 shall afford priority access to Reserve Channels in the geographic areas covered by the waiver outside the 128 km radius.

In the Report and Order, the Commission afforded:

T-Band incumbent's priority access to the Reserve Channels on the condition that relocating T-Band incumbents:

- (1) Commit to returning to the Commission an equal amount of T-Band spectrum
- (2) Obtain RPC concurrence. For example, a relocating T-Band incumbent seeking four Reserve Channels must commit to return four or more T-Band channels.
- (3) Be an eligible agency under the §90.523: 14-172, The FCC reiterated "that even though state and local governmental entities, including transit agencies, have access to 700 MHz narrowband spectrum as eligible licensees, uses of this spectrum must conform to the "sole or principal purpose" prong of Section 337(f)(1)(A) (i.e. the protection of safety of life, health, or property)"

Further Region 8 requires the following of the requesting agency:

- (4) Exhausted all other channel allocations the Region 8 Plan of spectrum allocation Priority.
- (5) Agencies applying for the same former Reserved Channels will be evaluated per Section 7 of the plan: Application Scoring Matrix
- (6) A maximum of <u>four (4) reserved channels</u> will be allocated to each eligible agency on a first come first serve basis.

Pursuant to the FCC Report and Order 14-172, dated October 24, 2014 and 47 CFR Part 90.531(b)(2)(ii), Outside of the 80 miles zone, six (6) of the former reserved channels may allocated for deployable use as recommended by the National Public Safety Telecommunications Council (NPSTC) and the National Regional Planning Council (NRPC). At this time, the Region choose not reserve any channels for deployable use.



FCC	Base	Mobile	Status – within 80 miles of
Channel	Frequency	Frequency	New York, NY
37-38	769.231250	799.231250	Reserved T-Band Replacement
61-62	769.381250	799.381250	Reserved T-Band Replacement
77-78	769.481250	799.481250	Reserved T-Band Replacement
117-118	769.731250	799.731250	Reserved T-Band Replacement
141-142	769.881250	799.881250	Reserved T-Band Replacement
157-158	769.981250	799.981250	Reserved T-Band Replacement
197-198	770.231250	800.231250	Reserved T-Band Replacement
221-222	770.381250	800.381250	Reserved T-Band Replacement
237-238	770.481250	800.481250	Reserved T-Band Replacement
277-278	770.731250	800.731250	Reserved T-Band Replacement
301-302	770.881250	800.881250	Reserved T-Band Replacement
317-318	770.981250	800.981250	Reserved T-Band Replacement
643-644	773.018750	803.018750	Reserved T-Band Replacement
683-684	773.268750	803.268750	Reserved T-Band Replacement
699-700	773.368750	803.368750	Reserved T-Band Replacement
723-724	773.518750	803.518750	Reserved T-Band Replacement
763-764	773.768750	803.768750	Reserved T-Band Replacement
779-780	773.868750	803.868750	Reserved T-Band Replacement
803-804	774.018750	804.018750	Reserved T-Band Replacement
843-844	774.268750	804.268750	Reserved T-Band Replacement
859-860	774.368750	804.368750	Reserved T-Band Replacement
883-884	774.518750	804.518750	Reserved T-Band Replacement
923-924	774.768750	804.768750	Reserved T-Band Replacement
939-940	774.868750	804.868750	Reserved T-Band Replacement