

Before the
Federal Communications Commission
Washington, D.C. 20554

FILED/ACCEPTED
OCT - 1 2009
Federal Communications Commission
Office of the Secretary

In the Matter of:)
)
Petition for Rulemaking to Make Unused) RM
Narrowband PCS Channels in the 900 MHz)
Band Available for Public Safety Use)
)

**PETITION FOR RULEMAKING OF
THE NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL**

The National Public Safety Telecommunications Council (NPSTC) submits this Petition for Rulemaking recommending that the Commission amend its rules to make spectrum formerly auctioned for the 900 MHz narrowband PCS service available for public safety use. While initially deployed for commercial advanced two-way messaging and paging, this spectrum is lightly used because advanced cellular services have overtaken the mass market originally intended for narrowband PCS. NPSTC recommends the Commission conduct an audit of the 900 MHz Narrowband PCS spectrum, recover unused or lightly used channels, and make channels available for public safety use to enable cost-effective alerting services needed by public safety entities.

The National Public Safety Telecommunications Council

The National Public Safety Telecommunications Council (NPSTC) is a federation of public safety organizations whose mission is to improve public safety communications and interoperability through collaborative leadership. NPSTC pursues the role of resource and

advocate for public safety organizations in the United States on matters relating to public safety telecommunications. NPSTC has promoted implementation of the Public Safety Wireless Advisory Committee (PSWAC) and the 700 MHz Public Safety National Coordination Committee (NCC) recommendations. NPSTC explores technologies and public policy involving public safety telecommunications, analyzes the ramifications of particular issues and submits comments to governmental bodies with the objective of furthering public safety telecommunications worldwide. NPSTC serves as a standing forum for the exchange of ideas and information for effective public safety telecommunications.

The following 15 organizations participate in NPSTC:

American Association of State Highway and Transportation Officials
American Radio Relay League
Association of Fish and Wildlife Agencies
Association of Public-Safety Communications Officials-International
Forestry Conservation Communications Association
International Association of Chiefs of Police
International Association of Emergency Managers
International Association of Fire Chiefs
International Municipal Signal Association
National Association of State Chief Information Officers
National Association of State Emergency Medical Services Officials
National Association of State Foresters
National Association of State Technology Directors
National Emergency Number Association
National Sheriffs' Association

Several federal agencies are liaison members of NPSTC. These include the Department of Homeland Security (the Federal Emergency Management Agency, the Office of Emergency Communications, the Office of Interoperability and Compatibility, and the SAFECOM Program); Department of Commerce (National Telecommunications and Information Administration); Department of the Interior; and the Department of Justice (National Institute of Justice, CommTech Program). NPSTC has liaison relationships with associate members, the

Telecommunications Industry Association and the Canadian Interoperability Technology Interest Group.

The 900 MHz Narrowband PCS Band

The Commission opened the 900 MHz Narrowband PCS band, i.e., 901-902, 930-931 and 940-941 MHz approximately 15 years ago. At that time, the rules were designed to address the need for two-way paging and messaging. One-way paging systems provide a way to send a short text or voice message to the end user, but do not have any capability for a response. In contrast, two-way paging or messaging provides the capability for short transmissions in both directions which enables transmission of an acknowledgement or other short response.

The spectrum was originally established for commercial use to provide two-way paging to the mass market and was auctioned to the highest bidders. The band included both nationwide and regional licenses and a mix of bandwidth combinations that provided options for both symmetrical and asymmetrical traffic.¹ A depiction of the Bandplan is shown in Appendix A to this Petition.

Soon after auction, deployment of two-way paging systems commenced. However, the mass market requirement for two-way paging has declined as consumers have increasingly relied on mobile phone service from cellular and PCS providers. Accordingly, NPSTC believes a significant portion of this spectrum is unused and lies fallow today. Appendix B list the licensees of record in this band, based on a search of the Commission's ULS database as of July

¹ Symmetrical traffic, i.e., traffic in which the amount of information transmitted from the base to the user device and that transmitted in response from the user device to the base is generally equivalent. For such traffic, a channel pair would normally consist of the same channel bandwidth in both directions. In contrast, asymmetrical traffic can be accommodated on channel pairs in which the channel bandwidths of the forward and return paths are not the same.

9, 2009. However, it is only the Commission who has the legal authority to require licensees to provide information on which spectrum is actually in use.

Such an audit is consistent with actions the Commission is considering in other proceedings. For example, in its Notice of Inquiry regarding the development of a National Broadband Plan as required by the American Recovery and Reinvestment Act of 2009, the Commission raises the issue of conducting a spectrum inventory or spectrum census to help find spectrum to support broadband services.² While the relatively small amount of spectrum in the Narrowband PCS bands at 901-902, 930-931 and 940-941 MHz are not compatible with broadband services, NPSTC believes the same policy considerations apply. In particular, spectrum, even spectrum that has been auctioned, should not be allowed to lie fallow for years with no active deployment while public safety could put it to good use to protect the public by providing advanced emergency alerting of emergency responders.

The primary requirement NPSTC envisions is for local or regional system channels.

Public safety users would also benefit from the ability to roam onto any remaining commercial narrowband PCS systems when out of their respective jurisdiction. While such roaming does not provide mission critical operation needed within the jurisdiction, it could offer “best effort” access to supplement dedicated public safety alerting systems.

The Benefits of Two-Way Paging and Alerting to Public Safety

Current typical emergency responder alerting and notification systems utilize one-way voice technology. These systems do not provide a means for the responder to notify their agency that they have received the message or that they are responding to the scene. Public Safety

² A National Broadband Plan for Our Future, Notice of Inquiry, GN Docket No. 09-51, released April 8, 2009 at paragraph 44.

communications centers often do not know who, or how many, responders they have reached until the responders actually arrive at the incident. The use of two-way data emergency alerting would provide a great advance by instantly notifying communications center personnel of the number of responders who have received the alert. In addition, responders would have the capacity to report that they were enroute thereby allowing agencies to determine if sufficient forces were available for the incident. Another benefit would be the ability to integrate caller and incident data from the agency computer aided dispatch system into the messages sent and displayed on the two-way data capable pagers, a feature not available to most voice based one-way systems in use today.

Interest in 2-way paging systems by the City of Richmond over the past several years has provided some insight into the benefits of dedicated two-way paging and alerting systems to public safety, as well as the need for spectrum on which to deploy such private two-way paging systems. Richmond's pilot 2-way paging system has the capability to customize groups that receive alerts. Every user with a 2 way paging/alerting device can be designated as part of one or more of up to sixteen groups, all driven by operational requirements. For example, a public safety dispatcher could send a short message alert simultaneously to a whole department or some subset of officers, firefighters and/or emergency medical personnel and then automatically receive an acknowledgement from each recipient that the message had been received and read. Personnel receiving the alerts also have the opportunity to initiate one or more short responses, for example, enroute, out of service, etc. These pre-set responses are also under the control of the City, and therefore can be customized and modified as operational needs dictate. In addition to day-to-day public safety prevention and response activities, such an alerting capability would be beneficial, in cases involving a significant threat or act of terrorism, a large crash scene or

other incidents requiring the immediate attention of a large number of personnel. Also, the system could be used for transmission of AMBER alerts to help place public safety personnel on notice and maximize the chances of saving an abducted child.

NPSTC also believes the information supplied by the City of Richmond in its previous request for waiver to the FCC equally applies to many other public safety agencies throughout the country:

The City looked at commercial two-way paging as an alternative approach. However, while there are some commercial paging operations in the Region, they would not meet the mission critical communications requirements of the City's public safety agencies. First, the emergency nature of the City's data operation demands that pages be delivered immediately. The commercial pagers in use in the central Virginia area typically have delays of several minutes and, in some cases many more minutes, before messages are delivered. Second, there will be a great deal of sensitive information transmitted over the City's data system, requiring a level of security not available through commercial paging operations. Third, commercial systems do not have adequate back-up reliability, an important issue in Virginia where hurricane landfall forms a significant risk to power and public communications. During the 2004 and 2005 hurricane seasons, the wide-spread failure, and slow recovery, of commercial carrier operations in Florida made these systems completely unusable.³ In contrast, for its part, the City maintains back-up power generators at all sites and the system is designed with diverse routing to allow service to be maintained even if certain sites or transmission routes face unexpected outages. Finally, the system is designed for maximum coverage throughout the Region, as emergencies and emergency personnel can be located anywhere within its borders. Commercial systems have significant coverage holes in rural and other remote areas within the Region.⁴

NPSTC recommends that public safety be provided sufficient channels to support alerting on a local or regional basis as the particular requirement dictates. Because messages on alerting systems tend to be rather short, NPSTC believes identifying approximately five channels actually available in each area would meet the majority of the requirements envisioned. Such channels of

³ See Florida Department of Transportation Hurricane Response Evaluation and Recommendations, February 11, 2005 at 39.

⁴ Request for Waiver, DA-06-1511, at pages 3 and 4

course need to be “clean spectrum,” that is, spectrum that does not suffer interference from any nearby high powered co-channel or adjacent channel operations.

As previously recognized by the City of Richmond, a combination of private two-way paging capabilities and the ability to roam onto any system being offered by commercial operators is the best approach to provide alerting solutions meeting the needs of multiple public safety agencies throughout the country.

Richmond wholeheartedly agrees that having such “roaming” capability is highly desirable. Indeed, that is an inherent feature of the ReFLEX technology upon which Richmond’s proposed system is based; and it affords a level of interoperability among public safety and other agencies that is extremely important during time of emergency.⁵

Public safety entities could benefit by building out their own 900 MHz two-way alerting systems to conform to operational requirements within their jurisdiction or group of jurisdictions where multiple agencies cooperate on a regional basis, and supplementing that use by accessing any remaining operational commercial 900 MHz narrowband PCS systems on a roaming basis.

Low cost two-way messaging devices using the ReFLEX technology originally deployed for 900 MHz band Narrowband PCS commercial use are still available. However, the few remaining 900 MHz Narrowband PCS systems in operation do not provide the coverage, reliability and application software features needed by public safety agencies. Unfortunately, public safety agencies do not routinely have the option to build their own system even when operational requirements dictate the need to do so and the spectrum needed is actually vacant, because the spectrum is reserved for commercial use and licensed. NPSTC urges the Commission to rectify this situation and put fallow spectrum to use by first conducting the spectrum audit and then making vacant spectrum available to public safety entities.

⁵ Reply Comments submitted by the City of Richmond, File No. 0002660203, DA 06-1511, submitted September 11, 2006, at page 5.

Conducting the spectrum audit and modifying the rules as proposed herein would provide the spectrum foundation upon which public safety entities could implement a cost-effective and reliable alerting system designed to meet public safety needs. Such a system would provide local, state and potentially some Federal users with an additional communications tool to support essential prevention and response activities needed to help ensure public safety and homeland security.

Respectfully submitted,



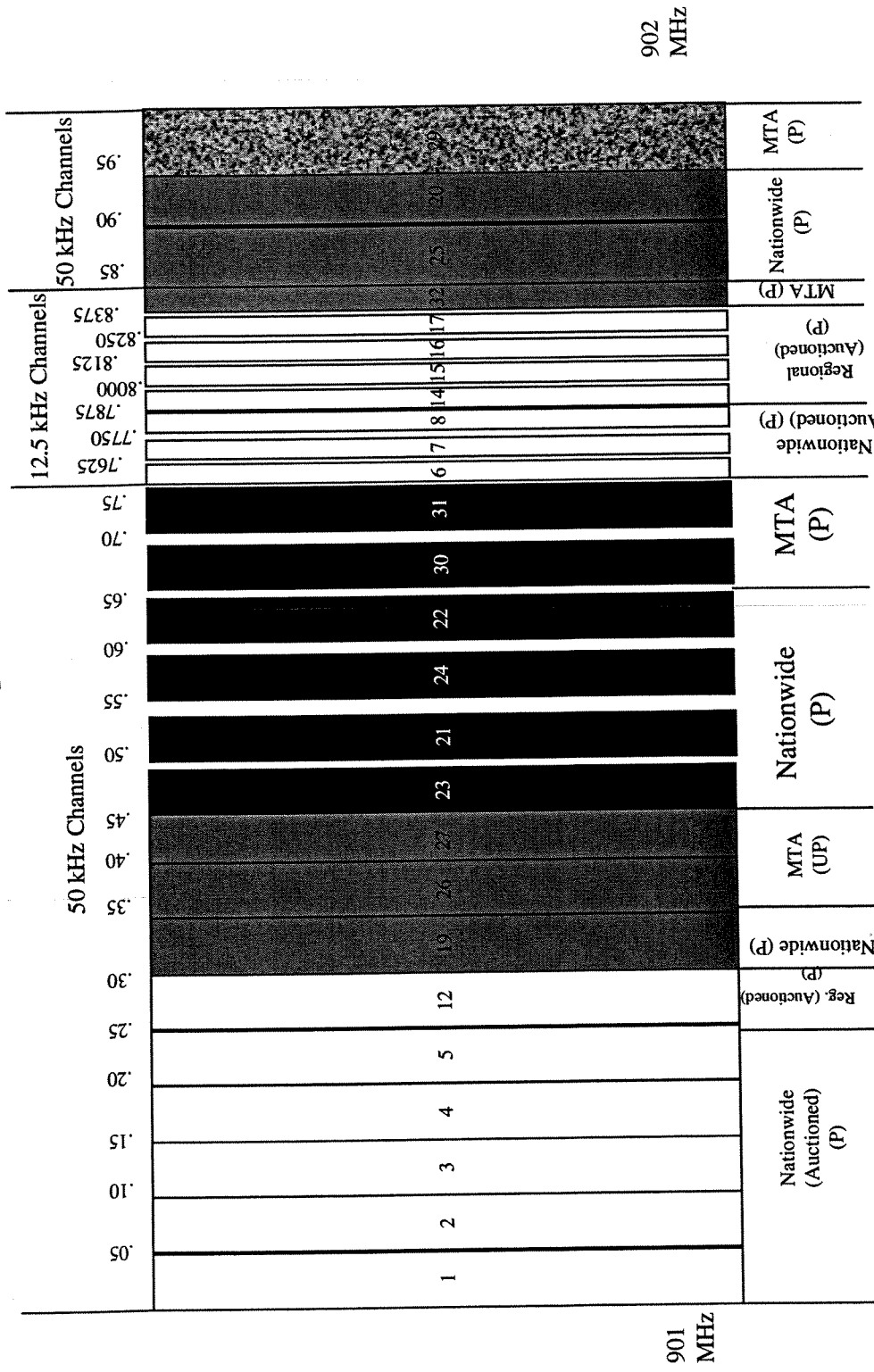
Ralph A. Haller, Chair
National Public Safety Telecommunications Council
8191 Southpark Lane, Number 205
Littleton, Colorado 80120-4641
866-807-4755

September 25, 2009

Appendix A

Narrowband PCS Bandplan

**NARROWBAND PCS CHANNELS IN THE 901-902 MHz BAND
FCC Proposal**



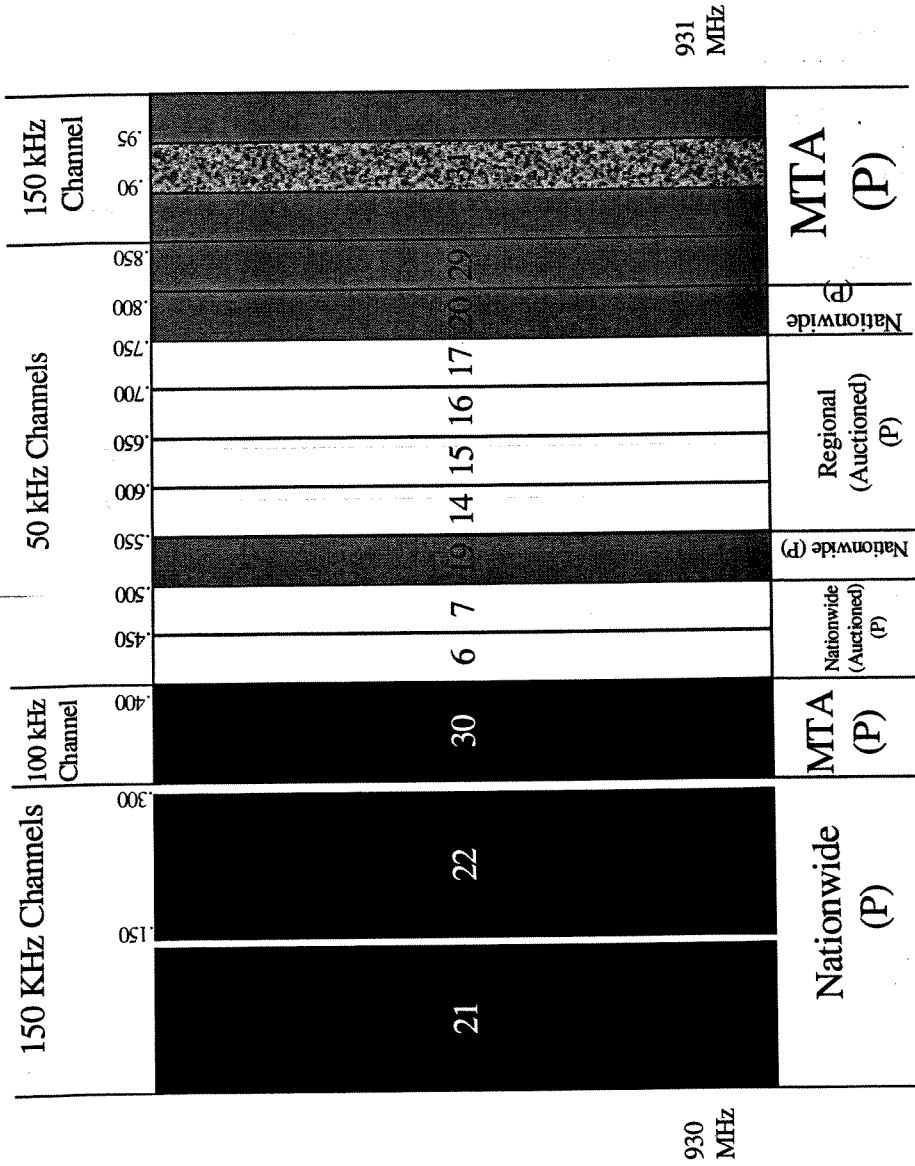
Spectrum Already Auctioned
 Unchannelized Spectrum
 Spectrum Proposed For Auction
 N/A in Los Angeles

(P) = Paired Channels (UP) = Unpaired Channels

Appendix A

Narrowband PCS Bandplan

NARROWBAND PCS CHANNELS IN THE 930-931 MHz BAND
FCC Proposal



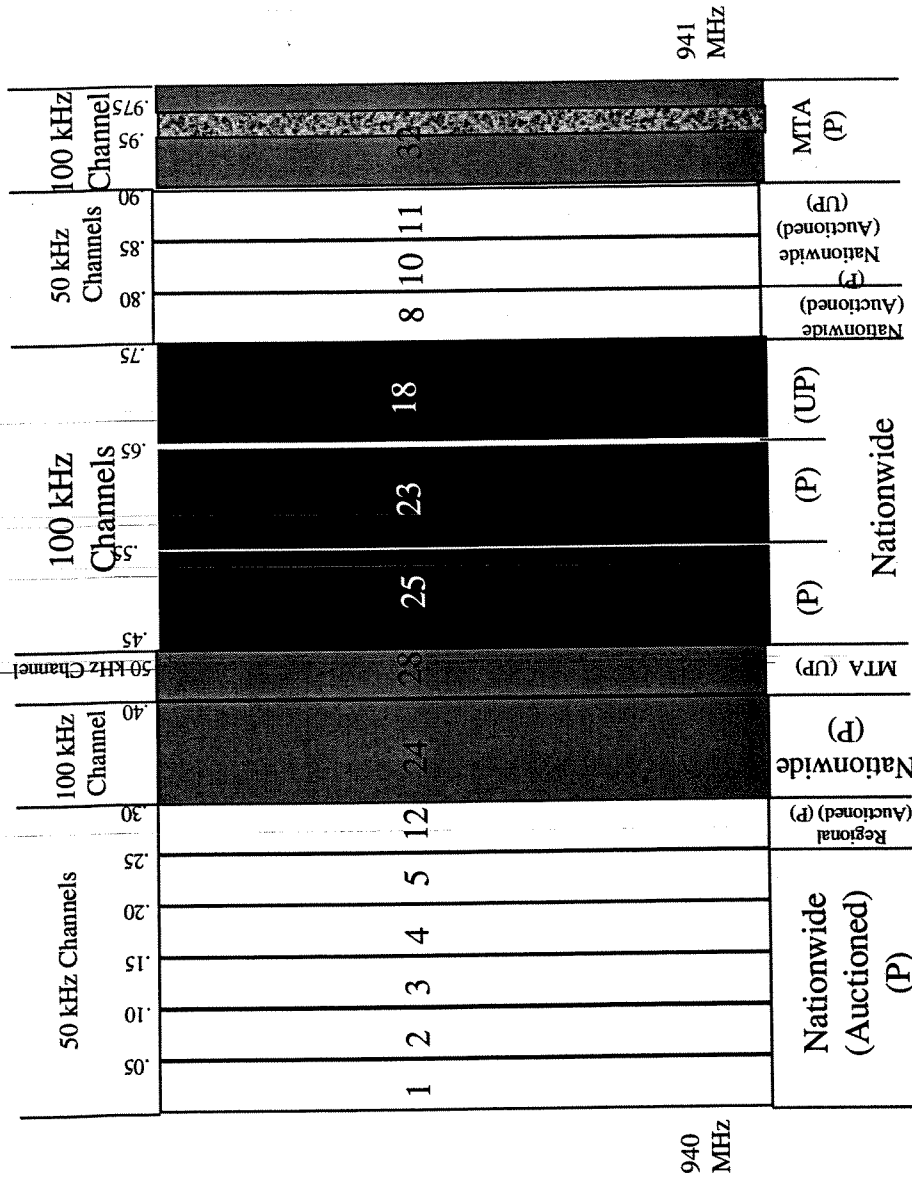
Spectrum Already Auctioned
 Spectrum Proposed for Auction
 N/A in Los Angeles
 Unchannelized Spectrum
 (P) = Paired Channels
 (UP) = Unpaired Channels

Appendix A

Narrowband PCS Bandplan

NARROWBAND PCS CHANNELS IN THE 940-941 MHz BAND

FCC Proposal



Spectrum Already Licensed
 Spectrum Proposed for Auction
 N/A in Los Angeles
 Unchanneled Spectrum
 (P) = Paired Channels (UP) = Unpaired Channels

Appendix B
Licenses Issued in the Narrowband PCS Band
Based on a Review of the Commission's ULS License Information

Call Sign	Licensee	Region	Narrowband PCS Licensees			Channel Block
			Radio Service	Status	Expiration Date	
KNKV200	DESTINEER CORP.	Nationwide	CN	Canceled	7/13/2004	9
KNKV201	USA Mobility Wireless, Inc.	Nationwide	CN	Active	1/9/2015	1
KNKV202	USA Mobility Wireless, Inc.	Nationwide	CN	Active	1/25/2015	2
KNKV203	M&FC Holding, LLC	Nationwide	CN	Active	9/29/2014	3
KNKV204	Space Data Research, LLC	Nationwide	CN	Active	9/29/2014	4
KNKV205	SkyTel Spectrum LLC	Nationwide	CN	Active	9/29/2014	5
KNKV206	American Messaging Services, LLC	Nationwide	CN	Active	9/29/2014	6
KNKV207	USA Mobility Wireless, Inc.	Nationwide	CN	Active	9/29/2014	7
KNKV208	SkyTel Spectrum LLC	Nationwide	CN	Active	9/29/2014	8
KNKV209	USA Mobility Wireless, Inc.	Nationwide	CN	Active	1/25/2015	10
KNKV210	USA Mobility Wireless, Inc.	Nationwide	CN	Active	9/29/2014	11
KNKV212	USA Mobility Wireless, Inc.	Northeast Region	CN	Active	1/27/2015	12
KNKV213	CONXUS SPECTRUM, INC.	Northeast Region	CN	Canceled	2/3/2005	13
KNKV214	USA Mobility Wireless, Inc.	Northeast Region	CN	Active	4/27/2015	14
KNKV215	SkyTel Spectrum LLC	Northeast Region	CN	Active	5/11/2015	15
KNKV216	American Messaging Services, LLC	Northeast Region	CN	Active	1/23/2015	16
KNKV217	PAGE CALL, INC.	Northeast Region	CN	Terminated	1/23/2005	17
KNKV218	USA Mobility Wireless, Inc.	Southern Region	CN	Active	1/27/2015	12
KNKV219	CONXUS SPECTRUM, INC.	Southern Region	CN	Canceled	2/3/2005	13
KNKV220	USA Mobility Wireless, Inc.	Southern Region	CN	Active	4/27/2015	14
KNKV221	SkyTel Spectrum LLC	Southern Region	CN	Active	5/11/2015	15
KNKV222	INSTAPAGE NETWORK, LTD.	Southern Region	CN	Terminated	1/23/2005	16
KNKV223	PAGE CALL, INC.	Southern Region	CN	Terminated	1/23/2005	17
KNKV224	USA Mobility Wireless, Inc.	Midwest Region	CN	Active	1/27/2015	12
KNKV225	CONXUS SPECTRUM, INC.	Midwest Region	CN	Canceled	2/3/2005	13
KNKV226	USA Mobility Wireless, Inc.	Midwest Region	CN	Active	4/27/2015	14
KNKV227	SkyTel Spectrum LLC	Midwest Region	CN	Active	5/11/2015	15
KNKV228	American Messaging Services, LLC	Midwest Region	CN	Active	1/23/2015	16
KNKV229	PAGE CALL, INC.	Midwest Region	CN	Terminated	1/23/2005	17
KNKV230	USA Mobility Wireless, Inc.	Central Region	CN	Active	1/27/2015	12
KNKV231	CONXUS SPECTRUM, INC.	Central Region	CN	Canceled	2/3/2005	13
KNKV232	USA Mobility Wireless, Inc.	Central Region	CN	Active	4/27/2015	14
KNKV233	SkyTel Spectrum LLC	Central Region	CN	Active	5/11/2015	15
KNKV234	American Messaging Services, LLC	Central Region	CN	Active	1/23/2015	16
KNKV235	BENBOW P.C.S. VENTURES, INC.	Central Region	CN	Terminated	1/23/2005	17
KNKV236	USA Mobility Wireless, Inc.	Western Region	CN	Active	1/27/2015	12
KNKV237	CONXUS SPECTRUM, INC.	Western Region	CN	Canceled	2/3/2005	13
KNKV238	USA Mobility Wireless, Inc.	Western Region	CN	Active	4/27/2015	14
KNKV239	SkyTel Spectrum LLC	Western Region	CN	Active	5/11/2015	15
KNKV240	American Messaging Services, LLC	Western Region	CN	Active	1/23/2015	16
KNKV241	BENBOW P.C.S. VENTURES, INC.	Western Region	CN	Terminated	1/23/2005	17
KNKV203 - L0	Southern Company Services, Inc.	1755248	CN	Active	9/29/2014	3
KNKV205 - L0	SkyTel Spectrum LLC	Nationwide	CN	Canceled	6/12/2009	5
KNKV208 - L0	SkyTel Spectrum LLC	Nationwide	CN	Canceled	6/12/2009	8
KNKV215 - L0	SkyTel Spectrum LLC	Nationwide	CN	Canceled	6/12/2009	15
KNKV221 - L0	SkyTel Spectrum LLC	Nationwide	CN	Canceled	6/12/2009	15
KNKV227 - L0	SkyTel Spectrum LLC	Nationwide	CN	Canceled	6/12/2009	15
KNKV233 - L0	SkyTel Spectrum LLC	Nationwide	CN	Canceled	6/12/2009	17
KNKV239 - L0	SkyTel Spectrum LLC	Nationwide	CN	Canceled	6/12/2009	15
WPRS306 - LQ	SkyTel Spectrum LLC	Nationwide	CN	Canceled	6/12/2009	7
WPUH452 - LQ	Lockheed Martin Corporation	Richmond-Norfolk	CN	Active	6/26/2009	28
WPXI874 - L00	Lockheed Martin Corporation		CN	Active	6/26/2009	18
WPXI878 - L00	Lockheed Martin Corporation		CN	Active	6/26/2009	23
WPXI879 - L00	Lockheed Martin Corporation		CN	Active	6/26/2009	24
WPXI876 - L00	Lockheed Martin Corporation		CN	Active	6/26/2009	21
WPXI877 - L00	Lockheed Martin Corporation		CN	Active	6/26/2009	22
WPXI880 - L00	Lockheed Martin Corporation		CN	Active	6/26/2009	25
WPXI888 - L00	Lockheed Martin Corporation	Richmond-Norfolk	CN	Active	6/26/2009	31
WPXI221 - L0	Lockheed Martin Corporation	Richmond-Norfolk	CN	Active	6/26/2009	
WPOI469	Paging Systems, Inc.	Los Angeles-San Diego	CN	Active	7/30/2018	29
WPOI470	Paging Systems, Inc.	Los Angeles-San Diego	CN	Active	7/30/2018	32
WPOI471	Paging Systems, Inc.	Los Angeles-San Diego	CN	Active	7/30/2018	32
WPOI472	Paging Systems, Inc.	Los Angeles-San Diego	CN	Active	7/30/2018	31
WPRS385	USA Mobility Wireless, Inc.	Nationwide	CN	Active	9/29/2014	8
WPRS386	SkyTel Spectrum LLC	Nationwide	CN	Active	9/29/2014	7
WPUH409	Space Data Spectrum Holdings, LLC	New York	CN	Active	3/6/2012	28
WPUH410	Allegheny Communications Holdings I, LLC	New York	CN	Active	3/6/2012	32
WPUH411	Space Data Spectrum Holdings, LLC	Los Angeles-San Diego	CN	Active	3/6/2012	28

Appendix B
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Based on a Review of the Commission's ULS License Information

Call Sign	Licensee	Radio Service	Status	Expiration Date	Channel Block
PA/PUH412	Allegheny Communications Holdings I, LLC Los Angeles-San Diego	CN	Active	3/6/2012	31
WPUH413	Space Data Spectrum Holdings, LLC Chicago	CN	Active	3/6/2012	28
PA/PUH414	Allegheny Communications Holdings I, LLC Chicago	CN	Active	3/6/2012	32
WPUH415	Space Data Spectrum Holdings, LLC San Francisco-Oakland-Si	CN	Active	3/6/2012	28
PA/PUH416	Allegheny Communications Holdings I, LLC San Francisco-Oakland-Si	CN	Active	3/6/2012	32
PA/PUH417	Allegheny Communications Holdings I, LLC Detroit	CN	Active	3/6/2012	32
WPUH418	Space Data Spectrum Holdings, LLC Charlotte-Greensboro-Gr	CN	Active	3/6/2012	28
PA/PUH419	Allegheny Communications Holdings I, LLC Charlotte-Greensboro-Gr	CN	Active	3/6/2012	32
WPUH420	Space Data Spectrum Holdings, LLC Dallas-Ft. Worth	CN	Active	3/6/2012	28
PA/PUH421	Allegheny Communications Holdings I, LLC Dallas-Ft. Worth	CN	Active	3/6/2012	31
PA/PUH422	Allegheny Communications Holdings I, LLC Dallas-Ft. Worth	CN	Active	3/6/2012	32
WPUH423	Space Data Spectrum Holdings, LLC Boston-Providence	CN	Active	3/6/2012	28
PA/PUH424	Allegheny Communications Holdings I, LLC Boston-Providence	CN	Active	3/6/2012	32
WPUH425	Space Data Spectrum Holdings, LLC Philadelphia	CN	Active	3/6/2012	28
PA/PUH426	Allegheny Communications Holdings I, LLC Philadelphia	CN	Active	3/6/2012	32
WPUH427	Space Data Spectrum Holdings, LLC Washington-Baltimore	CN	Active	3/6/2012	28
PA/PUH428	Allegheny Communications Holdings I, LLC Washington-Baltimore	CN	Active	3/6/2012	32
WPUH429	Space Data Spectrum Holdings, LLC Atlanta	CN	Active	3/6/2012	28
PA/PUH430	Allegheny Communications Holdings I, LLC Atlanta	CN	Active	3/6/2012	32
WPUH431	Space Data Spectrum Holdings, LLC Minneapolis-St. Paul	CN	Active	3/6/2012	28
PA/PUH432	Allegheny Communications Holdings I, LLC Minneapolis-St. Paul	CN	Active	3/6/2012	32
PA/PUH433	Allegheny Communications Holdings I, LLC Tampa-St. Petersburg-Orl	CN	Active	3/6/2012	32
WPUH434	Space Data Spectrum Holdings, LLC Houston	CN	Active	3/6/2012	28
PA/PUH435	Allegheny Communications Holdings I, LLC Houston	CN	Active	3/6/2012	31
PA/PUH436	Allegheny Communications Holdings I, LLC Houston	CN	Active	3/6/2012	32
WPUH437	Space Data Spectrum Holdings, LLC Miami-Ft. Lauderdale	CN	Active	3/6/2012	28
PA/PUH438	Allegheny Communications Holdings I, LLC Miami-Ft. Lauderdale	CN	Active	3/6/2012	32
WPUH439	Space Data Spectrum Holdings, LLC Cleveland	CN	Active	3/6/2012	28
PA/PUH440	Allegheny Communications Holdings I, LLC Cleveland	CN	Active	3/6/2012	32
WPUH441	Space Data Spectrum Holdings, LLC New Orleans-Baton Rouge	CN	Active	3/6/2012	28
PA/PUH442	Allegheny Communications Holdings I, LLC New Orleans-Baton Rouge	CN	Active	3/6/2012	32
WPUH443	Space Data Spectrum Holdings, LLC Cincinnati-Dayton	CN	Active	3/6/2012	28
PA/PUH444	Allegheny Communications Holdings I, LLC Cincinnati-Dayton	CN	Active	3/6/2012	32
PA/PUH445	Allegheny Communications Holdings I, LLC St. Louis	CN	Active	3/6/2012	32
WPUH446	Space Data Spectrum Holdings, LLC Milwaukee	CN	Active	3/6/2012	28
PA/PUH447	Allegheny Communications Holdings I, LLC Milwaukee	CN	Active	3/6/2012	31
PA/PUH448	Allegheny Communications Holdings I, LLC Milwaukee	CN	Active	3/6/2012	32
WPUH449	Space Data Spectrum Holdings, LLC Pittsburgh	CN	Active	3/6/2012	28
PA/PUH450	Allegheny Communications Holdings I, LLC Pittsburgh	CN	Active	3/6/2012	32
WPUH451	Space Data Spectrum Holdings, LLC Denver	CN	Active	3/6/2012	28
L/PUH452	Space Data Spectrum Holdings, LLC Richmond-Norfolk	CN	Active	3/6/2012	28
PA/PUH453	Allegheny Communications Holdings I, LLC Richmond-Norfolk	CN	Active	3/6/2012	32
WPUH454	Space Data Spectrum Holdings, LLC Seattle	CN	Active	3/6/2012	28
PA/PUH455	Allegheny Communications Holdings I, LLC Seattle	CN	Active	3/6/2012	32
WPUH456	Space Data Spectrum Holdings, LLC Puerto Rico-Virgin Islands	CN	Active	3/6/2012	28
PA/PUH457	Allegheny Communications Holdings I, LLC Puerto Rico-Virgin Islands	CN	Active	3/6/2012	32
WPUH458	Space Data Spectrum Holdings, LLC Louisville-Lexington-Evan	CN	Active	3/6/2012	28
PA/PUH459	Allegheny Communications Holdings I, LLC Louisville-Lexington-Evan	CN	Active	3/6/2012	32
WPUH460	Space Data Spectrum Holdings, LLC Phoenix	CN	Active	3/6/2012	28
PA/PUH461	Allegheny Communications Holdings I, LLC Phoenix	CN	Active	3/6/2012	32
WPUH462	Space Data Spectrum Holdings, LLC Memphis-Jackson	CN	Active	3/6/2012	28
PA/PUH463	Allegheny Communications Holdings I, LLC Memphis-Jackson	CN	Active	3/6/2012	32
WPUH464	Space Data Spectrum Holdings, LLC Birmingham	CN	Active	3/6/2012	28
PA/PUH465	Allegheny Communications Holdings I, LLC Birmingham	CN	Active	3/6/2012	32
WPUH466	Space Data Spectrum Holdings, LLC Portland	CN	Active	3/6/2012	28
PA/PUH467	Allegheny Communications Holdings I, LLC Portland	CN	Active	3/6/2012	32
WPUH468	Space Data Spectrum Holdings, LLC Indianapolis	CN	Active	3/6/2012	28
PA/PUH469	Allegheny Communications Holdings I, LLC Indianapolis	CN	Active	3/6/2012	32
WPUH470	Space Data Spectrum Holdings, LLC Des Moines-Quad Cities	CN	Active	3/6/2012	28
PA/PUH471	Allegheny Communications Holdings I, LLC Des Moines-Quad Cities	CN	Active	3/6/2012	32
WPUH472	Space Data Spectrum Holdings, LLC San Antonio	CN	Active	3/6/2012	28
PA/PUH473	Allegheny Communications Holdings I, LLC San Antonio	CN	Active	3/6/2012	31
PA/PUH474	Allegheny Communications Holdings I, LLC San Antonio	CN	Active	3/6/2012	32
WPUH475	Space Data Spectrum Holdings, LLC Kansas City	CN	Active	3/6/2012	28
PA/PUH476	Allegheny Communications Holdings I, LLC Kansas City	CN	Active	3/6/2012	32
WPUH477	Space Data Spectrum Holdings, LLC Buffalo-Rochester	CN	Active	3/6/2012	28
PA/PUH478	Allegheny Communications Holdings I, LLC Buffalo-Rochester	CN	Active	3/6/2012	32
PA/PUH479	Allegheny Communications Holdings I, LLC Salt Lake City	CN	Active	3/6/2012	32

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Based on a Review of the Commission's ULS License Information

Call Sign	Licensee	Narrowband PCS Licensees			Channel Block	
		Radio Service	Status	Expiration Date		
WPUH480	Space Data Spectrum Holdings, LLC	Jacksonville	CN	Active	3/6/2012	28
PAWPUH481	Allegheny Communications Holdings I, LLC	Jacksonville	CN	Active	3/6/2012	32
WPUH482	Space Data Spectrum Holdings, LLC	Columbus	CN	Active	3/6/2012	28
PAWPUH483	Allegheny Communications Holdings I, LLC	Columbus	CN	Active	3/6/2012	32
WPUH484	Space Data Spectrum Holdings, LLC	El Paso-Albuquerque	CN	Active	3/6/2012	28
PAWPUH485	Allegheny Communications Holdings I, LLC	El Paso-Albuquerque	CN	Active	3/6/2012	31
PAWPUH486	Allegheny Communications Holdings I, LLC	El Paso-Albuquerque	CN	Active	3/6/2012	32
WPUH487	Space Data Spectrum Holdings, LLC	Little Rock	CN	Active	3/6/2012	28
PAWPUH488	Allegheny Communications Holdings I, LLC	Little Rock	CN	Active	3/6/2012	32
WPUH489	Space Data Spectrum Holdings, LLC	Oklahoma City	CN	Active	3/6/2012	28
PAWPUH490	Allegheny Communications Holdings I, LLC	Oklahoma City	CN	Active	3/6/2012	32
WPUH491	Space Data Spectrum Holdings, LLC	Spokane-Billings	CN	Active	3/6/2012	28
PAWPUH492	Allegheny Communications Holdings I, LLC	Spokane-Billings	CN	Active	3/6/2012	32
WPUH493	Space Data Spectrum Holdings, LLC	Nashville	CN	Active	3/6/2012	28
PAWPUH494	Allegheny Communications Holdings I, LLC	Nashville	CN	Active	3/6/2012	32
WPUH495	Space Data Spectrum Holdings, LLC	Knoxville	CN	Active	3/6/2012	28
PAWPUH496	Allegheny Communications Holdings I, LLC	Knoxville	CN	Active	3/6/2012	32
WPUH497	Space Data Spectrum Holdings, LLC	Omaha	CN	Active	3/6/2012	28
PAWPUH498	Allegheny Communications Holdings I, LLC	Omaha	CN	Active	3/6/2012	32
WPUH499	Space Data Spectrum Holdings, LLC	Wichita	CN	Active	3/6/2012	28
PAWPUH500	Allegheny Communications Holdings I, LLC	Wichita	CN	Active	3/6/2012	32
WPUH501	Space Data Spectrum Holdings, LLC	Honolulu	CN	Active	3/6/2012	28
PAWPUH502	Allegheny Communications Holdings I, LLC	Honolulu	CN	Active	3/6/2012	31
PAWPUH503	Allegheny Communications Holdings I, LLC	Honolulu	CN	Active	3/6/2012	32
WPUH504	Space Data Spectrum Holdings, LLC	Tulsa	CN	Active	3/6/2012	28
PAWPUH505	Allegheny Communications Holdings I, LLC	Tulsa	CN	Active	3/6/2012	32
WPUH506	Space Data Spectrum Holdings, LLC	Alaska	CN	Active	3/6/2012	28
WPUH507	Space Data Spectrum Holdings, LLC	Guam-Northern Mariana I	CN	Active	3/6/2012	28
WPUH508	Space Data Spectrum Holdings, LLC	American Samoa	CN	Active	3/6/2012	28
WPUH509	Allegheny Communications Holdings I, LLC	Nationwide	CN	Terminated	3/6/2012	20
WPUH510	ComSoft Corporation	New York	CN	Active	3/6/2012	27
WPUH511	ComSoft Corporation	Boston-Providence	CN	Active	3/6/2012	27
WPUH512	ComSoft Corporation	Philadelphia	CN	Active	3/6/2012	27
WPUH513	ComSoft Corporation	Washington-Baltimore	CN	Active	3/6/2012	27
WPUH514	ComSoft Corporation	Richmond-Norfolk	CN	Active	3/6/2012	27
WPUH515	Space Data Spectrum Holdings, LLC	Tampa-St. Petersburg-Orl	CN	Active	3/6/2012	28
WPUH516	Space Data Spectrum Holdings, LLC	St. Louis	CN	Active	3/6/2012	28
WPUH518	Paging Systems, Inc.	Los Angeles-San Diego	CN	Active	3/6/2012	32
LPXI874	Space Data Spectrum Holdings, LLC	Nationwide	CN	Active	4/15/2013	18
PAWPUH518	Space Data Spectrum Holdings, LLC	Nationwide	CN	Active	4/15/2013	19
LPXI876	Space Data Spectrum Holdings, LLC	Nationwide	CN	Active	4/15/2013	21
LPXI877	Space Data Spectrum Holdings, LLC	Nationwide	CN	Active	4/15/2013	22
LPXI878	Space Data Spectrum Holdings, LLC	Nationwide	CN	Active	4/15/2013	23
LPXI879	Space Data Spectrum Holdings, LLC	Nationwide	CN	Active	4/15/2013	24
LPXI880	Space Data Spectrum Holdings, LLC	Nationwide	CN	Active	4/15/2013	25
PAWPUH518	Space Data Spectrum Holdings, LLC	New York	CN	Active	4/15/2013	31
PAWPUH518	Space Data Spectrum Holdings, LLC	San Francisco-Oakland-Si	CN	Active	4/15/2013	31
PAWPUH518	Space Data Spectrum Holdings, LLC	Boston-Providence	CN	Active	4/15/2013	31
PAWPUH518	Space Data Spectrum Holdings, LLC	Philadelphia	CN	Active	4/15/2013	31
PAWPUH518	Space Data Spectrum Holdings, LLC	Washington-Baltimore	CN	Active	4/15/2013	31
PAWPUH518	Space Data Spectrum Holdings, LLC	Pittsburgh	CN	Active	4/15/2013	31
PAWPUH518	Space Data Spectrum Holdings, LLC	Denver	CN	Active	4/15/2013	31
LPXI888	Space Data Spectrum Holdings, LLC	Richmond-Norfolk	CN	Active	4/15/2013	31
PAWPUH518	Space Data Spectrum Holdings, LLC	Seattle	CN	Active	4/15/2013	31
PAWPUH518	Space Data Spectrum Holdings, LLC	New York	CN	Active	4/15/2013	29
PAWPUH518	Space Data Spectrum Holdings, LLC	Los Angeles-San Diego	CN	Active	4/15/2013	27
PAWPUH518	Space Data Spectrum Holdings, LLC	Los Angeles-San Diego	CN	Active	4/15/2013	29
PAWPUH518	Space Data Spectrum Holdings, LLC	Chicago	CN	Active	4/15/2013	27
PAWPUH518	Space Data Spectrum Holdings, LLC	Chicago	CN	Active	4/15/2013	29
PAWPUH518	Space Data Spectrum Holdings, LLC	Chicago	CN	Active	4/15/2013	29
PAWPUH518	Space Data Spectrum Holdings, LLC	San Francisco-Oakland-Si	CN	Active	4/15/2013	27
PAWPUH518	Space Data Spectrum Holdings, LLC	San Francisco-Oakland-Si	CN	Active	4/15/2013	29
PAWPUH518	Space Data Spectrum Holdings, LLC	Detroit	CN	Active	4/15/2013	27
PAWPUH518	Space Data Spectrum Holdings, LLC	Detroit	CN	Active	4/15/2013	29
PAWPUH518	Space Data Spectrum Holdings, LLC	Charlotte-Greensboro-Gre	CN	Active	4/15/2013	27
PAWPUH518	Space Data Spectrum Holdings, LLC	Charlotte-Greensboro-Gre	CN	Active	4/15/2013	29
PAWPUH518	Space Data Spectrum Holdings, LLC	Dallas-Ft. Worth	CN	Active	4/15/2013	27
PAWPUH518	Space Data Spectrum Holdings, LLC	Dallas-Ft. Worth	CN	Active	4/15/2013	29
PAWPUH518	Space Data Spectrum Holdings, LLC	Boston-Providence	CN	Active	4/15/2013	29

Appendix B
Licenses Issued in the Narrowband PCS Band
Based on a Review of the Commission's ULS License Information

Call Sign	Licensee	Radio Service	Narrowband PCS Licensees			Channel Block
			Status	Expiration Date		
PX1904	Space Data Spectrum Holdings, LLC	Philadelphia	CN	Active	4/15/2013	29
PX1905	Space Data Spectrum Holdings, LLC	Washington-Baltimore	CN	Active	4/15/2013	29
PX1906	Space Data Spectrum Holdings, LLC	Atlanta	CN	Active	4/15/2013	27
PX1907	Space Data Spectrum Holdings, LLC	Atlanta	CN	Active	4/15/2013	29
PX1908	Space Data Spectrum Holdings, LLC	Minneapolis-St. Paul	CN	Active	4/15/2013	27
PX1909	Space Data Spectrum Holdings, LLC	Minneapolis-St. Paul	CN	Active	4/15/2013	29
PX1910	Space Data Spectrum Holdings, LLC	Tampa-St. Petersburg-Orl	CN	Active	4/15/2013	27
PX1911	Space Data Spectrum Holdings, LLC	Tampa-St. Petersburg-Orl	CN	Active	4/15/2013	29
PX1912	Space Data Spectrum Holdings, LLC	Houston	CN	Active	4/15/2013	27
PX1913	Space Data Spectrum Holdings, LLC	Houston	CN	Active	4/15/2013	29
PX1914	Space Data Spectrum Holdings, LLC	Miami-Ft. Lauderdale	CN	Active	4/15/2013	27
PX1915	Space Data Spectrum Holdings, LLC	Miami-Ft. Lauderdale	CN	Active	4/15/2013	29
PX1916	Space Data Spectrum Holdings, LLC	Cleveland	CN	Active	4/15/2013	27
PX1917	Space Data Spectrum Holdings, LLC	Cleveland	CN	Active	4/15/2013	29
PX1918	Space Data Spectrum Holdings, LLC	New Orleans-Baton Rouge	CN	Active	4/15/2013	27
PX1919	Space Data Spectrum Holdings, LLC	New Orleans-Baton Rouge	CN	Active	4/15/2013	29
PX1920	Space Data Spectrum Holdings, LLC	Cincinnati-Dayton	CN	Active	4/15/2013	27
PX1921	Space Data Spectrum Holdings, LLC	Cincinnati-Dayton	CN	Active	4/15/2013	29
PX1922	Space Data Spectrum Holdings, LLC	St. Louis	CN	Active	4/15/2013	27
PX1923	Space Data Spectrum Holdings, LLC	St. Louis	CN	Active	4/15/2013	29
PX1924	Space Data Spectrum Holdings, LLC	Milwaukee	CN	Active	4/15/2013	27
PX1925	Space Data Spectrum Holdings, LLC	Milwaukee	CN	Active	4/15/2013	29
PX1926	Space Data Spectrum Holdings, LLC	Pittsburgh	CN	Active	4/15/2013	27
PX1927	Space Data Spectrum Holdings, LLC	Pittsburgh	CN	Active	4/15/2013	29
PX1928	Space Data Spectrum Holdings, LLC	Denver	CN	Active	4/15/2013	27
PX1929	Space Data Spectrum Holdings, LLC	Richmond-Norfolk	CN	Active	4/15/2013	29
PX1930	Space Data Spectrum Holdings, LLC	Seattle	CN	Active	4/15/2013	27
PX1931	Space Data Spectrum Holdings, LLC	Seattle	CN	Active	4/15/2013	29
PX1932	Space Data Spectrum Holdings, LLC	Louisville-Lexington-Evan	CN	Active	4/15/2013	27
PX1933	Space Data Spectrum Holdings, LLC	Louisville-Lexington-Evan	CN	Active	4/15/2013	29
PX1934	Space Data Spectrum Holdings, LLC	Phoenix	CN	Active	4/15/2013	27
PX1935	Space Data Spectrum Holdings, LLC	Phoenix	CN	Active	4/15/2013	29
PX1936	Space Data Spectrum Holdings, LLC	Memphis-Jackson	CN	Active	4/15/2013	27
PX1937	Space Data Spectrum Holdings, LLC	Memphis-Jackson	CN	Active	4/15/2013	29
PX1938	Space Data Spectrum Holdings, LLC	Birmingham	CN	Active	4/15/2013	27
PX1939	Space Data Spectrum Holdings, LLC	Birmingham	CN	Active	4/15/2013	29
PX1940	Space Data Spectrum Holdings, LLC	Portland	CN	Active	4/15/2013	27
PX1941	Space Data Spectrum Holdings, LLC	Portland	CN	Active	4/15/2013	29
PX1942	Space Data Spectrum Holdings, LLC	Indianapolis	CN	Active	4/15/2013	27
PX1943	Space Data Spectrum Holdings, LLC	Indianapolis	CN	Active	4/15/2013	29
PX1944	Space Data Spectrum Holdings, LLC	Des Moines-Quad Cities	CN	Active	4/15/2013	27
PX1945	Space Data Spectrum Holdings, LLC	Des Moines-Quad Cities	CN	Active	4/15/2013	29
PX1946	Space Data Spectrum Holdings, LLC	San Antonio	CN	Active	4/15/2013	27
PX1947	Space Data Spectrum Holdings, LLC	San Antonio	CN	Active	4/15/2013	29
PX1948	Space Data Spectrum Holdings, LLC	Kansas City	CN	Active	4/15/2013	27
PX1949	Space Data Spectrum Holdings, LLC	Kansas City	CN	Active	4/15/2013	29
PX1950	Space Data Spectrum Holdings, LLC	Buffalo-Rochester	CN	Active	4/15/2013	27
PX1951	Space Data Spectrum Holdings, LLC	Buffalo-Rochester	CN	Active	4/15/2013	29
PX1952	Space Data Spectrum Holdings, LLC	Salt Lake City	CN	Active	4/15/2013	27
PX1953	Space Data Spectrum Holdings, LLC	Salt Lake City	CN	Active	4/15/2013	29
PX1954	Space Data Spectrum Holdings, LLC	Jacksonville	CN	Active	4/15/2013	27
PX1955	Space Data Spectrum Holdings, LLC	Jacksonville	CN	Active	4/15/2013	29
PX1956	Space Data Spectrum Holdings, LLC	Columbus	CN	Active	4/15/2013	27
PX1957	Space Data Spectrum Holdings, LLC	Columbus	CN	Active	4/15/2013	29
PX1958	Space Data Spectrum Holdings, LLC	El Paso-Albuquerque	CN	Active	4/15/2013	27
PX1959	Space Data Spectrum Holdings, LLC	El Paso-Albuquerque	CN	Active	4/15/2013	29
PX1960	Space Data Spectrum Holdings, LLC	Little Rock	CN	Active	4/15/2013	27
PX1961	Space Data Spectrum Holdings, LLC	Little Rock	CN	Active	4/15/2013	29
PX1962	Space Data Spectrum Holdings, LLC	Oklahoma City	CN	Active	4/15/2013	27
PX1963	Space Data Spectrum Holdings, LLC	Oklahoma City	CN	Active	4/15/2013	29
PX1964	Space Data Spectrum Holdings, LLC	Spokane-Billings	CN	Active	4/15/2013	27
PX1965	Space Data Spectrum Holdings, LLC	Spokane-Billings	CN	Active	4/15/2013	29
PX1966	Space Data Spectrum Holdings, LLC	Nashville	CN	Active	4/15/2013	27
PX1967	Space Data Spectrum Holdings, LLC	Nashville	CN	Active	4/15/2013	29
PX1968	Space Data Spectrum Holdings, LLC	Knoxville	CN	Active	4/15/2013	27
PX1969	Space Data Spectrum Holdings, LLC	Knoxville	CN	Active	4/15/2013	29
PX1970	Space Data Spectrum Holdings, LLC	Omaha	CN	Active	4/15/2013	27
PX1971	Space Data Spectrum Holdings, LLC	Omaha	CN	Active	4/15/2013	29

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Licenses Issued in the Narrowband PCS Band
Based on a Review of the Commission's ULS License Information

Call Sign	Licensee		Narrowband PCS Licensees	Radio Service	Status	Expiration Date	Channel Block
PXPX1972	Space Data Spectrum Holdings, LLC	Wichita		CN	Active	4/15/2013	27
PXPX1973	Space Data Spectrum Holdings, LLC	Wichita		CN	Active	4/15/2013	29
PXPX1974	Space Data Spectrum Holdings, LLC	Tulsa		CN	Active	4/15/2013	27
PXPX1975	Space Data Spectrum Holdings, LLC	Tulsa		CN	Active	4/15/2013	29
PXPX1976	Space Data Spectrum Holdings, LLC	New York		CN	Active	4/15/2013	26
PXPX1977	Space Data Spectrum Holdings, LLC	New York		CN	Active	4/15/2013	30
PXPX1978	Space Data Spectrum Holdings, LLC	Los Angeles-San Diego		CN	Active	4/15/2013	26
PXPX1979	Space Data Spectrum Holdings, LLC	Los Angeles-San Diego		CN	Active	4/15/2013	30
PXPX1980	Space Data Spectrum Holdings, LLC	Chicago		CN	Active	4/15/2013	26
PXPX1981	Space Data Spectrum Holdings, LLC	Chicago		CN	Active	4/15/2013	30
PXPX1982	Space Data Spectrum Holdings, LLC	San Francisco-Oakland-Si		CN	Active	4/15/2013	26
PXPX1983	Space Data Spectrum Holdings, LLC	San Francisco-Oakland-Si		CN	Active	4/15/2013	30
PXPX1984	Space Data Spectrum Holdings, LLC	Detroit		CN	Active	4/15/2013	26
PXPX1985	Space Data Spectrum Holdings, LLC	Detroit		CN	Active	4/15/2013	30
PXPX1986	Space Data Spectrum Holdings, LLC	Charlotte-Greensboro-Gre		CN	Active	4/15/2013	26
PXPX1987	Space Data Spectrum Holdings, LLC	Charlotte-Greensboro-Gre		CN	Active	4/15/2013	30
PXPX1988	Space Data Spectrum Holdings, LLC	Dallas-Ft. Worth		CN	Active	4/15/2013	26
PXPX1989	Space Data Spectrum Holdings, LLC	Dallas-Ft. Worth		CN	Active	4/15/2013	30
PXPX1990	Space Data Spectrum Holdings, LLC	Boston-Providence		CN	Active	4/15/2013	26
PXPX1991	Space Data Spectrum Holdings, LLC	Boston-Providence		CN	Active	4/15/2013	30
PXPX1992	Space Data Spectrum Holdings, LLC	Philadelphia		CN	Active	4/15/2013	26
PXPX1993	Space Data Spectrum Holdings, LLC	Philadelphia		CN	Active	4/15/2013	30
PXPX1994	Space Data Spectrum Holdings, LLC	Washington-Baltimore		CN	Active	4/15/2013	26
PXPX1995	Space Data Spectrum Holdings, LLC	Washington-Baltimore		CN	Active	4/15/2013	30
PXPX1996	Space Data Spectrum Holdings, LLC	Atlanta		CN	Active	4/15/2013	26
PXPX1997	Space Data Spectrum Holdings, LLC	Atlanta		CN	Active	4/15/2013	30
PXPX1998	Space Data Spectrum Holdings, LLC	Minneapolis-St. Paul		CN	Active	4/15/2013	26
PXPX1999	Space Data Spectrum Holdings, LLC	Minneapolis-St. Paul		CN	Active	4/15/2013	30
PXPXJ200	Space Data Spectrum Holdings, LLC	Tampa-St. Petersburg-Orl		CN	Active	4/15/2013	26
PXPXJ201	Space Data Spectrum Holdings, LLC	Tampa-St. Petersburg-Orl		CN	Active	4/15/2013	30
PXPXJ202	Space Data Spectrum Holdings, LLC	Houston		CN	Active	4/15/2013	26
PXPXJ203	Space Data Spectrum Holdings, LLC	Houston		CN	Active	4/15/2013	30
PXPXJ204	Space Data Spectrum Holdings, LLC	Miami-Ft. Lauderdale		CN	Active	4/15/2013	26
PXPXJ205	Space Data Spectrum Holdings, LLC	Miami-Ft. Lauderdale		CN	Active	4/15/2013	30
PXPXJ206	Space Data Spectrum Holdings, LLC	Cleveland		CN	Active	4/15/2013	26
PXPXJ207	Space Data Spectrum Holdings, LLC	Cleveland		CN	Active	4/15/2013	30
PXPXJ208	Space Data Spectrum Holdings, LLC	New Orleans-Baton Rouge		CN	Active	4/15/2013	26
PXPXJ209	Space Data Spectrum Holdings, LLC	New Orleans-Baton Rouge		CN	Active	4/15/2013	30
PXPXJ210	Space Data Spectrum Holdings, LLC	Cincinnati-Dayton		CN	Active	4/15/2013	26
PXPXJ211	Space Data Spectrum Holdings, LLC	Cincinnati-Dayton		CN	Active	4/15/2013	30
PXPXJ212	Space Data Spectrum Holdings, LLC	St. Louis		CN	Active	4/15/2013	26
PXPXJ213	Space Data Spectrum Holdings, LLC	St. Louis		CN	Active	4/15/2013	30
PXPXJ214	Space Data Spectrum Holdings, LLC	Milwaukee		CN	Active	4/15/2013	26
PXPXJ215	Space Data Spectrum Holdings, LLC	Milwaukee		CN	Active	4/15/2013	30
PXPXJ216	Space Data Spectrum Holdings, LLC	Pittsburgh		CN	Active	4/15/2013	26
PXPXJ217	Space Data Spectrum Holdings, LLC	Pittsburgh		CN	Active	4/15/2013	30
PXPXJ218	Space Data Spectrum Holdings, LLC	Denver		CN	Active	4/15/2013	26
PXPXJ219	Space Data Spectrum Holdings, LLC	Denver		CN	Active	4/15/2013	30
PXPXJ220	Space Data Spectrum Holdings, LLC	Richmond-Norfolk		CN	Active	4/15/2013	26
PXPXJ221	Space Data Spectrum Holdings, LLC	Richmond-Norfolk		CN	Active	4/15/2013	30
PXPXJ222	Space Data Spectrum Holdings, LLC	Seattle		CN	Active	4/15/2013	26
PXPXJ223	Space Data Spectrum Holdings, LLC	Seattle		CN	Active	4/15/2013	30
PXPXJ224	Space Data Spectrum Holdings, LLC	Puerto Rico-Virgin Islands		CN	Active	4/15/2013	26
PXPXJ225	Space Data Spectrum Holdings, LLC	Puerto Rico-Virgin Islands		CN	Active	4/15/2013	27
PXPXJ226	Space Data Spectrum Holdings, LLC	Puerto Rico-Virgin Islands		CN	Active	4/15/2013	29
PXPXJ227	Space Data Spectrum Holdings, LLC	Puerto Rico-Virgin Islands		CN	Active	4/15/2013	30
PXPXJ228	Space Data Spectrum Holdings, LLC	Louisville-Lexington-Evan		CN	Active	4/15/2013	26
PXPXJ229	Space Data Spectrum Holdings, LLC	Louisville-Lexington-Evan		CN	Active	4/15/2013	30
PXPXJ230	Space Data Spectrum Holdings, LLC	Phoenix		CN	Active	4/15/2013	26
PXPXJ231	Space Data Spectrum Holdings, LLC	Phoenix		CN	Active	4/15/2013	30
PXPXJ232	Space Data Spectrum Holdings, LLC	Memphis-Jackson		CN	Active	4/15/2013	26
PXPXJ233	Space Data Spectrum Holdings, LLC	Memphis-Jackson		CN	Active	4/15/2013	30
PXPXJ234	Space Data Spectrum Holdings, LLC	Birmingham		CN	Active	4/15/2013	26
PXPXJ235	Space Data Spectrum Holdings, LLC	Birmingham		CN	Active	4/15/2013	30
PXPXJ236	Space Data Spectrum Holdings, LLC	Portland		CN	Active	4/15/2013	26
PXPXJ237	Space Data Spectrum Holdings, LLC	Portland		CN	Active	4/15/2013	30
PXPXJ238	Space Data Spectrum Holdings, LLC	Indianapolis		CN	Active	4/15/2013	26
PXPXJ239	Space Data Spectrum Holdings, LLC	Indianapolis		CN	Active	4/15/2013	30

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Licenses Issued in the Narrowband PCS Band
Based on a Review of the Commission's ULS License Information

Call Sign	Licensee		Narrowband PCS Licensees			Channel Block
			Radio Service	Status	Expiration Date	
PXPJ240	Space Data Spectrum Holdings, LLC	Des Moines-Quad Cities	CN	Active	4/15/2013	26
PXPJ241	Space Data Spectrum Holdings, LLC	Des Moines-Quad Cities	CN	Active	4/15/2013	30
PXPJ242	Space Data Spectrum Holdings, LLC	San Antonio	CN	Active	4/15/2013	26
PXPJ244	Space Data Spectrum Holdings, LLC	San Antonio	CN	Active	4/15/2013	30
PXPJ245	Space Data Spectrum Holdings, LLC	Kansas City	CN	Active	4/15/2013	26
PXPJ246	Space Data Spectrum Holdings, LLC	Kansas City	CN	Active	4/15/2013	30
PXPJ247	Space Data Spectrum Holdings, LLC	Buffalo-Rochester	CN	Active	4/15/2013	26
PXPJ248	Space Data Spectrum Holdings, LLC	Buffalo-Rochester	CN	Active	4/15/2013	30
PXPJ249	Space Data Spectrum Holdings, LLC	Salt Lake City	CN	Active	4/15/2013	26
PXPJ250	Space Data Spectrum Holdings, LLC	Salt Lake City	CN	Active	4/15/2013	30
PXPJ251	Space Data Spectrum Holdings, LLC	Jacksonville	CN	Active	4/15/2013	26
PXPJ252	Space Data Spectrum Holdings, LLC	Jacksonville	CN	Active	4/15/2013	30
PXPJ253	Space Data Spectrum Holdings, LLC	Columbus	CN	Active	4/15/2013	26
PXPJ254	Space Data Spectrum Holdings, LLC	Columbus	CN	Active	4/15/2013	30
PXPJ255	Space Data Spectrum Holdings, LLC	El Paso-Albuquerque	CN	Active	4/15/2013	26
PXPJ256	Space Data Spectrum Holdings, LLC	El Paso-Albuquerque	CN	Active	4/15/2013	30
PXPJ257	Space Data Spectrum Holdings, LLC	Little Rock	CN	Active	4/15/2013	26
PXPJ258	Space Data Spectrum Holdings, LLC	Little Rock	CN	Active	4/15/2013	30
PXPJ259	Space Data Spectrum Holdings, LLC	Oklahoma City	CN	Active	4/15/2013	26
PXPJ260	Space Data Spectrum Holdings, LLC	Oklahoma City	CN	Active	4/15/2013	30
PXPJ261	Space Data Spectrum Holdings, LLC	Spokane-Billings	CN	Active	4/15/2013	26
PXPJ262	Space Data Spectrum Holdings, LLC	Spokane-Billings	CN	Active	4/15/2013	30
PXPJ263	Space Data Spectrum Holdings, LLC	Nashville	CN	Active	4/15/2013	26
PXPJ264	Space Data Spectrum Holdings, LLC	Nashville	CN	Active	4/15/2013	30
PXPJ265	Space Data Spectrum Holdings, LLC	Knoxville	CN	Active	4/15/2013	26
PXPJ266	Space Data Spectrum Holdings, LLC	Knoxville	CN	Active	4/15/2013	30
PXPJ267	Space Data Spectrum Holdings, LLC	Omaha	CN	Active	4/15/2013	26
PXPJ268	Space Data Spectrum Holdings, LLC	Omaha	CN	Active	4/15/2013	30
PXPJ269	Space Data Spectrum Holdings, LLC	Wichita	CN	Active	4/15/2013	26
PXPJ270	Space Data Spectrum Holdings, LLC	Wichita	CN	Active	4/15/2013	30
PXPJ271	Space Data Spectrum Holdings, LLC	Honolulu	CN	Active	4/15/2013	26
PXPJ272	Space Data Spectrum Holdings, LLC	Honolulu	CN	Active	4/15/2013	27
PXPJ273	Space Data Spectrum Holdings, LLC	Honolulu	CN	Active	4/15/2013	29
PXPJ274	Space Data Spectrum Holdings, LLC	Honolulu	CN	Active	4/15/2013	30
PXPJ275	Space Data Spectrum Holdings, LLC	Tulsa	CN	Active	4/15/2013	26
PXPJ276	Space Data Spectrum Holdings, LLC	Tulsa	CN	Active	4/15/2013	30
PXPJ277	Space Data Spectrum Holdings, LLC	Alaska	CN	Active	4/15/2013	29
PXPJ278	Space Data Spectrum Holdings, LLC	Alaska	CN	Active	4/15/2013	30
PXPXN803	Space Data Spectrum Holdings, LLC	Detroit	CN	Active	5/13/2013	28
WPXN804	MacIntyre, Scott C	Denver	CN	Terminated	5/13/2013	29
WPXN805	MacIntyre, Scott C	Denver	CN	Active	5/13/2013	32
PXPXN806	Space Data Spectrum Holdings, LLC	Salt Lake City	CN	Active	5/13/2013	28
QAF366	Space Data Spectrum Holdings, LLC	Atlanta	CN	Active	5/20/2014	31
QAF367	Space Data Spectrum Holdings, LLC	Tampa-St. Petersburg-Orl	CN	Active	5/20/2014	31
QAF368	Space Data Spectrum Holdings, LLC	Miami-Ft. Lauderdale	CN	Active	5/20/2014	31
QAF369	Space Data Spectrum Holdings, LLC	Jacksonville	CN	Active	5/20/2014	31
QAZ640	Space Data Spectrum Holdings, LLC	Northeast Region	CN	Active	1/12/2015	17
QAZ641	Space Data Spectrum Holdings, LLC	Southern Region	CN	Active	1/12/2015	17
QAZ642	Space Data Spectrum Holdings, LLC	Midwest Region	CN	Active	1/12/2015	17
QAZ643	Space Data Spectrum Holdings, LLC	Central Region	CN	Active	1/12/2015	17
QAZ644	Space Data Spectrum Holdings, LLC	Western Region	CN	Active	1/12/2015	17
QAZ645	Space Data Spectrum Holdings, LLC	Chicago	CN	Active	1/12/2015	31
QAZ646	Space Data Spectrum Holdings, LLC	Detroit	CN	Active	1/12/2015	31
QAZ647	Space Data Spectrum Holdings, LLC	Charlotte-Greensboro-Gr	CN	Active	1/12/2015	31
QAZ648	Space Data Spectrum Holdings, LLC	Minneapolis-St. Paul	CN	Active	1/12/2015	31
QAZ649	Space Data Spectrum Holdings, LLC	Cleveland	CN	Active	1/12/2015	31
QAZ650	Space Data Spectrum Holdings, LLC	New Orleans-Baton Rouge	CN	Active	1/12/2015	31
QAZ651	Space Data Spectrum Holdings, LLC	Cincinnati-Dayton	CN	Active	1/12/2015	31
QAZ652	Space Data Spectrum Holdings, LLC	St. Louis	CN	Active	1/12/2015	31
QAZ653	Space Data Spectrum Holdings, LLC	Puerto Rico-Virgin Islands	CN	Active	1/12/2015	31
QAZ654	Space Data Spectrum Holdings, LLC	Louisville-Lexington-Evan	CN	Active	1/12/2015	31
QAZ655	Space Data Spectrum Holdings, LLC	Phoenix	CN	Active	1/12/2015	31
QAZ656	Space Data Spectrum Holdings, LLC	Memphis-Jackson	CN	Active	1/12/2015	31
QAZ657	Space Data Spectrum Holdings, LLC	Birmingham	CN	Active	1/12/2015	31
QAZ658	Space Data Spectrum Holdings, LLC	Portland	CN	Active	1/12/2015	31
QAZ659	Space Data Spectrum Holdings, LLC	Indianapolis	CN	Active	1/12/2015	31
QAZ660	Space Data Spectrum Holdings, LLC	Des Moines-Quad Cities	CN	Active	1/12/2015	31
QAZ661	Space Data Spectrum Holdings, LLC	Kansas City	CN	Active	1/12/2015	31

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Call Sign	Licensee		Radio Service	Status	Expiration Date	Channel Block
PAQBZ662	Space Data Spectrum Holdings, LLC	Buffalo-Rochester	CN	Active	1/12/2015	31
PAQBZ663	Space Data Spectrum Holdings, LLC	Salt Lake City	CN	Active	1/12/2015	31
PAQBZ664	Space Data Spectrum Holdings, LLC	Columbus	CN	Active	1/12/2015	31
PAQBZ665	Space Data Spectrum Holdings, LLC	Little Rock	CN	Active	1/12/2015	31
PAQBZ666	Space Data Spectrum Holdings, LLC	Oklahoma City	CN	Active	1/12/2015	31
PAQBZ667	Space Data Spectrum Holdings, LLC	Spokane-Billings	CN	Active	1/12/2015	31
PAQBZ668	Space Data Spectrum Holdings, LLC	Nashville	CN	Active	1/12/2015	31
PAQBZ669	Space Data Spectrum Holdings, LLC	Knoxville	CN	Active	1/12/2015	31
PAQBZ670	Space Data Spectrum Holdings, LLC	Omaha	CN	Active	1/12/2015	31
PAQBZ671	Space Data Spectrum Holdings, LLC	Wichita	CN	Active	1/12/2015	31
PAQBZ672	Space Data Spectrum Holdings, LLC	Tulsa	CN	Active	1/12/2015	31
PAQBZ673	Space Data Spectrum Holdings, LLC	Alaska	CN	Active	1/12/2015	26
PAQBZ674	Space Data Spectrum Holdings, LLC	Alaska	CN	Active	1/12/2015	27
PAQBZ675	Space Data Spectrum Holdings, LLC	Alaska	CN	Active	1/12/2015	31
PAQBZ676	Space Data Spectrum Holdings, LLC	Alaska	CN	Active	1/12/2015	32
PAQBZ677	Space Data Spectrum Holdings, LLC	Guam-Northern Mariana I	CN	Active	1/12/2015	26
PAQBZ678	Space Data Spectrum Holdings, LLC	Guam-Northern Mariana I	CN	Active	1/12/2015	27
PAQBZ679	Space Data Spectrum Holdings, LLC	Guam-Northern Mariana I	CN	Active	1/12/2015	29
PAQBZ680	Space Data Spectrum Holdings, LLC	Guam-Northern Mariana I	CN	Active	1/12/2015	30
PAQBZ681	Space Data Spectrum Holdings, LLC	American Samoa	CN	Active	1/12/2015	26
PAQBZ682	Space Data Spectrum Holdings, LLC	American Samoa	CN	Active	1/12/2015	27
PAQBZ683	Space Data Spectrum Holdings, LLC	American Samoa	CN	Active	1/12/2015	29
PAQBZ684	Space Data Spectrum Holdings, LLC	American Samoa	CN	Active	1/12/2015	30
PAQBZ685	Space Data Spectrum Holdings, LLC	American Samoa	CN	Active	1/12/2015	31
PAQBZ686	Space Data Spectrum Holdings, LLC	American Samoa	CN	Active	1/12/2015	32
PAQE1552	Allegheny Communications Holdings I, LLC	Miami-Ft. Lauderdale	CN	Active	5/20/2014	31
PAQE1553	Allegheny Communications Holdings I, LLC	Atlanta	CN	Active	5/20/2014	31
PAQE1554	Allegheny Communications Holdings I, LLC	Jacksonville	CN	Active	5/20/2014	31
PAQE1555	Allegheny Communications Holdings I, LLC	Tampa-St. Petersburg-Orl	CN	Active	5/20/2014	31
WQE1556	Space Data Radio LLC	Cleveland	CN	Active	3/6/2012	32
WQE1557	Space Data Radio LLC	Jacksonville	CN	Active	3/6/2012	32
WQE1558	Space Data Spectrum Holdings, LLC	Dallas-Ft. Worth	CN	Active	3/6/2012	31
WQE1559	Space Data Radio LLC	Salt Lake City	CN	Active	3/6/2012	32
WQE1560	Space Data Radio LLC	Chicago	CN	Active	3/6/2012	32
WQE1561	Space Data Radio LLC	Tulsa	CN	Active	3/6/2012	32
WQE1562	Space Data Radio LLC	Houston	CN	Active	3/6/2012	32
WQE1563	Space Data Spectrum Holdings, LLC	Houston	CN	Active	3/6/2012	31
WQE1564	Space Data Radio LLC	Birmingham	CN	Active	3/6/2012	32
WQE1565	Space Data Radio LLC	Charlotte-Greensboro-Gre	CN	Active	3/6/2012	32
WQE1566	Space Data Radio LLC	Kansas City	CN	Active	3/6/2012	32
WQE1567	Space Data Radio LLC	San Francisco-Oakland-Si	CN	Active	3/6/2012	32
WQE1568	Space Data Radio LLC	Spokane-Billings	CN	Active	3/6/2012	32
WQE1569	Space Data Radio LLC	San Antonio	CN	Active	3/6/2012	32
WQE1570	Space Data Radio LLC	New Orleans-Baton Rouge	CN	Active	3/6/2012	32
WQE1571	Space Data Radio LLC	Washington-Baltimore	CN	Active	3/6/2012	32
WQE1572	Space Data Radio LLC	Milwaukee	CN	Active	3/6/2012	32
WQE1573	Space Data Radio LLC	Louisville-Lexington-Evan	CN	Active	3/6/2012	32
WQE1574	Space Data Spectrum Holdings, LLC	Milwaukee	CN	Active	3/6/2012	31
WQE1575	Space Data Radio LLC	New York	CN	Active	3/6/2012	32
WQE1576	Space Data Radio LLC	Atlanta	CN	Active	3/6/2012	32
WQE1577	Space Data Radio LLC	St. Louis	CN	Active	3/6/2012	32
WQE1578	Space Data Spectrum Holdings, LLC	Honolulu	CN	Active	3/6/2012	31
WQE1579	Space Data Radio LLC	Knoxville	CN	Active	3/6/2012	32
WQE1580	Space Data Radio LLC	Nashville	CN	Active	3/6/2012	32
WQE1581	Space Data Radio LLC	Columbus	CN	Active	3/6/2012	32
WQE1582	Space Data Radio LLC	Miami-Ft. Lauderdale	CN	Active	3/6/2012	32
WQE1583	Space Data Radio LLC	Dallas-Ft. Worth	CN	Active	3/6/2012	32
WQE1584	Space Data Radio LLC	Seattle	CN	Active	3/6/2012	32
WQE1585	Space Data Radio LLC	Philadelphia	CN	Active	3/6/2012	32
WQE1586	Space Data Radio LLC	Minneapolis-St. Paul	CN	Active	3/6/2012	32
WQE1587	Space Data Radio LLC	Des Moines-Quad Cities	CN	Active	3/6/2012	32
WQE1588	Space Data Radio LLC	El Paso-Albuquerque	CN	Active	3/6/2012	32
WQE1589	Space Data Radio LLC	Honolulu	CN	Active	3/6/2012	32
WQE1590	Space Data Radio LLC	Tampa-St. Petersburg-Orl	CN	Active	3/6/2012	32
WQE1591	Space Data Radio LLC	Phoenix	CN	Active	3/6/2012	32
WQE1592	Space Data Spectrum Holdings, LLC	San Antonio	CN	Active	3/6/2012	31
WQE1593	Space Data Radio LLC	Memphis-Jackson	CN	Active	3/6/2012	32
WQE1594	Space Data Spectrum Holdings, LLC	Los Angeles-San Diego	CN	Active	3/6/2012	31

Appendix B
Licenses Issued in the Narrowband PCS Band
Based on a Review of the Commission's ULS License Information

Call Sign	Licensee	Radio Service	Narrowband PCS Licensees	Status	Expiration Date	Channel Block
WQE1595	Space Data Radio LLC	Richmond-Norfolk	CN	Active	3/6/2012	32
WQE1596	Space Data Radio LLC	Omaha	CN	Active	3/6/2012	32
WQE1597	Space Data Radio LLC	Little Rock	CN	Active	3/6/2012	32
WQE1598	Space Data Radio LLC	Indianapolis	CN	Active	3/6/2012	32
WQE1599	Space Data Spectrum Holdings, LLC	El Paso-Albuquerque	CN	Active	3/6/2012	31
WQE1600	Space Data Radio LLC	Cincinnati-Dayton	CN	Active	3/6/2012	32
WQE1601	Space Data Radio LLC	Buffalo-Rochester	CN	Active	3/6/2012	32
WQE1602	Space Data Radio LLC	Puerto Rico-Virgin Islands	CN	Active	3/6/2012	32
WQE1603	Space Data Radio LLC	Wichita	CN	Active	3/6/2012	32
WQE1604	Space Data Radio LLC	Portland	CN	Active	3/6/2012	32
WQE1605	Space Data Radio LLC	Detroit	CN	Active	3/6/2012	32
WQE1606	Space Data Radio LLC	Boston-Providence	CN	Active	3/6/2012	32
WQE1607	Space Data Radio LLC	Oklahoma City	CN	Active	3/6/2012	32
WQE1608	Space Data Spectrum Holdings, LLC	Nationwide	CN	Active	3/6/2012	20
WQE1609	Space Data Radio LLC	Pittsburgh	CN	Active	3/6/2012	32
PAQEM397	Allegheny Communications Holdings I, LLC	Wichita	CN	Active	1/12/2015	31
PAQEM398	Allegheny Communications Holdings I, LLC	New York	CN	Active	4/15/2013	31
PAQEM399	Allegheny Communications Holdings I, LLC	New Orleans-Baton Rouge	CN	Active	1/12/2015	31
PAQEM400	Allegheny Communications Holdings I, LLC	Phoenix	CN	Active	1/12/2015	31
PAQEM401	Allegheny Communications Holdings I, LLC	Tulsa	CN	Active	1/12/2015	31
PAQEM402	Allegheny Communications Holdings I, LLC	Boston-Providence	CN	Active	4/15/2013	31
PAQEM403	Allegheny Communications Holdings I, LLC	Des Moines-Quad Cities	CN	Active	1/12/2015	31
PAQEM404	Allegheny Communications Holdings I, LLC	Minneapolis-St. Paul	CN	Active	1/12/2015	31
PAQEM405	Allegheny Communications Holdings I, LLC	Nashville	CN	Active	1/12/2015	31
PAQEM406	Allegheny Communications Holdings I, LLC	Spokane-Billings	CN	Active	1/12/2015	31
PAQEM407	Allegheny Communications Holdings I, LLC	Chicago	CN	Active	1/12/2015	31
PAQEM408	Allegheny Communications Holdings I, LLC	Birmingham	CN	Active	1/12/2015	31
PAQEM409	Allegheny Communications Holdings I, LLC	Oklahoma City	CN	Active	1/12/2015	31
PAQEM410	Allegheny Communications Holdings I, LLC	Nationwide	CN	Active	4/15/2013	25
PAQEM411	Allegheny Communications Holdings I, LLC	Alaska	CN	Active	1/12/2015	31
PAQEM412	Allegheny Communications Holdings I, LLC	Seattle	CN	Active	4/15/2013	31
PAQEM413	Allegheny Communications Holdings I, LLC	Memphis-Jackson	CN	Active	1/12/2015	31
PAQEM414	Allegheny Communications Holdings I, LLC	Cincinnati-Dayton	CN	Active	1/12/2015	31
PAQEM415	Allegheny Communications Holdings I, LLC	Pittsburgh	CN	Active	4/15/2013	31
PAQEM416	Allegheny Communications Holdings I, LLC	Kansas City	CN	Active	1/12/2015	31
PAQEM417	Allegheny Communications Holdings I, LLC	San Francisco-Oakland-San Diego	CN	Active	4/15/2013	31
PAQEM418	Allegheny Communications Holdings I, LLC	Denver	CN	Active	4/15/2013	31
PAQEM419	Allegheny Communications Holdings I, LLC	Columbus	CN	Active	1/12/2015	31
PAQEM420	Allegheny Communications Holdings I, LLC	Louisville-Lexington-Evanston	CN	Active	1/12/2015	31
PAQEM421	Allegheny Communications Holdings I, LLC	Puerto Rico-Virgin Islands	CN	Active	1/12/2015	31
PAQEM422	Allegheny Communications Holdings I, LLC	Salt Lake City	CN	Active	1/12/2015	31
PAQEM423	Allegheny Communications Holdings I, LLC	Cleveland	CN	Active	1/12/2015	31
PAQEM424	Allegheny Communications Holdings I, LLC	Portland	CN	Active	1/12/2015	31
PAQEM425	Allegheny Communications Holdings I, LLC	Philadelphia	CN	Active	4/15/2013	31
PAQEM426	Allegheny Communications Holdings I, LLC	Buffalo-Rochester	CN	Active	1/12/2015	31
PAQEM427	Allegheny Communications Holdings I, LLC	St. Louis	CN	Active	1/12/2015	31
PAQEM428	Allegheny Communications Holdings I, LLC	American Samoa	CN	Active	1/12/2015	31
PAQEM429	Allegheny Communications Holdings I, LLC	Little Rock	CN	Active	1/12/2015	31
PAQEM430	Allegheny Communications Holdings I, LLC	Detroit	CN	Active	1/12/2015	31
PAQEM431	Allegheny Communications Holdings I, LLC	Omaha	CN	Active	1/12/2015	31
PAQEM432	Allegheny Communications Holdings I, LLC	Indianapolis	CN	Active	1/12/2015	31
PAQEM433	Allegheny Communications Holdings I, LLC	Washington-Baltimore	CN	Active	4/15/2013	31
PAQEM434	Allegheny Communications Holdings I, LLC	Knoxville	CN	Active	1/12/2015	31
PAQEM435	Allegheny Communications Holdings I, LLC	Richmond-Norfolk	CN	Active	4/15/2013	31
PAQEM436	Allegheny Communications Holdings I, LLC	Charlotte-Greensboro-Raleigh	CN	Active	1/12/2015	31
PAQIQ488	Space Data Radio LLC	New York	CN	Active	4/15/2013	29
PAQIQ489	Space Data Radio LLC	Los Angeles-San Diego	CN	Active	4/15/2013	29
PAQIQ490	Space Data Radio LLC	Chicago	CN	Active	4/15/2013	29
PAQIQ491	Space Data Radio LLC	San Francisco-Oakland-San Diego	CN	Active	4/15/2013	29
PAQIQ492	Space Data Radio LLC	Detroit	CN	Active	4/15/2013	29
PAQIQ493	Space Data Radio LLC	Charlotte-Greensboro-Raleigh	CN	Active	4/15/2013	29
PAQIQ494	Space Data Radio LLC	Dallas-Ft. Worth	CN	Active	4/15/2013	29
PAQIQ495	Space Data Radio LLC	Boston-Providence	CN	Active	4/15/2013	29
PAQIQ496	Space Data Radio LLC	Philadelphia	CN	Active	4/15/2013	29
PAQIQ497	Space Data Radio LLC	Washington-Baltimore	CN	Active	4/15/2013	29
PAQIQ498	Space Data Radio LLC	Atlanta	CN	Active	4/15/2013	29
PAQIQ499	Space Data Radio LLC	Minneapolis-St. Paul	CN	Active	4/15/2013	29
PAQIQ500	Space Data Radio LLC	Tampa-St. Petersburg-Orlando	CN	Active	4/15/2013	29

Appendix B
Licenses Issued in the Narrowband PCS Band
Based on a Review of the Commission's ULS License Information

Call Sign	Licensee		Narrowband PCS Licensees			Channel Block
			Radio Service	Status	Expiration Date	
PAQIQ501	Space Data Radio LLC	Houston	CN	Active	4/15/2013	29
PAQIQ502	Space Data Radio LLC	Miami-Ft. Lauderdale	CN	Active	4/15/2013	29
PAQIQ503	Space Data Radio LLC	Cleveland	CN	Active	4/15/2013	29
PAQIQ504	Space Data Radio LLC	New Orleans-Baton Rouge	CN	Active	4/15/2013	29
PAQIQ505	Space Data Radio LLC	Cincinnati-Dayton	CN	Active	4/15/2013	29
PAQIQ506	Space Data Radio LLC	St. Louis	CN	Active	4/15/2013	29
PAQIQ507	Space Data Radio LLC	Milwaukee	CN	Active	4/15/2013	29
PAQIQ508	Space Data Radio LLC	Pittsburgh	CN	Active	4/15/2013	29
PAQIQ509	Space Data Radio LLC	Richmond-Norfolk	CN	Active	4/15/2013	29
PAQIQ510	Space Data Radio LLC	Seattle	CN	Active	4/15/2013	29
PAQIQ511	Space Data Radio LLC	Louisville-Lexington-Evan	CN	Active	4/15/2013	29
PAQIQ512	Space Data Radio LLC	Phoenix	CN	Active	4/15/2013	29
PAQIQ513	Space Data Radio LLC	Memphis-Jackson	CN	Active	4/15/2013	29
PAQIQ514	Space Data Radio LLC	Birmingham	CN	Active	4/15/2013	29
PAQIQ515	Space Data Radio LLC	Portland	CN	Active	4/15/2013	29
PAQIQ516	Space Data Radio LLC	Indianapolis	CN	Active	4/15/2013	29
PAQIQ517	Space Data Radio LLC	Des Moines-Quad Cities	CN	Active	4/15/2013	29
PAQIQ518	Space Data Radio LLC	San Antonio	CN	Active	4/15/2013	29
PAQIQ519	Space Data Radio LLC	Kansas City	CN	Active	4/15/2013	29
PAQIQ520	Space Data Radio LLC	Buffalo-Rochester	CN	Active	4/15/2013	29
PAQIQ521	Space Data Radio LLC	Salt Lake City	CN	Active	4/15/2013	29
PAQIQ522	Space Data Radio LLC	Jacksonville	CN	Active	4/15/2013	29
PAQIQ523	Space Data Radio LLC	Columbus	CN	Active	4/15/2013	29
PAQIQ524	Space Data Radio LLC	El Paso-Albuquerque	CN	Active	4/15/2013	29
PAQIQ525	Space Data Radio LLC	Little Rock	CN	Active	4/15/2013	29
PAQIQ526	Space Data Radio LLC	Oklahoma City	CN	Active	4/15/2013	29
PAQIQ527	Space Data Radio LLC	Spokane-Billings	CN	Active	4/15/2013	29
PAQIQ528	Space Data Radio LLC	Nashville	CN	Active	4/15/2013	29
PAQIQ529	Space Data Radio LLC	Knoxville	CN	Active	4/15/2013	29
PAQIQ530	Space Data Radio LLC	Omaha	CN	Active	4/15/2013	29
PAQIQ531	Space Data Radio LLC	Wichita	CN	Active	4/15/2013	29
PAQIQ532	Space Data Radio LLC	Tulsa	CN	Active	4/15/2013	29
PAQIQ533	Space Data Radio LLC	Puerto Rico-Virgin Islands	CN	Active	4/15/2013	29
PAQIQ534	Space Data Radio LLC	Honolulu	CN	Active	4/15/2013	29
PAQIQ535	Space Data Radio LLC	Alaska	CN	Active	4/15/2013	29
PAQIQ536	Space Data Radio LLC	Alaska	CN	Active	1/12/2015	32
PAQIQ537	Space Data Radio LLC	Guam-Northern Mariana I	CN	Active	1/12/2015	29
PAQIQ538	Space Data Radio LLC	American Samoa	CN	Active	1/12/2015	29
PAQIQ539	Space Data Radio LLC	American Samoa	CN	Active	1/12/2015	32
WQIQ540	Space Data Radio LLC	Nationwide	CN	Active	3/6/2012	20
PAQIQ541	Space Data Radio LLC	Denver	CN	Active	5/13/2013	29
PAQIQ542	Space Data Radio LLC	Denver	CN	Active	5/13/2013	32
PAQIQ543	Space Data Spectrum Holdings, LLC	Denver	CN	Active	5/13/2013	29
WZZN222	INSTAPAGE NETWORK, LTD.	Southern Region	CN	Expired	1/16/2002	16